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# NBS TECHNICAL NOTE 467

## Part 2

Revision 1—December 1969

# Activation Analysis: A Bibliography

U.S.  
DEPARTMENT  
OF  
COMMERCE  
  
National  
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Standards

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NATIONAL BUREAU OF STANDARDS • Lewis M. Branscomb, Director



# TECHNICAL NOTE 467

Part 2—Appendices

Revision 1

## ACTIVATION ANALYSIS: A BIBLIOGRAPHY

(Part 2 —Issued December 1969)  
(Supersedes publication issued September 1968)

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ACTIVATION ANALYSIS - A BIBLIOGRAPHY

(Part 2 - Revision 1)

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ABSTRACT

References to activation analysis in the open literature are published from a computer readout. The first part of the two-part series contains more than 6,000 references numbered according to their accession to the system. The second part contains an author index and three additional indexes for Element Determined, Matrix Analyzed, and Technique Used. Part 1 is updated by this addendum to include new references. Part 2 is superseded by revision 1 to include cross references to the new accessions listed in part 1.

Key words: Activation analysis, bibliography, element determined, literature file, matrix analyzed, technique used.



**APPENDIX I**



## ACTIVATION ANALYSIS-AUTHORS

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BRUNFELT, A.O.	3470 3961 4192 4305 5731 5960 7148 7181 7305
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BUDZYNSKI, A.Z.	7255
BUGLIO, B.	586
BUGORKOV, S.S.	5318
BUJDOSO, E.	633 2806 2807 3792 6202 6203 6403 7056
BUKHOV, A.P.	149
BULANOV, L.A.	1218
BULASHEVICH, Y.P.	8007
BULLETIN D'INFORMATIONS A.T.E.N.	7415
BUNCE, L.J.	3078
BUOT, F.	4215
BURKE, K.C.	908
BURLEY, H.A.	1740
BURNETT, W.T., JR.	450 2522
BURNHAM, C.D.	6922
BURNS, F.C.	1107 1266 1453 1739 3781 5339
BURNS, R.S.	3283
BURRILL, E.A.	91 92 556 557 917 1808
BURROWS, B.A.	2972 6302 7020 8000 8038

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BUSHKOV, A.P.	4276
BUSSELL, H.	1865
BUSSIERE, P.	558 853 4261 6690
BUTLER, J.P.	1377
BUTLER, J.R.	1812 7867
BUTLER, J.W.	7011
BUZZELLI, G.	1653
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BYGRAVE, W.	3496
BYRNE, A.R.	7927
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CABANE, G.	2555 7322
CABELL, M.J.	93 94 95 96 7886
CADDOCK, B.D.	2651
CADWELL, J.J.	97
CAHIER D INFORMATION DU BUREAU EURISOTOP	4394
CALDWELL, R.L.	98 413 580 1843 2684 7033
CALI, J.P.	231 255 322 1092 1253 2541 3474 6226 7074 7075
CALKINS, G.D.	99
CALVIN, M.	160
CAMERON, A.E.	100

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CAMPBELL, L.	862
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CAMPERO, A.	7879
CANADIAN CHEMICAL PROCESSING	1626 2710 7198
CAPANNESI, G.	7341
CAPITANT, M.	1518 1538
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CASE, D.R.	6972
CASE, L.F.	1141 2125 2535 3710
CASSATT, W.A., JR.	1757 2685 3962
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CERRAI, E.	762
CESARANO, C.	2795
CHAE, S.C.	4296
CHAIKA, M.	5759
CHAKRABORTY, P.P.	6331
CHALLANSONNET, J.	1262
CHALMERS, J.G.	309
CHAMBERLAIN, M.J.	7372 7426
CHAMBERS, M.E.	361
CHAMNIROKASARNY, D.	6671
CHAMPION, W.R.	447
CHAN, L.H.	7340 7416
CHANDRASEKARAN, V.R.	2977
CHANG, W.P.	3342
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CHAUVIN, R.	104
CHAYAWATANANGKUR, K.	7099
CHAYKA, M.	7424
CHEMICAL AND ENGINEERING NEWS	559 672 1093
CHEN, P.Y.	5924
CHENAUD, A.	7014
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CHIOTAN, C.	3759
CHO, C.M.	3093
CHOI, S.S.	1181
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CHOPOROV, D.Y.	6053 6072
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CHOWDHARY, S.Y.	2473
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CHOY, T.K.	507 1537 1962 2696
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CHRISTIAN, J.E.	1233 1259 4329
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CIUFFOLOTTI, L.	873 1097 1455 1456
CLAEYS, A.	1748
CLARK, H.M.	106 610
CLARK, L., JR.	1618 1787
CLARK, R.G.	1802
CLARK, R.S.	5716
CLAYTON, C.G.	1922
CLESS-BERNERT, T.	1821
CLEYRERGUE, C.	6410 6412 6568 7003
COATES, A.D.	3973
COBB, J.C.	1101 1486 3780
COCKBILL, M.W.	1102
COCKS, F.H.	1966
COHAN, M.D.	450 2521 2522 2647 2648
COHN, S.H.	6064 7968
COJOCARU, V.	796 803
COLARD, J.	107 1552 5989 6011 6063
COLAS, R.	1503
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COMAR, D.	570 882 1105 1143 1250 1278 1824 2558 3728 3745 5596 5701 5998 6001 6304 6932 7084 7240 7429 8026
CONDAMIN, J.	5579
CONDIT, R.H.	346 1483
CONNALLY, R.E.	3117
CONNER, J.P.	1967
CONNOR, J.	263
CONRAD, F.J.	1112 2568 4228 4274 6062
COOK, C.F.	519
COOK, G.B.	681 715 793 1255 2882
COON, J.H.	114
COOPER, J.A.	6360 6930 6941 7042 7125
COOPER, R.D.	2972 4204 5977 6302 6931 7186 8000
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COREY, J.C.	7127
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CORNUET, R.	891 1352 1503 7897
CORTH, R.	955
CORYELL, C.D.	1362
COSGROVE, J.F.	116 117 370 371 980 5955 6049 6065 6978 7301
COTTINO, F.	5999
COTZIAS, G.C.	929 1206 1705 2733
COUCHOUD, S.	4393
COULOMB, R.	1817 6324 7865
COULY, J.	1543
COURRIER, W.D.	6735
COUTURE, C.	6732
COVAULT, D.O.	1917
COVEART, A.S.	1924
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CRAWFORD, G.I.	3502 3750
CRESPI, M.B.A.	1255
CRIPPS, F.W.	4380 5390 6839 7129
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CRISTY, G.A.	1048
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CRUMP, J.G.	3460
CRUMPTON, D.	5594
CSADA, G.I.	5499
CSADA, I.	5793
CSAJKA, M.	1613 3661 4190 5712 7233 7235
CSATH, G.	7233
CSOKE, A.	2659
CUFF, D.R.A.	2429 5372
CURCANEANU, D.	3759
CURIE, I.	118 119 120
CURRAN, S.C.	121 122 354
CURRIE, L.A.	4224 7062
CURRIE, R.L.	1813 7043 7938
CURTIS, H.J.	123
CUTHBERT, G.	1231
CUYPERS, J.	1378 2567 6340
CUYPERS, M.	546 1378 1477 2550 2567 6059 6340 6595
CUYPERS, M.Y.	1978 2586 2707 3461
CYPRES, R.	1968
CZAMANSKE, G.K.	1107

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DABAGIAN, H.J.	232
DABEK, W.	903
DABROWSKI, H.	7151
DAGLISH, M.	1087
DAHL, J.B.	50 2853 6848
DAHMER, L.H.	4411
DAIEV, C.	6355
DAIEVA, L.	6355
DAKHOV, V.N.	1061
DALE, B. MCS.	124
DALTON, J.V.	5402
DALY, P.J.	5403
DALZIEL, J.A.W.	1108
DAMS, R.	4254 5349 5447 5730 6394 6395 6446 7178 7207 7226 7227 7402 7876 7934
DANFORTH, J.P.	1590
DANGUY, L.	125
DANIEL, R.	1535 3997
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DANILCHENKO, I.A	6706
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DARDANONI, Z.T.	4243 7128
DARRALL, K.G.	5714 6718
DAS, H.A.	372 854 2838 3738 4230 5996 6956 7260 7408 7901 7911 7978 7987 8045
DAS, M.S.	3560 7916
DASHER, J.	169
DAUDEL, P.	127 128
DAUDEL, R.	126 645
DAVID, D.	7200
DAVID, N.	6215
DAVIES, W.W.	514
DAVIS, R.C.	5571
DAYAL, N.	2318
DE BOECK, R.	5381 6696
DE BRUIN, M.	6019 6924
DE BRUYNE, P.	87
DE CARVALHO, A.M.B.	5770
DE CORTE, F.	7395
DE GELAS, B.	7200
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DE GROOT, A.J.	6924
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DE VEGA, V.R.	1970
DE VOE, J.R.	2280 2536 2539 2592 2593 2978 3910 4224 5784 7185
DE WAAL, T.J.	7250
DE WET, W.J.	5410 5761 6346 6439 6691 6702 6748 7939 7941
DE, A.K.	129 130
DEAK, M.	1842
DEAN, J.A.	83
DEAN, M.H.	3391
DEBIARD, R.	5445
DEBIESSE, J.	1262
DEBRUN, J.L.	5954 6591 7009 7018 7230 7231 7232
DECAT, D.	866 877 880 986 1156 1234
DECELL, R.F.	348
DECKER, C.F.	1141
DECKER, J.L.	2123
DEEV, Y.S.	7366
DEGRAZIA, A.R.	1383
DEHAAN, A., JR.	132
DEIBE, J.	802
DEL MILAGRO PEREZ, M.	6722



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DELBECQ, C.J.	133
DELL, E.S.	7020
DELLONTE, S.	5448
DELUCCHI, A.A.	634
DEMBROVSKY, M.A.	7388
DEMIDOV, A.M.	948 6053 6072
DEMILDT, A.C.T.	771 1256 6836
DEMJEN, Z.	1005
DENGEL, O.H.	6976
DEPANGHER, J.	1
DERBLAY, P.R.	2719
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DESENNE, J.J.	7429
DESSOUKY, Y.M.	4319
DETERDING, J.H.	2651
DEUTSCHMAN, J.E.	5409
DEWAR, W.A.	134 154 2719
DEYRIS, M.	781 851 3721 3722
DI COLA, G.	7051 8003
DIBBS, H.P.	669 972 1353 3710 3785
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DIECIDUE, A.T.	2732
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DIENSTBIER, Z.	1948
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DINGLE, A.N.	7312
DIVISION OF ISOTOPES DEVELOPMENT	5527
DIXON, B.W.	4255
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DJOURKOVITCH, O.	188
DMITROVSKII, A.A	5435
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DOGNIN, J.	3991
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DOMBROWSKI, C.S.	7968
DOMINGUEZ, G.	2714
DONALDSON, G.W.K	6846 7425
DOOLEY, J.A.	6310 7040 7047 7059

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DOPEL, R.	135
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DOROSH, M.M	4277
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DORWARD, R.C.	6349
DOSHI, G.R.	2786 6348
DOTY, W.H.	7907
DOW CHEMICAL COMPANY	660 1724 2608
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DOWNES, W.E.	2147 7105
DOWNTON, D.W.	2526 7028
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DRAGANIC, I.	1696
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DRAN, J.C.	6970
DRASKOVIC, R.J.	7945
DRASKOVIC, R.S.	7945
DRESSER INDUSTRIES INC,	204
DREVER, R.W.P.	354
DREW, D.D.	1809 2574
DRINKIN, V.I.	1558
DRUSCHEL, R.E.	292
DRUYAN, R.	136 730
DRYNKIN, V.I.	1445

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DUDEY, N.D.	6923
DUFFEY, D.	738 2141 2665 2722 5407 5743 5747 7204 7900 7985 8018
DUFTSCHMID, K.E.	5994
DUGAIN, F.	1165 1417 1741 1759 1983 2668 5593 6356 7071 7326
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DUNHAM, C.L.	4376
DUNN, A.L.	1041 1975
DUNN, R.W.	138 512 513
DURBIN, D.R.	5884
DURHAM, R.W.	701
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DYMOND, J.A.	67
DZHEMARDYAN, Y.A.	5854
EASTWOOD, T.A.	141 2787
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EDWARDS, L.C.	144
EDWARDS, R.R.	926 6057 7405
ECKHAUT, J.	305
ECKHAUT, Z.	304 306
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EHMANN, W.D.	9 145 146 199 285 698 988 1002 1017 1022 1117 1169 1214 1566 1571 1718 2506 2774 2975 3352 3774 5720 5775 5884 6447 6943 6958 7195 7371 7385 7386 7393 7983
EICHELBERGER, J.F.	1609 1637 2591 2596
EICHHOLZ, G.G.	147
EIFE, K.	5555
EIFE, K.H.	7144
EISELE, J.A.	6988
EISNER, U.	4410 7094
EL-SHAMY, H.K.	1856 2654
EL-SHERIF, A.	6215
ELDRIDGE, J.S.	822 1643 1934 1942 1943 1944
ELEJALDE, C.	7336
ELEK, A.	1615 4231 6826
ELKADY, A.	7900
ELLETT, W.H.	3443
ELLIS, W.H.	2534 2540 2772 6006
EMELEUS, V.M.	561 1132 7873
EMERY, J.F.	291 292 640 641 819 964 974 1031 1035 1268 1361 1635 1709 1715 1725 1727 1796 2533 2931 6935
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EMMERT, R.A.	4289
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ERLENMEYER, H. 7883

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FACCHINI, U.	151
FACETTI, F.	7986
FACETTI, J.F.	7986
FAIRCHILD, R.G.	7321 7968
FALCOFF, R.	2327
FAN, L.T.	7115
FANALE, D.T.	863
FARAGGI, H.	120
FARINELLI, U.	6004
FASOLO, G.B.	883 1097 1167 1254 1456
FAURE, J.	3991
FAURE, P.K.	6368 6402
FAVALE, A.J.	707
FEARING, H.W.	909
FEDOROFF, M.	6733 6829
FEDOROV, V.V.	1430
FELDMAN, I.I.	3462 5577
FELDMAN, M.H.	2584 2585 2637 6068 7999
FELKER, V.M.	2957
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FERGUSON, R.L.	1268
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FERRETT, D.J.	466 615
FEUERSTEIN, H.	2333
FIELDS, T.	938 1141 2125 2535 3710
FIESS, H.	1801
FIFIELD, F.W.	362 600
FILBY, R.H.	1432 1433 1480 1678 2509 2669 6941 6963 7243
FILIPPOV, E.M.	2966
FILIPPOVA, N.V.	3365
FINEMAN, I.	562 573 620 1114 3756
FINK, R.W.	77 157
FINK, W.C.	6209
FINN, J.J.	7111
FINSTON, H.L.	1860 3126 4194
FIREMAN, E.L.	158 563 721 6387
FIREMAN, P.	2730
FISCHER, E.	1523
FISHER, C.	51 159 564
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FISHMAN, M.J.	2656 4412
FITE, L.E.	574 642 845 1033 1058 1567 1702 1712 1721 1809 1866 1912 2586 2702 2740 3662 5434 6861 6937 7113 7346
FITTKAU, S.	6716
FITZGERALD, J.V.	274 275
FLACK, F.C.	7238 7239
FLECHON, J.	28
FLECKENSTEIN, A.	1704
FLEGENHEIMER, J.	1504
FLEISCHER, A.A.	1836 6598 7023
FLEISHMAN, D.M.	592 2553 7431
FLEROV, G.N.	301
FLETCHER, K.E.	5547
FLEURENCE, A.	1540
FLIEDER, D.E.	7195
FLIKKE, M.	5405
FLORKOWSKI, T.	5866
FODOR-CSANYI, P.	5348
FOGELSTROM-FINEHMAN, I.	160
FOLDZINSKA, A.	1862 6054 7093
FONTAN, J.	1543
FORBERG, S.	919
FORD, R.J.	7990
FOREMAN, J.K.	7953

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FORRO UNIVERSAL	653
FORSBERG, H.G.	562
FORSEN, S.	3965
FORSHUPVUD, S.	565 1225 2570
FORSLEV, A.W.	1422
FOSS, J.E.	7989
FOSTER, L.M.	161
FOUARGE, J.	162 2713 4303
FOUCHE, K.F.	4253 7210
FOURCY, A.	2736 2876 3991 4315 5445 5978 6281 6409 6704 6939 7242 7334 7404 7921
FOURNET, L.	760 821 851 879 1410 1699
FRADKIN, G.M.	1430
FRANA, J.	7220
FRANCOIS, P.E.	6730
FRANKE, K.H.	1000
FRANKE, R.	7919
FRANZ, I.	887
FRANZGROTE, E.	4289
FRASER, R.	1110
FRASER, T.R.	965
FREEDMAN, M.S.	163
FREEMAN, D.H.	7078
FREIBURG, C.	7428
FREMLIN, J.H.	6004 7372 7412 7426

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FREY, F.A.	6079
FREYBERGER, W.L.	169 171
FRIEDLANDER, G.	1777
FRISCHAUF, H.	1767 3358 3360 5947 6303 7877
FRITZ, B.	6593
FRITZ, G.J.	2540 2772
FRITZ, K.M.	2798 3357 3981
FRITZE, K.	550 6341 6407 6745 7072
FROHBERG, M.G.	2678
FRYER, G.E.	1684
FRYER, J.R.	1168
FRYKBERG, B.	1089
FUJII, I.	375 426 606 899 960 998 1015 1016 1038 1063 1115 1116 1399 1530 1656 1681 2649 2749 3768 5380 5431 5432 7114
FUJIMOTO, M.	5928
FUJINO, O.	5776 5777
FUJINO, R.	1170 1697
FUJINO, T.	1019
FUKAI, R.	164 165 409 758 823
FUKAO, Y.	2297
FUKASE, M.	2440
FUKUDA, K.	2711 7298
FULLER, R.K.	2553
FUNKHOUSER, J.	6399

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FURR, A.K.	4287 5744 6350
FURUHASHI, N.	5726
FURUKAWA, M.	1151 1194 1742 3995 7223
FURUKAWA, Y.	5919
FURUSHIMA, K.	7894
GADDA, F.	624 762
GAGE, S.J.	6319 8022
GAHN, R.F.	3085
GAITANIS, C.D.	161
GAITTET, J.	166 167 767
GALE, A.J.	91 92 1808
GALESLOOT, T.E.	5996
GALIANO SEDANO, J.A.	4249
GALIANO, J.A.	1833 2752 2753
GALLYAS, M.	5348
GAMBARYAN, R.G.	5317 6706 7110
GAN, R.	2634
GANAPATHY, R.	5716
GANGADHARAM, E.V.	7108 7196
GANGADHARAN, S.	1903 2602 2976 3560
GANGULY, A.K.	6331
GANIEV, A.G.	7135 7237
GARBRAH, B.W.	3466 5933 6367
GARDNER, D.G.	7915

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GARDNER, R.P.	700
GAREIS, F.J.	2121
GARREC, C.	6939
GARREC, J.P.	5445 5978 6939 7334 7338 7404
GARZON, O.L.	3474
GATROUSIS, C.	168
GATZ, D.F.	7312
GAUDE, G.	2797
GAUDIN, A.M.	169 170 171 445
GAUER, Z.E.	301
GAUTHIER, P.	172 173
GEBAUHR, W.	174 1118 1354 1731 1839 2769 2788 2840 7942
GEHL, M.A.	1474 1959
GELFMAN, A.Y.	4275
GELLI, D.	1406
GENAEVA, L.I.	6822 8006
GENERAL DYNAMICS	566 576 577 598 611 663 764 1279 1876
GEORGE, K.D.	6711
GEORGIEV, N.	984 2923
GERARD, J.T.	7938
GERBIER, R.	876
GERMAGNOLI, E.	2 1074 1095
GERRARD, M.	3803
GETOFF, N.	176

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GHINTURI, E.N.	7420
GIAMBASTIANI, R.	2930
GIBBONS, D.	19 177 178 179 180 574 626 642 769 852 1570 1807 1809 1815 1896 2525 3479 3491 3492 3497 3500 5409 6948 6974 7346 7874
GIBBONS, J.H.	8034
GIBELLO, A.	8004
GIBER, J.	6708 6990
GIETZ, R.J.	6341
GIJBELS, R.	1119 1425 2515 5363 5364 5940 6398 6723 6728 7006 7076
GILAT, G.	772
GILAT, J.	609 840 843 4194 5262 6983 7216
GILBERT, E.N.	2640 3730 3731 5336 5500 5619 5703 5787 6833 7118 7119 7212
GILL, R.A.	181
GILLESPIE, A.S., JR.	678
GILLINGS, B.R.D.	418
GILLIS, J.	1211 1221
GILLS, T.E.	8020
GILMAN, A.R.	58
GILMORE, J.T.	696 1258 1670 1738
GHINTURI, E.N.	3757
GIOVANNETTI, S.	6008
GIRARDI, F.	579 708 790 942 1042 1277 1281 1541 1573 1598 1676 1729 1755 1779 1878 2556 2757 2836 2901 3082 3724 3793 3985 5421 5980 5987 6016 6997 7051 7421 8003

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GIRARDI, G.	977 5583
GIRON, H.	7014
GIROUX, J.	5580
GIRSHIN, A.B.	4197 5435
GITLIN, D.	2730
GITTER, S.	772 1645
GIVENS, W.W.	7033
GLASSON, V.V.	1558
GLAZUNOV, M.P.	1227 2306 6720 7082 7083
GLEIT, C.E.	1478 1584 1655 1784 1844
GLENDENIN, L.E.	133
GLOS, M.B.	2670
GLOVER, E.D.	455
GLUBRECHT, H.	2803 5992 7889
GLUCK, P.	1586
GLUKHAREVA, N.A.	1286 2717
GOBBI, A.	1091
GOBRECHT, H.	2775 4299 4300
GODA, S.	1513 5777
GODAR, S.	639
GOEDERT, L.	5450 5451 5452 7419
GOEDKOOP, J.A.	6288
GOENVEC, H.	313
GOPMAN, A.K.	2717
GOHSHI, Y.	7201



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GOLANSKI, A.	7460 7962
GOLD, R.	184 185
GOLDBERG, E.D.	84 85 86 186 187
GOLDSCHMIDT, B.	188
GOLDSTEIN, G.	983
GOLDSTEIN, M.I.	538
GOLDSZTEIN, M.	6324
GOLES, G.G.	1122 5718 5936 6964 7869 7935
GOMEZ, H.	802 1734 2926
GOODE, G.C.	7948 8031
GOODMAN, C.	189
GORDIENKO, A.G.	4196
GORDON, B.E.	732
GORDON, C.L.	190 191 1605
GORDON, C.M.	1606 6936
GORDON, G.E.	5936 6970
GORDON, H.S.	77
GORDUS, A.A.	6209 6217 6224 6227 6241 6242 6244
GORIN, E.	2933
GORODETZKY, S.	4209
GORRELL, J.H.	6310 6753 7047 7059
GORSHKOV, G.V.	978
GORSKI, L.	621 1623 1859 3335 5866 6325 6844 6973 7351
GORSUCH, T.T.	192



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GOSHI, Y.	1509
GOSSET, J.	1263 6593 7015
GOTO, H.	193 805
GOTTE, H.	194 195
GOVAERTS, J.	203 747
GRABER, F.M.	2272 2350 3100 3101 4284 5979 6309 6712 6933 7246 7884 7944
GRAEFF, P.	6593 6597
GRAHAM, L.	2125 2535 3710
GRAHAM, W.W., III	8036
GRAKHOV, V.A.	5858
GRAMMAKOV, A.G.	978
GRAND, J.A.	729 1123
GRANDJEAN, P.	197
GRANT, L.G.	966 6006
GRAUDINYA, L.Y.	7133
GRAY, A.L.	1489 2507 2622 3750 4202
GRAY, F.B.	567
GREEN, D.E.	622 1907 3391
GREEN, F.L.	1590 1591
GREEN, J.L.	4226
GREENDALE, A.E.	634 3333
GREENE, R.E.	261 6320
GREENLAND, L.P.	4388 5307 5718 6443 6724
GREENWOOD, R.C.	665 713 1611 1783 1785 2146 3811

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GRIFFIN, J.B.	6227
GRIFFON, H.	198
GRILLOT, E.	32 200 202
GRIMANIS, A.P.	686 964 1725 1728 1971 2701 4272 5415 5935 5995 6942 6944
GROSEL, J.	1487 1840
GROSHEV, L.V.	948
GROSSE-RUYKEN, H.	1592 2621 7145 8005
GROSSMANN, K.D.	1633
GROSSMANN, O.	1632
GROSSO, P.	1965 3957 6397
GROTHE, K.H.	1578
GROVE, G.R.	1609 1637 2591 2596
GRUMMITT, W.E.	1890
GRUNEWALD, R.	1259
GRUVERMAN, I.J.	652 699 1124
GUAZZONI, P.	1046
GUCZI, L.	664
GUEBEN, G.	203
GUEST, A.	6735
GUINN, V.P.	183 205 444 568 569 592 659 716 733 846 934 935 1014 1034 1056 1327 1355 1451 1482 1488 1508 1620 1649 1665 1868 2144 2348 2383 2517 2595 2598 2605 2607 2653 2782 2790 2791 2792 2939 2959 3028 3063 3072 3077 3486 3495 3498 3504 3505 4286 5979 6020 6025 6034 6225 6305 6333 6751 6840 6929 7126 7140 7191 7350 7417 7943 8009 8030

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GUNNINK, R.	5587 7066
GUNTHER, F.A.	2347
GUREEV, E.S.	3395 5857 6200 7134
GURFINKEL, Y.	609 840
GUSINSKII, G.M.	4197 5435
GUSTAFSON, P.F.	938 2552 8017
GUTENMANN, W.H.	6437
GUTTMANN, S.	1020
GUZZI, G.	1573 1676 1729 1755 1779 1878 1919 2556 3082 3793 5421 5583 7051 8003
HADZISTELIOS, I.	6942
HAERDI, H.	1321
HAERDI, W.	356 690 906 915 940 1217 1397 1426 1535 1536 2481 2623 2626 3996 3997 4309 6335 7080 7156 7160 7161 7956
HAFNER, J.W.	6453
HAGGAG, A.	5369
HAHN-WEINHEIMER, P.	6741
HAHN, K.J.	2434 2445 3062 6328 7215
HAHN, P.B.	5699
HAHN, R.B.	7977
HAHN, R.L.	153 201 1065 2259 2531 3071 4193 6579
HAIGH, C.P.	206 207
HAINES, K.	6743
HAJDUKOVIC, G.T.	1274

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HALDAR, B.C.	677 2811 6086 6738 6980 7359 7374 7376
HALE, F.H.	908 1083
HALL, E.	1132
HALL, E.T.	7873
HALL, H.E., JR.	1683
HALL, J.D.	2504 5578
HALL, T.A.	208
HALLABA, E.	6721
HALLER, W.A.	6012 6058 6360 6941 6963 7042 7077 7125 7243
HALLETT, R.	7052
HALVERSON, G.	910
HAMADA, K.	1929 5969
HAMADA, S.	2440
HAMAGUCHI, H.	209 211 410 571 572 575 585 776 778 779 820 922 1125 1127 1128 1154 1155 1174 1176 1307 1385 1693 2283 2340 3755 6220 6379 6445 6729 6864 6962 7223
HAMAMOTO, K.	2440
HAMANN, W.	2813
HAMBUCKEN, J.	7917
HAMELIN, R.	1503
HAMMAR, L.	3965
HAMPTON, W.J.	946 2662 7111
HAN, I.G.	2540 2772
HANAPPE, E.	6213

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HANDA, M.	604
HANDLEY, T.H.	1351 6709
HANS, A.	7290 7291
HANSON, H.	6716
HAPP, W.W.	213
HARA, R.	947 1694 1908
HARBOTTLE, G.	7937
HARDEN, R.M.	6047
HARLEY, N.	7063
HARMISON, L.T.	2665 2722 3475
HARRAP, V.	2376
HARRIS, J.A.	1795 2559 2579 2688
HARRIS, W.F.	1589
HARRISON, A.	543 7902
HARRISON, G.E.	214
HARRISON, G.M.	6937
HARRISON, P.E.	7957
HARRISON, W.W.	6955
HART, D.M.	6312
HARTLEY, H.O.	2691 2706
HARWARD, M.E.	6442
HASEBE, N.	7906
HASHIMOTO, J.	211
HASHIMOTO, M.	6859
HASHIMOTO, Y.	2672 6859

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HASHITANI, H.	2683
HASKIN, L.A.	728 909 1383 1474 1959 5852 5939 6343
HASKIN, M.A.	6343
HASKINS, J.	2124
HASSELLTINE, E.H.	3788 7308
HATTEMER, J.A.	194
HATTORI, D.M.	6922
HATUDA, Z.	1531 5328 5867
HAUMONT, S.	2633
HAVEN, G.T.	1975
HAVEN, M.C.	1975 3062
HAVENS, W.W., JR.	503 505 506
HAWKINS, R.H.	7127
HAYASHI, S.	4240
HAYASHI, Y.	7295
HAYES, D.W.	4219
HAZLETON NUCLEAR SCIENCE CORPORATION	668
HEADRIDGE, J.B.	3336 5342
HEADY, H.H.	500 2498
HEAGAN, B.	7188
HEALY, W.B.	2881 4232
HEATH, R.L.	2684 7038
HECHT, F.	813 982 1526 1564 2296 7304 7306
HECKER, A.B.H.	3105

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HECKER, R.	1612
HEDGES, D.H.	2848
HEGEDUES, D.	1614 1832 2806
HEINEN, K.G.	3514
HEINTZ, P.H.	5733
HEIZER, R.F.	6391
HELBY, P.	943
HELLSTROM, S.	2604
HENDEL, H.W.	21
HENDERSON, P.	5406
HENDRY, C.O.	6598
HENITZ, P.A.	4283
HENKELMANN, R.	3986 6370 7194 7337
HENNESSEN, J.A.	2124 6309 6712 6933 7246
HENNINGER, W.A.	1124
HENO, Y.	5520
HENRY, C.N.	6713 6714
HENRY, W.M.	69 1026 1951 2652
HERAK, M.J.	1581
HERFORTH, L.	1130
HERMANN, A.	6378
HERNEGGER, F.	143 217
HEROLD, C.	1193 1344
HERPERS, U.	5591 6369 6689 7241

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HERR, W.	100 218 219 222 223 224 225 226 347 683 1345 1612 2644 5591 5592 6369 6689 7241
HERRMANN, G.	761
HERRMANN, R.	5988
HERZOG, W.	100
HESLOP, J.A.B.	622 1312
HESLOP, R.B.	7931 7932
HESS, B.	7241
HEVESY, G.	227 228
HEYDEGGER, H.R.	7933
HEYDORN, K.	2696 3098 3099 3100 4314 5983 6946 7396
HEYMANN, D.	5262
HIGASHI, K.	1325 3773
HIGASHI, T.	5927
HIGH VOLTAGE ENGINEERING CORP.	647 1837 1838 1854
HIGHTOWER, D.	1452
HIGUCHI, H.	2340 3994 6220 6379 6445 6729 6962
HILL, M.E.	6209
HILL, N.	1458 7081
HILL, W.W.	678
HILTON, D.A.	1428 2846
HIMES, D.	5745
HIMMEL, L.	346
HINES, C.R.	4413



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HINES, J.	2516
HINGORANI, S.B.	2977
HINN, G.	8012
HINOSHITA AND SUJI	1758
HIRAI, H.	7300
HIRANO, S.	424 754
HIRAO, Y.	7223
HIRAOKA, T.	1929
HIRAYAMA, T.	1929 5969 7328
HIROSE, Y.	403 2418 3033
HIRSCHFIELD, J.	557
HISADA, T.	5927
HISLOP, J.S.	3461 3790
HOEDE, D.	2838 7408
HOFFMAN, C.M.	2648 4263 6021 6030 6036 6048 6951 7909
HOFFMAN, E.	7059
HOFFMANN, W.	2657
HOFFMEISTER, H.	2728
HOFFMEISTER, W.	226
HOFLER, H.	7303
HOFSTETTER, K.J.	5403
HOGDAHL, O.T.	1335 1641 1945 3482 5359 5873 6228
HOLLAND, W.D.	692 1584 1655
HOLLAND, W.W.	1478

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HOLLANDER, J.M.	1795 2559 2579 2688 4280
HOLM-HANSEN, O.	160
HOLM, D.M.	1604 2949 3970 3977 5417 5752 5769 6456 6589 6752 7045 7162
HOLM, V.	6673
HOLMES, T.H.	550
HOLT, J.B.	346 1483
HOLTZMAN, R.B.	1439
HOLZL, J.	1534
HONDA, M.	7981
HONDA, Y.	5926
HONGO, S.	6860
HONJO, T.	5776
HOOD, D.W.	273 422 586 2848 4219 4255
HOOTON, B.W.	1951
HOPKINSON, E.C.	996
HORI, R.	1395 2973 3769
HORIE, K.	7981
HORIGUCHI, Y.	3773 6858
HORN, M.K.	2107
HORNNES, N.	405
HORNSBY, J.B.	2433
HORSLEY, J.	7406
HORWOOD, J.L.	213
HOSOHARA, K.	211 571 572 1127 1385

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HOSTE, J.	87 229 304 305 306 552 581 687 691 886 893 950 1064 1066 1085 1119 1211 1221 1388 1425 1500 1707 1735 1827 1841 1969 2430 2431 2497 2515 2610 2612 2613 2643 2715 3411 3485 3993 4254 5349 5363 5364 5381 5385 5398 5447 5730 5772 5808 5940 5961 5962 5963 5964 6043 6218 6354 6383 6394 6395 6398 6408 6446 6696 6723 6728 7006 7076 7226 7227 7254 7289 7325 7360 7395 7876 7930 7934
HOUSTON, C.D.	2505 3070
HOUTMAN, J.P.W.	1825 2562 2755 6013 6019 6061 6592 6849 6924 6954
HOWARD, P.K.	1917
HOWIE, R.A.	1977 7087
HOYTE, A.F.	2720 6222
HSIA, R.C.H.	1108
HSIEH, S.	5717 6403
HSU, K.	1687
HSU, P.L.	5437
HUANG, H.M.	5437
HUARINGA, M.	230
HUBNER, U.	649
HUDGENS, J.E., JR.	231 232 233 234 617 1357
HUGHES, D.J.	746
HUGHES, J.D.H.	5932
HUGHES, T.C.	1222
HUIZENGA, J.R.	39 40 41 42 146 1076
HUKAI, Y.	1898

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HULL, D.E.	696 1258 1670 1738
HULL, R.L.	3355
HUME, D.N.	71
HUMMEL, R.L.	1737
HUMMEL, R.W.	235 236
HUNT, L.H.	1979
HUNT, L.P.	1803 5347
HURE, J.	38
HUTCHIN, W.H.	719
HUTCHINSON, W.P.	237
HYODO, H.	3341
IBERT, E.	1033 1058 1712 1721 1912
ICHIJIMA, I.	6856
ICHIMIYA, T.	7870
IDDINGS, F.A.	348 1437 2518 2519 6975 7120 7392
IDENO, E.	779 1155 1693
IIO, M.	6853 7993
IKEDA, N.	2800 7906
IKEDA, S.	805
IKEMOTO, S.	5927
IKEYA, M.	2804
IL, K.W.	7916
ILIFF, T.L.	2664
ILLSLEY, C.T.	2549

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IMAI, I.	7019
IMAI, S.	5924
IMAI, T.	1679
IMAMURA, M.	7981
IMOTO, M.	5872
INAMOTO, K.	6857
INGELS, O.	6715
INOUE, Y.	193
INOUE, T.	7114 7221
INTERNATIONAL ATOMIC ENERGY COMMISSION	76
IONOV, V.P.	1227
IREDALE, P.	238 1136
IRVING, G.	742
IRVING, H.	239 240 478 526
ISAEVA, E.A.	869 1223
ISENHOUR, T.L.	1580 1984 1985 2514 3741 4397 5733 6046 6380 7034 7904
ISHIBASHI, N.	1514
ISHIDA, K.	1391 3414
ISHIHARA, M.	1723
ISHII, D.	403 1510 2418 3033 8040
ISHIKAWA, H.	7297
ISHIMORI, T.	1019
ISLAMOV, T.	5857 6200 7134

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ISONO, H.	7996
ISOTOPES	1405
ISOTOPICS	582
ISRAEL ATOMIC ENERGY COMMISSION	2603
ISSEROW, S.	58
ISTVAN, P.	1695
ITANI, M.	4302
IVANOV, G.V.	7118 7119
IVANOV, L.I.	2660
IVANOVA, V.F.	905
IWAI, M.	5386
IWAI, Y.	7316
IWASAKA, T.	5872
IWASE, T.	6853 7993
IWASHIMA, K.	999 7887
IWASHITA, F.	5425
IWATA, S.	7357
IYA, V.K.	2473
JACKSON, A.L.	6360 7042
JACOBSON, A.	938
JACOBSON, E.C.	1803 2480 2496
JACQUEMIN, R.	5989
JAGANNADHA RAO,	7375
JAKOVLEV, J.V.	241

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JAKOVLEV, T.U.V. 3732  
 JAKOVLEV, Y.V. 7423  
 JAKOWLEW, J.W. 902 1203  
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 JAMIESON, J.M. 8036  
 JAMIN-CHANGEART, F. 1621  
 JANCZYSZYN, J. 3335 6325 6844 6973 7351 7387  
 JANKE, J. 1704  
 JANOT, P. 5765  
 JANSEN, C. 7137  
 JASKOLSKA, H. 210 248 249 1133 1135 2444  
 JEFFERY, P.G. 1677 1961 3948  
 JENKINS, E.N. 250 251  
 JENKINS, W. 6744  
 JERCHEL, D. 437 438  
 JEROME, D.Y. 5718 6584  
 JERVIS, R.E. 252 325 326 349 584 706 726 970 1736  
 1737 2143 2548 2666 5981 6018 6041  
 6210 6307 6308 6314 6315 6835 6863  
 6952 7017 7031 7348 7383 7384 7430  
 JESSEN, P.L. 316 324 1956 7027  
 JESTER, W.A. 4285 5510 6710 6984 8024  
 JEWETT, G.L. 1803 2480 2496  
 JIMENEZ, A.T. 1464

## ACTIVATION ANALYSIS-AUTHORS

JIMENEZ, P.	1809 1912 2707
JINNO, K.	8040
JIRLOW, K.	1910 5860 6694
JOHANNING, H.	6741
JOHANSEN, O.	50 2739 3079 3961 4195 5713 6212 7913
JOHN, J.	8014
JOHNSON, D.G.	3960
JOHNSON, F.F.	1680
JOHNSON, G.F.	1041
JOHNSON, J.F.	860
JOHNSON, P.	2969
JOHNSON, P.F.	6846 7425
JOHNSON, R.A.	732 1355 1627 2252 3809 7044
JOHNSON, R.G.	45 46 49
JOHNSTON, W.H.	632
JOLY, M.	1105
JONA, F.	881
JONES, L.V.	1609 1637 2591 2596
JONES, R.E.	274 275 1956
JONES, W.T.	2433
JORDAN, E.D.	1336 1337 1423 7286
JOWANOVITZ, L.S.	727 907
JOZEFOWICZ, K.	923
JULIANO, J.O.	630 1782 2963 4215 5551



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JULIANO, P.O.	5551
JUNA, J.	7285 7361
JUNKINS, R.L.	3748
JUNOD, E.	1706 1819 2557 2587 6690
JURS, P.C.	4397 7034
KAHN, M.	6374
KAHNG, M.W.	738
KAINDL, K.	1703 3360 7877
KAISOV, R.L.	1430
KAISER, D.G.	254 811 844 1001 1314 1692
KALICHEVA, I.S.	1493 2474
KALININ, A.E.	7165
KALININ, A.I.	799 870 2523 3383 7164 7166 7167 7168
KALNACH, L.P.	7133
KAMADA, H.	2711
KAMAN NUCLEAR	658 2576
KAMATA, S.	1514
KAMATH, P.R.	2984
KAMEDA, H.	7993
KAMEDA, K.	757 1257
KAMEGAYA, K.	7222
KAMEI, M.	7894

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KAMEMOTO, Y.	215 604 608 774 775 776 777 945 956 957 992 994 995 997 998 1003 1004 1009 1139 1140 1176 1200 1261 1272 1299 1300 1349 1374 1403 1409 1413 1418 1420 1491 1497 1533 1631 1682 1693
KAMINISHI, T.	631
KAMINSKI, J.W.	7899
KANABROCKI, E.L.	1141 2125 2535 3710 6922
KANIJ, J.B.W.	2755
KANT, A.	255
KANTOR, S.A.	3462
KAPLAN, E.	938 1141 2125 2535 3710
KAPLAN, E.P.	1218
KAPLAN, L.	256
KAPLAN, S.A.	6010
KARAJANOVA, G.I.	6994
KARALOVA, Z.K.	4391
KARASEV, B.V.	904 1062 1393
KAREV, V.N.	7214 7923
KARK, R.M.	1311
KARLICEK, V.	5774
KARLIK, B.	1821
KARNAUCKOVA, N.M.	6994
KARPUKHIN, O.A.	2564 3751
KARTASHEV, E.R.	5317 7342
KARTTUNEN, E.	7915

## ACTIVATION ANALYSIS-AUTHORS

KASHKAROV, L.L.	6822 8006
KASPEREK, K.	7224
KASYMOV, A.K.	5621
KATAKURA, Y.	5393
KATO, H.	516
KATO, P.H.	15
KATO, R.	4240
KATO, T.	1402 1481 1765 2744 5308 5311 5379 5868 6351 6676 6677 6678 7920
KATO, Y.	6727
KAURANEN, P.	1630
KAWABUCHI, K.	1125 1385 3414
KAWAI, H.	5926
KAWAI, K.	2804
KAWAI, M.	1307
KAWAI, N.	7177
KAWAKAMI, Y.	6859
KAWASHIMA, T.	585 602 1142 1208 2502 2920 3770
KE, C.H.	531 1096 1131
KEANE, J.R.	7123
KEAYS, R.R.	5717 6405
KEENAN, C.W.	1351
KEENAN, R.G.	2539 2937
KEEPIN, G.R.	3841 6713
KEGEL, G.H.R.	6371

## ACTIVATION ANALYSIS-AUTHORS

KEHLER, P.	961
KEIMATSU, S.	2711
KEISCH, B.	1326 2546
KELEN, E.	1617
KELLER, K.A.	7946
KELLER, O.L., JR.	7192
KELLER, R.A.	2680
KELLERSHOHN, C.	570 882 1105 1143 1278 3745 5998 6304 6932 7084 7240
KELLEY, W.D.	952
KEMP, D.M.	257 587 1145
KEMPCHINSKY, P.C.	3073
KENNA, B.T.	1051 1112 1946 2568 4228 4274 6062 6374 7957
KENNA, L.A.	1051
KENNEDY, J.H.	944 2938
KENNEDY, J.W.	1777
KENNINGTON, G.S.	2756 4281
KENT, R.A.R.	1
KERDEL-VEGAS, F.	7089
KERNFORSCHUNGSANLAGE, JULICH, WEST GERMANY	5362
KERR, M.F.	706
KERRIGAN, F.J.	3776
KERTESZ, L.	4190 5945
KERWICK, W.	1590

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KESSLER, W.V.	4329
KETELLE, B.H.	258
KEYNES, R.D.	259
KHAIDAROV, A.A.	924 1162 1550 1551 1553 1554 1555 1556 1557 1585 3362 3385 5857
KHAKDAROV, N.A.	7134
KHAKIMOV, M.	5621
KHALIFA, K.	5729
KHALIKOV, T.	6301
KHALIN, N.F.	7214
KHAN, A.A.	2984
KHARABADZE, N.E.	3757
KHERA, A.K.	7896
KHOLIN, A.I.	1559
KHOTAMOV, S.	6295
KHRISTIANOV, V.K.	904 1062 1393 2303 6366
KHUDAIBERGANOV, A.	3369 3370 3371 3760
KHUSNUTDINOV, R.I.	2979 3472 3473
KIBA, T.	4311
KIENBERGER, C.A.	261
KIENLE, P.	862
KIESL, W.	982 1264 1273 1526 1564 2296 2601 2950 4268 6957 7304 7306
KIGOSHI, K.	411 1212 1401
KILLICK, R.A.	221 262 363 364 365 366 601 792 1146 1147 1182 1183 1184 3530

## ACTIVATION ANALYSIS-AUTHORS

KIM, C.K.	636 74ñ 953 1137 1201 2551 3342 3344 6080 7982
KIM, J.I.	1749 1969 2610 2612 2613 3342 3713 7337
KIM, Y.S.	4296
KIMBERLIN, J.	3476 7107
KIMEL, W.R.	7115
KIMURA, K.	916 5926 7906
KIMURA, Y.	5926
KINBARA, A.	1496
KING, E.R.	136 487 488 489 730
KING, R.W.	3027
KINSEY, R.J.	1590
KINSLEY, M.	1860
KIRCHMANN, R.	459 1484 2773 5989
KIRCHNER, J.F.	1586
KIREEV, V.A.	6705
KIRK, P.L.	1149 6026
KIRNOZOV, F.F.	905
KIRYANOV, G.I.	2561
KISHITANI, M.	4240
KISS, I.	664
KIST, A.A.	1207 1548 1769 3388 3395 3736 6295
KJELBERG, A.	2754
KJELLIN, K.G.	1287 1421 6009

## ACTIVATION ANALYSIS-AUTHORS

<JENSLI, O.	6687
<LAUS, E.E.	4285 5510
<LECKOVA, E.	1588
<LINE, J.R.	2552 3005 3345 7988 7989
<LOPFER, E.	1602 2761
<LUGER, F.	2296
<NIGHT, A.	6358 6368
<NOLLE, K.	4289
<NOTEK, O.	1610
<NOWLES, F.E., JR.	1982
<NOX, R.J.	5384
<NUDSON, A.R.	5543
<NUTSON, R.A.	555
<O, W.H.	4347
<OBALADZE, M.G.	1329
<OBAYASHI, A.	5327
<OBAYASHI, M.	756 806 1325 1338 1468 1469 1700 3771 3773 5749 5920 6045 6859
<OCH, B.	1848
<OCH, H.	1130 1633 1848 2723 2724 2725
<OCH, H.J., JR.	263
<OCH, R.C.	588 643 676 705 1326 2546
<OCHEROV, N.P.	3394
<OCHEVANOV, V.A.	7117
<ODIRI, S.	7366

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<ODOCHIGOV, P.N.	1227 2306 6720 7082 7083
<OEHLER, W.	1958
<OGA, T.	5926
<OHLER, W.	2625
<OHMAN, T.P.	3934
<OHN-ABREST, M.E.	3726
<OHN, A.	264 265 266 896 1339 1473 1503
<OHN, H.W.	267
<OHN, R.E.	1590 1591
<OJIMA, C.	631
<OLAR, R.D.	1785
<OLASKI, H.	7090
<OLCHINA, A.G.	978
<OLESOV, G.M.	1493 2474 6822
<OLOMIITSEV, M.A.	2957
<OMAROV, A.N.	7252
<OMIYA, K.	6851 6852
<ONAMI, Y.	7920
<ONANYKIN, L.V.	7924
<ONDO, M.	5872
<ONDO, Y.	2800 6854 7315 7316
<ONECNY, K.	7285 7361
<ONIG, H.	142 143 268 269 529
<ONISHI, J.	2440
<ONO, T.	4240



## ACTIVATION ANALYSIS-AUTHORS

KOPINECK, H.J.	2615
KOPP, E.	5592
KORBEL, K.	3335
KORNBERG, H.A.	2738 2971
KOROBKO, M.I.	4196
KOROBOV, S.S	904
KOROTKOVA, V.A.	1049
KORTHOVEN, P.J.M.	5740 6330
KOSHIMIZU, Y.	5327
KOSTA, L.	2882 7413 7927
KOSTER-PFLUGMACHER, A.	2678
KOTELNIKOV, G.A.	6053 6072
KOTELNIKOV, L.A.	7949
KOTT, J.	5774
KOVACINA, T.A.	1568
KOVALENKO, L.I.	7923
KOVANIC, P.	7918
KOWALSKI, B.R.	6046
KOYAMA, M.	5919
KOZHEVNIKOV, D.A	5554
KOZIOROWSKI, J.	5952
KOZMINSKA, D.	1245
KOZUKA, H.	112 7996
KRAAY, C.M.	6570 7873

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KRAMER, H.W.	1150 1334 1340 1790 2382 2662 2676 2690 2789 5953 6393 6711 7111 7141
KRAMER, J.	2779
KRANER, H.W.	2694 2762
KRATOCHVILOVA-TALPOVA, M.	1948
KRAUCH, H.	684
KRAUSS, O.	6069
KRAVTSOV, V.V.	7411
KREIENBUHL, L.	1159
KRISHNAMOORTHY IYER, R.	1596 1903 2602 7375
KRISHNAN, S.S.	3065 5750 6035 6311 7086
KRISTAK, J.	7220
KRITALUGSANA, S.	7099
KRIVANEK, M.	2358 3396 4306 5984 6024 6294 6337 6692 6825 7174
KRIVIT, W.	657 1799 7188
KRIVOKHATSKII, A.S.	5318
KROBER, M.S.	2969
KRUGER, P.	652 699 2554 6927 6928 8023
KRYLOV, B.E.	3362
KUBOTA, M.	2464
KUCHAVA, N.E.	3757 7420
KUDINOV, B.S.	5782
KUDO, K.	1018 2887 4298 5753 5922 5928
KUEHNE, F.J.	3075 5383
KUHN, W.K.G.	6461

## ACTIVATION ANALYSIS-AUTHORS

<UIN, P.N.	6580
<UKHARENKO, N.I.	1430
<UKOC', A.	7945
<UKULA, A.F.	1519
<UKULA, F.	2358 2878 3396 3975 4306 5335 5984 6024 6294 6337 6667 6825 7174
<ULAK, A.I.	270 544 545 662
<ULUS, E.	7236
<UMAMARU, T.	7295
<UMAMOTO, T.	7991
<UNO, H.	2437
<UPER, A.B.	4347
<URIYAMA, S.	5922
<UROCHKIN, S.S.	1358
<URODA, P.K.	5716
<URODA, R.	571 572 575 820 922 1127 1128 1385 2283 3414
<UROSAWA, R.	1320 1672 7293 7331
<UROSU, H.	1338
<USAKA, Y.	271 272 589 628 827 1111 1152 1202 1267 1315 1656 1879 3764 5566 5924 6352 6436 6842 6850 7893
<USCH, W.	621 1859
<USUGI, T.	8041
<UTSEV, V.S.	75
<UUSI, J.	6977
<UVIK, V.	1974 5426

## ACTIVATION ANALYSIS-AUTHORS

KUWAHARA, H.	7332 8008
KUYKENDALL, W.E.	273 590 1359 3461 7872
KUYPER, E.	107
KUZMINSKII, A.S.	3729
KUZNETSOV, K.F.	2750 7100
KUZNETSOV, R.A.	870 2523 3383 7117 7164 7165 7166 7167 7168 7949
KUZNETSOVA, G.A.	2717
KUZNETSOVA, R.A.	799
KWIECINSKI, S.	2934 3335 6325 6844 7399
LA FLEUR, P.D.	7005 7154 7182 7960 7964 8020 8027
LACOMBE, P.	7200
LACOMBLE, M.	7291 7917
LACOMBLE, M.	7290
LACONI, A.	2964
LACROIX, M.J.	6594
LAMAIE, G.	1890
LAING, K.M.	274 275
LAJOS, V.	1695
LAKSHMANAN, S.	738 2141 2665 2722 5407 5743 5747 7204 7985
LAM, C.F.	2529 2704
LAMB, J.F.	2688 5768 6588
LAMBERT, J.P.F.	6359 6940 7908
LAMBRECHT, R.M.	6321

ACTIVATION ANALYSIS-AUTHORS

LAMBREV, V.G.	7388
LAMM, A.	1503
LANDRY, J.W.	3074
LANDSTROM, O.	2852 3808 5771 5785 6965
LANFRANCO, G.	5344 5345 6323
LANG, W.	5988
LANGEROVA, I.	1660 3334
LANGHAM, W.H.	4227
LANGHENRICH, W.	887 888
LANGHOFF, J.	226 1345
LARANJEIRA, M.	37
LAROCHE, G.	1470
LARRABEE, G.B.	2376 3514
LARSEN, R.P.	7397
LARSON, G.V.	72
LARSON, R.E.	1606 6936 6988
LASCH, J.E.	439 1356 1424
LAUL, J.C.	6972
LAUNE, J.	7863
LAURENT, A.	6690
LAUTTMAN, R.G.	21
LAVERLOCHERE, J.	637 789 833 834 835 836 853 872 890 901 1045 1046 1165 1360 1667 1706 1759 1819 1983 2557 5444 5593 6987 7121 7151 7313
LAVERTY, A.	3073

ACTIVATION ANALYSIS-AUTHORS

LAVRUKHINA, A.K. 1441 1493 2474 3754 5759 6822 7235  
 7424 8006  
 LAW, J. 7392  
 LAWRENCE RADIATION 2801  
 LABORATORY  
 LAWSON, D. 2525 6948 6974  
 LAZZARINI, E. 1415  
 LBOV, A.A. 591 784 921 1007  
 LE HERICY, J. 1378 6410 6412 6568  
 LE POEC, C. 570 2558  
 LE STRAT, J. 5444  
 LEAFER, M.A. 5751  
 LEAVITT, W.Z. 446  
 LEBOEUF, M.B. 509 2599 3117  
 LECHTMAN, H.N. 1834  
 LECLERC, P. 1503  
 LEDDICOTTE, G.W. 43 54 55 56 79 80 81 82 83 277 278  
 279 280 281 282 283 286 287 288 289  
 290 291 292 293 294 295 296 297 298  
 300 329 640 641 654 685 722 735 763  
 819 859 946 963 964 973 974 981 1031  
 1035 1039 1060 1088 1189 1190 1268  
 1316 1350 1351 1361 1476 1635 1638  
 1674 1709 1725 1727 1728 1746 1796  
 2931 3483 6028 6051 6926 6934 7137  
 7184 7218 7356  
 LEE, C. 2888  
 LEE, C.J. 3344  
 LEE, D.M. 5768 6588  
 LEE, H.M. 5941

## ACTIVATION ANALYSIS-AUTHORS

LEE, J.	6307
LEE, M.B.	1033
LEE, N.D.	1351
LEE, N.K.	5323
LEE, S.	786
LEE, W.	931
LEE, Y.H.	5323
LEE, Y.Y.	5991
LEHMAN, R.L.	1495
LEIBETSEDER, J.	5994
LEIMDORFER, M.	5261
LEIPUNSKAYA, D.I.	301 1430 1445 1558 2617 2750 3366 3368 3462
LELIAERT, G.	302 303 304 305 306 689 866 880 893 986 1156 1234
LEMBERG, I.H.	5435
LEMBERG, I.K.	4197
LEMBERT, I.K.	149
LENCHENKO, V.M.	1561
LENIHAN, J.M.A.	134 307 308 309 310 406 593 638 1461 1669 2581 2719 2943 2985 3477 3490 3503 3512 3745 5847 6027 6920 7084 7085 7190
LEONARD, B.H., JR.	4251
LEONHARDT, W.	655 1157 1158 1343 1344 1675 7079
LEPETIT, H.	2802 4260
LEPOEC, C.	1105 1143 1824 6304



## ACTIVATION ANALYSIS-AUTHORS

LERCH, P.	197 1159
LESBATS, A.	2550
LEUSHKINA, G.V.	2385 3384 6454 7925
LEVANDER, O.	7908
LEVENTHAL, L.	1478
LEVEQUE, M.P.	311
LEVEQUE, P.	38 104 312 313 332 756 1503 7381
LEVI, H.	227 228
LEVINE, A.S.	2546
LEVINE, C.A.	1160
LEVY, H.B.	5587
LEWIS, J.E.	399 979
LEWIS, J.N.	52 53
LEWIS, M.N.	491
LEWIS, P.R.	259
LEY, J.	1779
LIDEN, K.	6746
LIEBERMAN, K.W.	2991 5775 7386
LIEBSCHER, K.	6837
LIESER, K.H.	3105 5422
LIESSENS, J.L.	7226
LIGHTOWLERS, E.C.	1161 1269
LIHL, F.	3418 4308
LIMA, F.W.	1650 2904 2930 5358 5850 5851 6039 6674 7407 7422



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LIN, C.Y.	1096 1131
LIN, S.C.	5323
LINACRE, J.K.	1853
LINDNER, M.	828
LINEKIN, D.M.	5977 6931 7186
LINEKIN, G.L.	8010
LING, S.M.	6010
LININGER, R.L.	6365
LINN, T.A., JR.	5958 6050 7311
LINNENBOM, V.J.	315 6843
LINSTEDT, K.D.	2554 6928
LIPP, H.H.	7994
LIPSCHUTZ, M.E.	6972
LISK, D.J.	6437
LISOVSKII, I.P.	7969
LIVINGOOD, J.J.	443
LIVINGSTON, H.D.	1980 2573 3982 4267 6003 6455 7369 7370
LJUNGGREN, K.	317 318 562 573 594 682 791 1651 2563 7871
LLOYD, K.W.	4322
LOBANOV, E.M.	924 1162 1207 1546 1547 1548 1549 1550 1551 1553 1554 1555 1556 1557 1561 1585 1769 2385 2979 3088 3089 3361 3362 3369 3370 3371 3372 3384 3385 3386 3388 3395 3464 3472 3473 3736 3760 3766 4262 5320 5581 5705 5706 5707 5857 6295 6454 7132 7134 7229 7925

## ACTIVATION ANALYSIS-AUTHORS

LOCK, C.J.L.	6735
LOCKHART, L.B.	1123
LOEILLOT, A.	815 879
LOEPFE, E.	2481 3989 4309 5942 7160
LOEUILLET, M.	1263 6593 7015 7106
LOFBERG, R.T.	7976
LOGERQUIST, B.A.	1572
LOMBARD, S.M.	5733 6380 7904
LOMER, P.D.	1701 2527
LONG, J.V.P.	319
LOOS, R.	848
LOPOVOK, T.A.	1440
LORIA, G.	759
LOS ALAMOS SCIENTIFIC LABORATORY	5330
LOSKA, L.	3335 6325 6844 6973 7351 7387
LOTZSCH, W.	7379
LOUCKS, R.H.	6921
LOVE, D.L.	634 3333 5376
LOVERIDGE, B.A.	177 320 467 595
LOVERING, J.F.	656 1180 1494 1498 1502 3774 5719 6739 7386 7990
LOVETT, J.E.	321
LOWE, K.	6402
LOWE, L.F.	322 6226

## ACTIVATION ANALYSIS-AUTHORS

LOWENHAUPT, F.H.	4226
LOWMAN, F.G.	1970 5387
LOWMAN, J.T.	657 1799 7188
LUCAS, D.M.	7323
LUCAS, H.F., JR.	7061
LUCKNITSKY, V.A.	6994
LUDWIG, T.G.	4232
LUKAC, P.	5859 6847
LUKENS, H.R.	323 507 599 659 861 1014 1163 1327 1424 1537 1620 1900 1947 2144 2251 2272 2350 2553 2595 2598 2663 2696 3028 3072 3100 3101 4284 4314 5694 5979 6313 6344 6751 6953 7021 7068 7431 7879 7884 7943 7944
LUNDBERG, M.	741 968 1512
LUNDE, G.	1205 2739 6023 6052 7211
LUNDEN, A.	100
LUNDGREN, F.A.	1864
LUNDGREN, S.	919
LUPICA, S.R.	6935
LUSHRAUGH, C.C.	2422
LUSSIE, W.G.	2530
LUSTINEC, J.	2748
LUTZ, G.J.	1560 4224 6332 7016 7055 7155 7964 8037
LUX, F.	832 1525 2625 3988 6737 6947
LUZANOVA, L.M.	7380
LYKINS, J.H.	327

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LYON, W.S.	735 1635 1642 1643 1847 1935 2600 2673 2682 5710 5974 6327 6935 7183 7352 7892
LOYD, K.W.	4321
MAC ARTHUR, I.R.	7172
MAC GREGOR, M.H.	917
MAC KENZIE, J.K.	2251 2350 7944
MACHIROUX, R.	6444
MACKINTOSH, W.D.	252 325 326 349 416 706 726 920 970 7517 7430 8028 8039
MACKLIN, R.L.	327
MADAN, P.B.	6717
MADDOCK, R.S.	345 1164 1698 1733 6332 7055
MADIGAN, S.B.	2782
MADIGAN, S.C.	2790
MAEDA, S.	1338 3771 3773 6859
MAEDA, T.	4207 7282 8001
MAES, K.	1828
MAGGIORE, O.	6008
MAGNO, P.J.	1982
MAGRO, G.	5999
MAHLMAN, H.A.	80 289 329 1088
MAHONY, J.D.	105 1318 1599 1831
MAK, B.K.	3783
MAKASHEVA, I.E.	149 869 1166 1223
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MALMFORS, K.G.	385
MALMON, A.G.	1389
MALVANO, R.	895 1097 1098 1099 1167 1254 1406 1455 1456 1965 2970 3957 4201 5999 6008 6397 7399
MALYSCHEW, W.I.	1885
MALYSHEV, V.I.	2747 8043
MALYSHEVA, N.G.	3376 5325 5779 5854 7862
MAMADZHANOV, F.	7171
MAMADZHANOV, F.I.	7229
MANDLER, J.W.	2104 2364 6971 7967
MANHARTSRERGER, H.	3397
MANI, R.S.	2473
MANNEY, T.R.	1078 1470
MANRI, T.	6851 6852
MANSOUR, M.M.	1858
MANTEL, M.	1020 6983 7216
MANTESCU, C.	1416
MANUEL, O.K.	6208
MAPPER, D.	468 469 470 471 472 473 597 626 750 1168 1222 1275 1429 4253 7052
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 MARKOWITZ, S.S. 1318 1599 1831 5768 6588  
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 MARTIN, T.C. 113 314 1414 1798 2410 2504 2505  
 3076 3753 3794 4005 5578 6229  
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MASLOV, I.A.	149 869 1166 1647 3363 3381 6994
MASON, G.F.	5498
MASON, R.S.	1803
MASSACHUSETTS INSTITUTE OF TECHNOLOGY	667 5414 7353
MASSART, D.L.	5961 5962 5963 5964 6043 6354
MASSAUX, F.	1484
MASTALKA, A.	2741
MASTERS, C.F.	6713
MASTERS, L.W.	8037
MATHE, F.	2806
MATHIEU, R.	894
MATHUR, S.C.	113 1414 1798 5757 6845
MATSON, W.R.	6365 6921
MATSSON, S.	6746
MATSUDA, H.	7981
MATSUDA, Y.	7177
MATSUMOTO, C.	967
MATSUMOTO, W.Y.	137
MATSUMURA, Y.	856 1170 1697
MATSUURA, T.	1333
MATULA, J.	2934

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MATVEEV, V.V.	2564
MATVEEVA, N.P.	2385 7925
MAXIA, V.	331 1260 1644 3060 3954 3955 6726 6968 7002 7914
MAY, L.	2129
MAY, S.	28 332 756 789 814 878 1171 1319 1369 1818 2327 2865 7004
MAYES, P.	5742
MAYR, G.	333 334 335
MAZYUKEVICH, N.P.	4277 5319
MC CABE, W.J.	1815
MC CALLUM, G.J.	7936
MC CANDLESS, E.L.	3709
MC CARLEY, R.E.	727 907
MC CLENDON, L.	7005
MC CONNELL, K.P.	709
MC CRARY, J.H.	596
MC ELLISTRIM, M.T.	2774
MC ELLISTRIM, W.T.	285
MC FARLING, J.L.	1586
MC GONNAGLE, W.J.	2441
MC GUIRE, S.W.	2691
MC INNES, C.A.J.	1222
MC KAY, H.A.C.	336
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MC MASTER, C.H.	3785
MC MILLAN, J.W.	1434 6744
MC MURRAY, C.S.,JR.	1871
MC MURRAY, W.R.	6675
MC NAMARA, J.	6068
MC NATT, F.B.	907
MC PHERSON, D.	673
MC PHERSON, R.	7043
MECH, J.	1230
MEDNIS, I.V.	7082 7895
MEIJERS, P.	6949 7197 7205
MEINKE, W.W.	130 164 165 254 337 338 339 340 341 342 343 344 345 350 409 666 697 712 720 731 765 914 953 1001 1047 1054 1120 1164 1172 1201 1228 1630 1657 1692 1698 1733 1810 1867 2317 2551 3553 5973 6332 6862 7055 7074 8033
MELCHIORE, J.J.	3027
MELFI, F.	2964
MELLET, M.	892
MELONI, S.	1260 1644 3955 6726 6968 7002 7914
MELSON, S.	3482
MENAPACE, L.	7039
MENAPACE, L.M.	5698
MENGER, J.W.	5996

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MENLOVE, H.O.	6713 6714
MENON, M.P.	546 1978 2365 2520 3064 3797 4200 5975 6460
MERCER, W.A.	1913
MEREN, E.	5386
MERLINI, M.	1277 1781 2901 6016 6982
MERRETT, D.J.	1658 1661
MERRIHUE, C.	3081
MERZ, E.	222 225 347 1173 1381 1522
MESHRI, D.T.	677
MESLER, R.B.	918
MESTER, T.	4216 5326
METCALF, A.	1394 2507 2622
METCALFE, B.	6974
METVEEV, V.V.	3751
METZGER, A.E.	253 1052 1284
MEYER, H.G.	7296
MEYER, J.M.	7160
MEYER, R.A.	2972
MEYER, R.C.	233 737
MEYER, R.E.	654 1060
MEYER, R.J.	7397
MEYERS, P.	6587
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MIRISZLAI, E.	6005 6223
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MISKFI, M.	2807 3792 6202 6203 6403 7056
MISKOVITS, G.	7234
MITCHELL, C.	6222
MITCHELL, G.R.	7947
MITCHELL, J.C.	273
MITCHELL, T.G.	136 487 488 489 730
MITSUBAYASHI, T.	1385
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MIYAGUCHI, M.	864
MIYAGUCHI, Y.	5926
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MIYAKE, T.	2440
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MIZUIKE, A.	424 754 7298
MLITZ, P.	7280
MOAURO, A.	2795 5766 7341 7998
MOAV, R.	1645 2821
MOCHIZUKI, Y.	585
MOELLER, D.W.	55 56 290 963
MOGILYOVKIN, V.	773 1762
MOHAI, M.	7149
MOHNKE, M.	7866
MOISEEV, L.I.	7213
MOISEEV, V.V.	799 870 2523 3383 7164 7165 7166 7167 7168
MOKHIR, F.P.	4275
MOKI, T.	607
MOLINSKI, V.J.	1150 1334 1340 1788 2499 2690 5953 7111
MOLJK, A.	354
MOLL, E.	2813
MOLLE, E.D.	6010
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MONGAN, D.M.	1722
MONNIER, D.	355 356 590 906 915 940 1217 1313 1321 1341 1396 1426 1535 2481 2623 3989 3996 3997 4309 5942 6335 7080 7160 7956
MONNIER, R.	197
MONSE, E.U.	530
MONSECOUR, M.R.	6836
MONTARIOL, F.	358
MONTOYA, J.	2124
MONTVAI, A.	3552
MOORE, B.C.	273
MOORE, C.B.	5958 6050
MOORE, C.E.	6922
MOORE, F.L.	822
MORGAN, D.J.	2981 7947
MORGAN, I.K.	314
MORGAN, I.L.	113 596 1414 2254 2410 2504 2505 2686 3070 3076 3753 3794 3976 4005 5578
MORGAN, J.W.	469 595 656 1180 1431 1494 1498 1502 5719 6739 7990
MORGAN, W.R.	693
MORI, H.	357 403 2418 3033
MORI, T.	2440
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MORRISON, G.H.	116 117 368 369 370 371 1040 1289 1580 1775 1984 1985 2277 2514 5986 6999 7043 7938
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MOSES, A.J.	276
MOSHIER, R.W.	2830
MOSKOVITSEVA, G.A.	1207 1548 1769
MOSULISHVILI, L.M.	7420
MOSULISHVILI, L.M.	3757
MOTOJIMA, K.	2683
MOTOZIMA, K.	419
MOTT, W.F.	148 863 927 1213 1981 2512 3011 3752 5709
MOUND LABORATORY	5332
MOUNTJOY, W.	7994
MOUSTY, F.	4303 6444
MOYERS, J.L.	6361
MOZLEY, J.M.	1750
MUDROVA, B.	4306 5335 6667
MUEHLHAUSE, C.O.	373
MUELLER, D.W.	7256
MUKAI, K.	1723

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MULLER, J.H.	374
MULLINS, W.T.	282 291 292 640 641 1044 1060 1188 1189 1190 1268 1361 1709 1725 1727 1796
MULVEY, P.F., JR.	2972 6302 8000
MUMINOVA, M.F.	6200
MUNDKOWSKY, W.F.	273
MUNDSCHENK, H.	5546
MUNZEL, H.	1826 7946
MUNZER, H.	3746
MURANO, R.	7102 8012
MURIN, A.N.	799
MURRAY, K.	3469
MURRENHOF, A.	433
MUSAELYAN, R.M.	5321 5782
MUSE, L.	422 586
MUSYL, I.	1527
MUTO, H.	426 1115 1116 1399 1656 2649 3719 3768 5380 5431 5432 7114 7201
MYRBERG, N.	6055
MYTTENAERE, C.	459
VADKARNI, R.A.	6086 6738 6943 6980 7195 7376 7393 7983
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VAGY, L.G.	1005 1601 2806 4216 4217 5326 5399 6708 6990
VAKAGAWA, J.	2440
VAKAGAWA, T.	2440
VAKAI, T.	375 605 606 607 608 776 778 779 899 971 995 998 1038 1063 1154 1155 1174 1176 1322 1654 1672 1679 1682 3714
VAKAJIMA, K.	5920 6858
VAKAMURA, H.	7283
VAKAMURA, Y.	2464
VAKASA, H.	5967
VAKAYAMA, F.	1242 1342 1747
VAMIKAWA, Y.	827
VARGOLWALLA, S.S.	1864 2129 2280 2666 4392 6318 6830 7025 7026 7031 7176 7966
VARUSAWA, Y.	211
VASCUTIU, T.	511 1404 1774 7373
VASS, H.W.	1698 1791 2789 5953 6393 6995
VATI, G.	383
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VATUSME, H.	1681
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VFAL, T.F.	2511
VEDOSTUP, G.A.	1559 5577
VEEB, K.H.	2769 7281 7919
VEFEDOV, B.B.	1443
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VELLIGAN, W.B.	1680
VELP, W.R.	962 7102 7318 8012
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NICHOLSON, W.L.	1328
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NIELSEN, J.M.	2738 2971 2998 7153
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NIESE, S.	625 831 1193 1343 1344 2578 6716 7880
VIEWODENICZANSKI, H.	5950
VIEWODNICZANSKI, J.	7103 7966
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VIKANOROV, S.G.	1556
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VISHIGAKI, S.	991 3092
VISHIKAWA, Y.	5777
VISHIMURA, K.	7328
VISHIMURA, S.	1531 5328 5867
VISHIWAKI, Y.	5926
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VITTO, M.	1929
VIWASE, K.	112
VIWASE, T.	7996
VIXON, G.S.	378 675 2565 2572 2573 3506 6003 7369 7370
VIZET, G.	2713
VODA, M.	7282 8001
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VOMURA, K.	2744 5379 5868
VOMURA, S.	1694
VORIKOV, A.P.	1554
VORMAN, J.C.	5939
VORRIS, W.P.	1780
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NOWICKA-JANKOWSKA, T.	925 5862
NOZAKI, T.	379 602 1151 1153 1194 1208 1408 1742 3995 7019 7870
NUCIFORA, G.	3740 5448 5934
NUCLEAR APPLICATIONS CONFERENCE	1756
NUCLEAR CORPORATION OF AMERICA	380
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NUCLEAR-CHICAGO CORPORATION	837
NUCLEONICS	650 1364 1544
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O CONNOR, J.D.	2553
O CONNOR, J.J.	989 1092
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 OKA, Y. 1402 1481 1765 2744 5308 5311 5379  
 5868 6351 6676 6677 6678 6727 7920  
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 OKADA, M. 20 375 386 387 388 603 604 605 606  
 607 608 751 752 753 794 797 798 824  
 826 899 956 957 990 1008 1011 1021  
 1063 1144 1195 1196 1197 1199 1200  
 1374 1403 1413 1507 1511 1565 1624  
 1654 1679 1880 1881 1882 2614 2716  
 3399 3758 3772 7980  
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OKUO, T.	3995
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OLIN, J.S.	6950 7333 8019
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OLIVE, G.	1815 1896 1922 5409
OLIVERI, F.	1517
OLIVIER, C.	7036
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ONCESCU, M.	1416 1822
ONDREJCIN, R.S.	1607
ONO, M.	4240
ONO, R.	4240
ONODA, Y.	774 997 1261 1299 1300
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ONOSOV, A.I.	5515 5517
ONUMA, N.	572 922 1125 1307 1385 2283 2340 6220 6379 6445 6729 6962 7223
OHATA, T.	6860
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ORDOGH, M.	390 1608 1613 1614 1615 1616 1617 1832 2806 3661 3964 6005 6223 7233 7234
ORIFKHODZHAEV, U.	7926
ORLANDINI, K.A.	1863
ORLOV, Y.L.	2306 6720
ORMONT, B.F.	75
ORMOS, G.	2807 3792 6203
ORSONI, L.	151
ORTEGA, R.F.	6991
ORVINI, E.	1595
OSADA, K.	5969
OSAKI, S.	4311
OSAWA, M.	572 585 4302
OSBORN, S.B.	155 6014 6827
OSBORNE, J.F.	2376
OSHRY, H.I.	695
OSMOND, R.G.	391
OSSART, P.	7015
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OVERMAN, R.F.	7127
OVERMAN, R.T.	106 392 610
OWENS, G.C.	1204
OWLYA, A.	6586
OWSIAK, T.	6325
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OZOLS, A.E.	7133
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PAPADOPOULOS, C.	686

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 PARKER, S.H. 5769 6589  
 PARKHURST, R.M. 5751  
 PARKINSON, T.F. 959 966  
 PARR, R.M. 1310 1411 2698  
 PARSA, B. 1599  
 PARTHASARATHY, R. 1901 1960  
 PASCU, N. 5949  
 PASSELL, T.O. 423 482  
 PASTERNAK, B. 7063  
 PASZTOR, E. 1602 2761 6022  
 PASZTOR, L.C. 1950 2542 4413  
 PATE, B.D. 474 475 476  
 PATEK, P. 1492 2766 3418 4191 4293 4308 4406  
 5438 5930 6451  
 PATROVSKY, V. 1582

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PATTERSON, J.H. 4289  
 PAULY, J. 579 942 977 1042 1541 1573 1598 1676  
 1729 1755 1878 1952 2556 2836 2901  
 3082 3724 3793 3985 5421 5583 5987  
 PAVLICSEK, I. 7389  
 PAXTON, G.D. 2565  
 PEART, R.F. 881  
 PECK, P.F. 1026 1028 1209 1210 1951 2429 2652  
 5372  
 PEDERSEN, A.O. 6679  
 PEETERMANS, A. 743  
 PEETERS, E. 1447 1466  
 PEIRSON, D.H. 393  
 PEISACH, M. 770 841 842 868 1071 1302 2532 2618  
 6329 6339 6450 6582 6668 6669 6675  
 6680 6681 6682 6683 7013 7036 7163  
 7250  
 PELEKHOV, V.I. 948  
 PELEKIS, L.L. 2337 5869 5870 7131 8042  
 PELEKIS, Z.E. 2337 7131 8042  
 PENAS, N.P., JR. 4258  
 PENCEA, C. 7373  
 PENDHARKAR, M.S. 2982 3560  
 PERDIJON, J. 1304 1640 1753 2983 3090 3980 5443  
 5708 5853 6357 7302  
 PEREZHOGIN, G.A. 768 1763 2641 3367 3804 4310  
 PEREZHOGIN, G.P. 2721  
 PERFILOV, N.A. 3394

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PERIN, Y.I.	7365
PERKIN, J.L.	108 109
PERKINS, M.	6401
PERKINS, R.W.	2500 3424 4381 6012 6360 6375 6930 7042
PERKONS, A.K.	706 1737 2548 6037 6311 6315 6952 7383 7384
PERLMAN, I.	4280 5788
PERNECZKY, G.	3413
PEROVSKII, A.P.	5515 5517 6297
PERRICOS, D.C.	7364
PERRY, K.I.	2272
PERSIANI, C.	4386 5955 6065 7301
PESTANER, J.F.	5376
PETER, H.	1380
PETER, I.	2659
PETERS, B.F.G.	864
PETERS, D.K.	7372 7426
PETERSEN, D.F.	4227
PETERSON, S.F.	2277 6999 7938
PETIT, J.	814 849 3727
PETKOV, P.M.	3374
PETRU, F.	6828
PETRZHAK, K.A.	5318
PFEIFER, V.	1273
PFREPPER, G.	2723 2724 2725 2767

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PHELPS, P.L.	2547
PHILIBIN, P.W.	7414
PHILIP, H.	7372 7426
PHILLIPS, G.	396
PHILLIPS, H.R.	2574
PICCIOTTO, E.	397
PICCOT, D.	1818 2327 2865
PICER, M.	5790
PICK, M.A.	5756
PICON, M.	5579
PIERCE, C.M.	1467
PIERCE, K.C.	316
PIERCE, T.B.	1026 1028 1209 1210 1951 2429 2652 3336 3979 4304 5342 5372 6596 6743 7052
PIETRA, R.	790 1281 1952 2556 2794 2901
PIJCK, J.	1211 1707 1743 1744 1745 1748 1749 2805 2892 3713
PILLAY, K.K.S.	2145 6312 6695 7397 7899
PINDRUS, P.	13
PINK, H.	5350
PINKAS, V.	2386
PINKER, R.H.	183 1034 2959
PINTE, G.	1171 6071 7004
PIPER, D.Z.	7935
PIRIE, A.	484
PIRTLE, O.L., JR	1036

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PISA UNIVERSITY, ITALY	3468
PIKUNOV, L.I.	5513
PLAKSIN, I.N.	783 1280 3087 3373 3374 3375 3376 3379 3767 5325 5620 5778 5779 5854 7170 7862 7875 7878 8044
PLAKSIN, M.A.	855
PLANTIN, L.O.	710 1276 2508
PLASHAKOVA, G.P.	6053
PLATZER, R.	2927
PLESHAKOVA, G.P.	6072
PLETT, H.	6715
PLUMB, R.C.	398 399 400
POCZE, L.	2922
PODOLSKY, S.	8038
POEY, B.S.	7218
POINT, J.J.	401
POLESHCHUK, T.V.	3382
POLINSKY, P.D.	2123
POLISHUK, P.	6310 6753 7047
POLLACK, L.R.	2692
PONITZ, W.	1916
POOLE, D.O.	2532
POPOV, C.	2923 3739 5428
POPOV, C.P.	1754
POPOV, H.	984

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PORET, C.	7334
PORIES, W.J.	2124 6309 6712 6933 7246
PORRITT, R.	1845
PORTER, R.S.	860
PORTNOY, B.	7992
POST, R.G.	5745
POSTMA, F.W., JR.	1871
POSTMUS, C., JR.	1230
POTAPOVA, T.A.	3382
POTAPYEV, V.V.	4242
POTRATZ, H.A.	39 40 41 42
POTTER, J.C.	934
POTTER, N.M.	7938
POTTIER, R.	4001
POTZL, K.	5522
POURADIER, J.	402
POZYCHANYUK, V.F.	1550 1585 3385
POZZI, G.	6016
PRADZYNSKI, A.	7314
PRAPUOLENIS, A.A.	7219
PRASAD, K.N.	6710
PRASILOVA, J.	2845
PREISLER, E.	1829
PRESKITT, C.A.	8014
PRESNYAKOVA, M.A.	2369

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PRESSER, G.	2615
PRETORIUS, R.	2618 6329 6339 6675 6681 6682 6683 7013 7250
PRICE, H.J.	2549
PRICKARTZ, R.	2323
PRIEST, G.L.	3781 5339
PRIEST, H.F.	3781 5339
PRISTER, B.	773
PRO, M.J.	763 1031 1077 1635 2647 2648 4263 6021 6030 6036 6048 6951 7909
PROCHAZKOVA, Z.	1963 1972 3393 3669 4213 4248
PROKOP, R.	7954 7955
PROKOPCHIK, V.I.	4276 5356
PRONIN, V.A.	2640 3730 3731 5336 5619 5703 5787 6833 7118 7119 7212
PRONMAN, I.M.	5321 5781 5782
PROSPERI, D.	7130
PROUZA, Z.	1186 1506 2387 5602 5848 7124 7139 7368 7409
PRUDHOMME, J.T.	314 3753
PRUSSIN, S.G.	1795 2559 2579 2688
PRZYBYLOWICZ, E.	6830 7025 7026 7176
PUERTO RICO NUCLEAR CENTER	6204 6205 6206 6207
PURDY, J.C.	6209
PURSER, P.R.	405
PUTMAN, J.L.	407 2650



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PUTYATINA, N.D.	1558 3368
PYZHOVA, Z.I.	4391
QUAGLIA, L.	6595
QUAIFE, M.A.	2434 2445 3062
QUESSON, M.	57 1503
QUIGLEY, D.A.	7320
QUITNER, P.	3350 3413 3548 3550 3552 4231 5931 6572 7288 7922
QUIVY, R.	125
QURESHI, I.H.	2006 7005
RAAEN, H.P.	2609 4316
RABINOWICZ, E.	408
RABOT, R.	1503
RACK, E.P.	6321
RADAK, B.	1696
RADIATION COUNTER LABORATORIES	646
RADWAN, M.	1030 5966 7355
RADWAN, Z.	925 5862
RAFAELOFF, R.	1071 7180
RAGAINI, R.C.	1953
RAI, L.	2318
RAINOSK, A.P.	3797
RAISIC, N.	1659 1696

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RAKOVIC, M.	900 939 1186 1271 1282 1392 1506 1660 1662 1664 1751 1752 1948 1963 1972 2387 2681 2759 2921 2990 3334 3393 3669 3765 4213 4248 5602 5618 5848 5874 7124 7138 7139 7368 7409 7950
RAKOVSKII, E.E.	985 6298
RALEIGH, H.D.	1365
RALSTON, H.R.	7065
RAMDOHR, H.F.	1521 1886
RAMOS, E.	1970
RAMSEY, A.C.	7932
RANCITELLI, L.A.	6360 6375 6389 6399 6930 6941 7042 7077 7125 7243 7885
RANDLE, K.	5936 6964
RANZ, I.	888
RAO, S.R.	2984
RAPPAPORT, R.	1463
RASMUSSEN, N.C.	216 1618 1787 1898 3059
RASSOUL, A.	1345
RATHBURN, D.W.	1794 1888
RAUSCH, H.	4153 5499 5793 6385 7233 7401
RAUSCHER, H.E.	1976
RAVERA, O.	6982
RAVETZ, A.	6388
RAVNIK, V.	7413
RAWIENSKA-KOSCIUKOWA, B.	7355
RAYMOND, W.H.A.	214

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RAYUDU, G.V.S.	6308 6314
RAZUMOVA, G.N.	6834 7116
RE, C.	6597
REBA, R.C.	2585 6068 7999
RECKE, W.	1830
REDDY, G.R.	1449 1639 2982 7196
REED, D.	1428 2846
REED, G.L.V.	6081
REED, G.W.	209 410 411 412 736 1212
REED, J.H.	665 713 1611 1783 1785 2364 6971 7967
REEDER, S.D.	482
REES, T.B.	6401
REID, A.F.	413
REIFENSCHWEILER, U.	7029
REIFFEL, L.	414 1311 1366
REILLY, E.M.	6226
REINHARDT, K.	1578 1931
REINIG, W.C.	7037
REISER, W.	1367
REMBOLD, E.A.	1637
RENGAN, K.	1047
REULAND, R.J.	1283
REVEL, G.	2381 3721 5938 5954 6590 7018
REVENSKA-KOCTSYUK, R.	5966

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REY, P.	7405
REYNOLDS, G.M.	8014
REYNOLDS, L.M.	4329
REYNOLDS, S.A.	81 293 294 295 296 297 298 300 415 722 1044 1846
REZVANOV, R.A.	1445
RHODES, D.F.	1213
RHODES, J.R.	5764 6229 7030 7202
RICCI, E.	201 416 701 1065 1499 1593 1936 1937 1938 1939 2259 2531 2682 3071 4193 6327 6579 6709 7010 7228 7881 8029 8034
RICH, C.	7102 8012
RICHARDS, D.H.	242 243 244 245 246
RICHARDSON, A.E.	7902
RICHARDSON, R.H.	8022
RICHMOND, J.	7425
RICQ, J.C.	1518 1538 6569 7418
RIEHL, N.	1252
RIEZLER, W.	417
RIGA, USSR	2675
RIMSKII-KORSAKOV, A.A.	5704
RISON, M.H.	4273 5420
RISPAL, C.	889
RIVIERE, R.	1278 3745 6932 7084 7240
ROB, C.G.	2124 6309 6712 6933 7246
ROBAYE, G.	6595

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ROBERTS, J.O.	321
ROBERTSON, D.E.	2500 4381 6375
ROBERTSON, D.S.	2729
ROBERTSON, J.S.	4377
ROBERTSON, O.H.	90 725
ROBERTSON, R.	6407 7072
ROBIN, G.	1600 5968
ROBINS, C.H.	4287 6350
ROBINS, C.H., JR.	6082
ROBINSON, B.P.	4412
ROBINSON, E.L.	4287 5744 6350
ROBINSON, J.R.	954 976
ROBSON, A.	1368
ROCCA, H.C.	6993
ROCCO, G.G.	2541 3474
ROCHAS, P.	1503
RODDEN, C.J.	420
RODENBUSCH, H.	7954 7955
RODERBOURG, J.	1484 2773
RODIN, N.N.	7388
RODRIGUEZ, G.D.	1464
RODRIQUEZ MAYQUEZ, E.	2968
ROEDDER, E.	1107
ROELS, J.	2633
ROESMER, J.	588 676 705

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ROGERS, G.T.	5932
ROGUSHIN, I.I.	2750
ROHNSCH, W.	1520 1603 1628
ROJAS, M.A.	2685
ROLLIER, M.A.	1260 1644 3060 3954 3955 6726
ROMANETTI, R.	6384
ROMANOV, M.M.	924 1162 1551 1553 3362
ROMANOV, O.M.	1162 1554
ROMMEL, H.	1013 1193 1344 2712 8005
ROMMEL, M.A.	2680
RONA, E.	421 422 586
ROOK, H.L.	1861 2777 6066 7008 7248
ROOTS, E.N.	273
ROPER, N.J.	1875
ROSA, U.	3957
ROSE, R.M.	1966
ROSENBAUM, H.S.	5408
ROSENBLUM, L.	3085
ROSENFELD, I.	513
ROSENBER, V.M.	6211 7427
ROSHOLT, J.N.	6961
ROSS, A.M.	139
ROSS, D.A.	867
ROSS, H.H.	700 1932 1933 2682 6327
ROSS, L.F.	6923

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ROSS, W.J.	1035 1226 1710 1711 1796 3074
ROSSI, M.L.	707
ROSSOUW, S.F.	4006
ROTARIU, G.J.	5709
ROTH, E.	2768
ROTH, L.J.	2642
ROTTMANN, J.	2678
ROTTSCHAFER, J.M.	4410
ROUBAULT, M.	1308
ROUCHAUD, J.C.	6441
ROUECHE, A.	1426 7080
ROUTTI, J.T.	5971
ROWE, M.W.	5716
ROWLAND, F.S.	728 909
RUBIN, B.	989
RUBIN, S.	423
RUCH, R.R.	183 1034 2782 2790 2792 2793 2959 2978
RUDD, T.G.	8012
RUDELLI, M.	802
RUDELLI, M.D.	6993
RUF, H.	2844
RUNDO, J.	155 3078
RUSHBROOK, P.R.	1214
RUSHIKY, G.W.	5357

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RUSSELL, H.T.	3064
RUSSELL, I.J.	1584 1655
RUSSKAYA, E.I.	3379
RUST, R.H.	2552 3345
RUSTICHELLI, F.	4208
RUSYAEV, V.G.	6571
RUTHERFORD, H.A.	1073 1472 1583 7382
RUTTINK, J.	1748 3708
RUZICKA, J.	795 1121 1243 1244 1291 1346 1575 1579 1587 1588 1820 1930 1974 2154 2845 3084 6334
RYABCHIKOV, D.I.	1285
RYABUKHIN, V.A.	544 662 1285
RYABUKHIN, Y.S.	5976
RYAN, V.A.	1576 4226
RYAN, W.P.	6038
RYBACH, L.	1376 1505
RYCHKOV, R.S.	1286 2717
RYGAERT, J.	6216
RYGARD, J.	405 943
RYSKIN, G.Y.	425
RYTCHKOV, R.S.	544 662
SARBIONI, E.	1541 1598 1952 2794 2836 3724 3985 5987 7421
SABINA, A.C.	4258
SABINE, T.M.	3783



## ACTIVATION ANALYSIS-AUTHORS

SABIROV, S.	7135
SABLOFF, J.A.	7340
SARO, E.	5759 7424
SACCHETTI, N.	1406
SACHA, J.	6044
SAIFUTDINOVA, D.G.	1550 1585 3385
SAIRENJI, E.	1198 1446
SAISHO, H.	1232
SAITO, K.	1151 1194 1742
SAITO, N.	427 1198
SAITO, T.	5311 5379 6677
SAITOH, M.	1496
SAITSEV, E.I.	8043
SAIZEW, F.I.	1885
SAKAI, T.	1391
SAKAMOTO, A.	4374
SAKANQUE, M.	1391 2889 4302
SALAITA, G.N.	1843
SALAMON, A.	6385 7401
SALMIN, J.P.	1885
SALMIN, Y.P.	3387 6707 8043
SALMON, L.	155 239 428 429 430 431 432 477 3426
SALVETTI, F.	7130
SAMOSADNYI, V.T.	2764

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SAMSAHL, K.	442 714 829 830 1089 1134 1412 1766 1797 1892 1894 2403 2718 4004 5760 5771 5785 6574 6575 6576 6577 6697 6715 6754 6831 6838 6965
SAMSON, C.	1912
SAMUELSSON, E.G.	4323 5382
SANAD, W.	4203 5729
SANCHEZ IZQUIERDO, J.	2968
SANDERS, F.W.	993
SANDERS, W.M.	1604 3970 3977 5417 5752 5769 6589 6752
SANDOR, J.	1005
SANDRU, P.	1822
SANFORD, W.R.	1048
SANGUIST, V.	1415
SANKAR DAS, M.	1109 1449 1596 1639 1901 1902 1903 1911 2602 2976 6960 7375
SANO, H.	1198
SANTELLI, D.J.	1801
SANTOS, G.G.	6404 6740 6966 6967
SARDI, A.	5416
SARIGIANIS, P.	7414
SASAKI, E.	1446
SASAKI, M.	1402 1763 6678
SASAKI, T.	1333
SASAKI, Y.	755
SASTRY, B.V.R.	5756

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SATO, H.	6857
SATO, K.	838
SATO, M.	1115
SATO, R.	1780
SATO, Y.	5386 5928 7315 7316
SATTAROV, M.	6201 6301
SAUNKIN, O.F.	858
SAUTIN, A.	1957 4325
SAVEL, P.	911
SAVOSIN, S.I.	780 1430 2750
SAWAI, T.	1338 1468 3771 5921
SAYRE, E.V.	433 1032 1629 1834 1897 1926 2945 6031 6950 7333 7340 7416
SCHADE, H.	1091
SCHAEFFER, O.A.	6399
SCHAUB, B.	3727
SCHAUDY, R.	7304 7306
SCHNEER, K.E.	6069 7098
SCHERLE, W.	1010 1012
SCHIIVINI, G.	1095
SCHIERLING, H.E.	1336 1337 1423
SCHIFF, E.	4217
SCHILLING, J.G.	2763
SCHILTZ, J.C.	1454 1817 6324 7143 7152
SCHINDEWOLF, U.	434 435 436

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SCHIRJAJEWA, M.B 1885  
 SCHLEIFFER, J.J. 2632  
 SCHLESINGER, H.L. 2647 2648 4263 6021 6030 6036 6953  
 SCHLOSSER, J.E. 7049  
 SCHMADEBACK, R.L. 7048  
 SCHMADEBECK, R.L. 8015  
 SCHMEISER, K. 437 438  
 SCHMIDT-BLEEK, F. 5403 6972  
 SCHMIDT, D. 5440 6322 7951  
 SCHMIDT, G. 7959  
 SCHMIED, H. 1760 1842 6725  
 SCHMITT, B.F. 7280  
 SCHMITT, R.A. 439 613 648 932 933 944 1187 1251  
 1323 1356 1384 1634 1708 2735 5343  
 5720 5958 6010 6067 6442 7140 7377  
 SCHMOTZER, J.K. 8024  
 SCHNEIDER, E.L. 7907  
 SCHNEIDER, H. 1367  
 SCHNEIDER, W. 1869  
 SCHOLES, P.H. 5389  
 SCHON, A. 1529  
 SCHONFELD, E. 2450 2533 2545 4210 4326  
 SCHONFELD, T. 394 440 694 749  
 SCHONTAG, A. 1732  
 SCHRADER, C.D. 1052  
 SCHRAGE, E. 1381

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SCHRAMMEL, P.	3746 7142 7403
SCHROEDER, G.L.	1216 1953 2694 2762
SCHROPL, F.	7175
SCHUHL, C.	38
SCHULERT, A.R.	1858
SCHULTZ, W.W.	718 2571
SCHULZE, W.	441 627 711 898 1666 2513 2544 2566 3720 3978 5937
SCHUMANN, P.	2335
SCHUSTER, E.	5957 6581 6583 6736 7307 7905
SCHUTZ, D.F.	614 1027
SCHWARTZ, D.	216
SCHWARZER, D.	158
SCHWEIKERT, E.A.	1375 2628 2629 6066 6396 7008 7248
SCOTT, H.D.	4380 5390 6839 7129
SCOTT, J.E.	4263
SCOTT, W.L.	5394
SEABORG, G.T.	443
SEBESTIAN, I.	1363 1574
SEDLACEK, W.A.	1576
SEDYKIN, F.V.	7365
SEGEL, R.E.	862
SEIBOLD, C.T.	7321
SEILER, H.	7883
SEINO, H.	516

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SEIRMARCO, J.A.	881
SEITNER, H.	2296
SELECKI, A.	7258
SELLSCHOP, J.P.F	6358
SELTZ, R.	7903
SELZ, J.	1217
SEN SARMA, R.N.	15
SENFTE, F.E.	171 445 446 447 2720 4282 6222 7414 8015 8018
SENOO, M.	6859
SENS, J.C.	4209
SEREBRYANYI, B.L	6298
SERGEVA, T.V.	6707
SERVIAN, J.L.	2148
SETSER, J.L.	212 988 1022
SETTLE, D.M.	2517 3077 3101 3486 5979 6020 6033 6953
SEVASTYANOV, Y.G	1218
SEVIER, P.	5409
SEYFANG, A.P.	448 449 472 1347 1429
SHABANA, R.	2447 4319 5728 5729
SHAH, S.D.	677
SHAMAEV, V.I.	674 858 1215 1246 1247 3364
SHANKS, D.E.	2498 4214
SHARMA, H.D.	1902

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SHARP, R.A.	439
SHATS, M.M.	490
SHAW, D.C.	5395
SHCHAPOVA, Y.L.	7083
SHCHIOKAVA, T.	2674
SHCHULEPNIKOV, M.N.	1168 2721
SHEDLOVSKY, J.P.	148 927
SHEMAROV, F.V.	1764
SHENBERG, C.	4194
SHERLOCK, S.	7427
SHESTAKOV, B.I.	1430
SHIBA, K.	604 607 608 774 971 997 998 1038 1299 1300 1654 1682
SHIBAEVA, N.P.	4391
SHIBATA, H.	1650
SHIBUYA, M.	454 3714 5327 5725 5925
SHIDELER, R.W.	914 1054 2538
SHIGEMATSU, T.	1513 5776 5777 7357
SHIKATA, E.	1398
SHIMELEVICH, Y.S.	969 1430 2750 3462
SHIMIZU, T.	575 820 1127
SHIMP, N.F.	263
SHIMURA, K.	2649 7330
SHINAGAWA, M.	2727 7894
SHINBORI, Y.	6755 7299 7329 7332 8008

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SHINJO, Y.	7991
SHINOGI, M.	7893
SHIPMAN, G.F.	451
SHIRAISHI, H.	1382
SHIRYAEVA, M.R.	3387 6707
SHIRYAYEVA, M.B.	6043
SHKODA-ULYANOV, V.A.	4277 5319
SHMANENKOVA, G.I.	6053 6072
SHNEOUR, E.A.	839
SHOJI, H.	7906
SHORNIKOV, S.I.	1646 2965 7100
SHORT, H.G.	452
SHTAN, A.S.	5317 5780 6706 7110 7342
SHTASEL, A.	910
SHUBA, I.D.	6834 7116
SHUKOLYUKOV, Y.A.	7252
SHUMWAY, R.H.	1851
SICILIO, F.	936
SIEBERG, R.	3794
SIEBERG, R.D.	7202
SIEMER, P.L.	1259
SIEWIERSKI, J.	7090
SIJPERDA, W.S.	7987
SILVA, C.M.	5358 5851 6674 7422
SILVANOVICH, Y.A.	5787 7119



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SILVERMAN, J.	636 740
SILVERMAN, R.H.	400
SIMKOVA, M.	1519 1545 2386 2878 3975 6692
SIMNAD, M.T.	453
SIMON, F.O.	5959
SIMON, L.	941 1219
SIMONITS, A.	4231
SIMPSON, G.	561 6458
SIMPSON, H.	179 626 852 1220 1570 6974 7874
SIMPSON, R.E.	6359 6940 7908
SINGH, J.	5571
SINGHAL, N.	6753
SINGHAL, N.S.	3356 6310
SION, H.	1221
SIPPEL, R.F.	455
SIPPEL, R.S.	1148
SIRONI, G.	1254
SIVOKON, N.V.	7214
SJOBERG, H.E.	1400 1893
SJOSTRAND, B.	533 534 535 1100 1239 1288 2563
SKINNER, W.A.	5751
SKIPPEN, G.R.	2839
SKLAVENITIS, H.	6001
SKLAVENITIS, L.	5875
SKOUGSTAD, M.W.	2656

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SKOVORODKIN, N.V.	5318 7252
SLATER, D.N.	1185 3530 5742
SLEPCHENKO, I.F.	783
SLOAN, R.W.	1843
SLOTH, E.N.	1230
SLOTT, R.	3962
SLOWEY, J.F.	2848 4219 4255 4291
SLUNECKO, J.	1519 1545 2358 3975 7918
SMAKHTIN, L.A.	985 3365 7969
SMALES, A.A.	26 27 94 96 236 240 251 257 320 353 391 449 456 457 458 460 461 462 463 464 465 466 467 468 469 470 471 472 473 474 475 476 477 478 525 587 595 615 616 724 745 1145 1222 1275 1429 2338 2528 3979 4253 4266 5411 6306 7210
SMALLWOOD, R.A.	7427
SMATHERS, J.B.	2141 5407 5743 7204 7985
SMIRNOV, AVERIN, A.P.	1218
SMIRNOV, A.A.	5704
SMIRNOV, V.F.	6832
SMIRNOV, V.I.	2337
SMIRNOV, V.N.	479 1280 3767 8044
SMIRNOV, V.V.	5704
SMIRNOVA, N.B.	2717
SMIT, J. VAN R.	239 240 478 526
SMITH, B.A.	1458
SMITH, C.G.	6598

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SMITH, E.M.	1750
SMITH, E.R.	263
SMITH, G.D.	3750
SMITH, G.W.	1722 1801 2536 2537 4224 5985 7026 7176
SMITH, H.	154 309 310 378 481 565 651 675 788 1224 1225 1928 1977 1980 2565 2570 2572 2573 2719 2942 2958 2985 3507 3982 4267 5847 5944 6003 6042 6837 7087 7369 7370
SMITH, H.P., JR.	3788
SMITH, J.W.	155
SMITH, L.H.	2706 4199
SMITH, P.B.	6372
SMITH, R.H.	692 1323 1356 1634 5720 6010 7377
SMITH, R.L., JR.	273
SMITH, R.R.	482
SMYTHE, L.E.	3968 6038
SNOW, K.B.	6951 7909
SOBATCHKIN, A.	773
SOCIETA RICERCHE IMPIANTI NUCLEARI	140
SOCIETE ANONYME DE MACHINES ELECTROSTATIQUES	1619 1622
SOKOLOV, L.A.	7411
SOKOLOVA, M.N.	7168
SOLBERG, D.E.	959

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SOLVSTEN, S.	1241
SOMMERKORN, G.	2615
SONDEL, J.A.	2145 3061 5502 6312
SONNINO, T.	772
SORANTIN, H.	1264 1273 1487 1492 1564 1830 1840 2601 2766 2950 3418 4191 4293 4308 4406 5438 5930 7303
SOREMARK, R.	714 741 829 830 968 1317 1332 1512 1800 3086 4002 6055 6715 7882
SOROIU, M.	1416 5295
SOROKINA, A.V.	5318
SOROYU, M.	7169
SOUBEYRAND, R.	1805
SOULE, J.L.	57
SOULIOTIS, A.G.	928 1057 1964 1971 2701 4272 5415 7257
SOWDEN, F.M.	483 484 485
SOYA, I.	8008
SPADACCINO, E.	1260
SPAEPEN, J.	7358
SPALEK, J.	3811
SPARKS, R.J.	7936
SPECKER, H.	6440
SPEECKE, A.	1066 1828 2610 2643 5772 5808 6398 6723 6728 7076 7289 7395
SPENCER, R.P.	486 487 488 489 730

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SPENKE, H.	1821
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SPIKES, J.D.	3747
SPIRA, J.	4386
SPITSYN, V.I.	1227 6720 7082 7083
SPRONK, N.	1925 5993
SRAPENYANTS, R.A.	1443
ST. JOHN, L.E., JR.	6437
STALLWOOD, R.A.	863
STALNAKER, N.D.	6374
STAMM, S.J.	4283 6688 6938
STANG, L.G., JR.	1873
STANLEY, C.W.	1794 1888
STARCIK, L.P.	479 783 855 1280 3087 3373 3374 3375 3376 3379 5325 5620 5778 5779 5854 7109 7170 7862 7875 7924
STARCIK, M.P.	3767
STARFELT, N.	4000 5177 5238
STARIK, I.F.	490
STARIKOVA, N.A.	5435
STARK, H.	61 1292 1732 1829 2636 3987 5439 7194 7206
STARKE, K.	7951
STARY, J.	1243 1244 1291 1346 1575 1579 1587 1588 1820 2134 3084 6334

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STEFANOV, G.	984 1754 2923 3739 5428
STEHLIK, G.	1370 1703 1767
STEIM, J.M.	1462 1479 1870 3716
STEIN, M.N.	21
STEINER, N.	7280
STEINNES, E.	50 1768 2597 2739 2853 3079 3470 3961 4192 4195 4305 5366 5370 5405 5713 5731 5960 6074 6083 6212 6673 6679 6685 6686 6687 6959 7148 7181 7367 7896 7913 7928 7929 7961 7965
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STENSLAND, W.A.	1802
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STEPHENS, W.E.	491
STERLINSKI, A.	5865
STERLINSKI, S.	902 1761 1884 2760 2989 4206 5341 6381 6824 7244
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STEVENSON, P.C.	3380
STEVENSON, R.A.	2732
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STITCH, S.R.	485
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STOENNER, R.W.	493
STOGOVA, G.B.	3374
STOJANOVIC, N.	4267
STOKELY, J.R.	2157
STOLL, N.	5450 5451 5452 7419
STONE, C.A.	185 414 565 1311 1611
STRAIN, C.V.	6976
STRAIN, H.H.	1265
STRAIN, J.E.	82 1268 1361 1638 1642 1796 1940 1941 2531 3058 3074 5711
STRAIN, W.H.	1788 2124 6309 6712 6933 7246
STRAUB, R.F.	7321
STRAUSE, B.M.	509
STRAUSS, R.	6947
STREBEL, P.J.	6329 6339 6681
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STRIBEL, T.	494
STRICKLAND, E.H.	975
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SUZUKI, N.	1018
SUZUKI, T.	1446
SVENKE, E.	5423
SVENSSON, P.	5433
SVIRIDOVA, A.I.	1207 1548 1769
SWANBERG, S.C.	542
SWARTHOUT, J.A.	392
SWARTZ, H.M.	1452
SWIFT, G.	1685
SWISHER, J.A.	3973
SZABO, B.J.	6961
SZABO, E.	1608 1614 1615 1832 3350 4153 5499 5793 5931 6572 6826 7233 7234 7235 7236
SZEBENYI, I.	4270 5970
SZEKELY, G.	501
SZEKRENYESY, T.	1005
SZOKOLYI, L.	1601 6990
TABUSHI, K.	6858
TABUSHI, M.	5777

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TACZANOWSKI, S.	7387
TADA, K.	960
TAJIMA, F.	999
TAKACS, G.	4216 5326
TAKADA, K.	5432
TAKAGI, S.	424
TAKAGI, T.	2889
TAKAHASHI, H.	6379 6729 6962
TAKEDA, T.	916
TAKEMOTO, K.	5872
TAKENAGA, T.	6859
TAKETANI, K.	755
TAKEUCHI, T.	1510
TALANIN, Y.N.	6201 6301 6705
TALAT-ERBEN, M.	4221
TALBOT-BESNARD, S.	1621
TALBOT, J.	502
TALPOVA, E.	1664
TALPOVA, H.	939 1282 1392 1660 1662 1751 1752 3334
TALWAR, U.B.	2811
TAMACHI, T.	7299 7329
TAMURA, M.	5923 7296 7970
TANAKA, K.	2052
TANAKA, S.	1151 1194 1742

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TANDON, S.N.	6214
TANG, C.W.	6000 7187
TANI, A.	1115 1116 6853 7114 7177 7993
TANNER, J.T.	1571 3352 4290 7386
TANNER, T.M.	7077
TARRAS, S.	1036
TASAKI, A.	1496
TATAR, J.	612 2940 2941 2956 7354
TAURE, I.Y.	2337 7131
TAUSEND, A.	2775 4299 4300
TAY, S.K.	7931
TAYLOR, D.	152 1773
TAYLOR, D.M.	1310 1411 5997 6007 6438 7362
TAYLOR, K.J.	5648
TAYLOR, N.K.	1853
TAYLOR, T.I.	503 505 506
TAYLOR, W.H.	407 2650
TEOFILOVSKI, C.	2149
TERA, F.	2277
TERADA, K.	4311
TERCHO, G.P.	3061 5502
TEREE, T.M.	6064
TERESI, J.D.	123
TERMANINI, A.	7051 8003

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TERRANI, S.	5735
TERRELL, C.W.	1785 2104 2364 6453
TERREY, D.R.	2433
TERRY, R.A.	6712
TERTOOLEN, J.F.W.	1690
TESZLER, O.	1073
TEXACO DEVELOPMENT CORPORATION	1772
TEXAS A AND M	156 671 3791
TEXAS NUCLEAR CORPORATION	618 680 1889
THACKRAY, M.	1845
THEISEN, A.A.	6442
THIEL, A.	1524
THIERY, J.	1503
THILANDER, H.	968
THOMAS, A.	93
THOMAS, A.M.	595
THOMAS, C.C., JR.	2145 3061 5502 6312 7899
THOMAS, G.E.	373
THOMAS, R.C.	2145 6312
THOMAS, W.C., JR.	2534
THOMPSON, A.J.	1812 7867
THOMPSON, B.A.	508 509 912 7000 7154 8019
THOMPSON, C.J.	7053

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THOMPSON, G.A.	189
THOMPSON, H.D.	255 322 6226
THOMPSON, J.M.	6310 7059
THOMPSON, M.	6457
THOMPSON, M.F., JR.	6309 6712 6933 7246
THOMPSON, T.J.	216 3059
THOMSON, S.J.	3477 3478
THORESEN, P.	1419
THORPE, J.D.	6012
THORPE, M.E.C.	6211
THORPE, M.M.	6714
THOUZEAU, G.	57
TIEFENBACH, B.	6308 6314
TIFFANY, M.A.	6921
TILBURY, R.S.	1340 2690 2697 3403
TITTLE, C.W.	510 679 5552
TITTMAN, J.	1680
TIWARI, P.N.	7104
TOON, M.	936 1899 1912 2705
TOBIAS, C.A.	138 512 513 1470
TODD, A.P.	6211
TODD, R.	1231 1347
TOERIEN, P.V.S.	5410
TOKUNAGA, O.	2464
TOKUNAGA, T.	4302

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 TOLBERT, B.M. 160  
 TOLGYESSY, J. 1754 2923 3739 5428 5859 6847  
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 TOM, J.L. 6598  
 TOMCSANYI, A. 5416  
 TOMINAGA, H. 6859  
 TOMITA, I. 1232  
 TOMIZAWA, C. 5327  
 TOMLINSON, R.H. 2503 3956 6000 6735 7187 8011  
 TOMLINSON, R.W.S 155 6014 6827  
 TOMNOVEC, F.M. 175  
 TOMOV, T. 984 1754 2923 3739 5428  
 TOMPKINS, A. 517  
 TOMPKINS, E.R. 267  
 TOMURA, K. 572 2283 2340 3994 5927 6220 6379  
 6445 6729 6962  
 TONNA, E.A. 7321  
 TOPA, A. 1822  
 TORDAI, L. 515  
 TORGOV, V.G. 6833  
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TOTH, G.	4270 5970
TOTH, L.	633
TOTHILL, P.	6846 7425
TOUSSYT, J.	4260 4325 5579 5580 6594 7007 7014
TOWELL, D.G.	1835
TRAN, M.D.	6594 7007 7014
TRAVESI JIMENEZ, A.	1883 2765 4249
TRAVESI, A.	1833 2714 2752 2753 4250 5991 6999 7335 7938
TREW, J.R.	1372
TROLY, G.	1518 1538
TROMBKA, J.I.	1284 7048 8015 8016
TRUSSLER, J.W.A.	7320
TSAI, H.T.	5868 6727
TSANOS, N.A.	686 1971 2701
TSELYSCHEV, S.	1762
TSEPURNEK, V.E.	7164
TSETSKHLADZE, T.	2957
TSIRKUNOVA, I.E.	5727 5869
TSIRLIN, Y.A.	4275
TSUJI, H.	628 827 1111 1152 1202 1315 1656 1879 2384 5566 5924 6352 6842 6850 7893
TSUKAHARA, I.	575 820
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TUCK, D.G.	1181
TUCKER, W.O.	7912
TUCKERMAN, M.M.	1746
TUMA, D.J.	2434 2445 3062 6328
TUNNICLIFF, D.D.	7041 7067
TUPPER, R.	33 34
TUREKIAN, K.K.	614 1094 1293 1688 3960 3969 6823
TURKEVICH, A.	209 410 411 412 517 1212 4289 7933
TURKOWSKY, C.	2636 3987 5439 7206
TURKSTRA, J.	1825 5410 5761 6061 6346 6439 7939 7941
TURNER, G.	3081
TURNER, P.C.R.	965 1110
TURNER, S.E.	518
TURNOCK, A.C.	555
TUSTANOVSKII, V.T.	3087 5620 5778 7170 7926
TUTUBALIN, A.I.	7214 7923
TWITTY, B.I.	952
TWITTY, B.L.	1905 2122 2778 2798 3357 3981
TYDEN, G.	5433
TYOU, P.	7290 7291
J.S. ATOMIC ENERGY COMMISSION	520 1290 5849 6221



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JCHIYAMA, A.	187
JEDA, H.	7993
JEMURA, T.	5726
JFRET, S.L.	2732
JJIHARA, Y.	2711
JKEN, E.A.	6358 6368 6740 6966
JLFENDAHL, H.R.	930
JMANS, H.J.L.M.	6956
JMAROV, M.	5705
JMAROV, U.	5707
JMEZAWA, H.	357 1694
JNION CARBIDE	1024
JNITED KINGDOM ATOMIC ENERGY AUTHORITY	1371 1923
JNIVERSITY OF WASHINGTON	1806
JPOR-JUVANCZ, V.	390 1616 3964
JPOR, E.	1615 7149
JRATA, Y.	1446
JRLACHER, C.	2632
JYEDA, S.	2437
VACIK, J.P.	1233
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VAN DEN BERGHE, H. 229  
VAN DEN BROEK, S.F. 1792  
VAN DEN WINKEL, P. 5808  
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VAN NAHL, T.W. 1569 6362  
VAN PUYMBOECK, S. 5989  
VAN RAAPHORST, J.G. 2838 5996 6956  
VAN REENEN, T.J. 6702  
VAN STYVENDAEL, M. 397  
VAN WYK, J.M. 2586  
VAN ZANTEN, B. 866 880 986 1234  
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VARGA, L.	6069
VARTAPETYAN, B.B.	5435
VASILEV, I.Y.	6834 7116
VASILEV, S.S.	7924
VASILEVSKIS, J.	1187 1356
VASS, S.	6703
VASSOS, B.H.	2511
VEAL, D.J.	519 629 2619 6317
VENET, A.M.	402
VENTER, J.H.	5761 6691 6748
VERBEEK, A.A.	2611
VERBINSKI, V.V.	3717
VERES, A.	1006 7389
VERGHESE, K.	7898
VERHEIJKE, M.L.	818
VERNADSKII, V.I.	6366
VERNIN, F.	1490 1640 1753 2667
VEVERIS, O.E.	7131
VEZРАНOVSKI, E.	5966
VIAL, J.	7151
VIDAL, J.P.	1518 1600 5968
VIKHITILL, I.	1177
VILLAR, G.F.	1348
VINCENT, E.A.	522 523 524 525 724 1080

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VINS, V.	6337 6825
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VITTOZHENETS, G.C.	1646 2965 5950 7100
VLASOV, D.A.	1068
VOBECKY, M.	1610 2741 6828 7220 7285 7361
VODOPIVEC, F.	1770
VOELKER, F.	77
VOGEL, J.	356 906 915 940 1321
VOGT, J.R.	199 285 1017 1954 2506 2774
VOGT, R.W.	6976
VOIGT, A.F.	351 1283 1324 1802 1803 1849 2480 2495 2496 3775 5732 5740 7039
VOLBORTH, A.	1229 1294 1887 2354 2453 5322 5353 5739 6684
VOLDET, P.	2623
VOLFOVSKY, R.	1835
VON ARDENNE, M.	744
VON BAECKMANN, A.	2844 7890
VON DER FEHR, F.	6685 6686
VON-GUNTEN, H.R.	1010 1012
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2740 3064 3461 3491 3493 3494 3662  
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WALLS, H.J.	7324
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WALTERS, R.M.	6049
WALTERS, R.R.	1230
WANG, H.C.	5437
WANG, J.L.	7327
WANKE, H.	142 143 217 268 269 528 529 530
WARBURTON, J.A.	7146 7147
WASHINGTON POST	1955
WASSEN, A.	565 1225 2570
WASSON, J.T.	1266 3476 5365 6214 7107
WATANABE, K.	572
WATANABE, T.	2283
WATANABE, Y.	1128
WATERS, J.B.	6229
WATSON, B.T.	527
WATSON, J.E.	7412
WATTERSON, J.I.W	6358 6368
WAYMAN, C.W.	937 1237
WEAVER, J.N.	7898

## ACTIVATION ANALYSIS--AUTHORS

WEAVER, M.L.	2929
WEBER, E.J.	2969
WEBER, G.	6059
WEBSTER, R.K.	449 595 1222 7052 7247
WEBSTER, W.	6068
WECHTER, M.A.	1597 1803 3775 5732 5740 6972
WEICK, C.F.	433
WEINER, J.R.	989 1092 1253 2541
WEINSTEIN, S.T.	7378
WELLS, D.K.	6598
WELLWART, Y.	2157 3126
WELWART, Y.	772 782 1025 1070 1645
WENDT, H.R.	881
WENGER, P.E.	1321
WENNER, C.G.	2852 5771 6965
WESTER, P.O.	504 1089 1134 1412 1766 1797 1920 2308 2638 2639 2776 2819 2999 5785 6697 6831
WESTERMARK, Y.	317 533 534 535 560 573 620 1114 1239 2563 3734
WESTGAARD, L.	2754
WESTIN, B.	385
WESTON, N.T.	6376
WETHINGTON, J.A.	959
WEY, M.T.	995 2426 4269
WHITE, E.M.A.	33 34

## ACTIVATION ANALYSIS-AUTHORS

WHITE, J.C.	2673 7352 7892
WHITLEY, J.E.	622 3466 3480 5933 6367
WIBERLEY, J.S.	1850
WIDELL, M.	560
WIEHART, H.	2655
WIERNIK, M.	7032 7398 8035
WIESNER, L.	1390 2746
WIGGINS, P.F.	8018
WILCOX, G.E.	7065
WILCOX, T.R.	6209
WILDEMAN, T.R.	6343
WILKINS, W.W.	1058 1712 1721 1809 1866 2703
WILKNISS, P.E.	1330 1730 2379 3992 4198 4273 5420 6843 7024 7249 7952
WILLARD, J.E.	536
WILLERS, G.	2775 4299 4300
WILLIAMS, A.I.	452 537 1240
WILLIAMS, D.D.	729 1123
WILLIAMS, D.R.	6742
WILLIAMS, G.H.	2254
WILLIAMS, H.A.	7427
WILLIAMS, J.D.	1311
WILLIAMS, J.L.	8012
WILLIAMS, M.	1930
WILLIAMSON, T.G.	6955



## ACTIVATION ANALYSIS-AUTHORS

WILSON, H.W.	3489 3499
WILSON, R.	1860
WILSON, W.E.	5733
WILSON, W.E., JR.	2123 4283 5746 6688 6938
WILZBACH, K.E.	256
WINCHESTER, J.W.	538 623 654 739 748 913 981 1060 1216 1266 1457 1569 1726 1835 1872 1874 2672 2693 2763 2873 5397 6017 6362 6363 6364 6365 6921 7312
WING, J.	1297 2516 2799 3465 4294 6731 6986 7390
WINTERINGHAM, F.	539 540 541 543
WISEMAN, J.D.H.	616
WITZENC, H.C.	7314
WODKIEWICZ, L.	248 1133 1135 1542 5861 7091
WOHLLEBEN, K.	5957 6581 6583 6736 7307 7905
WOJTKOWSKA, J.	621 1859
WOLBERG, J.R.	2494
WOLFE, R.	138 513
WOLFLE, R.	2644 5591 5592 6369 6689
WOLICKI, E.A.	5543 7011
WONG, K.M.	1324
WONG, K.Y.	5981
WOOD, A.J.	469 470 471 473 1921
WOOD, D.A.	6698
WOOD, D.E.	1407 1875 1950 1956 2542 2569 2577 2580 3796 5748 6075 6841 7907

## ACTIVATION ANALYSIS-AUTHORS

WOOD, G.A.	7958 8ñ31
WOOD, W.L.	1572
WOOD, J.D.L.H.	1701 2526 2527 7028
WOODCOCK, A.H.	6361
WOODMAN, F.J.	670
WOODRUFF, G.L.	2123 4283 5733 5746 6688 6938
WOODS, J.D.	2480 2496
WOODWARD, K.T.	2585
WORMALL, A.	33 34
WORWOOD, M.	6007 6438 7362
WRIGHT, G.A.	6227
WRIGHT, H.W.	1060
WRIGLEY, R.C.	1478
WULFF, J.	1966
WYLD, G.E.A.	7041 7067
WYTTENBACH, A.	1010 1012 1973 2645 3998 6353 6378 6734 7209
YAGI, M.	1298
YAJIMA, S.	375 606 607 608 899 971 997 998 1038 1063 1299 1300 1654 1672 1679 1682
YAKOVLEV, Y.V.	544 662 785 985 1068 1648 2721 5786
YAKUBOVICH, A.L.	8043
YAKUBSON, K.I.	1559 5555
YAMABAYASHI, H.	7283
YAMADA, K.	754

## ACTIVATION ANALYSIS-AUTHORS

YAMADA, Y.	804 1515
YAMAGATA, N.	999 1563 7887
YAMAGISHI, M.	7330
YAMAGISHI, S.	215 775 777 945 992 994 1003 1009 1139 1140 1349 1409 1420 1497 1533 1631
YAMAKI, N.	5923
YAMAMICHI, K.	7315
YAMAMOTO, K.	5922
YAMAMOTO, R.	575 820
YAMAMOTO, S.	5361 7046
YAMAMOTO, Y.	6688 6938 7295
YAMASHITA, H.	2800
YANAGISAWA, I.	5929
YANKOVSKII, A.V.	3464 5320
YANSHKEVICH, V.A	2660
YASE, Y.	7991
YASUNAGA, T.	572 922 1693
YATSURUGI, Y.	7019
YAVORSKY, P.M.	2933
YAZAWA, K.	1408
YAZIKOV, I.F.	7388
YEH, S.J.	1909
YOKOYAMA, H.	7223
YON, E.	4347
YOSHIDA, H.	1509 2683

## ACTIVATION ANALYSIS-AUTHORS

YOSHIDA, J.	7315
YOSHIHARA, K.	7995
YOSHIKAWA, H.	5929
YOSHIMASU, F.	7979 7991
YOSHIMURA, Y.	4311
YOSHISAKI, M.B.	4258
YOUH, C.C.	7096
YOUMANS, A.H.	996 1686
YOUNG, L.G.	7146 7147
YOUNG, M.	7047
YOUNG, M.H.	3356 6310
YUASA, Y.	7177
YUITA, K.	5925
YUKI, M.	5919
YULE, H.P.	659 951 1327 1620 1649 1673 2116 2452 2595 2689 3798 6087 6861 6937 7050 7060 7069
YUNUSOV, M.	6201
YUSTER, P.H.	133
YUTAKA, M.	1399
ZADVORNYI, A.S.	7214
ZAHRINGER, J.	493
ZAITSEV, E.I.	949 2747
ZAKHIDOV, A.S.	5858 7410
ZALESKII, V.Y.	949
ZAMFIR, I.	3759

## ACTIVATION ANALYSIS-AUTHORS

ZAMYATINA, V.N.	1235	2369					
ZAMYATNINA, V.N.	871	1191					
ZANARDI, M.	6397						
ZAPOROZHETS, V.M.	3462						
ZARZECKA, E.	7355						
ZASUKHIN, E.N.	7165						
ZDANOVICH, I.D.	5779						
ZEGERS, C.	6954						
ZELENIN, V.M.	4196						
ZELLER, J.	1495						
ZEMAN, A.	1121	1243	1244	1291	1587	1588	1820
	1974	2154	2845	3084			
ZENGER, J.H.	1052						
ZHABIN, A.I.	3732						
ZHADIN, V.S.	978						
ZHAVORONKOV, V.Y.	2966						
ZHELTIKOV, A.N.	5577						
ZHIVKOV, Z.	984						
ZHURAVSKAYA, E.V.	3729						
ZIEMER, P.L.	4329						
ZIESSOW, D.	4278						
ZIFFERMAYER, G.	6725						
ZIMEN, K.E.	4278						
ZINOVEV, N.V.	7132						
ZITNANSKY, B.	1363	1574					

## ACTIVATION ANALYSIS-AUTHORS

ZIV, D.M.	1430
ZIVKOV, Z.	2923
ZMIJEWSKA, W.	1245 3091 5697 5865 7092 7122 7868
ZOLLER, W.H.	6364
ZONDERHUIS, J.	2838 3738 4230 7408
ZOUKIS, M.	8000
ZSCHUPPE, K.H.	6924
ZUBER, K.	619 4328
ZUPPINGER, K.	3959
ZVEREV, R.P.	1207 1546 1547 1561 3361
ZVYAGIN, V.I.	1207 1546 1547 1548 1561 1769 3361 3384 3388 3736
ZVYAGINA, L.S.	1769 3388 3736
ZVYAGINTSEV, O.E.	545 674 1246 1247
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ZYSKOWSKI, C.L.	1865
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**APPENDIX II**





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## ACTIVATION ANALYSIS-ELEMENT DETERMINED

## ACTINIUM

1439

## ALUMINUM

98 104 113 130 140 141 175 205 301 382 384 393 419 423  
 433 455 471 491 509 518 555 567 580 605 607 612 625  
 635 637 641 665 695 702 711 752 760 810 821 824 834  
 845 848 849 850 851 895 897 903 941 961 966 974 1097  
 1138 1140 1161 1193 1213 1220 1226 1263 1334 1340 1386  
 1414 1419 1420 1442 1456 1460 1466 1471 1492 1558 1559  
 1611 1616 1642 1709 1710 1721 1725 1746 1785 1793 1794  
 1798 1813 1857 1888 1889 1896 1897 1898 1912 1965 2144  
 2306 2498 2499 2504 2507 2526 2550 2662 2689 2699 2751  
 2764 2766 2931 2933 2940 2941 2956 3075 3355 3365 3369  
 3370 3384 3461 3727 3753 3788 3790 3793 3976 4191 4193  
 4216 4231 4232 4258 4286 4293 5326 5383 5384 5591 5727  
 5759 5957 5970 5978 6056 6081 6204 6301 6352 6376 6407  
 6453 6583 6733 6734 6845 6922 6930 6956 6963 6967 6968  
 6970 6977 7011 7077 7082 7101 7111 7123 7171 7229 7234  
 7235 7293 7301 7302 7303 7308 7320 7338 7342 7354 7403  
 7404 7416 7424 7460 7878 7896 7901 7902 7930 7938 7961  
 7978 8007 8017

## ANTIMONY

9 12 21 54 56 83 103 141 149 166 167 174 183 205 215  
 231 246 252 255 279 322 323 419 454 460 469 473 509  
 544 572 581 606 614 619 625 649 662 674 688 702 704  
 735 760 767 775 778 799 803 805 806 845 870 879 886  
 888 894 899 927 942 945 950 977 992 997 1027 1030 1034  
 1063 1064 1068 1089 1095 1118 1123 1124 1133 1134 1135  
 1138 1146 1166 1174 1191 1193 1223 1226 1231 1245 1246  
 1254 1272 1275 1286 1299 1300 1314 1338 1344 1349 1354  
 1371 1412 1434 1438 1441 1456 1466 1469 1471 1472 1477  
 1492 1500 1533 1542 1548 1564 1571 1587 1603 1613 1616  
 1648 1672 1693 1699 1700 1710 1715 1723 1732 1736 1737  
 1746 1766 1797 1825 1848 1858 1894 1907 1920 1977 2144  
 2296 2308 2369 2386 2403 2430 2464 2493 2523 2548 2550  
 2601 2612 2639 2688 2689 2694 2699 2739 2766 2769 2776  
 2801 2819 2852 2931 2938 2950 2999 3065 3352 3383 3418  
 3487 3514 3723 3730 3732 3759 3785 3808 3949 3957 3988  
 4216 4232 4253 4268 4286 4290 4293 4300 4308 4328 4329

## ACTIVATION ANALYSIS-ELEMENT DETERMINED

## ANTIMONY (CONTINUED)

4381	5326	5344	5390	5399	5438	5499	5619	5725	5729	5750
5771	5785	5787	5793	5936	5944	5960	5977	5981	5991	6003
6008	6012	6037	6199	6226	6307	6313	6323	6326	6375	6376
6394	6397	6397	6401	6406	6407	6451	6572	6575	6587	6702
6727	6839	6849	6923	6929	6930	6942	6943	6947	6949	6957
6963	6965	6972	6993	6999	7003	7004	7077	7086	7116	7129
7135	7164	7167	7211	7212	7218	7223	7254	7281	7283	7360
7369	7373	7386	7393	7407	7868	7923	7935	7938	7948	7949
7959	7983	7996	8017							

## ARGON

54	55	121	122	268	290	354	419	493	529	670	683	977	1004
1226	1345	1416	1539	1719	1891	1924	2731	3081	3483	4198			
4224	4278	5295	5449	6386	6389	6390	6399	7169					

## ARSENIC

4	5	22	54	55	56	103	116	124	134	140	141	149	154	165
166	167	172	174	189	193	194	198	205	215	242	245	246		
248	255	270	290	309	310	328	351	370	371	378	409	419		
424	431	451	465	469	473	474	475	476	481	502	504	509		
541	544	551	565	571	572	584	593	606	625	640	649	659		
662	674	686	688	689	702	704	704	706	707	758	760	767		
775	778	799	802	804	805	810	838	845	870	871	879	888		
892	894	896	902	911	944	945	970	985	992	997	1063	1064		
1068	1069	1100	1118	1133	1134	1135	1142	1146	1153	1166				
1171	1174	1177	1191	1192	1193	1223	1225	1245	1246	1272				
1275	1288	1299	1300	1314	1344	1354	1373	1412	1441	1442				
1446	1469	1471	1473	1477	1533	1542	1548	1588	1603	1613				
1616	1617	1628	1648	1649	1665	1672	1693	1699	1710	1725				
1727	1728	1734	1737	1746	1749	1760	1770	1797	1848	1862				
1894	1907	1920	1928	1965	1976	2296	2308	2333	2369	2403				
2495	2497	2508	2523	2548	2550	2570	2619	2638	2639	2640				
2688	2689	2690	2699	2707	2717	2719	2721	2769	2773	2776				
2795	2801	2819	2852	2871	2926	2942	2943	2954	2958	2999				
3098	3350	3383	3483	3514	3713	3725	3726	3730	3731	3748				
3791	3808	3993	4232	4253	4268	4269	4285	4319	5336	5344				
5349	5358	5385	5415	5428	5438	5499	5510	5619	5771	5785				



## ACTIVATION ANALYSIS-ELEMENT DETERMINED

## ARSENIC (CONTINUED)

5793	5851	5864	5926	5931	5944	5983	5991	6003	6008	6023
6037	6039	6040	6052	6226	6307	6323	6353	6376	6383	6394
6397	6401	6407	6572	6575	6587	6674	6697	6831	6832	6851
6924	6929	6941	6942	6943	6944	6949	6954	6957	6965	6972
6993	7003	7111	7125	7135	7154	7164	7167	7211	7218	7222
7223	7232	7242	7254	7332	7360	7393	7407	7460	7868	7870
7920	7938	7959	7983							

## BARIUM

54	55	56	67	68	183	189	209	214	217	290	326	423	483	484
485	504	588	614	631	635	676	686	688	704	705	708	723		
760	810	815	824	845	879	966	1014	1027	1034	1045	1086			
1118	1134	1150	1188	1190	1191	1193	1212	1226	1281	1334				
1340	1361	1412	1597	1670	1699	1710	1725	1727	1738	1797				
1815	1825	1890	1896	1920	1973	2308	2464	2474	2498	2523				
2550	2638	2639	2676	2689	2717	2776	2804	2819	2852	2965				
2999	3355	3383	3483	3775	3960	3988	4214	4263	5500	5619				
5785	5936	5977	5991	6002	6067	6227	6301	6376	6442	6574				
6584	6729	6822	6854	6939	6947	6951	6962	6963	7004	7164				
7168	7217	7254	7315	7316	7360	7938	7948	7959						

## BERYLLIUM

169	170	184	185	201	380	383	455	479	554	669	855	908		
978	983	1065	1081	1082	1083	1136	1160	1175	1178	1270				
1280	1435	1609	1637	1861	1871	2318	2777	3072	3767	4193				
5522	6056	6344	6368	7460	7862	7875	7994							

## BISMUTH

103	141	146	166	167	255	411	419	509	688	697	760	879		
894	1121	1124	1212	1354	1477	1613	1699	2550	3464	3793				
5320	5344	5381	5398	6226	6323	6696	6972	7460						

## ACTIVATION ANALYSIS-ELEMENT DETERMINED

## BORON

82 144 181 201 216 333 335 382 455 495 497 530 791 855  
 904 905 1013 1091 1280 1312 1393 1546 1547 1561 1618  
 1787 1821 1823 1985 2251 2298 2498 2661 2712 2987 3059  
 3126 3361 3376 3466 3767 3811 3962 3976 4193 4211 5332  
 5408 5429 5566 5756 5779 5854 5919 5932 5933 6056 6344  
 6367 6580 7240 7258 7285 7286 7321 7361 7460 7863 7866  
 7875 7905 7924

## BROMINE

23 54 55 56 62 68 100 117 126 205 290 328 347 437 442  
 504 539 602 625 631 635 641 659 686 688 697 702 704  
 706 714 760 810 824 827 829 830 851 888 933 934 942  
 977 1012 1055 1072 1086 1096 1118 1134 1208 1226 1266  
 1412 1419 1433 1462 1472 1479 1480 1492 1514 1569 1572  
 1577 1606 1617 1633 1709 1710 1736 1737 1746 1797 1848  
 1870 1874 1920 1964 2308 2347 2403 2508 2509 2548 2550  
 2614 2619 2638 2639 2689 2693 2694 2717 2730 2766 2776  
 2819 2852 2871 2873 2991 2999 3059 3101 3360 3365 3483  
 3708 3716 3791 3808 4194 4214 4254 4285 4329 5370 5390  
 5397 5510 5714 5718 5749 5751 5771 5775 5785 5870 5920  
 5924 5925 5929 5948 5975 5977 5995 6001 6012 6017 6023  
 6037 6055 6058 6085 6304 6307 6321 6359 6361 6362 6363  
 6364 6365 6375 6575 6584 6673 6687 6697 6831 6842 6852  
 6853 6858 6921 6922 6930 6931 6941 6943 6953 6965 6995  
 7077 7123 7125 7129 7195 7211 7227 7242 7243 7365 7386  
 7389 7393 7893 7901 7911 7938 7952 7959 7983 7996 8017  
 8024

## CADMIUM

9 80 82 103 141 166 167 174 180 255 328 416 419 508  
 509 522 535 606 631 662 674 688 697 704 710 713 790  
 799 815 870 879 894 968 1006 1014 1042 1045 1063 1080  
 1088 1089 1113 1118 1123 1134 1150 1191 1240 1246 1277  
 1320 1332 1334 1340 1344 1354 1412 1441 1442 1469 1471  
 1472 1477 1478 1584 1603 1614 1634 1655 1699 1703 1709  
 1710 1725 1766 1797 1800 1832 1856 1920 2308 2369 2508  
 2523 2550 2639 2654 2676 2689 2718 2769 2776 2819 2852  
 2871 2999 3376 3382 3383 3808 3811 3949 3964 4214 4267  
 5307 5325 5345 5369 5619 5698 5703 5779 5785 5922 5944

## ACTIVATION ANALYSIS-ELEMENT DETERMINED

## CADMIUM (CONTINUED)

5977 5991 6202 6226 6309 6323 6574 6575 6584 6712 6854  
 6923 6933 7004 7116 7164 7166 7212 7226 7246 7281 7315  
 7362 7389 7407 7934 7959

## CALCIUM

22 54 56 103 141 155 166 167 174 205 328 423 442 495  
 504 509 529 640 652 673 674 688 699 704 708 714 760  
 815 829 830 848 852 879 1045 1086 1087 1089 1118 1124  
 1134 1159 1166 1193 1247 1281 1292 1354 1362 1371 1457  
 1466 1559 1611 1699 1706 1709 1710 1726 1738 1766 1782  
 1797 1800 1806 1818 1843 1857 1872 1917 1920 1975 2308  
 2323 2422 2523 2550 2618 2638 2639 2687 2689 2737 2751  
 2776 2789 2819 2852 2871 2945 2963 2999 3383 3793 4193  
 4258 4329 5384 5386 5390 5771 5785 5981 6004 6010 6014  
 6044 6067 6073 6081 6307 6309 6376 6574 6582 6675 6683  
 6712 6734 6827 6933 6936 6939 6963 6965 6975 6982 7004  
 7013 7102 7129 7164 7168 7188 7246 7250 7254 7316 7318  
 7338 7353 7360 7403 7407 7426 7460 7938 7948 7968 8012

## CALIFORNIUM

822

## CARBON

4 8 29 45 46 49 105 113 118 119 201 351 401 417 423  
 455 497 498 578 623 637 688 703 704 744 767 811 814  
 913 1026 1065 1219 1263 1312 1414 1560 1599 1604 1646  
 1778 1798 1816 1823 1831 1837 1849 1889 1898 1951 2298  
 2495 2504 2505 2550 2554 2652 2661 2933 2948 2949 2965  
 3070 3077 3727 3753 3976 3977 4193 4209 4211 4226 4386  
 5238 5442 5621 5769 5954 6004 6339 6581 6582 6589 6593  
 6680 6681 6736 6742 6752 7009 7011 7015 7017 7018 7019  
 7162 7200 7213 7230 7248 7307 7322 7412 8034 8037

## ACTIVATION ANALYSIS-ELEMENT DETERMINED

## CERIUM

103 115 141 267 439 546 588 676 688 704 705 767 824  
 896 1042 1134 1226 1412 1710 1797 1835 1920 1945 1957  
 1978 2308 2474 2498 2639 2689 2694 2776 2819 2836 2852  
 2945 2999 3395 3766 3780 3949 5308 5369 5771 5785 5936  
 6295 6371 6442 6574 6822 6923 6950 6951 6965 6999 7021  
 7148 7254 7333 7360 7416 7884 7938 7959

## CESIUM

79 93 96 103 138 166 167 300 328 433 460 469 477 504  
 588 614 676 688 705 790 810 815 879 999 1027 1042 1045  
 1089 1134 1193 1222 1226 1265 1412 1449 1466 1477 1563  
 1699 1710 1727 1736 1761 1766 1797 1812 1897 1920 1973  
 2308 2508 2523 2548 2638 2639 2689 2776 2819 2852 2871  
 2931 2989 2999 3375 3383 4310 4381 5341 5369 5500 5619  
 5771 5785 5788 5934 5936 6012 6016 6037 6057 6359 6375  
 6376 6379 6442 6574 6724 6930 6939 6941 6951 6957 6965  
 6972 6994 7004 7077 7125 7152 7164 7165 7196 7887 7935  
 7937 7938 7948 7959 7983

## CHLORINE

23 31 32 35 37 44 48 54 55 56 62 68 81 82 117 141 155  
 205 290 291 328 419 437 442 588 591 602 625 635 637  
 641 652 676 686 688 697 699 702 704 705 714 732 760  
 777 824 829 830 845 849 851 871 887 895 921 932 933  
 941 942 966 977 992 1010 1061 1086 1138 1193 1200 1208  
 1217 1226 1263 1266 1320 1331 1442 1456 1477 1492 1520  
 1539 1569 1595 1617 1670 1689 1709 1710 1723 1725 1738  
 1746 1764 1772 1819 1843 1874 1902 1913 1971 2141 2148  
 2347 2422 2498 2508 2550 2614 2673 2689 2693 2701 2758  
 2766 2775 2871 2873 2930 2965 2981 3101 3355 3360 3483  
 3708 3736 3752 3778 3791 4191 4193 4195 4258 4285 4296  
 4299 4327 5386 5390 5397 5510 5718 5721 5751 5924 5948  
 6011 6014 6017 6055 6056 6063 6085 6212 6331 6361 6362  
 6364 6365 6446 6679 6688 6690 6735 6827 6842 6852 6921  
 6922 6930 6951 6953 7004 7026 7077 7092 7102 7123 7129  
 7172 7176 7227 7232 7240 7243 7316 7316 7338 7365 7373  
 7380 7388 7399 7403 7880 7893 7898 7901 7902 7919 7938  
 7952 8017



## ACTIVATION ANALYSIS-ELEMENT DETERMINED

## CHROMIUM

22	39	97	103	126	140	141	166	174	205	230	252	291	328
371	419	433	460	469	482	508	509	614	625	637	640	641	
667	674	688	706	712	716	718	726	735	741	760	767	789	
806	815	879	888	920	942	977	985	987	989	1030	1042	1118	
1124	1134	1138	1165	1211	1226	1245	1247	1251	1254	1255			
1263	1275	1277	1293	1333	1349	1412	1434	1436	1442	1456			
1471	1472	1477	1492	1512	1564	1614	1649	1699	1707	1709			
1710	1717	1723	1725	1736	1737	1760	1786	1795	1797	1825			
1832	1833	1844	1856	1897	1920	1965	2296	2306	2308	2430			
2473	2498	2508	2523	2548	2559	2597	2601	2639	2654	2662			
2673	2689	2690	2717	2721	2735	2739	2753	2766	2769	2776			
2819	2846	2852	2870	2871	2882	2950	2999	3005	3303	3384			
3470	3723	3791	3957	3964	3988	4192	4216	4253	4310	5326			
5343	5350	5369	5390	5438	5448	5499	5500	5581	5619	5728			
5771	5785	5788	5808	5936	5941	5977	6013	6037	6199	6226			
6359	6407	6442	6451	6574	6692	6702	6715	6720	6743	6754			
6823	6844	6846	6849	6923	6924	6930	6931	6941	6943	6947			
6950	6951	6956	6957	6963	6965	6977	6999	7002	7004	7036			
7077	7082	7111	7125	7129	7145	7154	7164	7166	7188	7212			
7232	7243	7254	7281	7283	7304	7306	7316	7333	7355	7360			
7375	7391	7393	7407	7408	7416	7422	7425	7898	7914	7934			
7935	7937	7938	7948	7983	8017								

## COBALT

4	5	13	47	80	83	103	124	130	138	140	141	166	167	174
205	246	252	254	263	270	328	352	356	390	419	428	433		
460	462	470	482	502	504	509	513	531	588	594	614	616		
620	625	635	637	641	662	667	674	676	688	697	704	705		
717	724	726	729	735	741	760	767	789	790	799	804	810		
813	815	823	834	852	870	879	883	892	906	915	920	940		
941	942	977	994	1009	1027	1042	1045	1088	1094	1095				
1097	1098	1099	1118	1123	1124	1129	1134	1138	1165	1167				
1171	1172	1183	1190	1193	1193	1204	1211	1226	1231	1247				
1251	1254	1262	1263	1273	1277	1293	1313	1321	1344	1349				
1354	1371	1406	1411	1412	1426	1434	1438	1441	1442	1443				
1454	1456	1466	1471	1472	1477	1492	1512	1515	1541	1564				
1614	1644	1699	1707	1709	1710	1717	1723	1725	1727	1729				
1741	1749	1760	1785	1797	1813	1817	1825	1827	1832	1833				
1856	1860	1897	1920	1965	2036	2296	2306	2308	2430	2447				
2495	2508	2523	2548	2550	2578	2601	2638	2639	2640	2654				
2658	2689	2690	2707	2707	2717	2718	2723	2725	2735	2739				

## ACTIVATION ANALYSIS-ELEMENT DETERMINED

## COBALT (CONTINUED)

2744	2752	2766	2769	2776	2819	2846	2852	2870	2871	2876
2882	2931	2950	2957	2999	3005	3383	3388	3418	3470	3661
3713	3716	3730	3731	3740	3810	3955	3957	3964	4153	4153
4264	4285	4308	4315	4317	4328	4381	5336	5343	5345	5369
5438	5448	5510	5619	5697	5703	5728	5759	5771	5785	5788
5808	5936	5941	5955	5967	5977	5981	6012	6016	6037	6067
6199	6202	6203	6226	6307	6309	6323	6348	6356	6375	6383
6442	6444	6451	6574	6587	6712	6715	6716	6724	6754	6755
6923	6924	6929	6930	6933	6941	6943	6950	6957	6963	6965
6966	6969	6972	6981	6999	7004	7077	7080	7082	7090	7094
7111	7125	7135	7137	7145	7152	7154	7164	7166	7197	7211
7212	7226	7235	7243	7246	7254	7260	7281	7310	7311	7326
7333	7360	7365	7371	7393	7416	7424	7865	7885	7934	7935
7937	7938	7978	7983	7988	8017					

## COPPER

5	6	7	12	22	54	55	56	63	68	78	81	83	102	103	116	130
138	140	141	149	166	167	174	183	189	200	205	215	238				
246	252	255	270	290	291	322	328	351	370	371	390	398				
402	408	419	423	442	443	454	462	469	470	471	473	501				
502	504	508	509	513	531	544	550	560	567	571	572	573				
594	606	616	621	637	641	648	649	652	662	674	675	686				
688	695	699	702	704	706	710	712	714	724	726	755	760				
767	772	775	789	799	803	804	805	806	810	813	824	825				
829	830	834	848	849	870	879	882	888	892	894	895	896				
899	919	920	922	938	941	945	977	982	985	987	992	997				
1000	1018	1030	1034	1045	1063	1068	1069	1073	1086	1089						
1093	1098	1099	1105	1107	1108	1118	1129	1132	1133	1134						
1135	1138	1141	1156	1162	1165	1166	1172	1190	1191	1211						
1223	1226	1240	1244	1245	1246	1251	1254	1255	1263	1269						
1272	1274	1275	1286	1287	1300	1306	1332	1344	1349	1354						
1373	1384	1398	1411	1419	1421	1441	1442	1456	1466	1469						
1471	1472	1473	1492	1504	1510	1515	1521	1533	1540	1542						
1554	1555	1556	1557	1559	1603	1616	1617	1623	1641	1645						
1648	1652	1672	1692	1699	1700	1703	1707	1708	1709	1710						
1725	1736	1737	1746	1748	1749	1760	1766	1767	1769	1797						
1800	1815	1817	1819	1825	1828	1832	1833	1841	1848	1855						
1859	1886	1895	1907	1920	1925	1926	1965	1973	1975	1976						
2125	2141	2144	2306	2308	2333	2358	2369	2386	2426	2495						
2508	2511	2523	2535	2539	2548	2550	2552	2578	2579	2590						
2597	2601	2610	2619	2638	2639	2640	2673	2688	2689	2690						

## ACTIVATION ANALYSIS-ELEMENT DETERMINED

## COPPER (CONTINUED)

2699	2713	2717	2718	2721	2723	2724	2728	2735	2739	2753
2766	2769	2776	2786	2801	2819	2848	2852	2871	2876	2882
2929	2930	2950	2965	2978	2999	3005	3027	3061	3065	3075
3341	3345	3350	3369	3371	3372	3373	3382	3383	3482	3483
3487	3708	3710	3713	3723	3727	3730	3731	3732	3738	3740
3760	3791	3797	3808	3957	3961	3964	3988	3991	3994	3998
4153	4191	4216	4217	4230	4232	4253	4267	4285	4291	4293
4298	4315	4329	5326	5336	5343	5345	5368	5382	5383	5390
5398	5399	5403	5499	5502	5510	5579	5619	5697	5703	5725
5750	5770	5785	5793	5864	5869	5924	5928	5931	5935	5944
5977	5981	5991	5995	6003	6007	6008	6009	6016	6037	6055
6067	6083	6199	6207	6211	6226	6301	6307	6309	6328	6356
6369	6375	6378	6383	6397	6401	6407	6438	6457	6570	6572
6587	6671	6689	6693	6697	6706	6708	6712	6715	6716	6720
6745	6754	6825	6831	6849	6851	6923	6924	6929	6933	6935
6941	6944	6947	6949	6953	6963	6967	6990	6999	7003	7004
7082	7087	7092	7094	7103	7111	7116	7118	7123	7125	7129
7138	7152	7154	7164	7166	7209	7211	7212	7218	7243	7246
7254	7257	7281	7299	7300	7304	7306	7311	7314	7360	7382
7407	7427	7865	7868	7873	7877	7879	7933	7934	7938	7945
7948	7976	7978	7992	7993	7996	8007	8041			

## DYSPROSIUM

79	115	139	188	252	267	343	396	419	439	604	713	757	824
920	958	982	998	1011	1038	1196	1199	1226	1329	1466			
1567	1648	1682	1702	1710	1723	1835	1945	1957	2369	2597			
2601	2689	2694	2735	2920	2950	3770	3780	3811	5746	5992			
6074	6312	6442	6445	6454	6858	7152	7423	7884	7889	7938			
8022													

## ERBIUM

115	267	439	544	631	824	1055	1195	1226	1344	1478	1655		
1710	1945	1957	1959	2689	2735	3100	4214	6991	7021	7884			



## ACTIVATION ANALYSIS-ELEMENT DETERMINED

## EUROPIUM

39 79 115 139 228 267 343 433 439 572 585 588 662 676  
 705 845 958 998 1226 1329 1466 1682 1710 1835 1897  
 1945 1957 1959 2350 2474 2689 2694 2735 2800 2945 3395  
 3397 3714 3770 3780 3811 4301 5740 5771 5777 5936 6057  
 6074 6312 6324 6442 6710 6822 6828 6858 6859 6860 6923  
 6927 6950 6963 6965 6966 6999 7148 7152 7254 7283 7333  
 7360 7393 7416 7423 7884 7937 7938 7988 8005 8023

## FLUORINE

17 23 29 105 141 201 313 382 423 455 479 549 659 704  
 712 716 760 824 855 895 986 1055 1065 1084 1157 1263  
 1280 1312 1442 1514 1639 1649 1764 1778 1793 1813 1823  
 1961 2126 2433 2498 2550 2584 2623 2666 2689 2796 2965  
 2987 3059 3089 3101 3767 3781 4000 4193 4198 4261 4276  
 4284 4392 5177 5356 5445 6056 6085 6331 6344 6749 6843  
 7194 7232 7238 7239 7342 7390 7406 7903 7952 7953 8039

## GADOLINIUM

79 103 115 139 267 439 688 704 767 824 845 948 1226  
 1329 1710 1785 1945 1957 1959 2689 2735 3811 4214 4325  
 5308 5740 6043 6371 7112 7423 7904 7938 8005

## GALLIUM

4 12 66 68 80 84 103 166 167 187 210 238 249 252 255  
 360 361 370 398 419 443 509 544 606 635 662 688 704  
 707 726 760 767 799 805 806 815 834 845 870 879 895  
 902 920 985 987 1045 1063 1086 1088 1092 1098 1099  
 1133 1134 1135 1138 1165 1166 1226 1245 1246 1264 1272  
 1338 1349 1441 1469 1477 1510 1548 1603 1616 1699 1700  
 1710 1723 1736 1737 1746 1797 1817 1974 1976 2444 2523  
 2548 2550 2579 2601 2683 2688 2689 2717 2718 2721 2769  
 2801 2950 3059 3382 3383 3476 3485 3487 3514 3730 3791  
 3797 3961 4310 5345 5365 5619 5771 5785 5787 6037 6199  
 6215 6226 6323 6356 6383 6574 6676 6678 6923 6963 6965  
 6972 6999 7004 7143 7152 7164 7166 7210 7212 7254 7304  
 7306 7310 7360 7865 7883 7934 7938

## ACTIVATION ANALYSIS-ELEMENT DETERMINED

## GERMANIUM

469 706 824 1055 1118 1275 1710 1863 2689 2954 3476  
 3481 3799 4253 5344 5365 5430 6323 6575 6824 6972 7116  
 7210 7281 7310

## GOLD

9 13 14 85 103 124 149 163 165 166 178 186 187 189 205  
 215 235 246 328 374 390 405 409 419 424 462 509 512  
 523 524 525 544 545 549 572 601 614 619 625 630 631  
 640 659 662 674 686 688 702 706 710 713 714 724 754  
 755 758 760 767 799 810 828 829 830 848 858 870 879  
 887 888 894 942 943 956 968 977 995 997 1007 1014 1027  
 1045 1055 1060 1073 1074 1089 1118 1132 1133 1134 1135  
 1191 1193 1205 1226 1233 1241 1254 1271 1277 1286 1299  
 1306 1310 1320 1332 1349 1383 1402 1412 1456 1471 1472  
 1477 1478 1492 1496 1506 1550 1551 1566 1581 1584 1585  
 1610 1616 1641 1648 1649 1655 1672 1699 1710 1725 1727  
 1736 1737 1743 1763 1766 1797 1800 1920 1926 1929 1930  
 1962 2123 2296 2308 2333 2369 2508 2511 2523 2548 2550  
 2614 2639 2641 2688 2689 2699 2715 2717 2718 2721 2766  
 2769 2776 2801 2805 2819 2852 2871 2887 2904 2923 2964  
 2966 2999 3342 3350 3367 3382 3383 3385 3418 3467 3514  
 3708 3710 3738 3757 3964 4153 4217 4230 4232 4242 4244  
 4249 4307 4308 4309 4310 4312 4328 4329 5344 5364 5390  
 5393 5399 5499 5500 5579 5619 5704 5717 5761 5787 5808  
 5848 5858 5931 5940 5942 5949 5959 5977 5981 6008 6037  
 6050 6202 6298 6323 6337 6358 6378 6383 6397 6405 6407  
 6457 6570 6572 6575 6584 6587 6670 6691 6697 6702 6708  
 6715 6748 6831 6923 6930 6947 6949 6957 6972 6990 6996  
 7003 7021 7072 7082 7095 7116 7118 7119 7124 7129 7133  
 7135 7139 7164 7188 7195 7209 7218 7232 7254 7260 7281  
 7298 7303 7304 7306 7311 7316 7329 7360 7382 7385 7393  
 7410 7420 7873 7900 7934 7957 7996 8018 8041

## ACTIVATION ANALYSIS-ELEMENT DETERMINED

## HAFNIUM

9 24 103 166 167 176 212 225 238 252 291 313 325 347  
 375 419 494 549 588 614 631 641 676 683 688 704 705  
 726 760 790 810 824 828 879 895 899 920 967 987 988  
 1003 1014 1022 1042 1045 1055 1097 1134 1165 1173 1185  
 1193 1226 1236 1381 1410 1471 1472 1477 1492 1564 1573  
 1574 1578 1612 1615 1642 1699 1709 1710 1723 1736 1795  
 1797 1920 1931 2550 2559 2601 2689 2717 2735 2766 2852  
 2950 2979 3811 3996 4214 5369 5500 5515 5517 5771 5785  
 5788 5936 6199 6213 6297 6335 6376 6442 6443 6574 6575  
 6584 6701 6741 6923 6951 6963 6965 6966 7132 7145 7241  
 7254 7360 7416 7937 7938 7948 7956

## HELIUM

114 158 528 563 721

## HOLMIUM

103 115 211 267 343 439 544 662 688 704 713 767 1036  
 1042 1226 1344 1466 1478 1597 1655 1710 1835 1945 1957  
 1959 2621 2689 2735 5732 7884 7938

## HYDROGEN

206 207 1062 1377 1415 1772 1785 1843 1898 1906 2303  
 3033 3072 3078 5319 6366 6367 6450 6582 6669 6682 6711  
 6995 7127 7144 7240

## INDIUM

82 141 166 205 210 229 234 239 240 249 255 272 301 344  
 419 436 478 509 526 544 588 631 637 662 674 676 697  
 704 705 713 724 742 760 799 810 815 870 879 894 924  
 941 957 964 1006 1014 1045 1055 1118 1133 1134 1135  
 1166 1168 1202 1209 1226 1243 1247 1263 1275 1349 1443  
 1472 1477 1478 1548 1564 1603 1616 1655 1671 1699 1710

## ACTIVATION ANALYSIS-ELEMENT DETERMINED

## INDIUM (CONTINUED)

1727	1754	1758	1797	1879	2340	2444	2523	2525	2601	2614
2640	2683	2688	2689	2717	2718	2769	2801	2950	2966	3079
3383	3514	3730	3731	3739	3740	4214	4253	4286	4328	5336
5343	5345	5619	5703	5785	5870	6202	6203	6214	6226	6323
6355	6376	6574	6584	6676	6678	6824	6848	6923	6957	6974
7004	7094	7123	7164	7166	7171	7210	7212	7225	7226	7229
7254	7281	7312	7342	7360	7389	7460	7888	7938	7948	7959
7995										

## IODINE

23	50	54	55	56	61	62	68	90	117	126	130	205	290	333	379
602	634	638	686	688	697	704	725	760	810	824	827	848			
851	882	926	962	965	966	1020	1086	1096	1105	1110	1122				
1143	1153	1208	1230	1250	1259	1266	1278	1326	1463	1470					
1519	1529	1569	1653	1710	1725	1750	1824	1874	1914	1964					
2440	2508	2546	2550	2558	2689	2693	2695	2758	2813	2873					
2972	2982	3077	3101	3358	3360	3468	3483	3745	3808	3959					
4190	4191	4232	4293	4310	5390	5397	5699	5716	5718	5948					
5977	5995	5999	6000	6015	6017	6023	6047	6058	6068	6085					
6208	6302	6303	6304	6321	6361	6362	6363	6364	6365	6437					
6461	6575	6699	6746	6747	6842	6853	6921	6945	6946	6953					
7020	7026	7084	7129	7176	7203	7227	7232	7316	7396	7405					
7869	7870	7893	7947	7952	7986	7998	8000	8010	8011	8038					

## IRIDIUM

2	9	135	145	221	352	545	588	631	662	676	698	705	727		
774	776	810	817	824	907	964	1014	1055	1095	1176	1193				
1214	1226	1260	1344	1425	1566	1581	1693	1710	1727	2296					
2515	2644	2689	2844	3467	3473	3530	3810	3949	4214	4312					
5363	5399	5436	5619	5703	5717	5940	6405	6574	6584	6710					
6957	6958	6969	6991	7107	7118	7119	7212	7281	7371	7385					
7394	7997														



## ACTIVATION ANALYSIS-ELEMENT DETERMINED

## IRON

4 22 78 83 97 102 103 113 116 138 141 166 167 174 238  
 246 252 255 263 291 322 328 352 371 398 408 419 423  
 433 471 482 504 508 509 531 567 588 606 614 637 640  
 641 652 657 662 665 676 688 692 699 704 705 712 713  
 716 726 735 741 755 760 789 790 806 815 834 879 894  
 920 942 961 977 987 1005 1042 1045 1063 1089 1118 1123  
 1134 1138 1165 1166 1184 1190 1193 1226 1251 1254 1263  
 1273 1277 1319 1338 1354 1373 1411 1412 1419 1434 1438  
 1456 1460 1466 1469 1471 1477 1512 1542 1559 1564 1603  
 1611 1614 1616 1632 1651 1699 1709 1710 1717 1721 1736  
 1766 1785 1786 1797 1798 1799 1820 1843 1844 1856 1860  
 1889 1897 1898 1912 1920 2308 2447 2507 2523 2526 2548  
 2550 2601 2629 2638 2639 2654 2658 2688 2689 2690 2694  
 2717 2718 2723 2725 2735 2769 2776 2789 2801 2819 2846  
 2852 2870 2871 2876 2878 2931 2933 2950 2965 2999 3005  
 3075 3382 3383 3418 3461 3730 3790 3957 3964 4005 4198  
 4211 4258 4264 4308 4315 5343 5345 5369 5383 5384 5619  
 5697 5728 5747 5759 5766 5771 5785 5787 5788 5808 5864  
 5936 5939 5941 5955 5977 5981 5991 6012 6016 6037 6199  
 6202 6203 6207 6226 6301 6307 6323 6356 6375 6376 6383  
 6407 6442 6451 6453 6574 6587 6671 6697 6740 6743 6754  
 6755 6831 6845 6923 6924 6930 6931 6941 6949 6950 6963  
 6965 6966 6967 6999 7004 7077 7083 7111 7125 7145 7166  
 7170 7188 7197 7211 7212 7217 7226 7232 7235 7243 7254  
 7260 7281 7310 7316 7333 7360 7379 7404 7416 7424 7934  
 7935 7937 7938 7948 7978 7983 7988 8017 8041

## KRYPTON

1539 1543 1891 2689 3468

## LANTHANUM

79 103 115 252 395 411 419 433 439 504 511 572 585 688  
 704 726 767 896 920 958 977 998 1038 1042 1134 1226  
 1412 1419 1438 1466 1473 1540 1549 1596 1597 1682 1710  
 1723 1736 1737 1760 1797 1835 1897 1920 1945 1957 1959  
 2306 2308 2548 2597 2638 2639 2689 2694 2717 2735 2776  
 2800 2819 2836 2852 2882 2999 3005 3384 3395 3470 3714  
 3766 3780 4286 4329 5732 5771 5777 5785 5788 5936 6037



## ACTIVATION ANALYSIS-ELEMENT DETERMINED

## LANTHANUM (CONTINUED)

6074 6227 6295 6307 6324 6354 6375 6376 6442 6574 6740  
 6828 6857 6858 6923 6924 6927 6943 6950 6951 6963 6965  
 6966 6974 6999 7082 7152 7195 7254 7333 7360 7375 7393  
 7416 7884 7934 7938 7983 7988 7989 8023

## LEAD

141 291 423 1101 1124 1150 1212 1340 1427 1486 1911  
 2251 2614 2689 2812 2965 4230 4319 6344 6587 6849 6854  
 6949 6960 7177 7232 7315 7316 7460

## LITHIUM

82 110 158 196 219 256 261 300 397 455 530 728 782 784  
 841 949 981 1070 1351 1528 1576 1618 1787 1801 1857  
 1906 2251 2385 2543 2755 2927 3059 3126 3376 3793 5854  
 6056 6331 6344 6751 7109 7875 7894 8035

## LUTETIUM

103 115 224 267 439 588 676 688 704 705 713 767 1014  
 1042 1226 1344 1710 1835 1945 1959 2621 2689 2694 2735  
 3384 3397 3780 4301 5771 5936 5962 6295 6442 6965 6999  
 7938

## MAGNESIUM

54 55 56 87 98 141 205 290 328 382 442 455 509 580 581  
 622 635 638 648 659 707 760 821 845 848 850 851 961  
 966 1086 1087 1139 1165 1193 1217 1226 1384 1400 1409  
 1460 1611 1616 1649 1708 1710 1785 1893 1912 1975 2306  
 2434 2445 2499 2508 2526 2551 2689 2690 2707 2871 2945  
 3075 3383 3388 3461 3483 3724 3790 3793 3976 3985 4193  
 4198 4258 4272 5383 5384 5743 5759 5924 5977 5978 6056  
 6067 6301 6309 6328 6453 6712 6734 6930 6933 6936 6963  
 6967 6970 7004 7111 7135 7204 7229 7235 7246 7282 7338  
 7938 7979 7985 8001

## ACTIVATION ANALYSIS-ELEMENT DETERMINED

## MANGANESE

4	5	54	55	56	59	64	68	78	80	81	83	88	97	103	130	140																
141	149	166	167	175	189	205	215	238	246	252	271	290	291	291	301	322	331	351	357	419	422	433	442	454	502							
509	516	531	544	552	561	564	573	581	586	625	635	637	640	641	648	651	652	662	665	686	688	699	702	704	706							
709	710	714	717	718	726	735	760	767	775	777	789	806	810	813	815	829	830	834	845	848	849	850	862	879	882							
893	895	896	897	899	902	903	919	920	929	933	934	938	941	942	966	968	969	977	985	987	992	995	1045	1048	1068							
1073	1086	1088	1089	1093	1098	1099	1105	1107	1112	1114	1118	1124	1129	1138	1141	1162	1166	1171	1191	1192	1193	1204	1206	1207	1226	1245	1251	1254	1255	1263	1264	1267
1269	1272	1277	1319	1332	1354	1376	1384	1406	1419	1434	1441	1442	1443	1456	1460	1466	1471	1477	1487	1492	1495	1510	1513	1540	1542	1558	1559	1572	1606	1611	1616	1636
1642	1699	1700	1703	1705	1708	1709	1710	1723	1725	1736	1737	1744	1746	1749	1766	1767	1769	1781	1789	1795	1800	1805	1813	1817	1819	1825	1828	1832	1833	1840	1857	1897
1965	1975	2125	2141	2157	2306	2337	2369	2426	2481	2495	2498	2502	2508	2511	2523	2534	2535	2548	2550	2559	2573	2578	2579	2597	2601	2685	2688	2689	2690	2699	2707	2717
2721	2723	2725	2733	2735	2739	2751	2753	2766	2769	2795	2801	2804	2821	2845	2846	2848	2852	2876	2882	2892	2931	2950	2963	2966	3062	3344	3365	3369	3382	3383	3470	3483
3710	3713	3723	3727	3804	3957	3964	3988	4191	4232	4263	4285	4286	4291	4293	4306	4310	4315	4317	4329	4374	5335	5343	5368	5370	5386	5390	5500	5501	5510	5571	5591	5619
5697	5713	5725	5726	5759	5766	5771	5785	5792	5864	5869	5924	5936	5941	5944	5955	5972	5977	5981	5996	6003	6006	6016	6037	6055	6067	6199	6206	6209	6226	6227	6309	6328
6375	6376	6407	6438	6442	6453	6574	6667	6671	6700	6712	6715	6716	6720	6734	6743	6754	6824	6849	6922	6924	6929	6930	6933	6935	6936	6939	6941	6947	6953	6963	6965	6969
6982	7077	7082	7090	7092	7099	7101	7111	7123	7125	7129	7160	7166	7170	7215	7218	7229	7235	7243	7246	7254	7260	7280	7281	7282	7303	7304	7306	7311	7341	7342	7355	7360
7375	7382	7401	7407	7411	7416	7424	7865	7877	7879	7889	7896	7898	7901	7938	7976	7978	7981	7991	7993	7996	7999	8001	8007	8017								

ACTIVATION ANALYSIS-ELEMENT DETERMINED

MERCURY

82 103 145 146 166 167 252 302 317 460 504 509 520 533  
 570 571 614 625 631 636 674 688 689 706 717 740 799  
 824 879 882 894 942 977 1005 1014 1045 1105 1118 1134  
 1181 1182 1212 1221 1224 1226 1239 1247 1255 1277 1288  
 1340 1409 1412 1462 1471 1477 1479 1497 1553 1568 1603  
 1699 1710 1737 1746 1797 1825 1894 1920 1969 2296 2308  
 2403 2430 2447 2508 2548 2563 2565 2572 2638 2639 2689  
 2699 2707 2715 2739 2769 2776 2819 2838 2852 2999 3084  
 3360 3376 3774 3789 3791 3808 3957 3989 4153 4214 4232  
 4267 4268 4285 5327 5390 5447 5499 5510 5698 5725 5728  
 5771 5785 5792 5808 5860 5944 5977 6003 6008 6037 6061  
 6080 6294 6302 6307 6308 6337 6375 6575 6584 6699 6747  
 6849 6851 6923 6930 6941 6942 6945 6947 6957 6965 6972  
 6981 7004 7125 7129 7195 7211 7243 7281 7316 7328 7386  
 7393 7913 7927 7938 8008 8017

MOLYBDENUM

66 68 103 116 140 165 166 167 205 246 291 322 328 398  
 409 442 504 508 509 575 641 688 704 726 758 760 767  
 773 799 804 810 820 870 879 980 1045 1086 1118 1124  
 1133 1134 1135 1150 1165 1190 1191 1215 1220 1234 1254  
 1275 1291 1340 1412 1442 1456 1471 1472 1477 1484 1515  
 1592 1616 1699 1709 1710 1715 1727 1786 1797 1832 1844  
 1907 1910 1920 1965 2308 2369 2495 2508 2523 2550 2638  
 2639 2689 2699 2717 2735 2769 2776 2819 2836 2852 2871  
 2881 2882 3059 3383 3487 3732 3808 3964 3982 4232 4253  
 4411 5785 5808 6003 6008 6226 6356 6383 6395 6397 6409  
 6574 6671 6697 6725 6738 6754 6823 6831 6957 6972 6980  
 6994 7003 7092 7122 7135 7154 7164 7167 7182 7211 7254  
 7359 7360 7376 7938 7959

NEODYMIUM

103 115 267 439 688 704 767 1042 1226 1710 1835 1945  
 1957 1959 2498 2597 2689 2735 2999 3087 3384 3395 4250  
 6371 6442 6836 6991 7021 7884 7938

## ACTIVATION ANALYSIS-ELEMENT DETERMINED

## NEON

528 1891 2699

## NICKEL

4 5 78 81 83 103 140 141 149 166 167 174 205 270 282  
 287 291 291 322 352 390 419 462 470 471 482 502 508  
 509 531 544 614 616 635 641 662 674 688 704 724 755  
 760 767 789 804 810 815 818 845 879 896 919 928 1027  
 1045 1117 1118 1124 1138 1165 1167 1190 1191 1193 1226  
 1240 1254 1354 1375 1398 1441 1456 1471 1477 1515 1526  
 1559 1614 1616 1699 1703 1709 1710 1717 1725 1727 1737  
 1785 1832 1965 1973 2369 2495 2508 2523 2548 2550 2578  
 2601 2619 2658 2673 2689 2723 2724 2744 2769 2950 3383  
 3418 3661 3957 3964 4272 4308 5345 5368 5386 5448 5500  
 5619 5759 5788 5955 5981 6037 6323 6356 6383 6453 6574  
 6587 6754 6755 6825 6844 6949 6969 7036 7164 7166 7197  
 7232 7235 7254 7281 7310 7360 7371 7424 7919 7937 7938

## NIOBIUM

89 197 353 419 697 1102 1137 1172 1201 1226 1232 1340  
 1410 1518 1538 1582 1710 1911 2499 2502 2611 2689 2690  
 2830 3560 3793 4411 6574 6575 6833 7948

## NITROGEN

49 201 346 423 495 497 499 637 696 703 704 712 716 760  
 811 814 841 1065 1263 1312 1408 1442 1599 1670 1680  
 1738 1778 1816 1823 1849 1857 1896 1898 1939 2129 2298  
 2384 2505 2524 2550 2569 2661 3059 3070 3364 3474 3976  
 3995 4193 4211 5238 5420 5442 5782 6056 6339 6374 6580  
 6582 6680 6681 7015 7019 7102 7200 7213 7219 7240 7297  
 7322 7343 7400 7413 7905 7907 7970 8034 8040



## ACTIVATION ANALYSIS-ELEMENT DETERMINED

## OSMIUM

221 222 224 226 347 352 683 1076 1095 1119 1134 1226  
 1340 1431 1492 1502 1710 1797 1920 2689 2766 4312 5436  
 5717 5719 5940 6392 6405 6575 6719 6957 6972 7990

## OXYGEN

29 38 45 46 49 58 69 74 75 105 108 109 113 131 153 160  
 199 201 285 391 403 423 423 426 455 495 497 500 519  
 549 567 578 591 596 611 623 629 637 638 654 655 659  
 695 703 712 716 756 762 770 771 811 814 839 841 843  
 860 863 867 868 912 913 921 959 977 1023 1055 1060  
 1065 1067 1071 1075 1103 1104 1116 1151 1158 1190 1194  
 1229 1238 1248 1252 1256 1258 1263 1294 1297 1309 1312  
 1318 1330 1394 1399 1414 1424 1437 1442 1450 1453 1483  
 1491 1509 1522 1530 1532 1589 1598 1604 1646 1649 1668  
 1675 1686 1704 1713 1721 1730 1739 1742 1773 1778 1798  
 1802 1804 1811 1814 1816 1823 1831 1857 1887 1889 1896  
 1900 1904 1906 1912 1915 1939 1950 1954 1956 1979 2129  
 2297 2298 2381 2418 2453 2498 2504 2505 2506 2507 2518  
 2526 2540 2542 2543 2549 2550 2562 2580 2586 2591 2598  
 2608 2615 2634 2649 2668 2678 2684 2686 2726 2734 2749  
 2764 2772 2774 2798 2802 2933 2948 2949 2965 2983 3063  
 3070 3073 3077 3085 3090 3355 3357 3461 3502 3553 3711  
 3718 3721 3722 3727 3729 3746 3753 3768 3771 3783 3790  
 3793 3810 3965 3970 3973 3976 3977 3981 3986 3992 4193  
 4196 4197 4198 4209 4211 4226 4260 4277 4386 5238 5321  
 5322 5330 5353 5380 5384 5409 5431 5432 5435 5442 5450  
 5451 5452 5708 5752 5768 5769 5772 5780 5781 5921 5923  
 5938 6053 6065 6066 6072 6329 6339 6370 6449 6582 6588  
 6589 6590 6591 6592 6593 6594 6595 6680 6681 6684 6694  
 6705 6722 6728 6742 6750 6752 6830 6845 6856 6967 6973  
 6978 7009 7011 7012 7014 7015 7017 7019 7025 7076 7097  
 7106 7142 7180 7200 7201 7213 7214 7230 7248 7289 7291  
 7301 7307 7322 7330 7337 7343 7344 7351 7387 7417 7419  
 7905 7912 7915 7917 7946 7949 7969 7982

## ACTIVATION ANALYSIS-ELEMENT DETERMINED

## PALLADIUM

28 84 103 166 167 187 262 352 462 525 544 545 588 662  
 676 705 724 760 776 879 997 1176 1226 1235 1275 1458  
 1539 1581 1693 1699 1710 2689 2839 3810 4253 4312 5307  
 5436 5619 5703 5717 6405 6980 7119 7212 7237 7394 7941

## PHOSPHORUS

4 22 35 47 54 56 123 140 161 189 223 243 244 246 255  
 328 385 398 414 419 438 442 443 455 504 508 509 553  
 588 591 638 641 652 676 688 689 699 704 705 706 714  
 716 767 829 830 864 869 871 892 893 894 921 936 954  
 975 976 977 979 985 1045 1057 1078 1085 1086 1118 1124  
 1134 1165 1166 1177 1190 1193 1198 1215 1223 1237 1242  
 1311 1342 1344 1412 1441 1442 1456 1471 1477 1520 1534  
 1552 1601 1614 1670 1694 1709 1710 1738 1747 1752 1762  
 1766 1767 1778 1780 1797 1815 1818 1832 1870 1892 1896  
 1899 1907 1937 1939 1948 1965 2052 2129 2148 2384 2386  
 2474 2498 2508 2523 2550 2633 2638 2657 2680 2689 2705  
 2721 2748 2759 2764 2819 2849 2852 2871 2931 2945 2965  
 2969 2999 3383 3469 3716 3736 3997 4193 4207 4273 4388  
 5357 5370 5395 5405 5406 5472 5499 5731 5785 5793 5927  
 5981 6004 6012 6056 6063 6086 6226 6397 6410 6412 6446  
 6568 6572 6574 6575 6685 6686 6939 6941 7004 7083 7102  
 7125 7145 7164 7167 7172 7219 7240 7243 7338 7380 7403  
 7877 7880 7977

## PLATINUM

9 205 352 509 544 545 588 631 662 676 705 741 776 817  
 824 1014 1045 1118 1134 1176 1226 1235 1458 1512 1566  
 1649 1693 1710 1797 1920 2639 2717 5436 5619 5717 5942  
 5984 6024 6337 6405 6584 6715 6725 7118 7119 7941

## PLUTONIUM

326 336 841 1357 1906 1921 2553 2689 2998 6713 6714  
 6985

ACTIVATION ANALYSIS-ELEMENT DETERMINED

POTASSIUM

22 35 54 55 56 73 79 103 123 166 167 189 205 246 259  
268 290 300 371 414 419 429 442 493 538 541 553 637  
652 662 686 688 699 702 704 739 815 845 848 849 879  
888 894 903 923 933 934 1045 1048 1086 1089 1131 1165  
1190 1193 1226 1263 1311 1344 1354 1395 1419 1466 1472  
1477 1510 1552 1558 1559 1597 1660 1699 1707 1710 1719  
1746 1785 1896 1898 1963 2508 2523 2550 2673 2689 2707  
2727 2797 2819 2852 2876 2945 2965 2973 2999 3059 3081  
3334 3368 3383 3393 3483 3669 3736 3769 3775 3791 3810  
3990 4193 4198 4240 4248 4262 4278 4315 5370 5384 5386  
5422 5500 5571 5619 5697 5703 5785 5924 5936 5977 6005  
6011 6056 6063 6067 6223 6375 6389 6390 6399 6574 6688  
6826 6930 6939 6941 6956 6963 6976 6982 6999 7004 7077  
7092 7125 7164 7165 7193 7196 7212 7240 7243 7254 7327  
7338 7341 7360 7380 7403 7934 7938 7978

PRASEODYMIUM

103 115 439 546 688 704 767 960 1115 1226 1710 1835  
1945 1957 1959 1978 2498 2689 2735 3087 3328 3397 4301  
6828 7021 7397 7910

PROMETHIUM

6057

PROTACTINIUM

1439 2889 6574 6961

RADIUM

1439



ACTIVATION ANALYSIS-ELEMENT DETERMINED

RHENIUM

85 86 165 186 205 224 226 362 409 511 600 677 683 686  
 713 758 768 810 964 1045 1226 1431 1478 1502 1584 1585  
 1655 1710 1727 1760 1803 2296 2350 2431 2689 2811 2902  
 3384 3414 4310 4311 5592 5619 5703 5719 5857 6054 6200  
 6395 6575 6677 6725 6735 6957 6972 7093 7134 7336 7374  
 7990

RHODIUM

344 352 436 631 697 713 824 941 1014 1055 1172 1226  
 1228 1710 2689 2966 3793 4312 6324 6677 7366 7941

RUBIDIUM

54 55 56 79 93 96 103 138 166 167 290 300 328 460 462  
 469 477 504 588 614 676 688 705 741 790 810 815 815  
 824 852 879 968 999 1027 1042 1045 1055 1089 1134 1190  
 1197 1222 1226 1265 1332 1412 1449 1466 1477 1512 1597  
 1699 1710 1727 1737 1766 1797 1800 1817 1920 1952 1973  
 2308 2508 2523 2548 2550 2614 2638 2639 2689 2735 2776  
 2819 2852 2871 2999 3383 3468 3483 3775 4214 4310 5369  
 5728 5771 5785 5936 5977 5981 6037 6227 6359 6375 6379  
 6442 6574 6930 6931 6939 6941 6957 6965 7004 7125 7152  
 7164 7165 7196 7232 7243 7887 7935 7938 7948

RUTHENIUM

205 347 352 358 588 676 705 1076 1086 1147 1226 1235  
 1425 1492 1710 2689 2766 2836 4255 4312 5311 5717 5940  
 6392 6405 6575 6719 6939 6957 7921

## ACTIVATION ANALYSIS-ELEMENT DETERMINED

## SAMARIUM

79 103 115 139 252 267 343 395 419 433 439 504 572 585  
 688 704 713 767 806 920 948 958 998 1036 1038 1042  
 1226 1245 1329 1338 1466 1549 1596 1682 1700 1710 1723  
 1737 1785 1835 1897 1920 1945 1957 1959 2308 2597 2638  
 2639 2664 2689 2694 2776 2800 2819 2852 2999 3395 3470  
 3714 3780 3811 4286 5771 5785 5788 5936 6074 6227 6295  
 6324 6371 6376 6442 6710 6824 6828 6858 6923 6924 6951  
 6965 7152 7423 7884 7904 7929 7938 7988 8005

## SCANDIUM

39 103 140 227 238 252 257 433 509 528 572 587 588 604  
 614 637 640 659 676 688 704 704 705 713 735 767 789  
 806 810 815 824 834 879 920 942 964 977 987 1011 1042  
 1045 1055 1134 1165 1196 1226 1245 1251 1263 1273 1277  
 1319 1338 1354 1412 1419 1438 1454 1456 1466 1469 1471  
 1472 1477 1492 1493 1540 1564 1596 1649 1699 1700 1710  
 1723 1727 1736 1741 1746 1760 1795 1797 1813 1817 1860  
 1897 1920 1945 1965 1970 2283 2296 2306 2308 2430 2447  
 2474 2550 2559 2597 2601 2639 2689 2690 2694 2717 2732  
 2735 2739 2766 2776 2800 2819 2852 2888 2931 2950 2999  
 3005 3088 3396 3470 3957 4329 4381 5343 5369 5448 5500  
 5591 5728 5771 5785 5788 5934 5936 5939 5941 6012 6079  
 6199 6205 6227 6307 6337 6375 6376 6442 6451 6574 6575  
 6702 6740 6822 6923 6924 6930 6939 6943 6950 6951 6957  
 6963 6965 6966 6972 6981 6999 7004 7077 7082 7083 7111  
 7152 7174 7195 7260 7281 7283 7326 7333 7371 7375 7393  
 7416 7865 7884 7935 7937 7938 7978 7983 7988 7989 8017

## SELENIUM

103 148 166 167 174 284 328 387 407 419 434 504 542  
 549 562 588 592 607 614 625 631 674 676 688 705 706  
 707 709 717 726 753 792 810 824 844 852 879 894 1014  
 1024 1027 1055 1086 1118 1134 1138 1190 1203 1226 1300  
 1340 1349 1412 1442 1477 1567 1649 1654 1665 1699 1702  
 1710 1712 1737 1797 1894 1920 2296 2308 2403 2455 2503  
 2508 2548 2550 2638 2639 2644 2676 2689 2699 2707 2764  
 2776 2819 2852 2853 2871 2954 2999 3060 3418 3791 3808  
 3948 3954 3956 4214 4232 4268 4274 4305 4308 5307 5366  
 5619 5771 5785 5808 5864 5994 6012 6037 6309 6385 6394

## ACTIVATION ANALYSIS-ELEMENT DETERMINED

## SELENIUM (CONTINUED)

6451	6575	6584	6697	6712	6831	6923	6930	6933	6941	6943
6957	6965	6972	6992	6995	7003	7089	7116	7125	7131	7195
7211	7212	7232	7243	7246	7281	7342	7389	7393	7888	7899
7908	7926	7959	7983							

## SILICON

4	54	56	81	98	102	113	141	285	291	417	419	423	452	497
517	518	555	580	591	612	622	623	628	637	641	665	695		
712	716	810	838	850	851	881	921	944	961	1017	1190	1193		
1263	1297	1414	1460	1535	1558	1559	1590	1591	1611	1642				
1686	1709	1710	1721	1740	1785	1798	1818	1832	1843	1875				
1889	1898	1912	1954	2354	2429	2498	2504	2506	2507	2526				
2550	2596	2662	2684	2689	2735	2774	2865	2933	2940	2941				
2956	2965	2987	3075	3355	3461	3753	3790	3976	3997	4005				
4193	4198	4198	4205	4258	5383	5384	5416	5720	5739	5759				
5776	5884	6086	6201	6301	6352	6398	6404	6453	6684	6723				
6844	6845	6967	6968	6975	6977	7004	7004	7101	7170	7235				
7293	7301	7302	7338	7354	7403	7404	7407	7424	7974					

## SILVER

13	30	31	82	83	103	125	130	141	166	167	193	205	255	334
344	363	364	365	366	386	419	423	436	460	509	549	589		
608	614	619	631	635	638	674	686	688	697	704	709	713		
738	741	760	790	798	805	824	832	845	879	894	941	984		
1014	1018	1027	1028	1036	1042	1045	1055	1066	1093	1095				
1106	1111	1118	1123	1124	1129	1132	1134	1165	1166	1172				
1190	1193	1226	1247	1275	1277	1320	1349	1354	1371	1375				
1412	1466	1471	1472	1477	1478	1492	1512	1525	1542	1567				
1584	1614	1615	1655	1672	1699	1702	1710	1712	1737	1797				
1825	1830	1832	1873	1920	1953	1955	2144	2154	2308	2333				
2447	2508	2511	2523	2548	2550	2612	2625	2639	2671	2689				
2694	2699	2715	2766	2776	2819	2852	2966	2999	3059	3374				
3383	3394	3418	3487	3738	3740	3810	3949	3957	3988	3998				
4191	4214	4215	4230	4253	4303	4308	4328	5307	5344	5369				
5394	5438	5579	5619	5703	5726	5728	5785	5808	5868	5870				
5977	6012	6037	6061	6202	6203	6217	6222	6226	6242	6244				
6307	6323	6351	6372	6375	6378	6388	6407	6436	6444	6451				



## ACTIVATION ANALYSIS-ELEMENT DETERMINED

## SILVER (CONTINUED)

6574	6575	6584	6587	6717	6824	6849	6925	6930	6943	6947
6948	6949	6981	7003	7004	7094	7118	7119	7146	7147	7166
7175	7181	7195	7209	7212	7229	7254	7281	7314	7360	7373
7389	7393	7394	7407	7414	7934	7959	7983	7997		

## SODIUM

4	6	7	22	29	35	54	55	56	73	79	102	103	104	107	123	136
141	155	166	167	174	175	189	205	215	237	238	246	252				
259	274	275	290	300	328	330	370	371	382	385	398	400				
413	414	417	418	419	423	429	432	433	442	450	454	455				
467	487	488	489	509	511	521	541	544	553	555	561	564				
606	625	635	637	641	652	659	662	686	688	699	702	704				
706	707	714	730	735	760	767	775	789	810	812	829	830				
831	834	842	845	848	849	850	853	879	887	888	894	895				
903	923	933	934	939	942	945	961	966	968	969	977	979				
992	993	995	1045	1055	1061	1063	1086	1089	1118	1134						
1138	1165	1193	1216	1217	1226	1227	1251	1263	1269	1272						
1283	1289	1311	1319	1332	1344	1351	1354	1376	1392	1395						
1398	1419	1438	1452	1456	1460	1466	1471	1472	1477	1492						
1495	1505	1510	1533	1540	1542	1552	1558	1559	1606	1616						
1617	1649	1664	1699	1703	1707	1709	1710	1715	1725	1736						
1737	1746	1751	1766	1780	1785	1800	1813	1819	1857	1897						
1925	1936	1957	1968	1976	1983	2121	2141	2306	2365	2376						
2422	2498	2502	2508	2519	2523	2548	2550	2579	2619	2651						
2657	2662	2673	2680	2688	2689	2690	2707	2711	2717	2735						
2751	2759	2766	2775	2797	2801	2819	2852	2871	2882	2963						
2973	2999	3350	3365	3368	3369	3383	3470	3483	3708	3723						
3736	3769	3791	3808	3964	3990	4191	4193	4198	4201	4216						
4231	4248	4258	4263	4281	4283	4285	4286	4293	4329	4347						
5326	5343	5370	5384	5390	5399	5402	5500	5510	5619	5697						
5703	5725	5771	5785	5869	5924	5931	5936	5981	6005	6011						
6014	6037	6055	6056	6062	6063	6067	6199	6209	6223	6226						
6301	6307	6359	6375	6376	6382	6442	6453	6572	6574	6668						
6687	6688	6720	6734	6754	6826	6827	6922	6929	6930	6936						
6937	6938	6939	6941	6951	6953	6963	6965	6967	6973	6976						
6982	6991	6999	7004	7073	7077	7082	7092	7102	7113	7123						
7125	7129	7164	7165	7177	7212	7218	7240	7243	7254	7260						
7282	7295	7304	7305	7306	7341	7351	7360	7371	7372	7373						
7375	7380	7393	7407	7416	7421	7896	7898	7901	7934	7938						
7945	7948	7978	7996	8001	8017	8021										

ACTIVATION ANALYSIS-ELEMENT DETERMINED

STRONTIUM

22 54 55 56 67 68 80 103 166 167 214 236 290 442 459  
 460 469 483 484 485 588 595 614 631 635 676 688 697  
 704 705 708 714 723 788 803 810 815 829 830 856 879  
 963 968 1014 1045 1086 1088 1089 1134 1150 1170 1190  
 1226 1277 1281 1332 1334 1340 1665 1697 1699 1710 1727  
 1737 1766 1797 1800 1890 1982 2006 2523 2548 2550 2676  
 2689 2852 2977 2984 3383 3483 4272 4329 5500 5619 5755  
 5771 5785 5951 5989 5991 6002 6016 6037 6055 6064 6067  
 6317 6375 6376 6574 6584 6729 6754 6936 6939 6962 6963  
 6965 7021 7164 7168 7232 7292 7316 7389 7935 7938 7948  
 7959

SULFUR

22 37 140 141 291 423 437 495 497 588 591 641 652 659  
 676 688 699 704 705 706 716 767 892 893 897 921 937  
 977 1045 1057 1085 1124 1177 1193 1215 1218 1237 1354  
 1378 1455 1456 1471 1477 1479 1520 1559 1570 1601 1621  
 1649 1709 1711 1720 1778 1782 1785 1818 1857 1870 1898  
 1965 2129 2148 2149 2550 2689 2751 2764 2794 2849 2948  
 2963 3709 3716 3723 3793 4193 4227 4258 4285 4300 5510  
 5543 5923 6086 6410 6412 6446 6568 6973 7004 7172 7231  
 7240 7296 7351 7874 7880 7931 7932

TANTALUM

9 26 51 97 103 145 147 166 167 179 197 265 266 291 319  
 367 371 390 419 508 509 544 575 614 637 641 662 688  
 698 704 729 760 789 799 820 849 870 879 887 896 910  
 955 1002 1045 1102 1118 1123 1127 1128 1137 1165 1166  
 1201 1226 1263 1319 1410 1434 1454 1478 1487 1518 1538  
 1582 1615 1616 1655 1699 1709 1710 1759 1803 1817 1829  
 1840 1966 2480 2496 2502 2523 2689 2690 2717 2830 3346  
 3383 3387 4310 4411 5500 5786 5936 6356 6376 6383 6442  
 6443 6574 6575 6707 6725 6833 6963 6965 6966 7145 7149  
 7152 7164 7167 7254 7281 7360 7865 7867 7937 7938 7948

## ACTIVATION ANALYSIS-ELEMENT DETERMINED

## TECHNETIUM

10 11 15 72 697 1220 2673 6574

## TELLURIUM

103 166 167 174 224 270 434 511 588 662 676 688 705  
 760 792 845 879 894 1118 1122 1226 1240 1246 1300 1412  
 1441 1477 1567 1603 1702 1710 1848 2537 2550 2640 2689  
 3730 3731 4321 5307 5336 5619 5716 5730 5948 6385 6394  
 6934 6972 6992 7003 7081 7116 7212 7281 7869 7888 7919  
 7959

## TERBIUM

79 103 115 267 439 544 662 688 704 767 1042 1226 1324  
 1478 1649 1655 1710 1723 1803 1835 1945 1957 1959 2689  
 2694 3100 3395 3714 5771 5936 6442 6923 6965 6999 7884  
 7938

## THALLIUM

89 133 141 146 255 363 365 411 419 697 815 869 883  
 1172 1212 1603 1710 2006 2525 2643 2689 3793 4221 4310  
 5619 5984 6226 6676 6678 6972 7232 7460 7919 7934

## THORIUM

40 41 42 54 55 56 104 120 137 166 250 289 290 393 395  
 421 640 641 656 688 704 708 790 808 815 828 879 973  
 1042 1045 1090 1165 1180 1189 1226 1277 1361 1371 1391  
 1401 1404 1439 1454 1477 1494 1498 1531 1699 1709 1722  
 1723 1725 1746 1760 1774 1817 1842 1857 1906 2122 2437  
 2447 2550 2636 2714 2852 2882 2976 3105 3483 3958 4198  
 4203 4302 4391 5323 5328 5735 5771 5785 5788 5790 5867  
 5936 6069 6376 6393 6442 6739 6950 6963 6965 6981 7108  
 7145 7152 7206 7254 7333 7360 7416 7865 7937 7938 7939  
 7943

## ACTIVATION ANALYSIS-ELEMENT DETERMINED

## THULIUM

115 439 544 588 662 676 705 713 811 1042 1226 1344  
 1478 1584 1655 1710 1803 1835 1945 1959 2689 3714 5308  
 5936 7938

## TIN

141 149 174 205 508 509 537 575 588 631 676 702 705  
 790 799 820 845 870 894 941 1042 1045 1113 1123 1124  
 1125 1133 1135 1165 1166 1191 1226 1349 1385 1564 1709  
 1710 1856 1863 2144 2296 2430 2523 2601 2640 2654 2689  
 2694 2717 2769 2950 3383 3730 3731 3793 4268 4328 5336  
 5344 5369 5619 5712 5977 6226 6322 6323 6337 6383 6575  
 6587 6947 6949 6956 6957 7164 7167 7212 7223 7225 7232  
 7254 7281 7360 7951 7959

## TITANIUM

78 83 140 205 291 659 697 760 821 841 851 953 1124  
 1134 1172 1226 1340 1363 1375 1442 1501 1710 1797 1863  
 1898 1911 1965 2306 2499 2550 2628 2689 2689 2965 3355  
 3560 3793 4189 4211 4286 6065 6963 7111 7232 7938 7996

## TUNGSTEN

26 65 81 103 140 141 145 165 166 167 189 205 230 246  
 252 291 304 347 371 409 419 504 508 548 549 575 631  
 637 659 687 688 698 704 714 726 758 760 767 779 783  
 799 810 820 824 829 830 849 870 879 893 920 990 1042  
 1045 1055 1086 1093 1118 1118 1150 1155 1165 1169 1215  
 1226 1263 1332 1340 1363 1371 1406 1412 1471 1477 1487  
 1649 1693 1699 1709 1710 1727 1800 1817 1829 1840 1920  
 1965 2308 2480 2495 2496 2502 2523 2550 2614 2638 2639  
 2690 2717 2718 2769 2776 2819 2852 2882 2999 3379 3383  
 3384 3808 3810 3975 3997 4232 4411 5378 5385 5619 5703  
 5771 5785 6356 6383 6409 6572 6574 6584 6725 6754 6844  
 6965 7003 7135 7152 7154 7164 7167 7211 7212 7254 7281  
 7355 7360 7410 7865 7934 7938



## ACTIVATION ANALYSIS-ELEMENT DETERMINED

## URANIUM

14	52	53	120	142	143	151	166	167	209	213	217	233	252
269	288	290	321	326	327	329	332	349	377	393	410	412	
419	448	449	461	472	490	492	511	514	530	564	572	588	
614	640	641	656	676	688	692	704	705	708	728	737	760	
790	808	810	819	824	828	841	866	879	880	909	920	946	
952	971	1019	1025	1042	1059	1076	1079	1090	1109	1122			
1124	1134	1180	1189	1190	1212	1226	1302	1325	1357	1361			
1371	1389	1404	1428	1429	1439	1442	1468	1477	1478	1494			
1498	1527	1531	1597	1607	1652	1699	1709	1723	1725	1727			
1797	1817	1857	1865	1901	1906	1960	1973	2437	2474	2550			
2673	2754	2852	3074	3391	3483	3755	3808	3958	3987	4198			
4208	4381	5262	5323	5328	5343	5439	5447	5551	5716	5732			
5735	5765	5771	5785	5788	5790	5867	5948	5953	5965	6012			
6077	6331	6346	6375	6376	6387	6439	6441	6459	6691	6702			
6713	6714	6739	6748	6951	6963	6965	6983	6985	7035	7216			
7220	7252	7254	7256	7360	7364	7865	7869	7906	7928	7938			
7940	7943	7948	7959	7975	8006								

## VANADIUM

47	68	80	81	89	107	140	165	205	230	257	301	305	409	419
468	509	598	607	635	637	638	641	686	687	690	697	702		
704	752	758	760	781	797	810	821	824	849	851	883	893		
895	941	1001	1086	1088	1093	1097	1145	1150	1172	1226				
1254	1263	1289	1298	1313	1317	1319	1340	1442	1460	1471				
1492	1526	1565	1631	1665	1709	1710	1727	1749	1788	1911				
1938	1965	1980	2495	2499	2550	2601	2662	2689	2696	2707				
2766	2950	3344	3713	3793	4191	4206	4232	4270	4314	5410				
5701	5958	5970	5995	6003	6065	6309	6712	6734	6743	6922				
6928	6929	6933	6940	6963	6970	7004	7111	7123	7232	7246				
7303	7311	7331	7342	7901	7930	7938	8017							

## XENON

1412 1539 1891 2689

## YTTERBIUM

115	267	439	588	641	676	705	713	1008	1021	1042	1055			
1226	1344	1709	1710	1835	1882	1945	1959	2689	2694	2735				
2931	3100	3384	3714	3780	5447	5771	5936	6043	6442	6923				
6965	6999	7938												

## ACTIVATION ANALYSIS-ELEMENT DETERMINED

## YTTRIUM

103 115 227 267 291 544 631 659 662 688 704 760 767  
 879 1014 1055 1340 1374 1403 1413 1474 1596 1649 1699  
 1710 1725 1835 1945 1959 1978 2498 2550 2614 2657 2689  
 2735 3100 3997 4214 6079 6584 7021 7964 8005

## ZINC

33 34 54 55 56 63 68 78 83 103 116 138 140 141 166 167  
 174 205 246 252 255 263 290 291 322 328 358 370 371  
 418 419 442 454 504 508 509 513 544 584 586 588 606  
 614 622 625 635 637 641 648 652 662 676 686 688 699  
 704 705 706 707 710 714 726 767 789 790 799 804 810  
 815 824 829 830 834 845 870 879 888 894 899 920 941  
 942 968 977 985 987 1005 1042 1045 1063 1068 1069 1086  
 1089 1105 1107 1113 1118 1123 1133 1134 1135 1138 1159  
 1165 1166 1190 1193 1210 1211 1215 1223 1240 1244 1254  
 1263 1273 1275 1277 1286 1307 1332 1344 1354 1373 1384  
 1411 1412 1432 1434 1438 1441 1456 1466 1469 1471 1472  
 1477 1492 1515 1564 1601 1613 1616 1645 1648 1670 1677  
 1678 1699 1703 1707 1708 1709 1710 1723 1736 1737 1738  
 1745 1766 1767 1797 1800 1815 1825 1828 1856 1920 1965  
 2124 2296 2308 2333 2386 2430 2447 2508 2509 2523 2534  
 2539 2548 2550 2578 2601 2613 2619 2638 2639 2640 2654  
 2665 2669 2673 2688 2689 2690 2699 2717 2718 2721 2739  
 2766 2769 2776 2801 2819 2848 2852 2870 2871 2876 2931  
 2950 2965 2999 3059 3061 3075 3382 3383 3418 3475 3483  
 3485 3487 3708 3723 3730 3731 3732 3740 3957 3961 4153  
 4232 4253 4263 4267 4286 4291 4308 4315 4329 5307 5336  
 5345 5369 5370 5383 5386 5390 5438 5448 5502 5619 5697  
 5703 5725 5728 5753 5771 5785 5808 5864 5869 5924 5944  
 5950 5977 5981 5991 5995 6003 6008 6012 6016 6037 6061  
 6067 6199 6202 6203 6207 6226 6307 6309 6328 6337 6348  
 6356 6375 6383 6397 6407 6451 6574 6587 6671 6697 6712  
 6715 6716 6754 6831 6845 6849 6923 6924 6929 6930 6931  
 6933 6941 6943 6949 6953 6963 6965 6972 6981 6999 7004  
 7077 7092 7094 7116 7125 7129 7164 7166 7195 7211 7212  
 7232 7243 7246 7254 7257 7260 7281 7299 7316 7360 7362  
 7370 7391 7393 7407 7877 7879 7933 7934 7935 7938 7948  
 7959 7983 8017

ACTIVATION ANALYSIS-ELEMENT DETERMINED

ZIRCONIUM

9 24 83 103 166 167 176 212 232 398 507 509 588 614  
641 676 688 704 705 767 815 879 988 1022 1045 1045  
1124 1165 1173 1226 1375 1381 1410 1477 1481 1537 1646  
1709 1710 1765 1860 2498 2550 2689 2717 2735 2965 3363  
3488 4317 5500 5771 5936 6227 6297 6574 6575 6943 6957  
6965 6994 7004 7145 7232 7393 7460 7938 7948 7949 7959

RARE EARTHS

7 102 166 167 227 258 544 879 895 925 1015 1016 1045  
1047 1187 1205 1235 1257 1323 1356 1404 1474 1477 1681  
1774 1839 2145 2327 2369 2550 2741 2763 2932 3376 3383  
3386 3395 3397 3732 3810 4219 4322 5347 5359 5500 5705  
5706 5707 5778 5862 5873 5961 5963 5964 6049 6077 6079  
6220 6228 6343 6367 6939 6959 7004 7091 7096 7166 7236  
7294 7309 7377 7431 7939 7944

LANTHANIDES

1205 1285 6207 6455 6586 7948



**APPENDIX III**



## APPENDIX III

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## ACTIVATION ANALYSIS-MATRIX ANALYZED

## AIR; ATMOSPHERE

184	185	476	562	966	1004	1036	1081	1083	1266
1543	1569	1874	1924	2553	2693	2981	2998	5397	
5967	6017	6058	6307	6361	6362	6363	6364	6365	
6393	6921	6922	6923	7090	7120	7123	7146	7147	
7312	7328	7334	7405	7901	8017				

## ARCHAEOLOGICAL SPECIMENS

13	351	533	561	619	1032	1132	1301	1306	1376	1897
1926	2495	2575	2762	2945	3738	3998	4230	4328		
5579	5729	5742	5788	6209	6215	6217	6224	6227		
6241	6242	6244	6372	6378	6388	6391	6436	6457		
6458	6570	6587	6948	6949	6950	7083	7209	7260		
7333	7340	7375	7416	7873	7937	8019				

## ART

1504	1825	1834	2589	2694	3988	6031	6061	6241	
6570	6849	6947	6948	7873					

## BIOLOGICAL, GENERAL, INCLUDING VIRUS

35	47	59	68	80	123	192	214	284	308	310	317	320
425	476	486	541	592	594	595	638	651	709	717	811	
839	848	894	930	939	965	975	976	999	1056	1086		
1088	1100	1105	1120	1125	1190	1195	1198	1224				
1241	1288	1296	1308	1317	1370	1389	1436	1439				
1461	1506	1534	1567	1577	1625	1644	1660	1665				
1668	1669	1687	1702	1703	1704	1705	1706	1762				
1769	1781	1873	1892	1894	1895	1899	1963	1970				
1977	1982	2124	2126	2422	2426	2445	2520	2554				
2563	2571	2584	2585	2603	2642	2657	2673	2707				
2718	2738	2759	2791	2792	2793	2946	2964	2969				
2971	2985	2998	3060	3086	3360	3468	3469	3482				
3503	3507	3508	3728	3769	3985	3989	4002	4004				
4194	4207	4221	4261	4267	4274	4315	4376	4377				
5358	5596	5626	5699	5760	5774	5785	5790	5808				
5847	5848	5874	5926	5945	5947	5979	5980	5982				
5983	5985	5986	5987	5988	5989	5993	5994	5995				
5997	5998	6016	6024	6051	6206	6207	6304	6328				
6438	6452	6459	6699	6737	6838	6930	6932	6942				
6944	7002	7035	7085	7087	7131	7139	7141	7187				
7188	7189	7191	7195	7224	7240	7334	7357	7362				
7403	7429	7913	7927	7950	7965	8009	8010	8011				
8013												

ACTIVATION ANALYSIS-MATRIX ANALYZED

BIOLOGICAL, BLOOD

33 34 62 63 64 66 123 138 237 263 308 328 335  
 383 405 476 488 489 533 542 560 570 648 657 710  
 730 845 862 882 929 938 993 1020 1041 1086 1089  
 1141 1143 1206 1211 1241 1242 1276 1305 1384  
 1412 1421 1436 1463 1470 1702 1707 1708 1712  
 1748 1750 1766 1767 1824 1858 1948 1975 1982  
 2123 2365 2503 2508 2535 2551 2563 2689 2690  
 2695 2696 2733 2871 3061 3358 3503 3669 3757  
 3789 3808 3955 3956 3959 4314 5386 5502 5755  
 5770 5972 5981 6001 6002 6008 6067 6303 6407  
 6671 6692 6697 6831 6846 7099 7243 7316 7391  
 7420 7425 7879 7887 7914 7976

BIOLOGICAL, URINE

50 214 476 483 484 487 673 702 866 880 894 943  
 1221 1241 1421 1702 1712 1858 1948 1964 2122  
 2534 2535 2551 2558 2689 2821 3503 5382 5755  
 5953 5972 6001 6437 7099 7947 7998

BIOLOGICAL, OTHER FLUIDS

178 208 385 418 450 476 560 772 788 932 1141  
 1206 1287 1392 1421 1645 1712 1747 1751 1824  
 1948 2125 2440 2535 2558 2733 2977 3503 3710  
 3957 5416 5472 5929 5972 6005 6009 6052 6055  
 6064 6223 6302 6711 6716 7020 7099 7137 7204

BIOLOGICAL, SOFT TISSUE, INCLUDES HAIR, NAILS, AND HOOFS

33 34 48 123 124 138 144 154 178 198 208 254 259  
 263 308 310 317 328 333 335 374 414 442 481 483  
 484 504 512 513 533 535 542 550 652 667 702 705  
 706 709 710 717 725 819 844 848 852 883 911 944  
 1001 1041 1078 1086 1088 1097 1100 1134 1172  
 1206 1225 1233 1250 1271 1276 1278 1310 1311  
 1326 1392 1400 1411 1412 1421 1439 1442 1452  
 1552 1563 1650 1692 1702 1712 1748 1752 1797  
 1858 1873 1893 1914 1920 1925 1937 2121 2308  
 2403 2434 2455 2503 2539 2546 2548 2551 2572  
 2588 2638 2639 2699 2719 2730 2756 2776 2786  
 2789 2797 2819 2853 2871 2881 2938 2942 2943  
 2999 3062 3098 3334 3388 3468 3503 3736 3949  
 3956 3982 4190 4227 4232 4240 4281 4283 4374  
 5366 5386 5390 5393 5394 5435 5701 5727 5851  
 5869 5927 5944 5976 5977 5999 6006 6007 6011  
 6012 6013 6063 6069 6211 6309 6353 6438 6674



ACTIVATION ANALYSIS-MATRIX ANALYZED

BIOLOGICAL, SOFT TISSUE, INCLUDES HAIR, NAILS AND HOOFS  
(CONTINUED)

6688 6712 6716 6832 6853 6931 6933 6934 6935  
6937 6938 7090 7113 7138 7175 7182 7186 7215  
7222 7234 7246 7300 7321 7380 7427 7877 7908  
7979 7991 7992 7993 7999 8000 8034

BIOLOGICAL, BONE, TEETH

79 136 194 308 378 413 485 512 521 675 709 714  
741 829 830 856 968 1086 1100 1170 1332 1436  
1439 1446 1457 1512 1697 1752 1780 1800 1873  
1980 1982 2565 2573 2629 2633 2685 3503 3506  
3725 3726 3958 3982 4319 6003 6004 6587 6685  
6686 6715 7369 7370 7412 7882 7999

BIOLOGICAL, FISH

164 165 409 757 758 1109 1172 1257 1395 1778  
2668 2973 5746 6023 6945

BIOLOGICAL, SHELL FISH

164 165 409 723 1087 1094 1257 1277 1395 1401  
1457 1781 5726 6936

BIOLOGICAL, SEAWEED

164 165 409 810 1109 1727 2546 2732 6375 7095  
7921

BIOLOGICAL, LEAVES, NEEDLES

67 310 636 702 709 740 953 1086 1230 1234 1436  
1930 2501 2773 2892 3391 3509 3791 4269 5370  
5935 6943 7257

BIOLOGICAL, WOOD

333 1100 1114 6670

ACTIVATION ANALYSIS-MATRIX ANALYZED

BIOLOGICAL, OTHER BOTANICAL

62 63 65 66 160 317 454 459 520 533 553 571 636  
702 709 723 740 773 804 810 811 866 880 933 934  
1087 1108 1230 1274 1361 1484 1748 1749 1782  
1805 1873 1970 1971 2347 2736 2876 2892 2929  
3092 3341 3391 3508 3713 3714 3747 3791 3982  
3991 4320 5327 5445 5571 5725 5924 5925 5978  
5990 5991 6080 6281 6295 6409 6438 6704 6842  
6851 6852 6926 6939 6941 7125 7182 7242 7338  
7393 7893 7921 7983

BIOLOGICAL, IN VIVO

155 962 1806 3078 3745 6014 6015 6047 6827 7084  
7102 7318 7319 7353 7372 7426 7429 7968 8012

CELLULOSE - TEXTILES

317 333 402 573 717 1007 1057 1073 1087 1110  
1114 1239 1472 1478 1583 1584 1888 2481 2493  
2655 2803 5872 6406 7077 7160 7373 7382

CEMENT

1917 2323 2934 6352 6721 6975

CHROMATOGRAPHY AND ION EXCHANGE - PAPER, RESINS, REAGENTS,  
ETC.

511 1664 2141 4406 5407 5930 7949 8021

CLAYS

289 433 518 1385 1495 3370 6352



ACTIVATION ANALYSIS-MATRIX ANALYZED

COAL

57 113 477 612 1067 1414 1646 1798 1889 1898  
2504 2507 2622 2933 2941 3076 3803 5621 6301  
7202 7293 7364 7899

CORROSION PRODUCTS

97 482 4327 6754 7365

DETERGENTS

309

DRUGS

90 573 810 1077 1203 1205 1314 1746 2588 2648 2739  
2805 4329 5751 5756 6314 6673 6679 6687 6746 6945

DUSTS

1036 1569 1606 1962 7090

FOOD

339 476 588 676 699 702 705 707 709 935 963 1024  
1057 1096 1788 1890 1913 1982 2563 2569 2689  
2701 2736 2838 3092 3505 4323 5951 5984 5996  
6024 6308 6359 6755 6940 6944 7126 7211 7219  
7297 7299 7329 7332 7413 7907 7911 7927 8008

FORENSIC, GENERAL

112 134 444 520 551 706 763 1031 1056 1149 1290  
1689 2517 2603 2605 2607 2647 2673 2765 2958  
2959 3486 3968 4006 5401 5710 6018 6020 6021  
6025 6027 6028 6030 6042 6210 6225 6311 6315  
6333 6377 6835 6847 6863 6952 7085 7190 7323  
7324 7348 7384 8030 8032

ACTIVATION ANALYSIS-MATRIX ANALYZED

FORENSIC, HAIR AND FINGERNAILS

134 198 520 565 584 593 625 702 706 802 970 1422  
1734 1736 1737 1928 2143 2517 2548 2570 2607 2765  
2926 2958 3486 3708 4380 5358 5869 6019 6037 6038  
6039 6040 6041 6953 6954 6955 7129 7383

FORENSIC, POISONS

706 2517 2605 2607 2765 3486 5401 6953

FORENSIC, GUNPOWDER RESIDUE

183 1034 1442 1732 2145 2464 2517 2605 2607 2765  
2782 2790 2791 2792 2793 3065 3486 3504 5401 5750  
6034 6035 6036 6312 6839 6953 7086

FORENSIC, TRACE IDENTIFICATION

1035 1635 1715 1736 2144 2517 2605 2607 2645 2647  
2648 2765 2782 2790 2791 2792 2793 2931 3486 3504  
4263 4286 4329 5401 5543 6026 6029 6032 6033 6045  
6048 6313 6314 6376 6951 6953 7996 8031

GLASS

274 275 407 1117 1472 5566 5919 5933 5968 6033  
7948 7958

INORGANIC COMPOUNDS (GENERAL)

79 82 130 196 200 205 313 437 438 499 514 519 631  
659 670 702 712 824 825 845 986 1014 1028 1067  
1072 1112 1116 1129 1202 1228 1248 1351 1404 1437  
1510 1528 1711 1713 1720 1725 1774 1899 1939 1968  
2052 2498 2543 2546 2845 2922 2989 4214 5499 6382  
6976 7174 7217 7902

ACTIVATION ANALYSIS-MATRIX ANALYZED

IN-STREAM ANALYSIS

169 206 207 219 445 632 791 1055 1302 2006 2410  
3753 4392 5578 5581 5748 5764 6229 7030 7031  
7198 7202 7302 7342

ISOTOPIC ANALYSIS

53 100 110 114 137 160 233 256 261 288 321 332 347  
421 448 449 517 530 737 770 782 784 841 926 1012  
1019 1023 1059 1062 1070 1079 1101 1357 1362 1377  
1415 1416 1427 1442 1457 1532 1576 1668 1678 1704  
1706 1726 1811 1857 1865 1872 1906 1914 1921 2303  
2473 2540 2543 2546 2618 2627 2634 2687 2695 2727  
2731 2737 2754 3074 3081 3102 3711 3959 3965 4208  
5295 5435 5449 6043 6073 6346 6366 6439 6450 6582  
6588 6669 6675 6683 6946 6960 6983 7013 7127 7216  
7220 7250 7894 8035

LIQUIDS, EXCLUDING WATER AND SEA WATER

279 573 1107 1351 1361 1374 1442 1879 1882 2511  
3374 3379 3393

METALS AND ALLOYS (GENERAL)

3 80 241 264 279 346 408 426 453 500 591 631 655  
703 704 707 712 755 756 805 806 819 821 824 921  
1030 1060 1067 1088 1093 1103 1113 1124 1190  
1193 1321 1361 1438 1441 1460 1522 1604 1739  
1849 2480 2550 2562 2662 2678 2686 2802 2922  
2936 2949 2970 2978 3070 3090 3502 3746 3768  
3977 4196 4197 4211 4215 5426 5772 5932 5968  
6593 6722 6725 6742 6750 6752 6821 6844 7012  
7015 7142 7284 7285 7308 7417 8037

## ACTIVATION ANALYSIS-MATRIX ANALYZED

## METEORITES AND TEKTITES

9 26 39 40 41 42 84 85 86 96 142 143 145 146 158  
 186 187 199 209 212 217 226 268 269 410 411 412  
 434 436 439 469 470 490 493 528 529 548 563 587  
 616 683 698 721 736 768 776 778 779 817 964 988  
 1002 1010 1012 1017 1022 1076 1101 1117 1122  
 1145 1155 1168 1169 1172 1173 1174 1176 1187  
 1209 1210 1212 1214 1222 1251 1275 1297 1307  
 1323 1356 1381 1386 1431 1433 1486 1493 1494  
 1498 1502 1566 1571 1634 1693 1718 1719 1793  
 1813 1954 1959 2296 2338 2474 2506 2509 2641  
 2735 2774 2991 3352 3467 3476 3774 4253 4268  
 4290 5262 5307 5343 5365 5448 5591 5716 5717  
 5718 5719 5720 5721 5759 5775 5884 5948 5958  
 6050 6214 6386 6387 6389 6390 6399 6405 6587  
 6689 6739 6749 6822 6957 6958 6964 6968 6970  
 7107 7169 7197 7210 7223 7235 7303 7304 7306  
 7310 7311 7371 7377 7385 7386 7405 7424 7869  
 7885 7888 7933 7940 7974 7981 8006

## MINERALS

10 11 15 72 73 96 98 104 120 121 122 151 171 189  
 222 224 225 239 240 249 250 354 360 366 380 393  
 397 429 461 469 478 486 522 548 562 683 695 735  
 739 742 750 783 841 924 941 1015 1016 1081 1082  
 1083 1092 1094 1107 1109 1137 1178 1213 1216  
 1280 1293 1294 1356 1381 1393 1403 1427 1431  
 1432 1433 1435 1454 1457 1458 1460 1466 1474  
 1480 1495 1513 1518 1527 1528 1538 1549 1550  
 1566 1652 1678 1817 1859 1863 1885 1906 1952  
 1970 1978 2318 2354 2431 2526 2636 2644 2669  
 2684 2688 2690 2720 2747 3366 3367 3375 3386  
 3387 3395 3414 3460 3501 3740 3766 4282 5320  
 5325 5343 5350 5406 5592 5705 5706 5707 5767  
 5852 5934 5949 5961 5962 5963 5965 6074 6204  
 6205 6222 6227 6343 6443 6454 6684 6701 6707  
 6845 6956 6959 6961 6972 7151 7327 7361 7367  
 7385 7418 7990 8043 8044

## ORES

14 120 147 169 170 172 210 213 249 265 266 289  
 291 301 329 349 380 445 479 546 554 562 612 616  
 621 630 665 677 695 717 728 768 819 855 908 971  
 978 984 1011 1025 1047 1081 1082 1083 1102 1111  
 1137 1150 1162 1190 1195 1196 1280 1334 1340  
 1356 1374 1413 1435 1458 1521 1527 1550 1551

## ACTIVATION ANALYSIS-MATRIX ANALYZED

## ORES (CONTINUED)

1553	1554	1555	1556	1581	1611	1623	1651	1671
1677	1857	1859	1886	1906	1955	1961	1978	2283
2348	2350	2444	2499	2688	2690	2747	2801	2888
2904	2940	2965	2966	3063	3076	3105	3342	3362
3371	3372	3373	3374	3376	3379	3385	3395	3460
3462	3464	3473	3501	3739	3760	3803	3948	3976
4005	4214	4307	4309	4311	5323	5356	5428	5551
5581	5761	5767	5950	6054	6358	6368	6392	6405
6691	6706	6748	6824	6977	7093	7103	7111	7202
7237	7302	7314	7354	7359	7374	7379	7411	7414
7862	7878	7883	7884	7904	7926	7941	7994	

## ORGANIC COMPOUNDS

80	192	205	323	403	498	519	591	696	702	709	711
827	839	863	871	895	921	928	986	1042	1045	1071	
1072	1084	1096	1103	1112	1116	1138	1139	1218			
1238	1259	1288	1437	1455	1456	1462	1472	1478			
1479	1491	1509	1510	1519	1529	1534	1539	1595			
1617	1655	1670	1694	1728	1743	1744	1745	1819			
1870	1896	1902	2379	2433	2519	2524	2543	2562			
2661	2794	2921	3033	3364	3365	3482	3505	3709			
3716	3723	3729	3778	3954	3986	4205	4216	5326			
5420	6085	6681	6717	7089	7180	7194	7258				

## ORGANOMETALLIC COMPOUNDS

2519 2543 3075 5357 7090

## PARTICLES

43 735 916 1036 1326 1439 1460 1606 1902 2976  
6307

## PESTICIDES

702 1056 2790 3505 3791 5975 6364 6926 7140 7242



ACTIVATION ANALYSIS-MATRIX ANALYZED

PETROLEUM AND DERIVATIVES

80 89 107 567 702 797 1088 1172 1254 1443 1535  
1565 1572 1601 1738 1789 1815 1896 1899 2337  
2452 2518 2619 2651 2705 2740 3027 3028 3365  
3505 3752 4270 4285 5383 5510 5923 5970 6357  
6451 6929 6973 7296 7331 7351 7899 7954 7955  
7970

PHOTOGRAPHIC FILM AND MATERIAL

334 738 3394 7026 7176

PLASTICS

21 37 105 605 702 860 942 977 1065 1088 1097  
1492 1514 1519 1764 1831 2518 2657 2689 2711  
2766 3781 3973 4209 6854 7218 7280 7315 7399  
7931 7969

PROCESS CONTROL

1586 1590 2666 5969

PROTEIN

134 709 1342 2129 5395 5405 6000 6001 6068 6745  
7282 8001 8038

QUARTZ

205 302 623 689 799 888 927 1065 1495 1505 1610  
1655 2717 2728 3369 3759 5353 5402 5865 6062 7164  
7165 7166 7167 7168 7229

REACTOR MATERIALS

234 349 419 708 717 726 735 974 1042 1171 1192  
1204 1357 1902 5765 6713 6714 6751 7397 7430

## ACTIVATION ANALYSIS-MATRIX ANALYZED

## REAGENTS

300 1069 1072 1135 1136 1265 1636 1862 2518 2717  
5335 6667

## REFRACTORIES AND CERAMICS

1540 2664 3488 6077 7073 7121

## ROCKS

9 10 11 26 96 98 120 199 204 212 240 257 269 285  
301 361 362 363 365 367 455 461 462 470 478 522  
523 524 525 526 538 548 555 572 575 580 587 595  
600 616 656 669 695 724 728 739 742 748 750 779  
810 819 820 841 909 922 941 949 953 969 984 999  
1002 1007 1022 1025 1047 1076 1080 1081 1082  
1083 1094 1107 1109 1121 1125 1128 1145 1169  
1180 1182 1185 1201 1209 1210 1213 1229 1293  
1294 1297 1340 1356 1374 1383 1385 1393 1416  
1419 1431 1432 1433 1445 1449 1454 1474 1480  
1495 1518 1531 1537 1538 1550 1558 1559 1571  
1585 1596 1615 1678 1693 1711 1718 1727 1812  
1817 1835 1857 1885 1887 1899 1902 1911 1930  
1953 1960 1970 2146 2283 2340 2348 2354 2437  
2447 2453 2603 2636 2641 2669 2684 2694 2705  
2720 2731 2735 2747 2750 2763 2839 2902 2965  
2966 2991 3079 3081 3088 3089 3366 3367 3368  
3371 3387 3395 3414 3461 3462 3470 3481 3501  
3560 3774 3780 3790 3803 3961 3987 4192 4195  
4242 4262 4278 4290 4305 4388 5322 5328 5406  
5428 5436 5439 5449 5501 5713 5729 5731 5739  
5743 5747 5767 5852 5867 5884 5934 5936 5939  
5959 5960 6079 6083 6204 6205 6215 6220 6298  
6322 6324 6343 6352 6379 6404 6405 6442 6443  
6445 6684 6701 6707 6724 6729 6734 6740 6741  
6823 6956 6959 6961 6962 6963 6964 6966 6967  
6970 6972 6999 7072 7101 7108 7143 7148  
7149 7152 7181 7193 7196 7225 7252 7256 7305  
7309 7336 7341 7367 7405 7408 7418 7865 7867  
7900 7928 7929 7938 7944 7951 7961 7978 7987

## SEDIMENTS, MARINE

9 204 212 470 471 477 616 810 819 961 964 1002  
1094 1128 1385 1727 1970 5771 5776 6204 6208 6375  
6455 6924 6965 6969 6982 7921 7975



## ACTIVATION ANALYSIS-MATRIX ANALYZED

## SEMI-CONDUCTOR MATERIALS

149 216 457 473 509 544 583 702 707 785 838 888  
 892 894 1063 1118 1133 1135 1253 1286 1354 1438  
 1441 1823 1855 1862 1907 1930 2523 3350 3485 3514  
 3993 3995 4153 4321 5399 5437 5703 5928 5931 6053  
 6572 6708 6989 7019 7325 7401 7942 7945 7982

## SOILS - FERTILIZERS

67 98 175 329 454 616 804 810 848 904 905 991 1011  
 1131 1195 1196 1361 1419 1515 1642 1782 1794 1874  
 1896 1899 1970 2552 2553 2590 2603 2705 3005 3091  
 3093 3345 5697 5990 6295 6926 6951 7083 7092 7122  
 7151 7404 7896 7909 7988 7989

## SPACE APPLICATIONS, LUNAR

253 545 658 996 1033 1052 1284 1721 1785 1912  
 2364 2684 3461 4198 4289 5261 5384 5440 6453  
 6971 7967 8014 8015

## STABLE TRACERS

1048 1799 5966 5967 5992 6010 6058 6320 6461  
 6846 6848 6858 6859 6860 6925 6927 6974 6994  
 7188 7312 7334 7382 7425 7889 8013 8022 8023  
 8024 8034 8038

## STEEL AND CAST IRONS

87 88 118 119 223 304 305 351 353 356 357 417 428  
 552 581 620 628 687 690 717 718 810 893 903 915  
 940 990 1026 1085 1093 1097 1102 1124 1201 1204  
 1274 1363 1367 1394 1426 1434 1453 1468 1473 1522  
 1537 1541 1589 1590 1598 1642 1711 1717 1740 1760  
 1773 1786 1821 1837 1844 1875 1910 1911 1950 1951  
 1956 2418 2429 2507 2526 2537 2542 2586 2596 2611  
 2615 2649 2652 2678 2764 2795 2846 2983 3357 3466  
 3560 3746 3750 3981 3997 4413 5238 5378 5380 5389  
 5408 5450 5451 5452 5708 5766 6086 6398 6401 6569  
 6723 6728 6738 6830 6856 6857 6977 6980 7076 7080  
 7142 7154 7162 7170 7171 7182 7289 7291 7330 7344  
 7355 7361 7376 7419 7917

ACTIVATION ANALYSIS-MATRIX ANALYZED

SURFACE ANALYSIS

29 423 1915 2562 2948 3070 3992 4000 5543 6066  
6595 6596 7011 7036 7200 7343 7903 8039

THIN FILMS

508 654 1060 1158 1380 1496 1899 2658 3064 3126  
3973 3992 6978 7301

WATER

54 55 56 125 126 206 207 250 290 300 333 686 735  
843 853 868 937 959 981 1008 1021 1027 1062 1070  
1109 1129 1135 1181 1190 1217 1237 1255 1266 1294  
1351 1361 1435 1497 1528 1532 1725 1758 1814 1857  
1874 1906 1973 1979 2157 2540 2543 2551 2656 2665  
2666 2673 2689 2693 2717 2800 2852 2873 2930 3084  
3483 3808 3962 3965 3969 4258 4272 4302 4412 5749  
5858 5919 5920 6016 6926 6928 6939 7120 7218 7294  
7334 7410 7422 7898 7921 7959 7977 7986

WATER, SEA

164 235 236 422 475 477 492 586 614 723 810 1125  
1127 1266 1345 1385 1402 1457 1688 1727 1874 1906  
1945 2157 2511 2673 2693 2790 2791 2792 2793 2848  
2984 3960 3969 4219 4244 4255 4291 4381 5359 5387  
5397 5777 5873 6228 6348 6375 6823 6843 7294 7935  
7952 8018

WELL LOGGING

695 780 786 1061 1430 1554 1555 1559 1680 1683  
1684 1685 1686 1772 1822 1843 3462 4252 5552 5554  
5555 5577 6221 6971 7144 7379 8007

LITHIUM AND ITS ALLOYS AND COMPOUNDS

467 869 1351 1568 2369 2726 3986

ACTIVATION ANALYSIS-MATRIX ANALYZED

AMMONIUM COMPOUNDS AND ALKALI METALS AND THEIR ALLOYS AND COMPOUNDS (EXCLUDING LITHIUM)

93 131 133 460 635 708 729 852 869 1123 1190 1197  
1281 1292 1330 1424 1514 1560 1761 1801 1816 1900  
2596 2598 2726 2734 2758 2804 3085 3393 4209 4386  
5341 5410 5422 6044 7106 8020

BERYLLIUM AND ITS ALLOYS AND COMPOUNDS

45 46 49 58 69 74 105 108 109 291 314 391 472 578  
596 623 637 640 789 814 849 850 983 1043 1081 1083  
1104 1177 1189 1191 1226 1235 1263 1318 1347 1351  
1361 1429 1442 1528 1637 1710 1730 1741 1816 1861  
1871 1904 2505 2549 2777 3073 3727 3976 5593 6369  
6689 7097 7214 7326

MAGNESIUM AND ITS ALLOYS AND COMPOUNDS

22 300 635 899 1190 1231 1274 1351 1398 1483 1801  
2798 3357 3488 3981 4201 5941 6410 6412 7407

CALCIUM, STRONTIUM AND BARIUM AND THEIR ALLOYS AND COMPOUNDS

635 1188 1466 1725 1726 1816 1872 2511 3396 4276  
5353 7292

BORON AND ITS ALLOYS AND COMPOUNDS

1136 1816 3369 4260

ALUMINUM

4 6 7 80 102 103 161 166 167 252 300 317 349 358  
371 398 416 417 432 531 533 544 578 662 688 708  
726 735 767 781 790 806 812 814 815 821 834 851  
866 879 880 881 883 895 920 979 982 1042 1088 1097  
1098 1099 1226 1245 1264 1273 1325 1338 1339 1398  
1406 1420 1442 1469 1473 1526 1564 1591 1598 1618

ACTIVATION ANALYSIS-MATRIX ANALYZED

ALUMINUM (CONTINUED)

1632 1700 1710 1723 1795 1804 1856 1901 1929 1960  
1974 2358 2550 2559 2579 2597 2601 2628 2654 2683  
2769 2950 3059 3382 3396 3721 3722 3724 3771 3791  
3797 3992 4203 4298 5369 5409 5432 5729 5863 5865  
5919 5921 5922 6024 6199 6215 6410 6412 6569 6694  
6702 7012 7201

ALUMINUM ALLOYS AND COMPOUNDS

78 83 161 234 238 384 400 451 533 806 823 853 864  
899 987 989 1093 1099 1140 1167 1190 1220 1274  
1725 2865 2927 2956 3487 4211 5353 6201 6690 6991

TITANIUM AND ITS ALLOYS AND COMPOUNDS

51 75 81 291 319 1067 3357 3783 3799 3981 5431  
5781 6065 6354 6383 6750 7132 7254 7360 7930

ZIRCONIUM AND ITS ALLOYS AND COMPOUNDS

24 176 231 252 287 291 319 325 375 494 641 726 760  
762 814 821 851 879 895 899 967 1003 1065 1067  
1097 1190 1236 1309 1377 1410 1442 1471 1537 1573  
1574 1578 1612 1642 1646 1699 1709 1765 1931 2381  
2550 2979 3721 3996 4000 5177 5515 5517 5938 6213  
6335 6441 6590 6700 7012 7241 7910 8039

HAFNIUM AND ITS ALLOYS AND COMPOUNDS

176 232 507 1375 1481 1537 1765 2381 5938 6590

NIObIUM AND ITS ALLOYS AND COMPOUNDS

51 105 265 266 319 641 896 910 1102 1165 1487 1709  
1759 1829 1840 1966 1983 2502 3059 3346 5781 5782  
5786 6569 6833 7201

ACTIVATION ANALYSIS-MATRIX ANALYZED

TANTALUM AND ITS ALLOYS AND COMPOUNDS

51 912 1045 1102 1165 1232 1442 2502 6833 7201

CHROMIUM, VANADIUM AND MANGANESE AND THEIR ALLOYS AND COMPOUNDS

130 585 1289 1333 1501 1570 2473 5385 6065 6356  
6591 6991 7009 7135 7230 7283 7874

MOLYBDENUM AND ITS ALLOYS AND COMPOUNDS

205 331 1760 1803 2381 3990 5321 5938 6071 6200  
6590 6705 6733 6829 7134 7145 7201

TUNGSTEN AND ITS ALLOYS AND COMPOUNDS

116 205 242 959 980 1045 1227 1283 1340 1592 1597  
1842 2381 3775 3810 3990 4231 5444 5732 5740 5938  
6071 6590 6826 7145 7201 7406

IRON AND ITS ALLOYS AND COMPOUNDS (EXCLUDING STEELS AND CAST IRONS)

4 5 8 118 119 130 140 166 167 179 271 319 401 443  
452 490 502 516 537 544 578 662 688 744 767 851  
879 896 906 1045 1067 1125 1150 1219 1226 1267  
1298 1313 1339 1344 1375 1442 1621 1770 1875 1910  
1938 1965 2358 2644 2658 2744 3785 3975 4189 4322  
5336 5349 5430 5728 5954 6412 6568 6591 6693 6825  
7009 7018 7090 7150 7230 7295

COBALT AND ITS ALLOYS AND COMPOUNDS

130 545 823 1156 1167 1828 7201



ACTIVATION ANALYSIS-MATRIX ANALYZED

NICKEL AND ITS ALLOYS AND COMPOUNDS

28 544 635 662 852 892 1009 1124 1167 1262 1442  
1613 1827 2658 3976 5712 6412 6568 6591 6693 6743  
7009 7081 7172 7230 7320

COPPER AND ITS ALLOYS AND COMPOUNDS

130 153 384 589 754 851 956 995 1004 1067 1190  
1299 1375 1378 1477 1728 1763 1896 2537 2550 2887  
3418 4277 4308 5403 5415 6412 6996 7387

ZINC AND ITS ALLOYS AND COMPOUNDS

31 32 44 117 141 180 202 229 272 360 584 608 635  
798 832 957 1000 1018 1398 1633 1689 1763 2358  
2525 2683 2723 2724 2725 2796 3084 3994 4303 5447  
5922 5955 6323 6394 6395 6444 7226

GALLIUM, INDIUM AND THALLIUM AND THEIR ALLOYS AND COMPOUNDS

141 229 622 825 867 894 957 1005 1045 1068 1159  
1190 1648 1675 2358 2721 3730 3731 4217 4321 5500  
5703 5753 5928 6024 6202 6203 6294 6337 6355 6369  
6385 6676 6678 6689 6825 6990 7116 7212 7225 7281  
7401 7982

CADMIUM AND ITS ALLOYS AND COMPOUNDS

30 31 141 832 1331 1525 1936 2625 6693 7112 7124  
7298

SILVER, GOLD AND MERCURY AND THEIR ALLOYS AND COMPOUNDS

105 130 211 344 544 589 662 774 997 1095 1106 1111  
1132 1599 1641 1787 5704 6980 7997

ACTIVATION ANALYSIS-MATRIX ANALYZED

PLATINUM AND ITS ALLOYS AND COMPOUNDS

2 135 205 221 262 364 451 601 727 774 792 907 1146  
1147 1183 1184 1344 2644 3473 3810 5940 6677 7394

RHENIUM, RUTHENIUM, OSMIUM, RHODIUM, IRIDIUM AND PALLADIUM  
AND THEIR ALLOYS AND COMPOUNDS

135 221 344 774 1119 1260 1425 1539 2515 2644 2671  
3530 5311 5363 5364 5868 6351 6677 6735 7118 7119

CARBON, GRAPHITE, DIAMOND

115 139 163 241 291 468 607 752 819 848 945 946  
992 994 1090 1161 1201 1269 1319 1408 1478 1618  
1653 1725 1760 1787 1818 1839 1860 2306 2717 2772  
2865 3474 3995 5863 5919 6071 6720 7004 7082

SILICON AND ITS ALLOYS AND COMPOUNDS (EXCLUDING QUARTZ)

12 105 149 181 193 244 245 246 255 279 319 322 371  
379 390 473 491 509 544 602 606 623 662 803 805  
818 831 853 864 869 870 881 887 888 892 894 913  
922 1013 1091 1118 1121 1142 1151 1153 1166 1194  
1207 1208 1223 1272 1304 1438 1441 1546 1547 1561  
1587 1588 1616 1742 1760 1820 1831 1855 1899 1907  
1930 1974 2358 2376 2386 2523 2578 2712 2717 2923  
3361 3383 3384 3514 4224 4347 5353 5399 5429 5619  
5787 5793 5931 6053 6072 6226 6572 6580 6581 6690  
6708 6736 6989 7019 7201 7248 7307 7870 7982 8041

GERMANIUM AND ITS ALLOYS AND COMPOUNDS

248 370 465 474 501 544 662 689 818 892 1045 1156  
1243 1244 1291 1442 1548 1679 1862 1907 2154 2430  
2497 2578 2712 2717 3485 3732 3993 4321 5330 5752  
5769 6053 6072 6589 6708 6834 7133 7945 7982



ACTIVATION ANALYSIS-MATRIX ANALYZED

TIN AND ITS ALLOYS AND COMPOUNDS

141 319 1018 1976 2358 4298 6369 6689 6727 6993  
7995

LEAD AND ITS ALLOYS AND COMPOUNDS

105 130 141 249 384 424 608 623 692 775 798 886  
950 1064 1066 1074 1500 1533 1598 1763 1830 1841  
1856 1901 1930 2154 2643 2654 2715 2717 3396 3788  
3804 5344 5345 5381 5398 6369 6689 6696 7017

PHOSPHORUS AND PHOSPHATES

174 902 919 936 954 1344 2680 2721 4191 4293 5438

ARSENIC AND ANTIMONY AND THEIR ALLOYS AND COMPOUNDS

270 544 662 852 985 1441 1570 1754 2640 2713 2721  
2878 4321 5787 5928 6385 6981 7401 7874 7880

BISMUTH AND ITS ALLOYS AND COMPOUNDS

215 544 608 662 777 798 894 1320 1441 1542 1672  
1760 1763 1969 2610 2612 2613 2812 3396 6369 6689  
7017 7923

SULFUR

148 387 431 607 753 1654 1862 6992

ACTIVATION ANALYSIS-MATRIX ANALYZED

SELENIUM AND TELLURIUM AND THEIR ALLOYS AND COMPOUNDS

330 544 662 674 838 894 1215 1240 1246 1247 1300  
1373 1520 1603 1628 1725 1760 1848 2775 2813  
4254 4299 4300 5730 6369 6446 6689 7227 7307  
7919 7920 7934

RARE EARTHS AND THEIR ALLOYS AND COMPOUNDS (INCLUDING SC + Y)

115 188 225 227 228 258 267 343 395 396 544 604  
662 948 958 960 1008 1011 1015 1016 1021 1115 1195  
1196 1199 1324 1329 1344 1403 1413 1648 1722 1802  
1803 1882 1957 1985 2480 2496 2621 2920 2932 3100  
3397 3770 3810 4226 4250 4322 4325 5308 5347 5778  
5964 6454 6828 7091 7236 7423 7964 8005

HALOGENS

243 923 1725 2982

NOBLE GASES

1004 1539 1543 4301

URANIUM, THORIUM AND PLUTONIUM AND THEIR ALLOYS AND COMPOUNDS

52 105 151 233 252 327 346 737 771 813 822 824 952  
973 998 1019 1038 1059 1079 1109 1256 1318 1357  
1391 1428 1442 1607 1614 1653 1681 1682 1725 1730  
1803 1832 1833 1857 1865 1921 2441 2480 2496 2714  
2741 2752 2753 2754 2836 2844 2870 2882 3074 3661  
3811 3841 3964 4208 4249 4391 5368 5728 5735 5765  
5863 6056 6057 7096 7397 7939

FISSION PRODUCTS

326 634 1543 4347 6057 6836

## APPENDIX IV



## APPENDIX IV

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ACTIVATION ANALYSIS-TECHNIQUE USED

REACTOR - THERMAL NEUTRON (N,γ)

2	4	5	6	7	9	10	11	12	13	14	15	21	22	24	26	28	30	31
32	33	34	35	39	40	41	42	43	44	47	48	50	51	54	55	56		
57	59	61	62	63	64	65	66	67	68	69	73	74	78	79	80	81		
83	84	85	86	88	89	90	93	96	97	100	101	102	103	104				
107	115	116	117	120	121	122	123	124	126	133	134							
136	137	138	139	140	141	142	143	144	145	146	147							
148	149	151	154	158	161	162	163	164	165	166	167							
171	172	174	176	178	179	180	183	186	187	193	194							
197	198	200	208	209	210	211	212	214	215	216	217							
221	222	223	225	226	231	232	234	235	236	237	238							
239	240	242	243	244	245	246	248	249	250	254	255							
261	262	263	264	265	266	267	268	269	270	279	284							
286	287	288	289	290	291	300	302	304	305	310	317							
319	321	322	323	325	326	328	329	330	331	332	334							
347	349	351	352	353	354	356	357	358	360	361	362							
363	364	366	367	370	371	375	376	378	379	386	387							
390	393	395	396	397	398	400	405	407	408	409	410							
411	412	414	416	418	419	421	422	424	428	429	431							
432	433	434	436	439	442	444	448	449	450	451	452							
454	459	460	461	462	465	467	468	469	470	471	472							
473	474	475	476	477	478	481	482	483	484	485	486							
487	488	489	490	492	493	494	501	502	504	505	506							
507	508	509	511	512	513	514	516	517	520	521	522							
523	524	525	526	531	533	535	537	538	539	541	542							
543	544	545	548	550	551	552	553	560	561	562	564							
565	566	570	571	572	573	574	575	561	583	584	585							
586	587	588	590	592	593	595	598	600	601	602	604							
605	606	607	608	609	610	614	619	620	622	625	630							
634	636	637	638	640	641	648	651	652	657	659	662							
663	665	667	670	673	674	675	676	677	681	683	686							
687	688	689	690	692	698	699	701	702	705	706	707							
708	709	710	711	713	714	716	717	718	721	723	726							
727	728	729	730	735	736	738	739	740	741	742	752							
753	754	755	757	758	760	763	765	767	768	772	773							
774	775	776	777	778	779	781	788	789	790	792	797							
798	799	802	803	804	805	806	808	810	812	813	815							
817	819	820	821	822	823	824	825	828	829	830	831							
832	834	838	841	842	843	844	845	846	848	849	850							
851	852	853	854	856	858	864	866	867	868	869	871							
877	879	880	881	882	883	887	888	896	902	903	906							
907	909	910	911	914	915	916	918	919	920	922	923							
927	928	929	932	933	934	935	937	938	939	940	941							
942	943	944	945	946	948	950	951	952	953	955	956							
957	959	962	963	966	968	970	971	973	974	977	979							
980	982	984	985	986	987	988	989	990	991	992	993							
994	995	997	998	999	1000	1001	1002	1003	1004	1005								
1007	1008	1009	1010	1011	1012	1015	1016	1018	1019									



## ACTIVATION ANALYSIS-TECHNIQUE USED

REACTOR - THERMAL NEUTRON (N,  $\gamma$ ) (CONTINUED)

1020	1021	1022	1024	1025	1027	1028	1030	1031	1032
1034	1035	1036	1038	1041	1042	1043	1045	1047	1050
1057	1059	1060	1063	1064	1066	1068	1069	1073	1074
1075	1076	1077	1078	1080	1085	1086	1087	1088	1089
1090	1092	1094	1095	1096	1097	1098	1099	1100	1102
1105	1107	1108	1109	1110	1112	1114	1117	1118	1119
1121	1122	1123	1124	1125	1127	1129	1131	1132	1133
1134	1135	1137	1138	1139	1140	1141	1143	1145	1146
1147	1150	1153	1155	1156	1159	1162	1165	1166	1167
1169	1170	1171	1173	1174	1176	1177	1180	1181	1182
1183	1184	1185	1187	1188	1189	1190	1191	1192	1193
1195	1196	1197	1199	1200	1201	1203	1204	1205	1206
1207	1208	1209	1210	1211	1212	1214	1215	1216	1218
1220	1221	1222	1223	1224	1225	1226	1227	1228	1230
1231	1233	1234	1235	1236	1237	1239	1240	1241	1243
1244	1245	1246	1247	1250	1251	1254	1257	1260	1261
1262	1263	1264	1265	1266	1269	1271	1272	1273	1274
1275	1277	1278	1279	1281	1283	1285	1286	1287	1288
1289	1290	1291	1292	1293	1299	1300	1302	1306	1307
1310	1311	1313	1314	1317	1319	1320	1323	1324	1325
1326	1331	1332	1333	1340	1347	1349	1351	1353	1356
1357	1361	1373	1376	1378	1380	1381	1382	1383	1384
1385	1386	1389	1391	1392	1395	1396	1398	1400	1401
1402	1404	1406	1409	1410	1411	1412	1416	1419	1420
1421	1425	1426	1428	1429	1431	1432	1433	1434	1436
1438	1439	1441	1443	1446	1449	1452	1454	1455	1456
1457	1458	1460	1463	1466	1468	1469	1470	1471	1472
1473	1474	1477	1478	1480	1484	1487	1491	1492	1493
1494	1495	1496	1497	1500	1502	1504	1505	1510	1512
1515	1517	1518	1519	1520	1521	1525	1526	1527	1529
1531	1533	1537	1538	1539	1540	1541	1542	1543	1548
1549	1550	1551	1552	1553	1554	1555	1556	1558	1563
1564	1565	1566	1568	1569	1570	1571	1572	1573	1574
1576	1577	1578	1581	1583	1584	1585	1587	1588	1592
1595	1596	1597	1601	1603	1606	1607	1610	1612	1613
1614	1615	1616	1617	1618	1621	1620	1631	1632	1633
1634	1635	1636	1641	1644	1645	1647	1648	1649	1652
1653	1654	1655	1658	1659	1660	1661	1664	1665	1671
1672	1673	1676	1677	1678	1679	1681	1682	1689	1692
1693	1694	1697	1699	1702	1703	1705	1706	1707	1708
1709	1710	1711	1712	1715	1717	1719	1722	1723	1725
1726	1727	1729	1731	1732	1734	1736	1737	1741	1743
1744	1745	1746	1748	1749	1750	1751	1752	1755	1759
1760	1761	1762	1763	1766	1767	1769	1770	1774	1780
1781	1782	1783	1785	1786	1787	1788	1789	1790	1791
1792	1793	1794	1795	1797	1799	1800	1803	1805	1806
1812	1813	1817	1818	1819	1820	1821	1824	1825	1827

## ACTIVATION ANALYSIS-TECHNIQUE USED

REACTOR - THERMAL NEUTRON (N,  $\gamma$ ) (CONTINUED)

1828	1829	1830	1832	1833	1834	1835	1839	1840	1841
1842	1844	1845	1848	1855	1856	1857	1858	1862	1863
1872	1874	1878	1881	1882	1886	1888	1890	1891	1892
1893	1894	1895	1897	1901	1902	1904	1906	1907	1909
1913	1914	1918	1920	1921	1924	1925	1926	1929	1930
1931	1936	1937	1938	1945	1948	1952	1953	1957	1958
1959	1960	1962	1964	1965	1966	1969	1970	1971	1973
1974	1975	1976	1977	1980	1982	1983	1984	1985	2052
2121	2122	2123	2141	2144	2145	2146	2154	2157	2251
2283	2296	2306	2308	2327	2333	2337	2340	2347	2350
2358	2365	2369	2376	2386	2403	2422	2426	2430	2431
2434	2437	2440	2441	2444	2445	2447	2455	2464	2473
2474	2480	2481	2493	2495	2496	2497	2499	2502	2503
2507	2508	2509	2511	2515	2517	2523	2525	2533	2534
2535	2537	2539	2540	2546	2548	2550	2551	2552	2553
2558	2559	2563	2565	2571	2573	2578	2579	2584	2590
2595	2597	2601	2605	2607	2610	2611	2612	2613	2614
2619	2621	2633	2636	2638	2639	2640	2641	2643	2644
2645	2651	2654	2657	2658	2659	2660	2663	2664	2669
2671	2673	2680	2683	2685	2687	2688	2689	2690	2694
2695	2696	2699	2701	2707	2711	2715	2714	2715	2717
2718	2721	2724	2725	2727	2728	2730	2731	2732	2733
2735	2737	2739	2740	2741	2744	2750	2752	2753	2754
2756	2759	2762	2766	2769	2772	2773	2775	2776	2782
2786	2789	2790	2791	2792	2793	2794	2795	2797	2800
2801	2804	2805	2806	2819	2821	2836	2838	2839	2840
2844	2845	2846	2848	2849	2852	2853	2865	2870	2871
2873	2876	2878	2881	2882	2887	2888	2889	2892	2902
2904	2920	2921	2922	2923	2926	2927	2929	2930	2931
2932	2936	2938	2942	2943	2945	2950	2957	2958	2963
2964	2970	2973	2976	2977	2978	2979	2981	2982	2984
2989	2991	2999	3005	3027	3059	3060	3061	3062	3065
3079	3081	3084	3088	3091	3092	3093	3098	3105	3126
3328	3341	3342	3344	3345	3350	3352	3358	3360	3362
3363	3365	3366	3367	3368	3369	3370	3371	3372	3382
3383	3384	3386	3387	3388	3391	3394	3395	3396	3397
3411	3414	3418	3464	3466	3467	3470	3473	3475	3476
3481	3482	3483	3485	3486	3488	3489	3494	3498	3504
3514	3530	3661	3669	3708	3709	3710	3713	3714	3716
3723	3724	3725	3726	3727	3730	3731	3732	3736	3738
3739	3740	3745	3755	3757	3759	3760	3766	3769	3770
3774	3775	3778	3780	3785	3788	3789	3791	3797	3804
3808	3810	3811	3841	3949	3954	3955	3956	3957	3958
3959	3960	3961	3964	3979	3982	3988	3989	3990	3991
3993	3994	3998	4153	4190	4191	4192	4194	4195	4196
4201	4202	4203	4207	4208	4216	4219	4224	4230	4231
4232	4240	4242	4244	4249	4250	4253	4254	4255	4258

## ACTIVATION ANALYSIS-TECHNIQUE USED

REACTOR - THERMAL NEUTRON (N,  $\gamma$ ) (CONTINUED)

4262	4263	4267	4268	4269	4270	4272	4274	4278	4281
4283	4284	4285	4286	4290	4291	4293	4298	4299	4301
4302	4303	4305	4306	4307	4308	4309	4310	4311	4314
4315	4319	4321	4322	4325	4328	4329	4347	4374	4381
4388	4406	5262	5295	5307	5320	5323	5326	5327	5328
5335	5336	5338	5341	5343	5344	5345	5347	5349	5350
5358	5359	5363	5364	5365	5366	5368	5369	5370	5378
5381	5382	5385	5386	5390	5393	5394	5395	5397	5398
5399	5401	5402	5405	5406	5407	5408	5410	5415	5422
5428	5436	5438	5439	5444	5447	5448	5449	5472	5499
5500	5502	5510	5515	5517	5547	5551	5571	5577	5579
5591	5592	5619	5697	5699	5701	5703	5704	5705	5706
5707	5712	5713	5716	5717	5718	5719	5721	5725	5726
5727	5728	5729	5730	5731	5732	5735	5742	5746	5749
5750	5751	5753	5755	5756	5759	5760	5761	5765	5766
5770	5771	5775	5777	5779	5784	5785	5786	5787	5788
5790	5792	5793	5808	5851	5858	5860	5862	5864	5868
5872	5873	5874	5919	5922	5924	5925	5926	5927	5928
5929	5931	5932	5933	5934	5935	5936	5939	5940	5941
5942	5944	5948	5949	5951	5953	5955	5958	5959	5960
5961	5962	5963	5964	5965	5967	5969	5970	5972	5975
5976	5977	5981	5983	5984	5989	5991	5992	5994	5995
5996	5999	6000	6001	6002	6003	6005	6006	6007	6008
6010	6011	6012	6013	6015	6016	6017	6023	6024	6031
6039	6040	6043	6044	6047	6048	6050	6052	6054	6055
6058	6061	6062	6063	6064	6067	6068	6069	6071	6073
6074	6077	6079	6080	6081	6083	6085	6086	6199	6202
6203	6204	6205	6206	6207	6208	6209	6211	6213	6214
6215	6217	6220	6223	6225	6226	6227	6228	6244	6294
6295	6297	6298	6303	6304	6307	6308	6309	6312	6313
6314	6315	6322	6323	6324	6328	6331	6335	6337	6343
6344	6346	6348	6351	6353	6354	6355	6356	6359	6367
6369	6375	6376	6378	6379	6380	6382	6383	6385	6386
6387	6388	6389	6390	6392	6393	6394	6395	6401	6405
6406	6407	6409	6410	6412	6438	6439	6441	6442	6443
6444	6445	6446	6451	6453	6454	6455	6459	6568	6569
6570	6572	6667	6668	6670	6671	6673	6674	6679	6685
6686	6687	6688	6689	6690	6691	6692	6696	6697	6699
6700	6701	6702	6707	6710	6712	6715	6716	6719	6720
6721	6724	6727	6729	6733	6734	6735	6738	6739	6740
6741	6745	6747	6748	6751	6754	6755	6822	6823	6824
6825	6826	6828	6829	6831	6832	6836	6839	6842	6846
6848	6849	6851	6852	6853	6857	6858	6859	6860	6921
6922	6923	6924	6925	6927	6928	6929	6930	6931	6932
6933	6934	6935	6936	6937	6938	6939	6940	6941	6942
6943	6944	6946	6947	6948	6950	6951	6954	6955	6956
6957	6958	6959	6960	6961	6962	6963	6964	6965	6966



ACTIVATION ANALYSIS-TECHNIQUE USED

REACTOR - THERMAL NEUTRON (N,  $\gamma$ ) (CONTINUED)

6967	6968	6969	6970	6972	6974	6976	6980	6981	6982
6983	6985	6989	6990	6991	6992	6993	6994	6995	6996
6999	7002	7004	7035	7072	7073	7077	7080	7081	7082
7083	7084	7086	7087	7091	7092	7093	7095	7096	7099
7107	7108	7111	7112	7113	7118	7119	7122	7123	7125
7129	7131	7132	7133	7134	7135	7137	7138	7143	7145
7146	7147	7148	7149	7152	7154	7165	7164	7165	7166
7167	7168	7169	7170	7171	7172	7174	7175	7181	7182
7186	7193	7194	7195	7196	7206	7209	7210	7211	7212
7215	7216	7218	7220	7222	7223	7225	7226	7227	7229
7234	7235	7236	7237	7240	7241	7242	7243	7246	7252
7254	7256	7257	7260	7280	7281	7282	7283	7294	7295
7298	7299	7300	7303	7304	7305	7306	7308	7309	7310
7311	7312	7326	7328	7329	7331	7332	7333	7336	7341
7353	7355	7359	7360	7361	7362	7364	7365	7369	7370
7371	7373	7374	7375	7376	7377	7380	7382	7388	7391
7393	7394	7396	7397	7399	7401	7405	7407	7408	7410
7416	7420	7422	7423	7425	7427	7431	7865	7867	7868
7869	7870	7873	7877	7879	7880	7883	7884	7885	7887
7888	7889	7893	7896	7898	7899	7900	7901	7904	7906
7908	7910	7911	7913	7914	7919	7921	7927	7930	7931
7932	7933	7934	7935	7937	7938	7939	7940	7941	7943
7944	7945	7947	7948	7951	7957	7959	7961	7976	7978
7979	7981	7983	7986	7988	7989	7990	7991	7992	7993
7996	7997	7998	7999	8001	8005	8006	8007	8008	8010
8011	8017	8019	8020	8021	8022	8023	8024	8038	8041

REACTOR - FAST (N,P) (N, $\alpha$ ) (N,N<sup>1</sup>) (N,2N)

140	157	314	341	491	520	530	681	703	707	711	716
807	808	810	811	818	828	843	854	877	897	951	1157
1161	1167	1198	1327	1334	1340	1357	1374	1378	1403		
1413	1415	1424	1427	1439	1455	1546	1547	1620	1639		
1659	1717	1731	1814	1902	1907	1911	1965	2595	2623		
2676	3059	3064	3361	3489	3494	3560	3965	3986	3997		
4221	4227	5698	5759	6344	6370	6410	6568	6749	6968		
7089	7172	7194	7285	7286	7321	7337	7424	7863	7864		
7866	7874	7880	7946	7974	7975	8035					

REACTOR - EPITHERMAL

140	520	807	818	828	862	1186	1439	1506	1659	1731
1910	2625	3385	3494	3975	3987	3998	4300	5848	7110	
7124	7139	7203	7409	7928	7929					

ACTIVATION ANALYSIS-TECHNIQUE USED

ISOTOPE NEUTRON SOURCES - PLUTONIUM AND LIGHTER ELEMENTS

1 20 37 52 53 82 130 135 147 188 203 213 219 227  
 228 229 230 233 234 258 259 271 272 301 321 327  
 333 335 343 344 377 402 445 555 569 612 665 717  
 783 791 810 827 837 841 904 905 924 949 958 1055  
 1056 1061 1093 1111 1202 1259 1267 1295 1298 1315  
 1329 1336 1337 1357 1393 1423 1430 1440 1513 1558  
 1559 1586 1591 1630 1637 1651 1698 1740 1754 1758  
 1772 1822 1843 1857 1865 1873 1879 1880 1941 1961  
 2364 2698 2940 2956 2966 2987 3033 3078 3366 3373  
 3374 3375 3376 3399 3411 3489 3758 3948 3962 3996  
 4198 4215 4276 4289 5325 5356 5501 5566 5581 5854  
 5857 6221 6436 6706 6709 6717 6731 6844 6850 6977  
 6986 7037 7101 7103 7105 7144 7198 7258 7342 7347  
 7379 7878

GENERATOR - OR SEALED TUBE

74 77 131 155 199 204 253 285 316 324 370 426 500  
 518 519 546 567 591 611 618 621 628 629 637 638  
 658 678 679 680 695 696 712 716 762 810 898 917  
 921 936 960 961 972 977 996 1017 1033 1046 1052  
 1054 1056 1067 1075 1084 1103 1104 1115 1116 1152  
 1172 1217 1229 1248 1258 1284 1294 1297 1304 1309  
 1353 1394 1397 1399 1407 1414 1437 1439 1444 1450  
 1453 1489 1508 1514 1522 1530 1535 1589 1593 1602  
 1619 1626 1640 1656 1666 1667 1670 1685 1698 1701  
 1721 1738 1739 1753 1773 1798 1802 1804 1813 1815  
 1859 1864 1875 1887 1889 1896 1899 1900 1905 1912  
 1922 1939 1940 1950 1954 1955 1956 1968 1978 1981  
 2129 2297 2354 2384 2410 2418 2433 2453 2493 2504  
 2505 2506 2512 2518 2519 2524 2526 2527 2542 2549  
 2561 2567 2568 2569 2580 2586 2591 2596 2598 2608  
 2615 2617 2620 2622 2649 2660 2667 2674 2678 2705  
 2707 2720 2734 2749 2761 2764 2776 2796 2798 2802  
 2806 2849 2933 2975 2983 2987 3058 3059 3063 3073  
 3074 3075 3076 3085 3087 3090 3335 3355 3357 3364  
 3366 3411 3460 3487 3495 3496 3497 3502 3553 3717  
 3718 3746 3751 3753 3781 3790 3794 3796 3810 3973  
 3976 3980 3981 4005 4205 4214 4228 4252 4260 4261  
 4273 4282 4392 5261 5321 5322 5332 5339 5353 5380  
 5383 5384 5389 5403 5409 5410 5420 5431 5432 5443  
 5445 5450 5451 5452 5708 5711 5714 5720 5739 5757  
 5764 5772 5776 5778 5780 5781 5782 5784 5884 5920  
 5923 5978 6014 6022 6059 6065 6075 6201 6222 6229

## ACTIVATION ANALYSIS-TECHNIQUE USED

## GENERATOR-OR SEALED TUBE (CONTINUED)

6301	6318	6325	6340	6352	6357	6359	6398	6402	6404
6684	6694	6703	6705	6713	6714	6718	6722	6723	6728
6730	6743	6750	6830	6840	6841	6845	6856	6967	6971
6973	6975	6978	7025	7026	7027	7028	7029	7030	7031
7033	7076	7097	7102	7114	7142	7176	7201	7202	7214
7217	7219	7259	7289	7290	7291	7293	7296	7297	7301
7302	7313	7318	7320	7330	7337	7338	7344	7351	7354
7387	7400	7403	7404	7411	7413	7417	7419	7460	7881
7902	7907	7912	7915	7917	7923	7926	7962	7966	7967
7968	7969	7970	8040						

## ACCELERATOR - NEUTRONS

16	17	23	91	92	98	108	109	111	113	125	175	189	205
274	275	304	310	370	403	413	520	549	574	580	596		
635	639	647	660	732	733	780	841	863	872	875	876		
934	965	967	1014	1026	1072	1075	1213	1319	1355				
1407	1442	1444	1489	1509	1598	1623	1691	1808	1830				
1838	1854	1917	1940	1963	2323	2510	2661	2668	2684				
2686	2697	2774	2947	3461	3495	3496	3497	3752	3768				
3791	3979	4198	4202	6372	6527	6949	7022	7023	7024				
7249	7253	7372	7426	8012									

## PHOTON ACTIVATION (INCLUDES ISOTOPE SOURCE)

38	45	46	49	58	74	75	169	170	206	207	339	351	380
554	631	637	669	703	814	855	861	978	983	1005	1014		
1043	1062	1075	1081	1083	1105	1136	1160	1163	1175				
1178	1238	1263	1270	1334	1340	1375	1435	1444	1475				
1481	1501	1560	1597	1609	1646	1764	1765	1778	1810				
1849	1857	1861	1871	1926	1935	2125	2272	2298	2303				
2318	2348	2495	2554	2555	2697	2758	2777	2965	2972				
3072	3077	3346	3379	3474	3486	3495	3727	3729	3771				
3775	3799	3803	3810	3970	3979	4189	4211	4277	4386				
5308	5311	5319	5379	5430	5442	5520	5621	5740	5784				
5870	5950	5954	5977	5979	6070	6225	6302	6317	6366				
6368	6371	6584	6586	6587	6593	6597	6676	6677	6678				
6693	6698	6711	6742	6746	6843	6854	7015	7016	7017				
7018	7020	7021		7106	7117	7127	7155	7186	7197				
7232	7292	7314	7315	7316	7322	7343	7366	7389	7392				
7405	7862	7949	7952	7964	7994	7995	8000	8037					

ACTIVATION ANALYSIS-TECHNIQUE USED

CHARGED PARTICLE (INCLUDES ISOTOPE SOURCE)

4 8 29 87 105 118 119 153 160 181 184 185 201 274  
 275 314 346 381 382 383 384 385 401 417 423 443  
 455 479 495 497 498 499 520 578 623 637 638 703  
 734 744 771 839 855 912 913 1013 1023 1065 1075  
 1091 1101 1148 1151 1194 1219 1232 1256 1280 1312  
 1318 1377 1408 1444 1450 1483 1486 1490 1561 1599  
 1604 1668 1704 1720 1742 1778 1811 1823 1931 1836  
 1837 1915 1935 1951 2254 2259 2293 2381 2429 2505  
 2531 2555 2618 2628 2629 2632 2634 2652 2673 2697  
 2712 2948 2949 3070 3071 3089 3351 3403 3411 3495  
 3711 3721 3722 3767 3777 3783 3791 3976 3977 3979  
 3995 4000 4193 4197 4198 4209 4211 4226 5177 5238  
 5330 5372 5429 5435 5442 5543 5580 5752 5768 5769  
 5773 5921 5938 5957 6004 6053 6056 6066 6072 6329  
 6339 6449 6450 6579 6580 6581 6582 6583 6587 6588  
 6589 6590 6591 6593 6594 6595 6596 6597 6598 6675  
 6630 6681 6682 6683 6736 6752 6949 6988 7007 7008  
 7009 7010 7011 7012 7013 7014 7015 7019 7036 7109  
 7152 7200 7213 7223 7230 7231 7238 7239 7248 7250  
 7307 7322 7343 7412 7875 7903 7905 7924 7936 7982  
 8028 8029 8034 8039 8044

SECONDARY PARTICLE

110 196 256 391 654 655 756 770 782 784 867 868  
 981 1070 1071 1075 1082 1108 1252 1330 1450 1529  
 1532 1609 1675 1713 1730 1801 1979 2385 2543 2562  
 2661 2726 3965 3985 3992 6092 6669 7180

ISOTOPE NEUTRON SOURCES - TRANSPLUTONIUM ELEMENTS

1336 1337 1423 1544 1575 1642 1941 2570 2572 3465  
 4294 7192 7390 7414 8015 8018

NON-DESTRUCTIVE DETERMINATION

2 13 17 21 23 24 29 35 37 38 43 45 46 48 49 51 52  
 53 54 58 59 73 75 81 82 88 90 97 98 100 102 104  
 105 107 108 109 110 113 114 118 119 120 125 130  
 131 135 136 140 144 147 148 151 153 155 163 169



## ACTIVATION ANALYSIS-TECHNIQUE USED

## NON-DESTRUCTIVE DETERMINATION (CONTINUED)

170	171	175	179	184	185	188	189	198	199	204	205
206	207	213	215	216	219	227	228	229	232	233	237
238	239	240	246	252	253	259	266	267	268	271	272
274	275	291	300	301	304	305	319	323	325	330	331
333	339	343	344	346	349	351	357	358	371	375	380
381	382	386	387	393	395	397	402	403	405	407	408
413	414	417	423	426	428	433	444	445	454	455	460
461	462	468	472	476	479	486	487	488	489	491	494
499	500	512	514	516	518	519	520	521	523	524	530
533	538	546	549	552	554	555	561	562	566	567	573
574	578	580	581	584	589	590	591	592	594	596	598
604	605	606	607	608	612	618	619	620	621	623	625
628	629	630	631	632	635	640	641	654	657	658	659
662	665	667	669	670	686	687	690	695	696	702	703
707	709	711	712	713	716	717	725	726	732	733	738
739	744	752	753	754	755	756	758	762	763	770	771
774	775	782	783	784	791	797	798	803	806	807	808
810	811	814	818	819	822	823	831	839	842	843	844
845	850	851	852	853	854	855	861	862	863	868	882
887	888	902	904	905	908	912	913	914	915	916	921
924	927	932	933	934	936	938	939	940	943	946	948
949	950	951	955	956	957	958	959	960	961	966	972
974	977	978	981	982	983	986	987	989	990	991	992
993	994	996	1003	1004	1005	1006	1007	1008	1009		
1011	1013	1014	1017	1019	1021	1023	1024	1025	1026		
1029	1030	1031	1032	1033	1035	1036	1052	1054	1055		
1056	1059	1060	1061	1062	1063	1064	1065	1066	1067		
1068	1070	1071	1072	1073	1074	1075	1077	1078	1079		
1081	1082	1083	1084	1088	1090	1092	1093	1095	1097		
1098	1099	1103	1104	1106	1110	1111	1112	1114	1115		
1116	1131	1132	1136	1140	1141	1143	1152	1153	1158		
1160	1161	1162	1172	1175	1178	1195	1196	1197	1199		
1200	1202	1203	1204	1213	1216	1217	1218	1219	1220		
1225	1227	1228	1229	1233	1238	1239	1245	1248	1251		
1252	1254	1256	1258	1259	1260	1263	1267	1269	1270		
1279	1280	1283	1284	1289	1290	1294	1295	1297	1298		
1302	1304	1306	1309	1311	1314	1315	1318	1336	1337		
1351	1355	1357	1361	1374	1375	1376	1377	1380	1396		
1389	1392	1393	1394	1395	1396	1397	1398	1399	1402		
1403	1407	1413	1414	1415	1419	1420	1424	1427	1429		
1435	1452	1453	1455	1456	1460	1466	1468	1472	1473		
1477	1481	1483	1487	1491	1492	1495	1496	1500	1501		
1504	1505	1506	1509	1510	1513	1514	1517	1519	1521		
1522	1527	1530	1531	1532	1535	1541	1546	1547	1549		
1550	1551	1552	1553	1555	1556	1558	1559	1565	1567		
1572	1573	1574	1576	1578	1583	1585	1586	1589	1590		

## ACTIVATION ANALYSIS-TECHNIQUE USED

## NON-DESTRUCTIVE DETERMINATION (CONTINUED)

1591	1595	1597	1598	1599	1601	1604	1606	1611	1617
1618	1620	1623	1635	1637	1639	1642	1646	1649	1651
1654	1656	1664	1665	1666	1667	1670	1676	1677	1680
1683	1685	1686	1689	1691	1702	1706	1707	1709	1710
1712	1715	1717	1719	1721	1725	1726	1736	1737	1738
1739	1740	1746	1751	1752	1754	1758	1759	1760	1761
1764	1765	1772	1773	1778	1782	1783	1785	1787	1789
1790	1793	1794	1795	1798	1799	1802	1803	1804	1806
1809	1813	1814	1815	1816	1819	1821	1822	1823	1827
1829	1830	1831	1834	1837	1840	1843	1854	1855	1857
1859	1861	1865	1871	1873	1875	1878	1879	1881	1882
1886	1887	1888	1889	1896	1897	1898	1899	1900	1905
1906	1910	1912	1917	1921	1922	1924	1926	1929	1938
1939	1940	1941	1948	1950	1951	1953	1954	1955	1956
1957	1958	1961	1962	1965	1966	1968	1971	1978	1981
1983	1984	1985	2121	2123	2126	2129	2141	2144	2145
2146	2251	2254	2272	2297	2303	2313	2323	2337	2350
2354	2364	2376	2381	2384	2418	2422	2426	2429	2430
2433	2441	2453	2480	2481	2493	2495	2496	2497	2498
2502	2503	2504	2505	2506	2507	2508	2517	2518	2519
2524	2525	2526	2542	2548	2549	2553	2554	2559	2569
2571	2579	2580	2584	2586	2591	2596	2597	2598	2605
2607	2608	2610	2612	2614	2615	2618	2619	2621	2622
2623	2633	2634	2644	2645	2649	2651	2652	2660	2661
2663	2664	2666	2668	2671	2676	2678	2680	2684	2686
2688	2689	2694	2699	2705	2707	2711	2727	2730	2732
2734	2737	2739	2740	2744	2749	2750	2751	2756	2758
2759	2762	2764	2766	2774	2775	2777	2782	2789	2790
2796	2797	2798	2801	2802	2804	2805	2844	2892	2920
2921	2922	2927	2931	2933	2940	2942	2943	2945	2948
2949	2956	2957	2963	2964	2965	2966	2972	2976	2979
2981	2983	2987	3027	3033	3060	3062	3063	3078	3085
3087	3088	3089	3090	3126	3344	3346	3350	3355	3357
3358	3361	3362	3363	3364	3365	3366	3367	3368	3369
3370	3371	3372	3373	3374	3375	3376	3379	3384	3385
3386	3394	3399	3411	3418	3460	3461	3464	3466	3470
3473	3474	3486	3502	3514	3530	3553	3661	3708	3709
3710	3711	3717	3718	3721	3722	3727	3729	3730	3736
3738	3739	3740	3745	3746	3752	3753	3760	3766	3767
3768	3770	3771	3775	3778	3780	3781	3783	3788	3790
3791	3794	3797	3799	3803	3809	3810	3811	3841	3948
3954	3956	3965	3970	3973	3975	3976	3977	3980	3981
3986	3991	3992	3994	3996	3997	3998	4000	4005	4189
4191	4193	4194	4196	4197	4205	4207	4208	4209	4211
4214	4215	4216	4224	4226	4230	4231	4232	4240	4250
4252	4258	4260	4261	4262	4263	4270	4276	4277	4281
4282	4283	4284	4285	4286	4289	4293	4294	4308	4322

## ACTIVATION ANALYSIS-TECHNIQUE USED

## NON-DESTRUCTIVE DETERMINATION (CONTINUED)

4328	4329	4347	4381	4386	4392	4406	5177	5238	5261
5262	5308	5311	5319	5320	5321	5322	5323	5325	5326
5330	5332	5343	5350	5353	5356	5358	5363	5370	5372
5380	5383	5384	5385	5386	5389	5390	5393	5394	5399
5401	5402	5403	5407	5408	5409	5420	5428	5429	5430
5431	5432	5435	5438	5445	5450	5451	5452	5501	5510
5515	5517	5543	5547	5551	5566	5571	5577	5579	5531
5591	5621	5698	5704	5706	5707	5708	5713	5714	5720
5726	5727	5732	5735	5739	5740	5742	5746	5749	5752
5756	5759	5761	5764	5765	5766	5768	5769	5772	5773
5776	5778	5779	5781	5782	5786	5788	5848	5858	5870
5872	5874	5884	5919	5920	5923	5925	5927	5931	5932
5933	5934	5936	5939	5950	5953	5958	5959	5965	5967
5969	5970	5975	5977	5978	5979	5992	5994	6000	6004
6005	6011	6012	6014	6015	6031	6047	6048	6050	6052
6056	6058	6062	6063	6065	6068	6069	6072	6073	6074
6083	6201	6204	6209	6213	6217	6222	6227	6229	6244
6295	6297	6301	6302	6312	6313	6314	6315	6317	6324
6329	6331	6335	6339	6344	6346	6348	6352	6355	6358
6359	6366	6367	6368	6369	6370	6372	6375	6376	6378
6380	6382	6388	6393	6398	6404	6406	6436	6439	6442
6449	6450	6453	6454	6455	6459	6570	6572	6582	6584
6588	6589	6590	6595	6596	6668	6669	6673	6675	6676
6677	6678	6679	6680	6681	6682	6683	6684	6685	6686
6687	6688	6689	6690	6691	6694	6700	6702	6705	6706
6710	6711	6713	6714	6717	6720	6722	6723	6724	6728
6734	6735	6736	6740	6743	6745	6746	6748	6749	6750
6751	6752	6824	6827	6828	6839	6844	6845	6848	6850
6854	6856	6857	6859	6922	6923	6924	6927	6929	6930
6931	6936	6937	6938	6941	6943	6946	6948	6949	6950
6951	6955	6958	6959	6963	6964	6966	6967	6968	6969
6970	6973	6974	6975	6976	6977	6978	6982	6983	6985
6989	6990	6991	6992	6993	6994	6995	7011	7012	7013
7017	7020	7026	7030	7031	7032	7073	7076	7077	7082
7083	7084	7086	7089	7097		7101	7102	7103	7106
7109	7113	7123	7125	7127	7129	7131	7132	7133	7134
7139	7142	7144	7146	7147	7160	7162	7170	7171	7176
7180	7194	7195	7197	7198	7200	7201	7202	7203	7206
7209	7214	7215	7216	7217	7219	7220	7229	7234	7235
7238	7239	7240	7241	7248	7250	7252	7258	7260	7280
7282	7283	7285	7286	7289	7291	7292	7293	7295	7296
7297	7298	7301	7302	7303	7305	7307	7308	7314	7315
7316	7318	7320	7321	7328	7330	7331	7333	7337	7338
7341	7342	7344	7351	7353	7354	7355	7361	7365	7366
7371	7372	7379	7380	7382	7387	7388	7389	7390	7393
7396	7403	7404	7406	7410	7411	7412	7413	7414	7416
7417	7419	7422	7424	7425	7426	7431	7460	7862	7863

ACTIVATION ANALYSIS-TECHNIQUE USED

NON-DESTRUCTIVE DETERMINATION (CONTINUED)

7866 7873 7878 7883 7885 7889 7894 7896 7898 7900  
 7901 7902 7903 7904 7907 7908 7912 7917 7920 7923  
 7926 7928 7929 7930 7935 7937 7939 7940 7941 7943  
 7946 7949 7957 7961 7964 7968 7969 7970 7974 7975  
 7988 7989 7994 7995 7996 7997 8001 8006 8007 8010  
 8011 8012 8017 8018 8021 8022 8023 8024 8034 8035  
 8038 8039 8041

CHEMISTRY - DISSOLUTION TECHNIQUE

103 192 212 239 254 255 270 322 436 442 465 469  
 470 473 482 512 522 550 610 651 677 698 706 718  
 815 821 881 909 910 1001 1155 1166 1167 1169 1171  
 1173 1174 1176 1192 1206 1207 1214 1436 1788 1842  
 1930 2154 2296 2365 2657 2836 2991 3334 5399 5444  
 7149

CHEMISTRY - GROUP SEPARATIONS

103 166 167 252 255 424 462 508 509 614 674 704  
 708 714 726 741 805 820 821 829 830 834 848 850  
 878 968 985 1045 1047 1069 1089 1118 1123 1134  
 1138 1254 1323 1425 1434 1443 1699 1710 1797 1800  
 1832 1894 1945 1965 1975 2403 2523 2715 2718 2729  
 2840 2852 2922 2936 2950 3382 4004 5344 5345 5347  
 5619 5760 5771 5785 5981 6071 6220 6323 6379 6569  
 6574 6575 6576 6577 6715 6729 6754 6838 6957 6962  
 6965 6972 6999 7000 7004 7154 7164 7211 7212 7254  
 7360 7938 7948

CHEMISTRY - GENERAL

4 5 9 22 28 65 68 69 78 80 81 83 84 85 89 123 141  
 154 158 174 176 187 192 193 194 200 215 239 240  
 282 284 287 288 289 290 291 300 310 317 374 477  
 493 502 564 588 614 638 640 641 651 652 662 674  
 676 683 686 688 692 698 699 702 703 704 705 706  
 710 735 742 760 767 773 779 789 790 807 815 818  
 825 827 838 844 851 852 856 879 882 895 896 920  
 942 944 962 963 964 965 967 970 971 979 980 984  
 995 997 998 1000 1002 1004 1020 1022 1027 1034



## ACTIVATION ANALYSIS-TECHNIQUE USED

## CHEMISTRY - GENERAL (CONTINUED)

1041	1057	1060	1075	1076	1080	1086	1087	1088	1094
1097	1102	1105	1107	1122	1140	1156	1165	1169	1170
1180	1183	1184	1187	1189	1190	1193	1194	1275	1283
1286	1312	1351	1354	1356	1357	1361	1371	1373	1382
1333	1384	1385	1396	1397	1400	1406	1408	1411	1421
1442	1457	1494	1652	1665	1675	1693	1694	1707	1709
1711	1713	1717	1723	1725	1760	1769	1786	1791	1803
1818	1828	1832	1848	1856	1858	1863	1890	1902	1907
1911	1914	1920	1933	1976	2296	2333	2447	2464	2473
2474	2495	2509	2522	2534	2535	2543	2546	2550	2578
2590	2601	2685	2687	2717	2721	2735	2802	2819	2848
2876	2892	2921	2922	2923	3079	3091	3382	3481	3483
3486	3504	3508	3514	3560	3708	3755	3962	3987	3988
3995	4153	4216	4219	4300	4315	4317	4319	5307	5327
5416	5436	5444	5499	5502	5716	5717	5718	5861	5864
5924	5940	5948	5976	5980	5982	5989	5991	6008	6016
6044	6055	6199	6203	6226	6307	6343	6394	6407	6451
6671	6712	6716	6739	6849	6851	6947	6956	6997	7081
7087	7092	7111	7135	7152	7172	7210	7218	7226	7233
7246	7281	7310	7311	7312	7370	7394	7407	7869	7877
7888	7919	7934	7945	7952	7959	7978	7983	7993	

## CHEMISTRY - PRECIPITATION

6	7	10	11	12	30	31	32	39	44	54	55	56	63	64	66	67
96	103	115	116	124	130	133	137	138	139	145	146	148				
161	165	172	178	180	183	209	214	217	221	223	225					
227	230	231	232	234	236	243	244	246	249	250	252					
254	255	262	263	270	279	300	302	304	326	329	349					
351	353	360	361	362	363	364	366	367	391	398	400					
411	416	422	429	431	432	434	436	448	449	452	459					
461	465	467	478	482	483	501	512	517	522	525	531					
535	537	541	544	545	553	560	562	571	575	585	586					
587	620	622	655	673	675	677	687	689	727	757	776					
777	778	788	792	802	805	810	821	858	867	869	871					
878	892	907	922	928	929	937	945	1080	1108	1117						
1118	1124	1125	1127	1135	1137	1151	1155	1159	1166							
1169	1170	1171	1173	1174	1176	1177	1181	1182	1188							
1205	1206	1207	1208	1212	1214	1215	1222	1223	1224							
1226	1230	1231	1232	1235	1237	1240	1241	1243	1244							
1246	1247	1257	1266	1271	1278	1292	1293	1299	1300							
1307	1310	1319	1320	1323	1324	1326	1334	1340	1347							
1351	1428	1433	1449	1456	1458	1469	1471	1473	1477							
1478	1480	1484	1515	1520	1520	1533	1542	1548	1563							
1564	1568	1569	1571	1577	1581	1584	1592	1613	1614							

## ACTIVATION ANALYSIS-TECHNIQUE USED

## CHEMISTRY - PRECIPITATION (CONTINUED)

1615	1621	1631	1632	1634	1636	1648	1655	1660	1671
1672	1677	1682	1697	1705	1720	1734	1743	1745	1749
1750	1770	1781	1801	1812	1820	1833	1839	1844	1893
1936	1937	1970	1977	1979	1982	2122	2365	2385	2496
2497	2552	2573	2643	2654	2658	2669	2690	2751	2769
2772	2773	2786	2791	2792	2793	2821	2838	2839	2849
2852	2865	2878	2926	2930	2938	2954	2977	2982	2984
3061	3098	3105	3328	3352	3387	3391	3393	3395	3467
3485	3488	3713	3723	3724	3725	3726	3732	3785	3949
3957	3960	3985	3993	3994	4190	4219	4221	4227	4244
4249	4253	4255	4267	4268	4272	4290	4299	4307	5349
5359	5369	5406	5472	5522	5721	5731	5755	5777	5972
5983	6002	6010	6053	6064	6086	6206	6389	6390	6412
6445	6670	6693	6701	6755	6823	6834	6925	6933	6960
6996	7072	7099	7108	7112	7124	7138	7145	7193	7196
7256	7299	7329	7369	7374	7867	7874	7879	7884	7910
7913	7944	7979	7982	7999					

## CHEMISTRY - DISTILLATION

8	10	11	62	103	117	121	122	124	134	142	143	172	181
186	196	197	221	222	226	231	242	245	248	256	279		
284	322	370	378	451	465	474	475	481	493	498	562		
570	602	636	709	804	812	851	864	871	911	1010	1012		
1100	1119	1124	1135	1151	1157	1205	1221	1226	1230				
1231	1235	1246	1250	1278	1288	1326	1340	1412	1416				
1425	1446	1470	1528	1542	1548	1560	1564	1648	1679				
1730	1742	1744	1749	1862	1891	1904	1964	1969	2157				
2403	2515	2537	2540	2562	2563	2661	2701	2712	2731				
2795	2813	2853	2954	3360	3713	3725	3726	3732	3789				
3808	3965	4217	4254	4255	4268	4269	4274	4278	4305				
4321	5295	5358	5364	5366	5449	5851	5926	5938	5954				
6039	6386	6387	6389	6390	6392	6401	6405	6441	6446				
6580	6591	6674	6719	6742	6831	6842	6843	6846	6853				
6934	6939	6954	7018	7019	7227	7230	7242	7332	7391				
7870	7893	7899	7906	7911	7921	8037							

## ACTIVATION ANALYSIS-TECHNIQUE USED

## CHEMISTRY - SOLVENT EXTRACTION

12 26 33 34 40 41 42 50 62 66 116 117 124 133 137  
 138 140 145 146 165 178 183 186 210 212 221 229  
 234 235 239 243 249 252 254 255 262 269 328 361  
 362 367 379 409 410 412 422 424 443 482 485 490  
 492 507 563 565 575 586 591 601 634 772 781 804  
 810 813 815 858 864 866 867 878 880 883 906 928  
 952 1015 1028 1096 1109 1121 1125 1127 1133 1135  
 1139 1143 1145 1146 1147 1150 1153 1156 1159 1166  
 1167 1168 1173 1184 1191 1201 1211 1212 1215 1231  
 1234 1235 1243 1244 1250 1262 1264 1266 1273 1274  
 1273 1292 1307 1313 1317 1323 1324 1325 1326 1340  
 1391 1401 1426 1431 1433 1442 1456 1458 1470 1477  
 1480 1497 1518 1526 1537 1538 1548 1564 1566 1569  
 1581 1592 1603 1610 1614 1615 1621 1632 1648 1653  
 1671 1692 1703 1728 1741 1743 1748 1749 1763 1767  
 1788 1820 1825 1833 1841 1874 1895 1901 1913 1930  
 1931 1960 1980 2036 2154 2340 2347 2369 2386 2431  
 2434 2444 2445 2455 2499 2502 2525 2539 2611 2613  
 2641 2683 2690 2696 2752 2753 2754 2769 2791 2792  
 2793 2795 2811 2873 2881 2888 2889 2951 2991 3005  
 3084 3342 3345 3391 3395 3476 3482 3713 3714 3804  
 3957 3982 4190 4203 4253 4255 4269 4302 4311 4314  
 5335 5349 5365 5369 5397 5415 5500 5699 5703 5719  
 5728 5729 5730 5770 5775 5787 5793 5868 5928 5935  
 5949 5955 5960 5995 5996 5999 6013 6017 6054 6061  
 6202 6205 6214 6215 6303 6309 6322 6328 6351 6353  
 6385 6405 6692 6696 6727 6825 6833 6836 6852 6860  
 6921 6928 6933 6940 6942 6944 6961 6981 7005 7030  
 7093 7095 7118 7119 7122 7149 7182 7326 7336 7359  
 7376 7401 7405 7408 7951 7986 7998

## CHEMISTRY - CHROMATOGRAPHY OR ION EXCHANGE

14 47 50 54 61 79 87 93 96 115 138 140 145 146 160  
 212 225 252 258 263 267 325 331 356 390 416 418  
 421 422 434 439 442 450 504 520 542 548 550 595  
 606 689 717 723 726 728 730 799 870 871 874 878  
 892 899 900 909 919 923 988 999 1015 1016 1038  
 1047 1063 1101 1107 1168 1169 1176 1205 1209 1210  
 1214 1221 1222 1236 1243 1265 1272 1277 1281 1285  
 1287 1292 1307 1323 1324 1332 1333 1381 1404 1410  
 1421 1428 1431 1432 1434 1441 1449 1454 1463 1469  
 1470 1471 1474 1477 1478 1486 1512 1529 1564 1566  
 1584 1592 1596 1603 1607 1613 1616 1632 1633 1634  
 1644 1645 1668 1677 1678 1679 1681 1682 1704 1708



ACTIVATION ANALYSIS-TECHNIQUE USED

CHEMISTRY - CHROMATOGRAPHY OR ION EXCHANGE (CONTINUED)

1722	1732	1741	1759	1762	1766	1780	1797	1800	1805
1811	1817	1824	1835	1839	1844	1872	1892	1894	1925
1945	1952	1957	1959	1973	1983	2052	2148	2149	2283
2308	2327	2386	2480	2496	2513	2523	2557	2638	2639
2640	2654	2669	2687	2690	2695	2713	2714	2725	2741
2754	2776	2794	2800	2812	2846	2849	2852	2870	2882
2888	2901	2902	2904	2932	2973	2989	2999	3005	3065
3093	3341	3383	3397	3414	3475	3661	3714	3716	3731
3757	3759	3774	3789	3808	3810	3955	3957	3958	3959
3961	3964	3990	4004	4192	4219	4267	4268	4291	4301
4388	4391	4410	4411	5336	5338	5341	5359	5368	5378
5382	5405	5410	5422	5439	5447	5448	5697	5750	5751
5790	5792	5808	5862	5873	5941	5951	5955	5961	5962
5963	5964	5981	6001	6007	6040	6043	6067	6077	6078
6079	6084	6085	6202	6207	6211	6228	6308	6354	6356
6383	6395	6397	6405	6409	6410	6438	6443	6444	6569
6574	6697	6707	6733	6741	6755	6825	6826	6829	6831
6858	6935	6961	6998	7002	7003	7091	7096	7107	7137
7143	7145	7148	7164	7165	7166	7167	7168	7181	7196
7211	7223	7236	7257	7294	7300	7304	7306	7326	7360
7362	7364	7370	7373	7377	7391	7397	7420	7423	7427
7865	7927	7933	7947	7976	7981	7990	8005		

CHEMISTRY - ELECTRODEPOSITION

136 211 261 340 395 579 832 1113 1129 1192 1221  
 1313 1391 1471 1525 2511 2728 2929 3991 4201 4303  
 5395 5398 6076

CHEMISTRY - ISOTOPE EXCHANGE

126 436 539 540 636 1525 2277 2551 5701 5712 5860  
 6080

CHEMISTRY - AMALGAM EXCHANGE

740 815 1411 2006 2978 3989 4309 5942

ACTIVATION ANALYSIS-TECHNIQUE USED

CHEMISTRY - SZILARD-CHALMERS

153 328 1333 2473 2871 7399

CHEMISTRY - SUBSTOICHIOMETRIC

425 768 1121 1159 1291 1346 1493 1575 1579 1587  
1588 1974 2154 2358 2560 2845 3396 3804 4306 4310  
5922 5956 5984 6024 6294 6298 6334 6337 6667 6738  
6980 7174 7225 7237 7890 7931 7932

CHEMISTRY - AUTOMATED

285 708 1042 2403 2556 2558 2901 5760 6304 6838  
6939 7948

CHEMISTRY - ABSORPTION OR ADSORPTION

192 1539 1543 7243 7421 7914 8019 8020

RAPID RADIOCHEMICAL SEPARATION

254 442 583 686 697 811 821 829 830 834 953 982  
1172 1409 1412 1425 1434 1446 1692 2157 2499 2611  
2636 2954 3388 3487 3669 3989 5336 7138

ISOTOPE DILUTION

172 195 1018 1750 2887 3084 3093 4298 5753

EM ISOTOPE SEPARATOR

6396

ACTIVATION ANALYSIS-TECHNIQUE USED

DERIVATIVE ACTIVATION ANALYSIS

1462 2665 2722 5743 5747 7204 7977 7985

SEPARATION OF SIMILAR ORGANIC COMPOUNDS WITH PAPER  
CHROMATOGRAPHY BEFORE IRRADIATION

437 438 954 975 976 1242 1342 1479 1534 1747 1870  
2748 2969 3469 4296 5357 7255

GAMMA SPECTROMETRY

2 4 5 9 12 13 14 15 17 21 26 28 29 33 34 35 39 40  
41 42 43 44 48 50 54 55 56 58 59 61 64 78 79 80 81  
89 90 103 104 107 113 116 117 130 131 136 137 140  
145 146 148 153 160 165 167 172 173 175 178 179  
183 184 185 193 197 199 205 212 215 221 237 238  
239 252 253 254 255 258 259 267 268 272 279 284  
285 288 289 290 291 301 302 304 305 310 312 314  
317 318 319 321 323 325 326 328 329 330 331 339  
343 344 349 351 352 353 356 357 364 370 371 374  
375 377 386 387 390 391 395 398 403 405 407 409  
410 412 414 416 418 422 423 425 426 430 433 434  
439 442 444 445 448 450 454 455 459 460 461 472  
473 476 482 486 487 488 489 493 494 500 504 507  
508 509 516 518 519 521 531 533 535 542 546 548  
552 555 560 561 562 564 566 567 570 573 574 581  
583 584 585 586 587 588 590 592 596 601 604 605  
606 607 608 614 619 620 622 623 625 628 630 634  
635 636 637 638 640 641 649 652 653 655 657 658  
659 662 665 667 676 686 687 688 689 690 693 695  
696 698 701 702 703 705 706 707 708 709 710 711  
712 713 714 716 718 726 727 732 733 735 738 740  
741 752 753 754 756 758 760 762 763 767 768 771  
772 773 777 781 784 788 789 790 791 792 796 797  
798 802 803 804 805 806 810 811 812 813 814 818  
820 821 822 823 824 825 827 829 830 831 833 834  
844 845 848 849 850 851 852 855 856 861 863 866  
867 871 879 880 881 882 883 884 886 887 888 892  
899 902 903 906 907 912 913 915 919 920 923 924  
927 930 931 932 933 934 935 936 938 940 942 943  
944 945 946 948 950 951 953 955 956 957 959 960  
961 962 964 966 968 971 972 974 977 980 982 984  
986 987 988 989 990 992 994 995 996 997 998 999

## ACTIVATION ANALYSIS-TECHNIQUE USED

## GAMMA SPECTROMETRY (CONTINUED)

1001	1002	1003	1004	1005	1006	1007	1008	1009	1010
1011	1012	1014	1017	1019	1020	1021	1022	1024	1027
1029	1031	1032	1033	1034	1035	1036	1038	1041	1042
1043	1047	1052	1055	1056	1060	1063	1064	1065	1066
1068	1072	1073	1074	1075	1076	1077	1084	1086	1087
1089	1090	1092	1094	1095	1097	1098	1099	1100	1101
1102	1103	1105	1106	1107	1108	1109	1110	1112	1114
1116	1117	1118	1119	1124	1129	1132	1134	1137	1138
1139	1140	1141	1143	1150	1151	1152	1153	1157	1158
1159	1161	1162	1166	1167	1168	1169	1170	1171	1172
1173	1174	1176	1182	1183	1184	1185	1187	1189	1190
1191	1192	1194	1195	1196	1199	1200	1201	1202	1203
1204	1205	1206	1207	1208	1209	1210	1211	1212	1213
1214	1215	1216	1217	1218	1220	1221	1222	1223	1224
1225	1226	1227	1228	1229	1230	1231	1232	1233	1234
1235	1236	1238	1239	1240	1241	1243	1244	1245	1246
1247	1248	1250	1251	1254	1256	1257	1258	1263	1264
1265	1269	1272	1273	1275	1277	1279	1281	1283	1284
1286	1288	1289	1290	1291	1293	1294	1295	1297	1299
1300	1304	1306	1309	1310	1311	1312	1313	1314	1317
1318	1319	1320	1323	1325	1327	1332	1333	1334	1340
1347	1355	1356	1358	1359	1361	1369	1374	1375	1376
1381	1382	1383	1384	1386	1391	1395	1396	1397	1398
1400	1402	1403	1404	1406	1407	1408	1409	1410	1411
1412	1413	1414	1415	1417	1419	1420	1421	1424	1425
1426	1427	1428	1429	1432	1433	1434	1436	1437	1438
1442	1443	1446	1447	1452	1453	1454	1455	1456	1460
1466	1468	1469	1470	1471	1472	1473	1477	1478	1480
1481	1484	1486	1487	1491	1492	1493	1494	1496	1497
1501	1504	1505	1508	1509	1510	1512	1514	1515	1517
1518	1519	1521	1522	1525	1526	1527	1528	1529	1530
1531	1532	1533	1535	1537	1538	1539	1540	1541	1542
1543	1548	1549	1550	1551	1552	1554	1555	1556	1558
1559	1560	1563	1564	1565	1566	1567	1568	1569	1571
1572	1574	1578	1581	1583	1584	1585	1586	1587	1588
1589	1590	1591	1592	1595	1596	1597	1598	1599	1601
1603	1606	1607	1610	1613	1614	1615	1617	1620	1628
1631	1633	1634	1635	1639	1642	1643	1644	1645	1646
1648	1649	1652	1653	1654	1655	1656	1665	1670	1672
1673	1676	1677	1678	1679	1680	1682	1689	1691	1692
1697	1699	1702	1705	1706	1707	1708	1709	1710	1712
1715	1717	1719	1721	1722	1723	1725	1732	1734	1735
1736	1737	1738	1739	1740	1741	1742	1744	1745	1746
1748	1749	1750	1759	1760	1761	1765	1766	1767	1769
1781	1786	1789	1790	1791	1793	1794	1795	1797	1798
1799	1803	1804	1805	1806	1809	1813	1815	1817	1821
1825	1827	1828	1829	1831	1832	1833	1835	1837	1840



## ACTIVATION ANALYSIS-TECHNIQUE USED

## GAMMA SPECTROMETRY (CONTINUED)

1842	1844	1848	1851	1854	1855	1856	1860	1863	1875
1878	1881	1882	1884	1885	1887	1889	1890	1891	1892
1893	1894	1896	1897	1899	1900	1901	1902	1904	1905
1906	1907	1910	1911	1912	1917	1920	1921	1925	1926
1929	1930	1931	1934	1936	1938	1939	1942	1943	1944
1950	1953	1954	1956	1957	1960	1961	1962	1964	1966
1968	1969	1970	1971	1973	1975	1978	1981	1982	1983
2121	2122	2123	2126	2129	2141	2144	2145	2154	2157
2251	2272	2283	2296	2297	2327	2337	2347	2354	2358
2369	2376	2381	2384	2385	2386	2403	2418	2422	2426
2430	2431	2433	2440	2441	2445	2447	2453	2455	2464
2474	2480	2481	2493	2494	2495	2496	2497	2498	2499
2502	2503	2504	2505	2506	2507	2508	2509	2511	2515
2517	2519	2524	2525	2526	2535	2537	2539	2540	2542
2548	2549	2550	2551	2552	2553	2558	2562	2563	2565
2569	2571	2573	2578	2580	2584	2586	2590	2591	2596
2598	2601	2605	2607	2608	2611	2613	2614	2615	2618
2619	2621	2622	2623	2626	2638	2639	2641	2645	2649
2651	2652	2658	2660	2661	2663	2664	2666	2668	2669
2671	2676	2678	2683	2684	2685	2686	2688	2689	2690
2694	2695	2696	2699	2701	2705	2707	2711	2713	2715
2717	2718	2721	2725	2727	2728	2730	2732	2733	2734
2735	2737	2739	2740	2741	2744	2749	2750	2752	2753
2754	2756	2758	2760	2764	2766	2769	2773	2774	2775
2776	2782	2786	2789	2790	2791	2792	2793	2795	2797
2798	2800	2801	2802	2804	2805	2819	2821	2836	2838
2840	2844	2846	2848	2852	2870	2871	2876	2881	2882
2888	2889	2892	2902	2904	2920	2921	2922	2923	2926
2929	2930	2931	2933	2936	2938	2948	2950	2957	2964
2965	2972	2973	2977	2978	2981	2983	2984	2989	2991
2999	3005	3027	3060	3061	3062	3063	3064	3065	3070
3073	3075	3076	3077	3079	3081	3085	3087	3088	3090
3091	3093	3098	3283	3328	3341	3342	3344	3345	3346
3350	3352	3355	3357	3358	3360	3363	3364	3365	3366
3367	3368	3369	3370	3371	3372	3373	3374	3375	3382
3383	3384	3385	3386	3387	3388	3395	3396	3411	3414
3418	3461	3467	3468	3470	3474	3475	3476	3483	3485
3486	3487	3488	3490	3491	3492	3502	3504	3514	3530
3553	3560	3661	3708	3710	3713	3716	3718	3723	3724
3725	3730	3731	3736	3738	3739	3740	3741	3745	3752
3753	3757	3759	3766	3768	3769	3770	3771	3774	3775
3780	3781	3783	3785	3788	3789	3790	3791	3794	3797
3799	3803	3804	3808	3809	3810	3841	3948	3949	3954
3955	3956	3957	3958	3959	3960	3961	3964	3973	3975
3976	3980	3982	3986	3988	3989	3990	3991	3992	3994
3996	3997	3998	4153	4189	4190	4191	4192	4193	4194
4195	4196	4197	4201	4203	4205	4208	4209	4214	4215

## ACTIVATION ANALYSIS-TECHNIQUE USED

## GAMMA SPECTROMETRY (CONTINUED)

4216	4217	4221	4224	4226	4227	4230	4231	4232	4240
4244	4249	4250	4252	4253	4254	4255	4258	4260	4261
4263	4267	4269	4270	4272	4273	4274	4276	4281	4282
4283	4284	4285	4286	4290	4291	4293	4294	4298	4299
4300	4301	4302	4303	4305	4306	4307	4308	4309	4311
4314	4315	4321	4322	4328	4329	4347	4381	4392	4406
5307	5308	5311	5321	5322	5325	5326	5327	5332	5335
5336	5338	5341	5343	5344	5345	5347	5349	5358	5359
5363	5364	5365	5366	5368	5369	5370	5378	5379	5380
5382	5383	5384	5386	5389	5390	5393	5394	5398	5401
5402	5407	5409	5410	5415	5416	5420	5428	5430	5431
5432	5435	5438	5444	5445	5447	5448	5449	5450	5451
5452	5498	5499	5500	5502	5510	5571	5579	5619	5697
5698	5699	5703	5704	5705	5706	5707	5708	5712	5713
5714	5716	5717	5718	5720	5721	5725	5726	5727	5728
5729	5730	5732	5739	5740	5742	5746	5749	5750	5751
5753	5755	5759	5760	5761	5764	5768	5770	5771	5772
5775	5776	5777	5778	5781	5785	5786	5787	5790	5792
5793	5808	5853	5858	5860	5868	5870	5872	5873	5874
5884	5920	5921	5922	5923	5924	5925	5926	5934	5935
5939	5940	5941	5942	5948	5949	5950	5951	5954	5955
5958	5959	5960	5961	5962	5963	5964	5967	5969	5970
5972	5975	5976	5978	5979	5981	5983	5989	5991	5992
5994	5995	5996	5999	6001	6002	6005	6006	6007	6008
6010	6011	6013	6014	6015	6016	6023	6029	6039	6040
6043	6048	6050	6052	6054	6055	6056	6058	6061	6062
6063	6064	6065	6067	6068	6071	6074	6077	6080	6081
6085	6199	6201	6202	6203	6204	6205	6206	6207	6209
6211	6213	6214	6215	6217	6222	6223	6228	6229	6244
6294	6295	6298	6301	6302	6303	6307	6308	6309	6312
6314	6317	6322	6323	6324	6328	6331	6335	6337	6343
6348	6351	6352	6354	6355	6356	6358	6359	6370	6372
6376	6378	6382	6384	6385	6388	6392	6394	6395	6398
6404	6405	6406	6409	6410	6438	6441	6443	6444	6446
6451	6453	6454	6570	6572	6584	6588	6589	6590	6591
6667	6670	6671	6673	6674	6676	6677	6678	6679	6680
6684	6687	6688	6690	6692	6693	6694	6695	6697	6699
6701	6705	6707	6710	6712	6715	6716	6717	6719	6720
6721	6722	6723	6727	6728	6733	6734	6735	6738	6739
6741	6743	6745	6746	6749	6750	6754	6755	6823	6824
6825	6826	6827	6828	6831	6832	6836	6842	6844	6845
6846	6849	6851	6852	6853	6854	6856	6857	6858	6859
6860	6922	6925	6927	6928	6929	6933	6934	6935	6937
6938	6939	6940	6942	6944	6946	6947	6948	6951	6954
6955	6956	6957	6960	6965	6967	6968	6973	6974	6975
6976	6977	6978	6980	6990	6991	6992	6994	7002	7004
7011	7012	7013	7018	7019	7020	7026	7030	7031	7039
7040	7058	7073	7076	7080	7082	7083	7084	7086	7089



ACTIVATION ANALYSIS-TECHNIQUE USED

GAMMA SPECTROMETRY (CONTINUED)

7096	7097	7099		7102	7103	7106	7107	7108	7111
7113	7118	7119	7122	7123	7124	7129	7131	7132	7134
7135	7137	7142	7143	7146	7147	7148	7149	7152	7160
7164	7165	7167	7168	7170	7171	7174	7176	7181	7182
7186	7193	7194	7196	7197	7198	7201	7202	7203	7206
7209	7210	7211	7212	7214	7215	7217	7218	7219	7225
7226	7229	7230	7234	7235	7237	7241	7242	7246	7248
7250	7257	7260	7280	7281	7282	7283	7289	7291	7292
7293	7295	7296	7297	7298	7299	7300	7301	7302	7303
7304	7305	7306	7307	7308	7311	7314	7315	7316	7318
7320	7326	7328	7329	7330	7331	7336	7337	7338	7341
7342	7344	7351	7353	7354	7355	7359	7360	7362	7364
7365	7366	7372	7373	7374	7375	7376	7377	7382	7387
7388	7389	7390	7391	7394	7396	7397	7399	7401	7402
7403	7404	7407	7408	7410	7413	7414	7417	7420	7422
7423	7424	7425	7426	7427	7460	7865	7867	7869	7873
7878	7879	7883	7884	7885	7888	7889	7893	7896	7898
7899	7901	7902	7906	7907	7908	7910	7911	7912	7913
7914	7917	7919	7920	7921	7923	7926	7927	7928	7929
7930	7933	7938	7939	7945	7947	7948	7951	7952	7957
7959	7961	7968	7969	7970	7974	7976	7978	7979	7981
7986	7988	7989	7990	7993	7995	7996	7997	7998	7999
8000	8001	8005	8007	8012	8017	8023	8024	8034	8041

SOLID STATE GAMMA SPECTROMETRY

845	865	1573	2146	2254	2350	2532	2559	2579	2604
2762	2945	3491	3791	3985	4005	4204	4280	5421	5583
5587	5766	5788	5875	5936	5975	5977	5981	6000	6012
6029	6069	6074	6220	6227	6313	6314	6315	6322	6346
6359	6360	6371	6375	6379	6380	6383	6407	6439	6442
6445	6455	6691	6700	6702	6729	6740	6748	6923	6924
6930	6931	6932	6936	6941	6943	6949	6950	6962	6963
6964	6966	6969	6970	6972	6982	6983	6993	6999	7039
7040	7042	7072	7077	7112	7125	7154	7186	7195	7207
7216	7220	7222	7227	7243	7245	7251	7254	7256	7285
7317	7333	7340	7341	7393	7416	7431	7935	7937	7944
7983	8010	8011	8019	8020	8038				

ACTIVATION ANALYSIS-TECHNIQUE USED

BETA AND ALPHA SPECTROMETRY

140 146 252 255 259 261 262 267 269 270 271 272  
 279 322 326 347 349 411 416 421 424 431 449 451  
 455 468 470 530 692 811 828 838 1076 1101 1123  
 1124 1125 1127 1145 1155 1158 1159 1160 1162 1169  
 1180 1183 1187 1190 1191 1197 1231 1237 1263 1357  
 1401 1404 1416 1424 1431 1437 1455 1486 1494 1618  
 1885 2052 2157 2497 2518 2523 3091 3093 3464 3760  
 3993 4001 4227 4248 4262 4289 5343 5344 5345 5347  
 5444 5543 6378 6751 6930 6961 7180 7903 7919

COINCIDENCE SPECTROMETRY

45 46 49 105 110 125 140 155 166 208 312 393 428  
 432 594 621 653 682 822 842 845 849 850 862 1012  
 1059 1071 1076 1079 1098 1099 1115 1194 1326 1340  
 1466 1500 1532 1578 1612 1616 1623 1735 1801 1814  
 1859 1860 1886 1914 1958 1965 1967 2500 2516 2529  
 2544 2546 2610 2612 2644 2772 2796 2971 2979 2987  
 3467 3473 3491 3720 3721 3738 3778 3970 3978 4001  
 4204 4386 5330 5343 5385 5399 5417 5591 5621 5782  
 5931 5975 6029 6053 6072 6083 6297 6369 6580 6689  
 6706 6724 6742 6752 6843 6958 6959 7017 7043 7044  
 7045 7046 7371 7405 7406 7871 7934 7941 7946 7949  
 7964 7982 8021 8037

NON-DISCRIMINATORY COUNTING ( $\alpha$ ,  $\beta$ ,  $\gamma$ ) BUT INCLUDES HALF LIFE AND ABSORBER MEASUREMENTS, AUTORADIOGRAPHY, EMULSIONS

6 7 8 10 11 12 13 22 23 24 26 28 30 31 32 35 37 47  
 51 52 53 54 61 62 63 64 65 66 67 68 69 73 75 79 83  
 84 85 87 93 96 97 98 100 102 103 105 108 109 114  
 115 118 119 120 121 122 123 124 126 133 134 135  
 138 139 141 142 143 144 147 151 154 158 161 163  
 166 167 171 174 176 178 180 181 186 187 188 189  
 194 196 198 200 209 210 211 213 214 216 217 219  
 221 222 223 225 226 227 228 229 230 231 232 233  
 234 235 236 243 245 249 250 256 266 274 275 287  
 301 327 333 346 354 358 360 361 362 363 366 378  
 379 382 384 385 396 397 398 400 402 408 413 417  
 429 436 443 465 467 474 477 478 481 483 485 490  
 491 492 493 499 501 509 512 522 524 537 538 553  
 563 571 578 580 589 591 595 602 610 612 622 623  
 629 631 651 652 653 654 669 670 674 675 676 677

ACTIVATION ANALYSIS-TECHNIQUE USED

NON-DISCRIMINATORY COUNTING ( $\alpha$ ,  $\beta$ ,  $\gamma$ ) BUT INCLUDES HALF LIFE AND ABSORBER MEASUREMENTS, AUTORADIOGRAPHY, EMULSIONS (CONTINUED)

688	692	699	705	723	730	736	739	744	755	757	760
774	775	776	778	779	783	792	853	858	864	869	871
881	883	909	910	911	914	916	921	922	923	928	929
937	939	941	949	952	963	965	967	970	973	979	985
1013	1015	1016	1018	1023	1028	1030	1057	1061	1062		
1078	1080	1081	1082	1083	1085	1086	1087	1088	1096		
1104	1107	1108	1109	1111	1113	1121	1123	1131	1133		
1135	1143	1146	1147	1219	1252	1257	1259	1260	1262		
1266	1267	1271	1274	1275	1278	1285	1287	1292	1293		
1295	1298	1307	1329	1351	1356	1373	1380	1385	1389		
1391	1392	1394	1399	1449	1457	1458	1471	1473	1474		
1477	1478	1483	1494	1495	1506	1513	1520	1540	1546		
1547	1563	1569	1577	1581	1601	1604	1621	1628	1636		
1655	1660	1664	1671	1675	1677	1683	1685	1686	1693		
1694	1700	1711	1713	1720	1726	1730	1743	1751	1752		
1754	1758	1762	1763	1764	1770	1772	1773	1774	1778		
1780	1786	1787	1788	1798	1800	1812	1818	1822	1824		
1830	1834	1839	1841	1844	1848	1858	1861	1862	1865		
1871	1872	1873	1874	1879	1888	1911	1924	1937	1945		
1948	1952	1955	1959	1974	1976	1977	1979	1980	2323		
2340	2384	2386	2409	2444	2455	2501	2523	2534	2554		
2597	2633	2636	2640	2643	2654	2657	2658	2661	2680		
2687	2712	2714	2717	2718	2721	2731	2735	2759	2794		
2797	2839	2845	2849	2853	2865	2873	2878	2920	2921		
2927	2932	2940	2942	2943	2949	2964	2976	2982	3064		
3105	3361	3376	3391	3394	3397	3414	3481	3482	3491		
3669	3709	3714	3716	3726	3727	3729	3730	3732	3736		
3746	3755	3767	3783	3962	3965	3976	3977	3981	3987		
3995	4207	4267	4278	4315	4319	4388	5295	5320	5350		
5353	5356	5359	5370	5381	5395	5397	5398	5403	5405		
5406	5408	5422	5429	5439	5472	5501	5515	5517	5547		
5581	5719	5731	5752	5769	5848	5851	5923	5927	5932		
5933	5938	5965	5984	6004	6017	6031	6044	6063	6073		
6086	6208	6304	6344	6353	6386	6387	6389	6390	6405		
6412	6436	6459	6572	6685	6686	6696	6736	6752	6839		
6921	6960	6989	7035	7081	7087	7101	7133	7138	7139		
7162	7166	7172	7200	7258	7312	7321	7369	7370	7380		
7411	7412	7866	7869	7874	7894	7931	7932	7940	7975		
7992	8006	8022	8035								

ACTIVATION ANALYSIS-TECHNIQUE USED

PROMPT NEUTRON COUNTING

82 88 169 170 206 207 380 479 554 770 839 904 905  
 908 978 983 1136 1270 1280 1377 1393 1435 1637  
 1642 1782 1811 1822 1857 2303 2318 2634 2751 2777  
 2963 2987 3491 3711 5238 5319 6329 6339 6366 6368  
 6449 6582 6668 6669 6675 6681 6682 6683 6711 6985  
 7013 7127 7862 7994 8018

PROMPT GAMMA COUNTING

184 185 312 383 665 713 1026 1049 1061 1178 1336  
 1337 1553 1576 1611 1651 1685 1772 1783 1785 1843  
 1898 1935 1951 1984 1985 2146 2254 2364 2429 2504  
 2530 2652 2684 2933 3033 3078 3089 3126 3362 3399  
 3466 3717 3741 3753 3811 3976 3979 4000 5177 5261  
 5372 5384 5566 5577 5733 5756 5773 5779 5919 6367  
 6380 6450 6595 6596 6850 6932 7011 7109 7144 7238  
 7239 7240 7252 7286 7361 7379 7863 7900 7904 7967  
 8026 8029 8039

DELAYED NEUTRON COUNTING

321 514 782 808 819 841 843 868 1025 1070 1302  
 1857 1906 2751 3491 4277 5262 5323 5551 5735 5765  
 5953 6393 6713 6714 7163 7943 8035

NEUTRON FLUX DETERMINATION, INCLUDES SAMPLE SELF-SHIELDING  
 AND FLUX PERTURBATIONS

125 161 179 186 205 209 212 221 304 305 306 316  
 347 377 391 396 399 403 467 510 552 581 609 662  
 701 735 743 794 828 832 840 843 845 853 854 868  
 903 1037 1044 1054 1064 1070 1085 1116 1156 1158  
 1161 1169 1261 1303 1331 1335 1347 1349 1418 1419  
 1420 1437 1452 1467 1477 1487 1511 1570 1593 1598  
 1624 1627 1641 1642 1647 1648 1659 1670 1696 1716  
 1729 1827 1877 1912 1936 1946 1950 1958 1981 1982  
 2280 2480 2537 2625 2754 2802 2957 3414 3479 3485  
 3719 3797 4224 5339 5447 5602 5860 5868 5962 6694  
 6703 7071 7215 7368 7400 7881



ACTIVATION ANALYSIS-TECHNIQUE USED

CHARGED PARTICLE FLUX DETERMINATION, INCLUDES SAMPLE SELF SHIELDING

314 381 1312 3403 3719 4215 7007 7008 7205 7228

PHOTONUCLEAR FLUX DETERMINATION, INCLUDES SAMPLE SELF SHIELDING

1014 1178 3719 3791 5379 7016

INTERFERING NUCLEAR REACTIONS

108 114 131 157 196 201 314 332 346 347 352 361  
386 399 432 461 493 516 518 544 552 555 567 578  
580 583 588 595 601 614 622 662 676 687 701 703  
705 711 727 819 822 828 831 835 842 844 850 856  
868 940 977 986 1010 1012 1104 1144 1145 1158 1160  
1161 1180 1183 1184 1190 1192 1194 1198 1199 1341  
1347 1375 1386 1398 1400 1408 1413 1420 1424 1425  
1432 1433 1436 1455 1456 1477 1499 1507 1520 1525  
1528 1598 1599 1601 1628 1647 1678 1731 1816 1899  
1907 1911 1914 1920 1937 1938 1950 1968 2259 2283  
2369 2495 2499 2515 2643 2662 2681 2723 2754 2767  
2839 3384 3403 3414 3461 3470 3479 3485 3993 3994  
4201 5341 5381 5382 5757 5978 6212 6408 6410 6412  
6568 6743 6993 7014 7015 7880 7956

OTHER ERRORS ASSOCIATED WITH IRRADIATION

131 205 212 291 295 297 300 306 322 328 344 346  
388 399 476 505 533 614 620 621 622 828 835 836  
842 845 850 1087 1261 1442 1528 1598 1647 1675  
1676 1729 1731 1889 1910 1956 1972 1981 2681 2849  
2948 2990 3101 3403 3479 3488 3781 3791 4206 4213  
4224 4325 5339 5602 6066 6321 6708 6830 7010 7015  
7025 7071 7128

# ACTIVATION ANALYSIS-TECHNIQUE USED

## COUNTING ERRORS AND CORRECTIONS

173	184	185	242	312	322	344	391	399	455	468	585
592	610	614	619	620	621	676	711	739	843	854	1090
1136	1161	1177	1178	1182	1187	1191	1195	1196	1199		
1309	1347	1434	1601	1643	1662	1676	1684	1729	1873		
1936	1937	1939	2280	2480	2497	2503	2580	2587	2643		
2660	2692	3374	3466	3468	3479	3499	3791	4206	4213		
4224	5385	6318	7398								

## PRECISION-ACCURACY DISCUSSED

57	105	108	110	113	114	130	201	205	212	255	263	267
284	285	286	287	288	289	290	305	312	322	329	337	
342	344	399	400	519	549	553	583	609	614	621	622	
656	691	739	808	840	841	842	843	853	854	863	866	
868	952	1017	1027	1040	1064	1076	1080	1082	1084			
1085	1090	1094	1160	1162	1167	1169	1171	1172	1175			
1178	1180	1181	1182	1183	1184	1187	1191	1193	1196			
1199	1255	1328	1347	1362	1414	1415	1439	1442	1453			
1466	1484	1505	1518	1528	1537	1541	1598	1599	1627			
1628	1641	1643	1647	1729	1731	1782	1815	1865	1872			
1873	1885	1889	1912	1913	1950	1967	1969	1979	1981			
1983	2157	2455	2499	2503	2525	2534	2537	2539	2541			
2542	2549	2652	2686	2754	2755	2777	2836	2849	2873			
3079	3091	3099	3368	3381	3382	3418	3482	3488	3514			
4196	4203	4276	4278	5341	5353	5366	5368	5372	5381			
5385	5390	5713	6742	6841	7062	7070	7071	7072	7291			
7305	7915											

## SENSITIVITY TABLES

16	111	130	132	141	162	164	201	203	205	218	281	293
294	295	296	297	298	312	337	340	342	343	344	345	
347	409	435	446	447	449	566	580	584	603	618	641	
643	644	646	659	663	668	671	678	679	685	702	703	
708	722	736	748	751	808	810	835	836	837	841	843	
846	850	852	859	873	877	890	894	901	918	942	951	
972	1039	1040	1049	1051	1065	1088	1097	1144	1148			
1152	1154	1162	1166	1172	1190	1193	1196	1304	1312			
1315	1327	1347	1352	1353	1355	1361	1375	1404	1407			
1416	1417	1421	1425	1439	1464	1465	1503	1522	1524			
1536	1540	1620	1642	1656	1666	1669	1673	1676	1691			
1731	1755	1808	1838	1854	1873	1874	1875	1881	1885			



ACTIVATION ANALYSIS-TECHNIQUE USED

SENSITIVITY TABLES (CONTINUED)

1889	1903	1911	1935	1940	1941	2452	2516	2567	2568
2663	2690	2697	2799	2924	2937	2939	3059	3071	3082
3091	3366	3395	3483	3487	3508	3756	3772	3793	3803
3978	3980	4294	5317	5372	5379	5384	5389	5993	6340
6731	7114	7117	7155	7156	7895	7925	7962	7966	

PRECONCENTRATION, CONTAMINATION, COLLECTION AND HANDLING TECHNIQUES

47	61	160	179	183	192	263	322	331	354	377	385	422
477	493	511	542	543	586	614	708	721	813	829	850	
851	932	933	1107	1129	1141	1143	1181	1281	1404			
1409	1412	1416	1427	1428	1432	1436	1455	1463	1478			
1497	1518	1526	1529	1609	1628	1636	1653	1655	1708			
1722	1750	1770	1774	1811	1832	1835	1874	1914	2440			
2511	2540	2598	2621	2635	2637	2672	2685	2687	2695			
2696	2734	2752	2800	2904	2936	2981	2984	2989	3100			
3358	3507	3508	3509	3724	3959	3960	3964	4201	4217			
4219	4273	4302	4314	5341	5358	5359	5368	5451	5869			
5873	5929	5959	5962	5963	6002	6052	6068	6076	6081			
6228	6302	6324	6341	6348	6361	6362	6363	6364	6365			
6407	6745	6747	6921	6927	6928	6990	7089	7094	7146			
7206	7294	7298	7328	7355	7422	7930	7935	7939	7941			
8010	8011											

IRRADIATION TECHNIQUES, SAMPLE HANDLING AND FACILITIES, FLUX MONITORS

125	131	146	181	192	199	200	280	281	285	316	324	
341	348	455	500	614	625	631	635	658	670	702	714	
719	737	765	819	824	843	846	848	852	898	950	961	
979	1029	1048	1054	1055	1083	1097	1116	1136	1145			
1148	1248	1256	1258	1269	1277	1407	1418	1437	1439			
1440	1517	1523	1528	1539	1545	1627	1642	1658	1659			
1661	1663	1676	1695	1696	1698	1701	1702	1706	1712			
1717	1722	1729	1845	1853	1861	1864	1868	1875	1883			
1889	1912	1916	1920	1922	1923	1940	1945	1956	1957			
1965	2104	2147	2335	2410	2501	2524	2527	2536	2542			
2548	2549	2564	2576	2598	2659	2672	2787	2849	2924			
2936	2937	2939	2948	3333	3376	3403	3461	3507	3509			
3745	3751	3790	3791	3796	3797	3808	3956	3981	4251			

ACTIVATION ANALYSIS-TECHNIQUE USED

IRRADIATION TECHNIQUES, SAMPLE HANDLING AND FACILITIES,  
FLUX MONITORS (CONTINUED)

4260 5318 5425 5443 5451 5594 5610 5694 5711 5733  
 5748 5868 5873 5943 5952 5963 5983 6059 6319 6325  
 6331 6349 6351 6382 6398 6402 6404 6406 6447 6459  
 6597 6598 6699 6703 6718 6726 6727 6728 6730 6743  
 6747 6830 6945 6979 6984 6987 6988 7015 7020 7032  
 7033 7173 7177 7199 7259 7290 7335 7358 7395 7916  
 8036 8040

ACTIVATION ANALYSIS STANDARDS AND STANDARD REFERENCE  
MATERIALS

205 306 314 361 362 363 365 367 371 572 581 587  
 600 676 687 808 820 841 953 1076 1126 1187 1255  
 1282 1293 1431 1433 1596 2501 2537 3413 3472 3481  
 3560 4320 5985 6349 7074 7075 7076 7077 7078 7185  
 7350 8033

COMPUTER APPLICATIONS AND NUMERICAL METHODS

18 36 58 156 199 201 273 520 527 534 574 590 642  
 693 707 759 826 845 977 1033 1041 1058 1073 1251  
 1328 1359 1419 1457 1508 1556 1557 1567 1580 1617  
 1620 1622 1691 1702 1735 1737 1790 1809 1819 1826  
 1851 1866 1868 1919 1947 2107 2116 2387 2450 2494  
 2506 2508 2514 2515 2521 2533 2538 2545 2547 2548  
 2574 2602 2673 2689 2691 2702 2706 2715 2740 2760  
 2767 2801 3082 3283 3353 3356 3380 3381 3391 3500  
 3514 3550 3552 3662 3741 3776 3791 3798 3809 4200  
 4210 4243 4275 4287 4326 4377 4393 4397 5348 5361  
 5376 5498 5513 5546 5583 5587 5618 5620 5740 5744  
 5745 5778 5937 5971 6046 6082 6087 6310 6330 6350  
 6373 6381 6448 6460 6571 6573 6734 6744 6837 7034  
 7047 7050 7052 7053 7054 7059 7060 7061 7063 7064  
 7065 7066 7067 7068 7069 7115 7123 7156 7178 7221  
 7244 7251 7346 7378 7428 7868 7872 7918 7922 7980  
 8016

ACTIVATION ANALYSIS-TECHNIQUE USED

DATA HANDLING SYSTEMS

590 931 961 1116 1279 1567 1620 1670 1702 1712  
1954 2547 2702 2703 2707 2740 2951 2968 3356 3662  
3791 4199 4200 5434 6209 6310 6316 6384 6460 6861  
7038 7041 7047 7048 7049 7051 7052 7053 7054 7251  
7872 8002 8003 8004

ELECTRONICS IN ACTIVATION ANALYSIS

318 352 389 393 653 682 837 1058 1079 1116 1350  
1358 1602 1612 1944 1984 2252 2500 2529 2538 2561  
2650 2702 2703 2704 2710 2738 2740 2779 2801 3117  
3424 3426 3438 3443 3521 3548 3662 3741 3790 3791  
4280 4289 5380 5414 5434 5943 6360 6456 6861 7038  
7041 7042 7043 7044 7045 7052 7053 7177 7460

AA LITERATURE SEARCHING

6403 7055 7056 7057

## THE NATIONAL ECONOMIC GOAL

Sustained maximum growth in a free market economy, without inflation, under conditions of full employment and equal opportunity

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The historic mission of the Department is "to foster, promote and develop the foreign and domestic commerce" of the United States. This has evolved, as a result of legislative and administrative additions, to encompass broadly the responsibility to foster, serve and promote the nation's economic development and technological advancement. The Department seeks to fulfill this mission through these activities:



## MISSION AND FUNCTIONS OF THE DEPARTMENT OF COMMERCE

"to foster, serve and promote the nation's economic development and technological advancement"

Participating with other government agencies in the creation of national policy, through the President's Cabinet and its subdivisions.

● Cabinet Committee on Economic Policy

● Urban Affairs Council

● Environmental Quality Council

Promoting progressive business policies and growth.

● Business and Defense Services Administration

● Office of Field Services

Assisting states, communities and individuals toward economic progress.

● Economic Development Administration

● Regional Planning Commissions

● Office of Minority Business Enterprise

Strengthening the international economic position of the United States.

● Bureau of International Commerce

● Office of Foreign Commercial Services

● Office of Foreign Direct Investments

● United States Travel Service

● Maritime Administration

Assuring effective use and growth of the nation's scientific and technical resources.

● Environmental Science Services Administration

● Patent Office

● National Bureau of Standards

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Acquiring, analyzing and disseminating information concerning the nation and the economy to help achieve increased social and economic benefit.

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NOTE: This schematic is neither an organization chart nor a program outline for budget purposes. It is a general statement of the Department's mission in relation to the national goal of economic development.





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