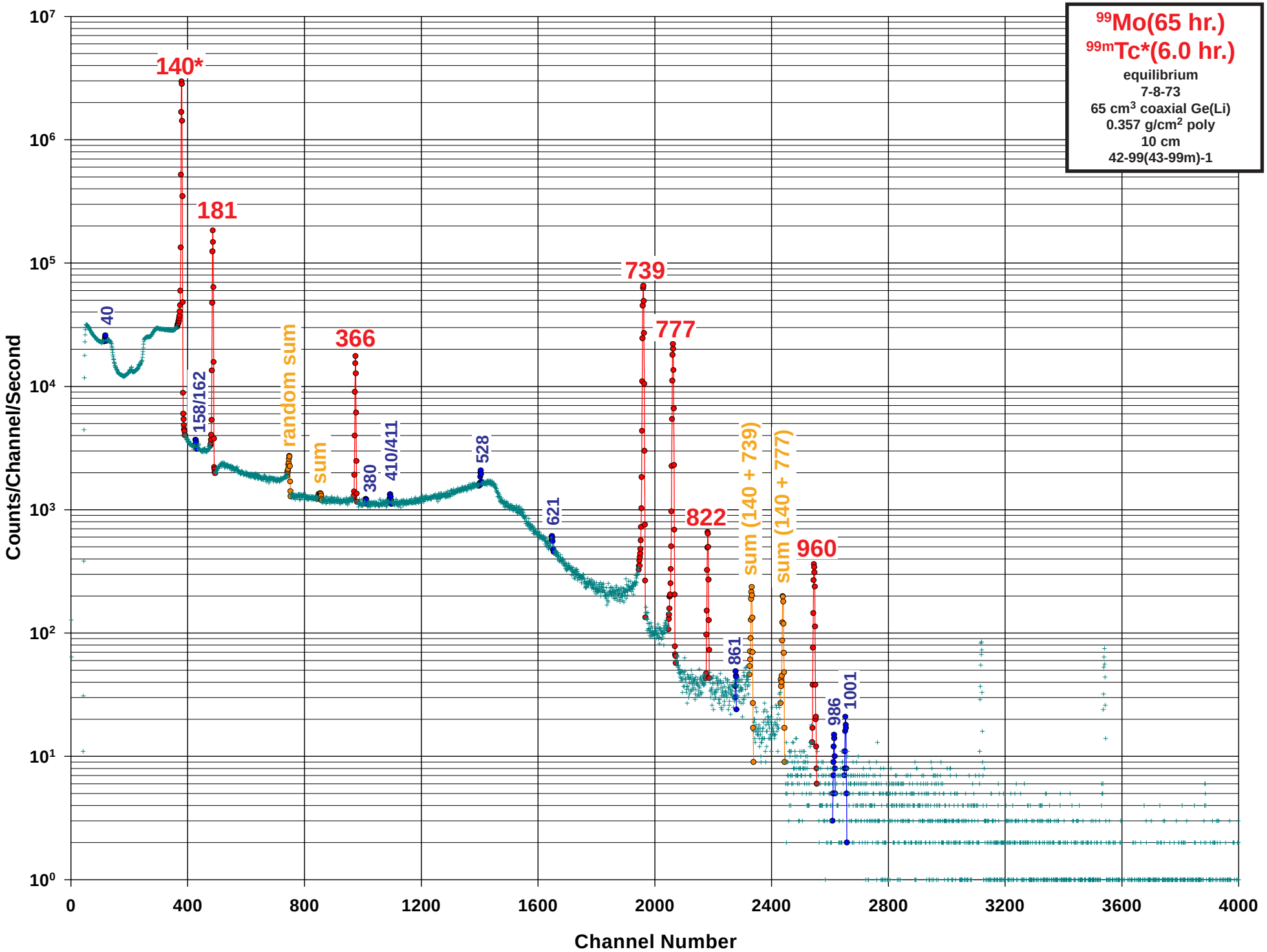
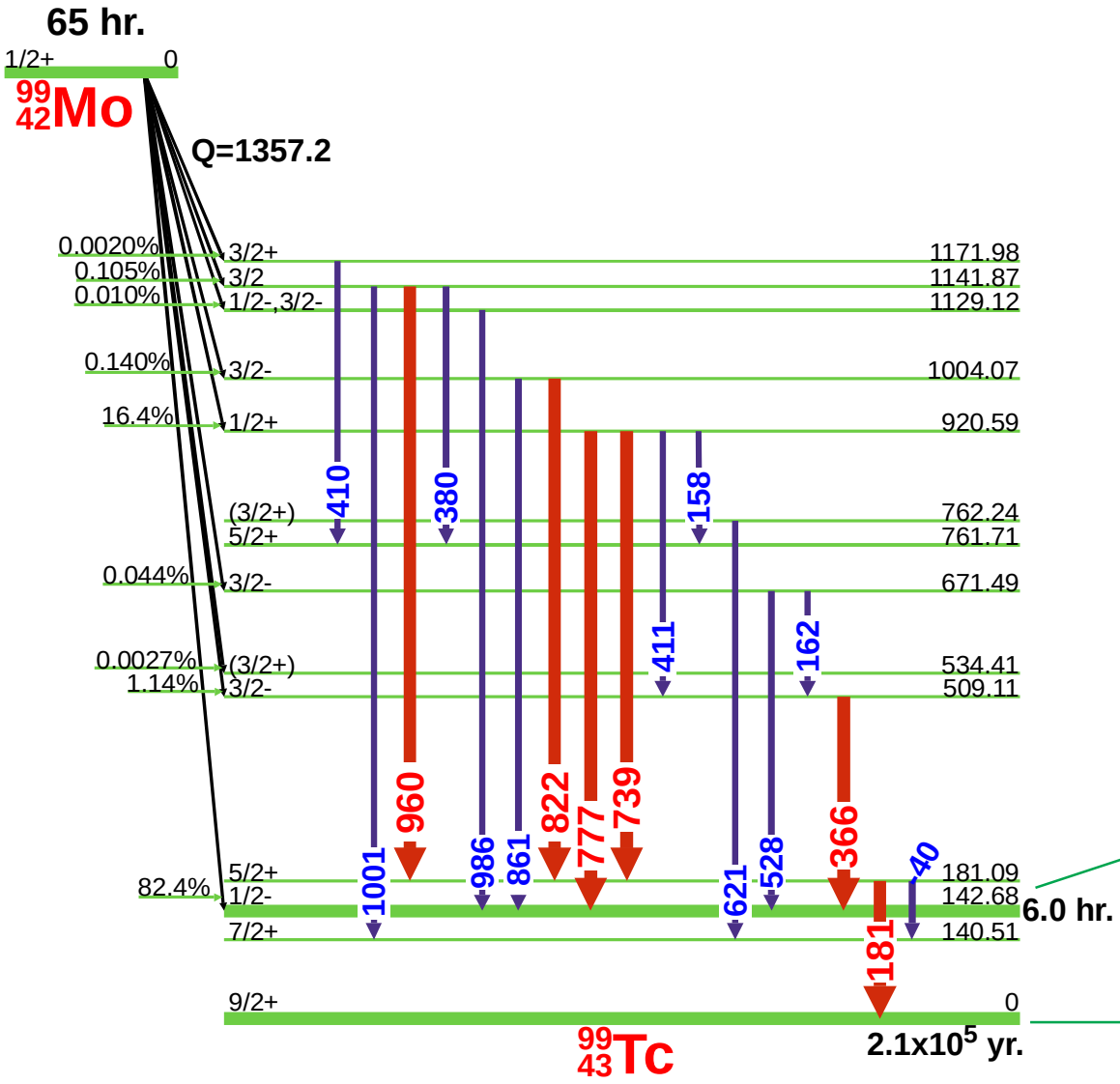
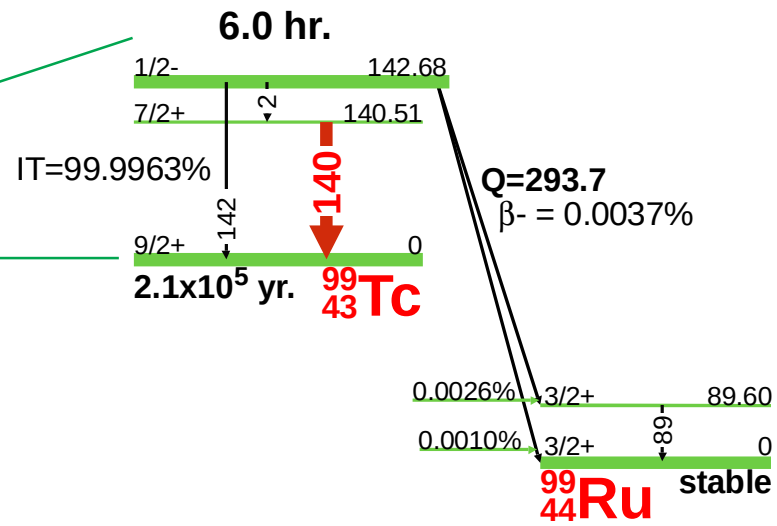

99Mo(65 hr.)
99mTc*(6.0 hr.)
equilibrium
7-8-73
65 cm3 coaxial Ge(Li)
0.357 g/cm2 poly
10 cm
42-99(43-99m)-1
140*
181
366
739
777
822
960
40
158/162
random sum
sum
380
410/411
528
621
861
sum (140 + 739)
sum (140 + 777)
986
1001
Counts/Channel/Second
Channel Number
10⁰
10¹
10²
10³
10⁴
10⁵
10⁶
10⁷
0
400
800
1200
1600
2000
2400
2800
3200
3600
4000

^{99}Mo(65 hr.) Decay Scheme



^{99m}Tc*(6.0 hr.) Decay Scheme



GAMMA-RAY ENERGIES AND INTENSITIES

Nuclide: ^{99}Mo – ^{99m}Tc*

E_γ, σE_γ, I_γ, σI_γ - 1998 ENSDF Data

Half Life: 65.94(1) hr. – 6.01(1) hr.*

Detector: 65 cm^3 coaxial Ge (Li)

Method of Production: ^{98}Mo(n,γ)

	E_γ (keV)	σE_γ	I_γ (rel)	I_γ (%)	σI_γ	S
	2.173					4
	40.584	0.002	0.63	1.05	0.04	4
	89.40	0.20		0.0030	0.0021	4
*	89.6	0.3				4
*	140.511	0.001	100	4.52	0.24	1
	142.675	0.025				4
	158.782	0.015	0.013	0.0189	0.0008	4
	162.370	0.015	0.010	0.0119	0.0006	4
	181.068	0.008	6.8	5.99	0.11	1
*	232.80	0.20		0.23	0.04	4
	242.29	0.08		0.0025	0.0005	4
	249.03	0.03		0.0039	0.0005	4
*	322.40	0.20		2.62	0.14	4
	366.421	0.015	1.37	1.191	0.022	1
	380.13	0.08	0.08	0.0104	0.0009	4
	391.7	0.4		0.0032	0.0006	4
D	410.27	0.10	0.05	0.0019	0.0004	4
	411.491	0.015		0.0146	0.0006	
	455.84	0.13		0.0013	0.0006	4
	457.60	0.03		0.0081	0.0006	4

E_γ (keV)	σE_γ	I_γ (rel)	I_γ (%)	σI_γ	S
469.63	0.07		0.0027	0.0005	4
490.53	0.15		0.0011	0.0004	4
528.788	0.015	0.05	0.0570	0.0026	4
537.79	0.15		0.0033	0.0006	4
580.51	0.07		0.0032	0.0005	4
581.30	0.12		0.0010	0.0005	4
599.6	0.5		0.0021	0.0010	4
620.03	0.04		0.0023	0.0008	4
621.771	0.024	0.026	0.0258	0.0009	4
689.6	0.9		0.0004	0.0002	4
739.500	0.017	13.7	12.13	0.22	1
761.77	0.08		0.0004		4
777.921	0.020	4.9	4.26	0.08	1
822.972	0.015	0.149	0.133	0.003	1
861.2	0.9	0.002	0.007	0.004	4
960.754	0.020	0.11	0.0946	0.0028	1
986.44	0.04	0.0022	0.0015	0.0005	4
1001.343	0.018	0.0037	0.0055	0.0005	4
1017.0	0.5		0.0006	0.0002	4
1056.20	0.05		0.0011	0.0001	4