Table X P.1. Variables appearing in the "suggel.inp" file

Key word	Units	Description
Parin		Input resonance parameter data file name. In the file, the resonance energy is given in eV and Γ_n (or $g\Gamma_n$) in meV.
Partyp		Type of neutron width in 'parin' file. If partyp = 0, the parin file is in SAMMY.PAR file format and Γ_n's are given; otherwise, the file is in rsap.gamma format and $g\Gamma_n$'s are given. Concerning the rsap.gamma file, see following this table.
Fout		Output list file name.
Parout		File name of the output resonance parameter file, which is in SAMMY.PAR format.
Awri		Atomic mass of target nuclide divided by the neutron mass.
Spin		Spin of the target nuclide (I).
Scattr	fermi	Scattering radius (R'). If scattr = 0.0, the program calculates it as $R' = 0.123\ (awri)^{1/3} + 0.08$ [10^{-12} cm]
Disp		Spin dispersion parameter (s). If disp = 0.0, the program calculates the value. Very large 'disp' value (e.g., 999.) implies to use ($2J$+1) law, with which the level density is proportional to $2J$+1. See further discussion following the table.
Bn	MeV	Neutron separation energy of (A+1) nuclide
Pair	MeV	Pairing energy
Denpar	MeV^{-1}	Level density parameter
Eini	eV	Lower energy boundary under the analysis
Efin	eV	Upper energy boundary under the analysis
Pcut		Probability cutoff. The suggested orbital angular momentum is adopted for a resonance for which the probability is higher than this value. If it is not the case, the l value is not altered from its original assignment as given in 'parin' file. It is not effective with the input rsap.gamma file.
Optj		Method of J assignment. If optj = 0, the most probable J value is adopted; otherwise, the J value is assigned randomly. Regardless of this option, the original J value is maintained if the original l value is maintained due to the probability cutoff. See Section 2.6 of [SO01].

Table X P.1 (continued)

Key word	Units	Description
Stn(*i*), *i*=1,2,3	10^{-4}	Neutron strength functions for *s*-, *p*-, and *d*-waves, respectively
Dzero	eV	Average level spacing of s-wave resonance. Level spacings of *p*- and *d*-waves are calculated in the program.
Frac(*i*), *i*=1,2,3		*A priori* probability correction factors for *s*-, *p*-, and *d*-waves, respectively. See Section 2.2 of [SO01].
Sam(*i*), *i*=1~max.18		*l* value of spin group *i* in 'parin' file. This definition shall be kept in subsequent SAMMY run. The number of spin groups can be more than 18 in SAMMY run (e.g., in case of the analysis of a natural element), and it is also possible to define the spin group not to begin with 1 in SAMMY. However, the SUGGEL assumes that the spin group starts at 1.
Ajsam(*i*), *i*=1~max.18		*J* value of spin group *i* in 'parin' file. This definition shall be kept in subsequent SAMMY run.

Note from SAMMY author: This program does not run under the VMS operating systems. In general, portability of SUGGEL is not guaranteed.