

# Technical Meeting on ( $\alpha,n$ ) Reaction Nuclear Data Evaluations and Data Needs

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## Improved evaluation of the $^{17}\text{O}$ system

*Wednesday, 29 November 2023 15:00 (45 minutes)*

What we would like to present in this meeting are the results of the latest evaluation of the  $^{17}\text{O}$  system. In the calculation of the RAC program, we have added several new sets of integral cross section data and differential cross section data for the  $^{13}\text{C}(\alpha,n)^{16}\text{O}$  reaction on the basis of the original data. The newly added data also include the latest measurements by the Peking University. The newly added data are shown below:

Integral cross section

1.P.S.Prusachenko+ 2022

2.G.F.Cian+ 2021

3.B.Gao+ 2022

Differential cross section

1.M.Febbraro+ 2020

2.E.M.Gazeeva+ 2020

3.P.S.Prusachenko+ 2022

We are still in the process of adjusting the parameters in the RAC program calculations based on the latest added data to get a better result. We will present the latest fitting results at the meeting.

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