EXFOR-2023



9th DAE-BRNS Workshop on Nuclear Reaction data and its compilation for EXFOR database Department of Physics, Bharathiar University, Coimbatore, Tamilnadu – 641046, India. November 14 -18, 2023.



Experimental measurements of nuclear cross sections are important inputs to potential applications such as reactor design and safety, radio-isotope production, high energy physics, astrophysics and medical physics. The experimental data are generally coded in an internationally accepted Exchange Format (EXFOR). The EXFOR compilation is an international activity of the Nuclear Reaction Data Centres (NRDC) coordinated by IAEA towards exhaustive collection and dissemination of experimental nuclear reaction data. India is one of the Member States of the NRDC and has been actively contributing to EXFOR database. BARC conducts Biennial DAE-BRNS Workshop cum Theme Meetings on compilation of Indian experimental nuclear reaction data and the nuclear reaction database EXFOR. These workshops have given impetus to nuclear data compilation activity and have resulted in substantial contributions to the IAEA-EXFOR database as well as encouraged Indian nuclear experimentalists to endeavour for international reckoning by making EXFOR compilation an integral part of their research.

Topics covered

- $\checkmark\,$ Scope, contents, objectives and importance of EXFOR database
 - ✓ Basic introduction, How to use EXFOR
 - ✓ EXFOR and Evaluation of Nuclear Data
 - ✓ Editor and Digitization software for EXFOR applications
 - ✓ Nuclear physics and nuclear data experiments in India
 - ✓ Tutorials and EXFOR coding exercises, including covariance
 ✓ Creation of new EXFOR entries and their review
 - ✓ Practical computer sessions with feedback

Who should attend?

Nuclear scientists, university faculty, people involved in nuclear reaction measurements, research scholars & final year MSc students, may apply through LINK in webpage https://b-u.ac.in/299/exfor2023bu. Participation is based on selection cum invitation. Recommendation of advisor, guide or professor is required.

Local hospitality and travel support for selected participants will be provided. Registration is only through on-line mode. Selected delegates will be notified. Note that this workshop is not in the nature of usual seminars but directed towards making EXFOR entries and augmenting the EXFOR data compilation activity.

> Important Links: https://b-u.ac.in/299/exfor2023bu (Registration) https://brns.res.in/ ; https://www-nds.iaea.org/exfor/ https://www-nds.iaea.org/nrdc/ https://nds.iaea.org/nrdc/india/ws2023/ (Working Materials)

Coimbatore is a metropolitan city in the state of Tamilnadu in southern part of India. <u>https://en.wikipedia.org/wiki/Coimbatore</u> <u>https://en.wikipedia.org/wiki/Coimbatore#Climate</u>

All communication must be directed through exforind+2023bu@gmail.com

Chief Patrons

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