

Indian EXFOR Compilation Progress Report for period 2024-2025

IAEA Technical Meeting, 17-20 June 2025

Madrid, Spain

Following are the details all EXFOR entries compiled and transmitted to the IAEA-NDS since the NRDC-2024 meeting.

EXFOR entries compiled and revised since the NRDC-2024 meeting:

Charged Particle induced Nuclear reaction Data	20
Neutron induced Nuclear reaction Data	15
Photon induced Nuclear reaction Data	02
Total New entries compiled	37

Number of EXFOR entries revised =12

Software utilized for EXFOR Compilation activity:

- Russian EXFOR editor [http://www.nds.iaea.org/nrdc/nrdc_sft/] for compilation.
- GSYS [<https://www.jcprg.org/gsys/2.4/>] for digitization
- JCPRG EXFOR tool [<https://www.jcprg.org/exfor/tool/>] for checking purpose:

Transmission Statistics since NRDC 2021 Meeting:

The table represents the Indian Centre's contribution to EXFOR compilation activities since NRDC 2021 meeting.

	New Entries (India)	Fraction to New Entries (NRDC)
NRDC2024 – NRDC2025	37	9%
NRDC2023 – NRDC2024	53	12%
NRDC2022 – NRDC2023	19	5%
NRDC2021 – NRDC2022	55	10%

Co-ordination of EXFOR Compilation activity by BARC:

The EXFOR compilation of nuclear reaction data in India is coordinated by Bhabha Atomic Research Centre (BARC), Department of Atomic Energy (DAE). The neutron, charged particles, and photon induced nuclear reaction data to be compiled is selected by IAEA. The BARC activity includes

- Offering project and funding opportunities to university faculties in partnership with different DAE units.
- Encouraging and engaging voluntary compilers, including young researchers and article authors.
- Hosting EXFOR theme meetings and workshops.

To introduce and promote EXFOR compilation activity among researchers a biennial EXFOR workshop is organised by Bhabha Atomic Research Centre (BARC) with support from Board of Research in Nuclear Sciences (BRNS) since 2009. The last workshop was held in 2023 at Bharthiyar University, Coimbatore, Tamil Nadu, India. Next workshop likely to be held in 2026.

Acknowledgement:

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