

Indian EXFOR Compilation Progress Report for period 2023-2024

IAEA Technical Meeting, 14-17 May 2024

Vienna, Austria

India continues to compile data on neutrons, charged particles, and photonuclear-induced reactions. This report details all EXFOR entries compiled and transmitted to the IAEA-NDS since the NRDC-2023 meeting.

EXFOR Compilation Team:

- Vidya Devi: Responsible for regular compilation activities.
- Devesh Raj: Organizes workshops for EXFOR compilation every two years.
- Gayatri Mohanto: Handles numerical data collection at BARC.

Software utilized for EXFOR Compilation activity:

The software tools used for the EXFOR compilation are: -

- 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:

Coordination by DAE-BRNS:

The DAE-BRNS coordinates EXFOR compilation in India with support from IAEA-NDS through:

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

9th DAE-BRNS EXFOR – 2023 workshop:

9th DAE-BRNS EXFOR-2023 workshop was held at the Department of Physics, Bharathiar University, Coimbatore.

EXFOR entries compiled during the workshop:

- CPND =20 entries (Trans.D141)
 - Neutron = 6 entries (Trans.3212)
 - PhND = 1 entry (Trans.G052)
- Total= 27**



Transmission Statistics since NRDC 2019 Meeting:

The table represents the Indian Centre's contribution to EXFOR compilation activities since NRDC 2019 meeting.

	New Entries (India)	Fraction to New Entries (NRDC)
NRDC2023 – NRDC2024	53	12%
NRDC2022 – NRDC2023	19	5%
NRDC2021 – NRDC2022	55	10%
NRDC2019 – NRDC2021	110	9%

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