



# International Workshop on Nuclear Structure and Decay Data: Experiment, Theory, Evaluation and Medical Applications

October 5–9 | 2026

First Circular

## About the Workshop

This workshop provides focused training on nuclear structure and decay data, their evaluation methodologies, and practical applications. The scientific scope and format are aligned with international training programmes based on Nuclear Structure and Decay Data: Experiment, Theory, Evaluation and medical applications of nuclear data. The programme includes lectures on modern experimental techniques, an overview of relevant theoretical models, and guided sessions on the use of online nuclear databases and webbased tools. Participants will receive hands-on training in the compilation and evaluation of nuclear structure and decay data using ENSDF analysis and utility codes, with special emphasis on mass-chain evaluation. The workshop is intended for postgraduate students, research scholars, early-career researchers, and faculty members working in experimental, theoretical, or applied nuclear physics. In addition, the workshop will highlight the role of evaluated nuclear data in medical applications, including PET and SPECT imaging, cancer radiotherapy, medical radioisotope production, radiation protection, and dosimetry, emphasizing the importance of reliable nuclear data for safe and effective healthcare.

## About Indian Nuclear Data Center

Evaluated Nuclear Structure Data File (ENSDF) is developed by an international network of Nuclear Structure and Decay Data (NSDD) evaluators across 17 centers worldwide and coordinated by International Atomic Energy Agency, Vienna. The Indian Nuclear Data Centre (INDC) established in 2005 initially hosted at IIT Roorkee under the leadership of Prof. A. K. Jain, Department of Physics and later transferred to VECC, Kolkata and being headed by Dr. Gopal Mukherjee, Physics Group. INDC has made significant contributions to mass-chain evaluations pertaining to Indian evaluation region  $A = 215-229$ , horizontal evaluations, technical code developments. NSDD evaluation project, coordinated by Dr. Gopal Mukherjee, provides recommended nuclear properties based on rigorous compilation and critical analysis of experimental results. It covers nuclear level characteristics, decay modes, radiation properties, and associated parameters, including energies, half-lives, spins and parities, multipolarities, internal conversion coefficients, log ft values, and decay probabilities, offering a reliable description of nuclear structure and decay behaviour.

## Important Dates

Call for Applications  
Open

**April 01, 2026**

Closing of Applications

**May 10, 2026**

Notification of Acceptance

**June 5, 2026**

Submission of Contributions  
Deadline

**August 10, 2026**

## About Akal University

Akal University, Talwandi Sabo, Bathinda, is a value-based institution dedicated to excellence in teaching, research, and societal engagement. The university promotes interdisciplinary and research oriented education with a strong emphasis on science and technology. With modern infrastructure and a supportive academic environment, the university provides an ideal venue for advanced training programmes and international scientific workshops. Unlike most of the educational entities having commercialized the higher education by operating like business ventures, the Akal University has mandated to uphold the three basic principles of higher education namely; Teaching, Learning and Research. Consequently, the University has started with Undergraduate and Postgraduate and Ph.D programmes in basic sciences and languages.

## Proposed Scientific Programme

- Expert sessions on NSDD evaluation
- Hands-on ENSDF mass-chain evaluation training
- Participant oral and poster presentations
- Special session on medical applications of nuclear data in imaging, cancer therapy, radiation protection radioisotope production, and supply chain.

## Organizing Institute

Akal University, Talwandi Sabo, Bathinda, Punjab (INDIA)

Jointly with

Indian Nuclear Data Center, Variable Energy Cyclotron Center, Kolkata (INDIA)

**Contact Us** Dr. Gopal Mukherjee  
Physics Group, VECC, Kolkata  
gopal@vecc.gov.in

Prof. Sukhjeet Singh Dhindsa  
Department of Physics, Akal University  
sukhjeet\_phy@auts.ac.in  
Contact: +91-8194801454

Dr. Sushil Kumar  
Department of Physics, Akal University  
sushil\_phy@auts.ac.in  
Contact: +91-9813520924