

NDPCI - BRNS School
on
Nuclear Reactions and Applications
2 - 12 November, 2016

Venue:
Multipurpose Hall, TSH
Anushaktinagar, Mumbai-400094



Organized by:
Nuclear Data Physics Centre of India
Bhabha Atomic Research Centre

Day -1
02.11.2016 (Wednesday)

- 09:30-11:00 Inaugural Session
Welcome Address
Inaugural Address
Vote of Thanks
- 11:00-11:30 High Tea
- 11:30-12:30 Nuclear reactions and compound nuclear theory
(Dr. B. K. Nayak, BARC)
- 12:30-13:30 Perspectives of nuclear data for reactor design
(Dr. Umasankari Kannan, BARC)
- 13:30- 14:30 Lunch Break
- 14:30-15:30 Techniques of neutron detection
(Dr. S. S. Desai, BARC)
- 15:30-16:30 Application of processed nuclear data for reactors
(Shri Devesh Raj, BARC)
- 16:30-17:00 Tea Break
- 17:00-18:00 Experimental techniques in Reactor Physics
(Dr. Rajeev Kumar, BARC)

Day - 2
03.11.2016 (Thursday)

- 10:00-11:00 Nuclear reactions and compound nuclear theory
(Dr. B. K. Nayak, BARC)
- 11:00-11:30 Tea Break
- 11:30-12:30 Sampling of interaction cross sections and reaction kinematics (Prof. F. Carminati, CERN-PH)
- 12:30-13:30 Nuclear data processing and evaluation
(Dr. G. Pandikumar, IGCAR)
- 13:30- 14:30 Lunch Break
- 14:30-15:30 Nuclear data processing and evaluation
(Dr. G. Pandikumar, IGCAR)
- 15:30-16:30 Application of processed nuclear data for reactors
(Shri Devesh Raj, BARC)
- 16:30-17:00 Tea Break
- 17:00-18:00 Experimental techniques in Reactor Physics
(Dr. Rajeev Kumar, BARC)

Day - 3
04.11.2016 (Friday)

- 10:00-11:00 Nuclear reactions and compound nuclear theory
(Dr. B. K. Nayak, BARC)
- 11:00-11:30 Tea Break
- 11:30-12:30 Physics and evaluation of nuclear structure data
(Dr. G. Mukherjee, VECC)
- 12:30-13:30 Introduction to neutron cross section measurements at CERN (Dr. Peter Schillebeeckx, EC-JRC-IRMM)
- 13:30- 14:30 Lunch Break
- 14:30-15:30 Nuclear data processing and evaluation
(Dr. G. Pandikumar, IGCAR)
- 15:30-16:30 Application of processed nuclear data for reactors
(Shri Devesh Raj, BARC)
- 16:30-17:00 Tea Break
- 17:00-18:00 Advances in Nuclear Instrumentation and Evolution of Nuclear Data in the last 50 years (Dr. S. Kailas, BARC)

Day - 6
07.11.2016 (Monday)

- 10:00-11:00 Nuclear reactions and compound nuclear theory
(Dr. B. K. Nayak, BARC)
- 11:00-11:30 Tea Break
- 11:30-12:30 Neutron data experiments for astrophysical applications
(Dr. Claudia Lederer, Univ. of Edinburgh, UK)
- 12:30-13:30 Study on neutron induced reaction cross sections using n_TOF method (Dr. Peter Schillebeeckx, EC-JRC-IRMM)
- 13:30- 14:30 Lunch Break
- 14:30-15:30 Neutron scattering for condensed matter applications
(Dr. Sohrab Abbas, BARC)
- 15:30-16:30 Application of processed nuclear data for reactors
(Shri Devesh Raj, BARC)
- 16:30-17:00 Tea Break
- 17:00-18:00 A road map of nuclear data science in India
(Dr. S. Ganesan, BARC)

Day - 7 08.11.2016 (Tuesday)	Day - 8 09.11.2016 (Wednesday)	Day - 9 10.11.2016 (Thursday)	Day - 10 11.11.2016 (Friday)	Day - 11 12.11.2016 (Saturday)
10:00-11:00 Nuclear data for astrophysics <i>(Dr. Indranil Mazumdar, TIFR)</i>	10:00-11:00 Experimental techniques in Nuclear Physics <i>(Dr. P.C. Rout, BARC)</i>	10:00-11:00 Experimental techniques in nuclear physics <i>(Dr. P.C. Rout, BARC)</i>	10:00-11:00 Experimental techniques in nuclear physics <i>(Dr. P.C. Rout, BARC)</i>	10:00-11:00 Use of GEANT code <i>(Shri. Raman Sehgal, BARC)</i>
11:00-11:30 Tea Break	11:00-11:30 Tea Break	11:00-11:30 Tea Break	11:00-11:30 Tea Break	11:00-11:30 Tea Break
11:30-12:30 Neutron data experiments for astrophysical applications <i>(Dr. Claudia Lederer, Univ. of Edinburgh, UK)</i>	11:30-12:30 Neutron data experiments for astrophysical applications <i>(Dr. Claudia Lederer, Univ. of Edinburgh, UK)</i>	11:30-12:30 Monte carlo simulations for n-TOF spectroscopy experiments <i>(Dr. S. Mitra, BARC)</i>	11:30-12:30 Error analysis of the experimental data <i>(Prof. K.M.Prasad, University of Manipal)</i>	11:30-12:30 Error analysis of the experimental data <i>(Prof. K.M.Prasad, University of Manipal)</i>
12:30-13:30 Study on neutron induced reaction cross sections using n_TOF method <i>(Dr. Peter Schillebeeckx, EC-JRC-IRMM)</i>	12:30-13:30 Study on neutron induced reaction cross sections using n_TOF method <i>(Dr. Peter Schillebeeckx, EC-JRC-IRMM)</i>	12:30-13:30 Error analysis of the experimental data <i>(Dr. Gobinda Majumder, TIFR)</i>	12:30-13:30 Error analysis of the experimental data <i>(Dr. Gobinda Majumder, TIFR)</i>	12:30-13:30 Seminars from professors
13:30- 14:30 Lunch Break	13:30- 14:30 Lunch Break	13:30- 14:30 Lunch Break	13:30- 14:30 Lunch Break	13:30- 14:30 Lunch Break
14:30-15:30 Introduction to nuclear model codes : TALYS <i>(Dr. S.V. Suryanarayan, BARC)</i>	14:30-15:30 The quest for super heavy elements and role of fission dynamics studies <i>(Dr. Alok Saxena, BARC)</i>	14:30-15:30 Study of chemical and magnetic structures using neutron diffraction <i>(Dr. V. Siruguri, UGC-DAE-CSR)</i>	14:30-15:30 Use of continuous energy cross sections for Monte Carlo simulations <i>(Shri. Anek Kumar, BARC)</i>	14:30-15:30 Conclusion and Summary
15:30-16:30 Physics simulations with Geant4 <i>(Dr. R.G. Thomas, BARC)</i>	15:30-16:30 Nuclear data processing with MONC code <i>(Dr. Harphool Kumawat, BARC)</i>	15:30-16:30 Student Seminars	15:30-16:30 Student Seminars	15:30-16:30 High Tea
16:30-17:00 Tea Break	16:30-17:00 Tea Break	16:30-17:00 Tea Break	16:30-17:00 Tea Break	
17:00-18:00 Use of Nuclear cross section libraries for safe operation of PHWRs <i>(Dr. M.P.S. Fernando, NPCIL)</i>	17:00-18:00 Use of research reactors for neutron cross section measurements <i>(Shri. Tej Singh, BARC)</i>	17:00-18:00 Studies on high energy photon and neutron induced fission of actinides and pre-actinides <i>(Dr. H. Naik, BARC)</i>	17:00-18:00 Use of Kalman filter technique for data evaluation in nuclear data science <i>(Dr. Jayalakshmi Nair, VESIT)</i>	