

**DAE-BRNS Symposium on
Nuclear Reaction and Structure up to Intermediate Energy Collision (NRSIC-23)**

24 - 25 January, 2023

Venue: Ajay Divatia Lecture Hall, VECC, Kolkata

24-01-2023 (Tuesday)

09:30 - 09:45		Welcome	
	Session-1	Chair: Chandana Bhattacharya	
09:45 - 10:05	Aradhana Srivastava (BARC, Mumbai)	Role of nuclear structure on reaction dynamics with stable and weakly bound nuclei	20 min
10:05 - 10:25	Sukalyan Chattopadhyay (SINP, Kolkata)	In-beam gamma Spectroscopy: The journey and the road ahead.	20 min
10:25 - 11:00	HIGH TEA + Poster Session		
11:00 - 12:05	Session-2	Chair:	
11:00 - 11:20	Rajdeep Chatterjee (IIT Roorkee)	Complex nuclei in explosive nucleosynthesis	20 min
11:20 - 11:35	Gautam Gangopadhyay (Calcutta University)	Revisiting the neutron poison ^{160}O in s-process nucleosynthesis	15 min
11:35 - 11:50	Soumya Bagchi (IIT Dhanbad)	Measurement of collective excitation in nuclei and importance of transfer reactions in nuclear astrophysics	15 min
11:50 - 12:05	Tapan Kr. Rana (VECC, Kolkata)	The Hoyle state: the secret of life	15 min
12:15 - 13:30	Session-3	Chair	
12:15 - 12:35	Vaishali Naik (VECC, Kolkata)	Development and physics of radioactive ion-beam facility at VECC	20 min

12:35 - 12:55	Rudrajyoti Palit (TIFR, Mumbai)	Nuclear structure studies with the Hybrid version of INGA	20 min
12:55 - 13:10	Debasish Mondal (VECC, Kolkata)	Experimental study of the hot GDR at VECC	15 min
13:10 - 13:20	Niyaz Rather (IUST, Kashmir)	Observation of collective and anti-magnetic rotations in ^{105}Pd	10 min
13:20 - 13:30	Anirban Goswami (Visva Bharati, Santiniketan)	A shell model description of nuclear structure in $^{67,68}\text{Zn}$	10 min
13:30 - 14:30	LUNCH BREAK		
14:30 - 16:35	Session-4	Chair	
14:30 - 15:10	Bikash Sinha (VECC, Kolkata)		40 min
15:10 - 15:30	Subhasish Chattopadhyay (VECC, Kolkata)	Facility for Anti proton and Ion Research : Universe in the laboratory	20 min
15:30 - 15:40	Akashrup Banerjee (SINP, Kolkata)	FRENA: Status Update and Road Ahead	10 min
15:40 - 15:50	Dipali Basak (SINP, Kolkata)	Study of $^{nat}\text{In}(\alpha, \gamma)$ reaction at astrophysically relevant energy region using Activation technique	10 min

15:50 - 16:00	S.H. Mondal (Aliah University, Kolkata)	Study of the energy dependence of thermonuclear reaction rate for p-induced ^{12}C fusion.	10 min
16:00 - 16:10	Parveen Bano (Sambalpur University)	The Fractional moment of inertia of neutron star crusts and Pulsar Glitches	10 min
16:10 - 16:30	TEA BREAK		
16:30 - 17:35	Session-5	Chair:	
16:30 - 16:45	Subir Nath (IUAC, New Delhi)	Reaction studies with recoil separators at IUAC	15 min
16:45 - 17:00	Samir Kundu (VECC, Kolkata)	Experimental facilities for nuclear physics experiment at K500 cyclotron, VECC	15 min
17:00 - 17:15	Prakash Ch. Rout (BARC, Mumbai)	Organic Scintillation Detector Array for fast neutron spectroscopy	15 min
17:15 - 17:25	Rahitashya Shil (Visva Bharati, Santiniketan)	Role of nuclear deformation and N-Z asymmetry in nuclear level density	10 min
17:25 - 17:35	Vishal Srivastava (Amity School of Engineering and Technology, Patna)	Importance of the Optical Model Potential Parameters in Nuclear Reactions	10 min
17:35 - 17:50	Joydip Nandi (VECC, Kolkata)	VECC Penning Trap and its application in nuclear physics	15 min
17:50 - 19:00	Poster Session		
19:00 - 20:00	Evening Lecture	Amit Roy	Chair:
20:00 - 21:30	DIRECTOR'S DINNER		

25-01-2023 (Wednesday)

09:30 - 10:10		Session-6		Chair:	
09:30 - 09:50	Gargi Chaudhuri (VECC, Kolkata)	Signatures of liquid-gas phase transition in nuclear reactions at intermediate energies	20 min		
09:50 - 10:00	Navjot K. Dhillon (Panjab University, Chandigarh)	Study of liquid gas phase transitions using QMD model	10 min		
10:00 - 10:10	Shabnam Mohsina (Thapar Institute of Engineering and Technology, Patiala)	Study of Orientation Effect in Capture Process using Langevin Dynamics in Heavy Ion Induced Reaction	10 min		
10:10 - 10:20		BREAK			
10:20 - 11:00		Session-7		Chair:	
10:20 - 10:40	Sarmishtha Bhattacharyya (VECC, Kolkata)	Some of the present and future aspects of nuclear structure studies at VECC	20 min		
10:40 - 10:50	Sk. Wasim Raja (Radiochemistry Division (BARC), VECC, Kolkata)	Radioisotope production and PIGE facility development using alpha and proton beams from K=130 cyclotron	10 min		
10:50 - 11:00	Mahesh Choudhary (BHU, Varanasi)	Production of medical radioisotope ^{97}Ru using K -130 cyclotron at VECC	10 min		
11:00 - 11:20		TEA BREAK			
11:20 - 13:30		Session-8		Chair:	
11:20 - 11:40	Sandeep Ghugre (UGC-DAE-CSR Kolkata Centre)	The Cyclotron & Us: Nuclear Physics at the Kolkata Centre	20 min		

11:40 - 11:55	V.V. Parkar (BARC, Mumbai)	Systematic studies of fusion and transfer reactions with strongly and weakly bound projectiles	15 min
11:55 - 12:10	Ajay Kumar (BHU, Varanasi)	How much to blame for entrance channel effects in heavy ion fusion fission dynamics	15 min
12:10 - 12:20	BREAK		
12:20 - 13:30	Session-7	Chair:	
12:20 - 12:40	B.P. Singh (AMU, Aligarh)	Heavy-Ion Reaction Studies from Low Energies to Fermi Energy Regime	20 min
12:40 - 12:55	M.K. Sharma (Thapar Institute of Engineering and Technology, Patiala)	Dynamics of heavy/superheavy nuclei and related aspects within collective clusterization approach	15 min
12:55 - 13:05	Ashna, B (Central University of Kerala, Kasaragod)	Studies on the mass angle distribution of fission fragments in $^{30}\text{Si} + ^{197}\text{Au}$ reaction populating ^{227}Np	10 min
13:05 - 13:15	Raghav Aggarwal (Panjab University, Chandigarh)	Study of ^{48}Ti induced reaction in Lead region using statistical model calculations	10 min
13:15 - 13:30	Concluding Session and Poster Prize distribution		
13:30 - 14:30	LUNCH BREAK		