International Conference on Nuclear Physics and Applications (ICNPA-2024)

University of Delhi, Delhi – 110007

October 21st – 25th, 2024

List of abstracts selected for Poster Presentation

S.N.	Name of Presenter	Abstract Title	Poster ID
1	Unnati Gupta	Characterization of White Cement Using X-Ray Diffraction and	PANT-01
		Gamma Ray spectrometry	
2	Prashant Ghule	Radiation Shielding Potential of HDPE Composites Filled with	PANT-02
		Gd2O3, Ta2O5, and Bi2O3: A Comprehensive Study	
3	Abhishek Shrivastava	Red Mud Based Neutron and Gamma Ray Shielding Material	PANT-03
4	SUBHAJIT PANDA	Evaluating the Impact of Air Gap on Dose Distribution in Pencil Beam	PANT-04
		Scanning Proton Therapy	
5	Pankaj Kumar	The variation in the indoor-outdoor natural gamma dose and annual	PANT-05
		effective dose around the Coal based Power Generation Facility in	
		West U. P., India.	
6	Dharmendra Singh	Production of 57Co and 51Cr Isotopes for Medical Application in 16O	PANT-06
		+ 45Sc System at Energy Above the Coulomb Barrier	
7	Sangeeta Ashok Dhuri	The g-g coincidence imaging setup using GAGG(Ce) and PSPMT for	PANT-07
		applications in nuclear medical imaging	
8	S. K. Baiwal	Impact of Delta-isobar on Neutron star Properties	PNA-01
9	Harsh Upendra Rai	CCalculating the theoretical cross section and reaction rates of the	PNA-02
		$18Ne(\alpha,p)21Na$ reaction, a critical component of HCNO cycle, in the	
		burning energy region for X-ray bursts.	

10	Sahil Balkrishna Dhuri	Calculating the neutron capture cross sections for the 74Ge(n, γ)	PNA-03
		relevant to nuclear astrophysics across an energy range from 0.1keV	
		to 5MeV	
11	Raj K Jagota	The role of nuclear symmetry energy and neutron skin thickness of	PNA-04
		208Pb in the physics of neutron star	
12	Sunil Kumar	Behaviour of neutron star properties in consideration of CREX and	PNA-05
		PREX-II results within relativistic mean field formalism	
13	Raj K. Jagota	Investigating the impact of nuclear matter incompressibility on the	PNA-06
		equation of state for asymmetric nuclear dense matter and neutron star	
		observables.	
14	Debabrata Dey	Dark Matter Influence on Quarkyonic Stars: A Relativistic Mean Field	PNA-07
		Analysis	
15	Subhasish Saha	Efficiency, Energy Resolution of gamma spectrometry system with	PNI-01
		Clover HPGe detectors.	
16	Neha Dhanda	Self-supporting taget of 170Er	PNI-02
17	Pallavi Priyadarshini	RF Buncher Design for MEHIPA-1 MEBT	PNI-03
18	M GEETHA	Thermodynamic temperature in the prediction of most feasible isotopes	PNR-01
		of Z=120	
19	Manoj Meher	Pairing Re-entrance Phenomenon in A? 70	PNR-02
20	TANYA SINGH	Effect of Inelastic, Transfer and Breakup Couplings on Elastic	PNR-03
		Scattering of 9Be off 209Bi	
21	Prabhat Mishra	Inclusive and Exclusive Breakup studies with 10B projectile	PNR-04
22	Lalit Kumar	Phase Shift Analysis of Nucleon Scattering on Light Nuclei Using	PNR-05
		Phase Function Method	

23	Madhumitha Shree S	Machine learning predictions of ?-Decay Half-Lives for superheavy nuclei	PNR-06
24	Abhishek Yadav	Understanding the p-stripping reaction dynamics for 16O+169Tm system	PNR-07
25	Mohammad Shuaib	Comparative Analysis of Mean Input Angular Momentum in Break- Up Fusion Reactions for 16O, 14N+159Tb Systems	PNR-08
26	HARSHIT SHARMA	Impact of non-coplanar orientations with different sign and magnitude of multipole deformations	PNR-09
27	KODAVANDLA PRAMEELA	Fusion studies around the Coulomb barrier for the reaction 16O + 138Ba	PNR-10
28	BHUPTANI CHIRAG GUNVANTRAI	Exploring intermediate mass fragment emission through the break-up reactions in 3He, 12C and 16O	PNR-11
29	Rahul Kumar	Activation cross section measurements and estimation of photon induced nuclear reactions for Manganese isotopes with covariance analysis	PNR-12
30	Pratima Singh	Search for Neutrinoless Double Beta Deacy using 136Xe	PNR-13
31	Lalit Kumar	Phase Shift Analysis of Nucleon Scattering on Light Nuclei Using Phase Function Method	PNR-14
32	SAMIKSHA	Exploration of fusion dynamics of 36S + 50Ti reaction	PNR-15
33	Avinash Agarwal	Measurement of excitation function for xpyn reactions for the 19F+93Nb system	PNR-16
34	BirBikram Singh	Comparative investigation of the fragment emissions from compound nuclei 58,59,60Cu*	PNR-17
35	Pawan Singh	Observation of stretched configuration in ternary fission via trajectory calculations	PNR-18

36	Subodh Kiran Sathe	Machine Learning Prediction of Fusion Cross Sections for Various	PNR-19
		Projectiles Interacting with 92Zr	
37	Dipika Patel	Study of fusion barrier distribution in 9Be+58Ni	PNR-20
38	Sowmya N	Neutron pre-scission multiplicity for fusion reaction to synthesis SHE	PNR-21
		Z=119 and 120	
39	Samiksha	Influence of nuclear structure in the sub-barrier fusion dynamics of	PNR-22
		16O + 174,176Yb reactions	
40	S. Ramakrishna Reddy	Mass-TKE distributions for the reaction 30Si+198Pt	PNR-23
41	Mamta	Mass-number dependence pre-compound emission in reactions	PNR-24
		induced by alpha particles below 10 MeV/nucleon	
42	Pushpal Ruhal	Fusion and quasi-elastic scattering of 16O with 174,176Yb around the	PNR-25
		Coulomb barrier	
43	ALPNA OJHA	Comprehensive analysis of optical potential parameters and their	PNR-26
		impact on heavy ion reaction dynamics studies	
44	Keshav Kapoor	Measurements of Fission cross-section in 28Si+175Lu reaction at	PNR-27
		above barrier energy	
45	Rahbar ali	Investigating 16O induced reaction on 156Gd targets at energies above	PNR-28
		the Coulomb barrier	
46	Abhishek Kumar	Study of fusion-fission dynamics for 16O+175Lu system at low	PNR-29
	Mishra	excitation energies	
47	MADHU S	Deformation dependent fission barrier for heavy nuclei	PNR-30
48	Swarali Shantanu	Cross sections for 184,186Re radioisotopes for medical applications :	PNR-31
	Hinge	a proton-induced approach	
49	Sanjana Takar	Poisson random process: An alternative approach for analyzing	PNR-32
		neutron evaporation channels in heavy ion-induced nuclear reactions	
50	ANUSHREE H S	Deformation dependent fusion barriers	PNR-33

51	Pooja Narendra Singh	Nuclear transmutation of long-lived fission product 135Cs using protons	PNR-34
52	Satyendra Kumar	Mass distribution of fission fragments of 189Pt* at low energy	PNR-35
	Gautam		
53	Sushant Arora	Low energy fusion-fission dynamics in 19F + 181Ta system	PNR-36
54	Aquib Siddique	Study of fusion hindrance in 16O+174Yb system	PNR-37
55	Reddi Rani L	Entrance channel dependent fusion cross-sections	PNR-38
56	MAHESH BABU A V	Competition between alpha decay and spontaneous fission for isotopes	PNR-39
		of Plutonium	
57	Manjunatha N	Synthesis of SHN 296119 using projectiles of Z> 20	PNR-40
58	Vasudha G S	Competition between CF, QF and FF for the synthesis of SHN 299 120	PNR-41
59	Pooja Chauhan	Exploring the Transition from Asymmetric to Symmetric Fission in	PNR-42
		Proton-Rich Nucleus 180Hg* formed in 36Ar+ 144Sm reaction: A	
		Dynamical Cluster-Decay Model Approach	
60	NISHA MALIK	Study of Coulomb and Nuclear Coupling Effects on CF, ICF and TF	PNR-43
		Excitation Functions for 6,7Li + 124Sn Systems	
61	Mohd Shariq Asnain	Projectile breakup effects on fusion dynamics in heavy-ion reactions	PNR-44
62	Hardev Singh	Comparison of fragment mass widths and dynamical model	PNR-45
		expectations on quasi-fission in the 28Si + 160Gd reaction	
63	Hardev Singh	Investigation of mass width variations in neutron-deficient nuclei	PNR-46
64	SIDHARTH B	Effect of Collective Enhancement of Level Density in the Neutron	PNR-47
		Emission from Compound Nuclei	
65	SRIYA PAUL	Study of the impact of shell closure on particle multiplicities	PNR-48
66	Shweta Singh	Comparative study of neutron-induced fission fragment mass	PNR-49
		distribution of 237Np	
67	Punit Dubey	To study the impact of excitation energy on fission timescale	PNR-50

68	Mahima Upadhyay	Cross section measurement of 181Ta(n, y)182Ta with covariance analysis	PNR-51
69	Avinash Agarwal	Probing of pre-equilibrium emission in some alpha induced reactions:	PNR-52
		An exclusive study on entrance channel effects	
70	Supriya Goyal	Phase transition in nuclear disassembly- A comparison of variety of	PNR-53
		clusterization algorithms.	
71	Ritvik Gupta	Microscopic Investigation of odd-mass 121-125La isotopes using	PNS-01
		Triaxial Projected Shell Model	
72	Deepak Patel	Study of 2?ECEC process in 132Ba: A Shell-model interpretation	PNS-02
73	CHANDRANI	Systematic study of magnetic rotational band in even-A In nuclei	PNS-03
	MAJUMDER		
74	Queena	Study of ground state properties and evolution of nuclear shapes in	PNS-04
		(136-154)Sm Isotopes within the framework of Hartree Fock	
		Bogoliubov Model	
75	Sachin Kumar Singh	Configurations of high-K band structures in Hf isotopes	PNS-05
76	Manish Kumar Bairwa	Data-driven prediction of GDR cross-sections of Sm isotopes using	PNS-06
		machine learning	
77	Atul Anupam	Shell Evolution and Magic Numbers in 42?56Ca Isotopes	PNS-07
78	Parvathi V Nair	Collective enhancement and shape transitions in nucleus	PNS-08
79	BirBikram Singh	Competing features of alpha and 14C cluster decays of even-even 216-	PNS-09
		226Ra nuclides within the preformed cluster decay model	
80	Nitin Sharma	Comparative analysis of sequential and simultaneous emission of	PNS-10
		double ?-decay modes in 214-220Rn isotopes	
81	Prerna Singh Rawat	Systematics of reduced B(E3) transitions probabilities for E3	PNS-11
		transitions in even-A nuclei in 50 <z<92 region<="" td=""><td></td></z<92>	
82	Nithu Ashok	Ground state properties of Carbon isotopes	PNS-12

83	DEVESH KUMAR	Lifetime measurements in neutron rich 130Xe	PNS-13
84	DAMODARA GUPTA	Energy optimization for the synthesis of superheavy element Z=119	PNS-14
	P S	and 120	
85	Sakshi Shukla	Study of Isobaric Analog States using Isospin Non-Conserving	PNS-15
		Interactions	
86	SUSHEELA R S	Radioactive decay Chains of 252Cm	PNS-16
87	Shubham Bharmoria	α-clustering in Z= 118-121 odd-A superheavy nuclei	PNS-17
88	Abdullah Modabbir	Symmetry Energy and its Correlation with the Nuclear Structure	PNS-18
		Properties of Z=40 Isotopic Series.	
89	zahra jahangiri	The algorithm of mixing based on seniority selection rules	PNS-19
	tazekand		
90	Anindita Karmakar	First identification of a combined particle-wobbling excitation in	PNS-20
		105Pd	
91	Anuj	Evidence for Signatures of E5 Symmetry in the 84Sr Nucleus	PNS-21
92	Aneeqa Basheer	Shape Coexistence in 119I and 121I: Insights from the Triaxial	PNS-22
		Projected Shell Model	
93	Ranjit Dalal	Short-Range Correlations Inside Nuclei: Past and Future Perspectives	PNS-23
94	Mamta Agarwal	Temperature effects on shape coexistence	PNS-24
95	UMESH KUMAR	Alpha Decay chains of Superheavy Nuclei with Z=117 and 118	PNS-25
	SINGH		
96	Akshay Jain	A Systematic Study of One-Proton Radioactivity in Light Mass Region	PNS-26
97	Ravi Bhushan	Structural properties of nuclei with mass A ~ 150 using lifetime	PNS-27
		measurement	
98	Mohd Imran	Theoretical Studies on Ground State Properties and Bubble Structure	PNS-28
		of Superheavy Nuclei	