

# Meenu Thakur



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Central University of Haryana,  
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## Curriculum Vitae

### Personal Details

Surname Thakur  
Given name Meenu  
Gender Female  
Date of 13 March, 2020  
writing CV  
Data of Birth 09 October 1989  
Place of Birth Punjab (India)  
Citizenship Indian

### Education

March, 2018 - **Post-Doctoral Research Associate in Experimental Nuclear Astrophysics**, *Physics Department, Florida State University, Florida, USA.*  
5th March, 2020

December, 2011- **Ph.D in Experimental Nuclear Physics (nuclear reactions)**, *Panjab University, Chandigarh.*  
February, 2018

- 2009–2011 **Master of Science in Physics (Hons. School)**, *Panjab University*, Chandigarh.  
 Major Courses Taken: Quantum Mechanics, Classical Mechanics, Mathematical Physics, Statistical Mechanics, Classical Electrodynamics, Relativistic Quantum Field Theory, Electronics, Particle Physics, Nuclear Physics, General Theory of Relativity, Experimental Techniques in Nuclear and Particle Physics, Condensed Matter Physics, Computational Physics  
**78% (First class with distinction)**
- 2006–2009 **Bachelor of Science (Non-Medical)**, *Panjab University*, Chandigarh.  
 Major Courses Taken: Physics, Chemistry, Mathematics and Environmental Science  
**86% (Gold Medalist)**
- 2006 **Sec. School**, *Punjab School Education Board*, Mohali.  
 Major Courses Taken: Physics, Chemistry, Mathematics, Environmental Science, Punjabi and English  
**80%**
- 2004 **High School**, *Punjab School Education Board*, Mohali.  
 Major Courses Taken: Science, Mathematics, English, Social Studies, Punjabi and Hindi  
**86.7%**

## Research Experience

Post-Doctoral Research Associate in Experimental Nuclear Astrophysics, Physics Department, Florida State University, USA

Supervisor	Prof. Ingo Wiedenhoever, Physics Department, Florida State University, USA
Description	I worked on a compact neutron detector setup <b>RESONEUT (compact setup of neutron, proton (an annular silicon-strip (S2) detector telescope), and heavy-ion (gas ionization) detectors)</b> consisting 12 compact neutron detectors made of p-terphenyl crystals to detect low energy neutrons at backward angles from a (d,n) reaction in inverse kinematics. This setup is mainly developed to study the populated proton resonances of astrophysical interest. I worked here to upgrade the detector setup and related electronics. Recently, we have performed a radioactive-beam experiment studying the $^{19}\text{Ne}(\text{d},\text{n})^{20}\text{Na}(\text{p})$ reaction using the RESONEUT detector setup. This reaction is comparable to the direct proton capture, $^{19}\text{Ne}(\text{p},\gamma)^{20}\text{Na}$ , which is of astrophysical significance in the breakout from the Hot CNO-cycle. The results from previous studies indicate the contradictions in the spin and parity assignment of the first state above the proton threshold in $^{20}\text{Na}$ . So, we study the population of the lowest lying proton resonances in $^{20}\text{Na}$ using neutron time of flight spectroscopy in an attempt to resolve the contradictions in spin-parity assignments and determine accurate information of the thermal reaction rate. Currently, I am analyzing this data.

## Ph.D Thesis

Title *Study of Dynamics of Fusion-Fission Process in Near Super-Heavy Region*  
Supervisor Prof. B.R. Behera, Department of Physics, Panjab University Chandigarh  
Description My research focuses on the measurements of mass distributions and neutron multiplicity from the decay (fission) of near super-heavy compound nuclei  $^{256}\text{Rf}$  populated through the reaction  $^{48}\text{Ti} + ^{208}\text{Pb}$  at a bombarding energy of 275 MeV. To perform these studies, experiments were carried out using the 15UD Pelletron + LINAC accelerator and 100 neutron detector array "National Array of Neutron Detectors (NAND)" facility at Inter University Accelerator Centre (IUAC), New Delhi, India. This was the first experiment performed using the NAND facility. During these studies, average neutron multiplicity and the dependence of neutron multiplicity on fission variables (mass and energy of fission fragments) were investigated. The outcomes of these studies shed light on the fission dynamics of near super heavy compound nuclei  $^{256}\text{Rf}$  and the production mechanism of super-heavy nuclei.

## Masters Thesis

Title *Experimental Determination of Nuclear Level Density*  
Supervisor Prof. B.R. Behera, Department of Physics, Panjab University Chandigarh  
Description The main aim of these studies was the experimental investigation of nuclear level density for different nuclear systems in the mass region 50-80, using particle evaporation spectra in heavy-ion induced compound nuclear reactions. Measured light particle evaporation spectra for different target-projectile system corresponding to residual nuclei in the given mass range, populated at different excitation energies were analyzed using the statistical model code PACE2 to derive values of the inverse level density parameter. These studies provided important input information for a systematic understanding of the statistical properties of nuclei at moderate excitation energies and angular momentum.

## Hardware Skills

- Worked for upgradation of RESONEUT detector setup and related electronics and performed a radioactive-beam experiment at RESOLUT beam facility using RESONEUT detector setup. In this experiment, we have used neutron detectors along with the compact charged-particle detection system consisted of an annular silicon-strip (S2) detector telescope and gas ionization detector.
- Performed four experiments based on mass distributions of heavy nuclei and neutron multiplicity measurements using Neutron Array, NAND
- Participated in experiments aimed on ER measurements and quasi-elastic scattering (transfer reactions)
- Fully involved in testing and installation of the neutron detectors (BC501A) in NAND array

at IUAC

- Participated in testing of gamma detectors (HPGe and BGO)
- Participated in testing of position sensitive multi-wire proportional counters (MWPC)
- Well known to target fabrication and characterization techniques
- Experience with NIM, CAMAC, and VME based DAQ systems

## Other Education and Training, Qualifications and Skills

Operating Systems	LINUX, MICROSOFT WINDOWS
Languages	C, C++, FORTRAN
Packages	ROOT, MINUIT, LATEX, MICROSOFT OFFICE, XMGRACE, ORIGIN
Monte Carlo simulation package	PACE2, PACE4, MODEFF, FLUKA(basic), little knowledge of GEANT4

## Linguistic Skills

Mothertongue	<b>Punjabi</b>
Advanced	<b>English, Hindi</b>

## Teaching Experience

2 years of teaching experience in experimental and computer laboratories of graduation and post-graduation courses at Department of Physics, Panjab University, Chandigarh.

## Research Funding

- 2017 Awarded International Travel Support from Department of Science & Technology (Government of India)
- 2011 Qualified University Grants Commission - National Eligibility Test (UGC-NET) as JRF, awarded with fellowship during Ph.D

## Awards

- 2017 Best poster award at XXXV Mazurian Lakes Conference on Physics held at Piaski, Poland
- 2017 2<sup>nd</sup> position holder in poster presentation at 11<sup>th</sup> Chandigarh Science Congress, CHASCON-2017 held at Panjab University, Chandigarh
- 2015 2<sup>nd</sup> position holder in poster presentation at 9<sup>th</sup> Chandigarh Science Congress, CHASCON-2015 held at Panjab University, Chandigarh
- 2011 3<sup>rd</sup> rank in Ph.D. entrance Test conducted by Panjab University, Chandigarh

- 2009 Principal Dr. S.K. Vashisht Memorial Gold Medal in B.Sc-III  
2009 Prof. H.R. Bhatla Award in B.Sc-III

## Workshops and Conferences

- 26 - 28 Feb, 2012 Poster Presentation at 6<sup>th</sup> Chandigarh Science Congress held at Panjab University, Chandigarh, India.
- 26 Nov, 2012 A one day workshop for the discussion about the future experimental programs using the National Array of Neutron Detectors (NAND) facility organized at IUAC, New Delhi, India.
- 17 - 18 Dec, 2012 User's workshop held at IUAC, New Delhi, India.
- 15 - 17 Jan, 2013 Lecture Series on fission by Dr. R. K. Choudhury from at the Department of Physics, IIT-Roorkee, India.
- 4 - 5 Apr, 2013 Participated in Conference on Particle Accelerators: Technology and Applications in Science organized held at IUAC, New Delhi, India.
- Nov, 2013 Participated in workshop on Secondary RIB using HYRA organized at IUAC, New Delhi, India.
- 2 - 6 Dec, 2013 Poster Presentation at DAE-2013 International Symposium on Nuclear Physics organized at Bhabha Atomic Research Centre, Mumbai, India.
- 22 - 24 Jan, 2014 Attended India-UK seminar in Nuclear Physics at ISOLDE held at Department of Physics, Panjab University, Chandigarh, India.
- 24 - 28 Feb, 2014 Poster Presentation at 6<sup>th</sup> International Conference, FUSION14 held at IUAC, New Delhi, India.
- 8 - 12 Dec, 2014 Poster Presentation at DAE-2014 Symposium on Nuclear Physics held at Banaras Hindu University, Varanasi, India.
- 25 - 27 Feb, 2015 Poster Presentation at 9<sup>th</sup> Chandigarh Science Congress held at Panjab University, Chandigarh, India.
- 19 - 21 Oct, 2015 Workshop on Research Methodology held at Dr. S. S. Bhatnagar UICET, Panjab University, Chandigarh, India under TEQIP-II
- 6 - 11 Dec, 2015 Oral Presentation at 60<sup>th</sup> DAE-BRNS Symposium on Nuclear Physics held at Sri Sathya Sai Institute of Higher Learning, Prasanthi Nilayam, India.
- 29 Feb - 2 Mar, 2016 Oral Presentation at 10<sup>th</sup> Chandigarh Science Congress held at Panjab University, Chandigarh, India.
- 28 - 29 Mar, 2016 Presentation at Workshop on Fission studies using Neutron Detector Array & GPSC facility held at IUAC, New Delhi, India.
- 4 - 9 Dec, 2016 Two Oral Presentations at 61<sup>th</sup> DAE-BRNS Symposium on Nuclear Physics held at Saha Institute of Nuclear Physics, Kolkata, India.

- 9 - 11 Mar, Poster Presentation at 11<sup>th</sup> Chandigarh Science Congress held at Panjab University, Chandigarh, India.
- 15 - 18 Mar, Oral Presentations at International Conference in Nuclear Physics with Energetic Heavy Ion Beams held at Panjab University, Chandigarh, India.
- 3 - 9 Sept, Poster Presentation & Oral Presentation (for the best poster award session) at XXXV Mazurian Lakes Conference on Physics held at Piaski, Poland
- 4 - 8 Dec, Oral Presentation at 13<sup>th</sup> International Conference on Nucleus-Nucleus Collisions (NN2018) held at Omiya, Saitama, Japan
- 10 - 14 Dec, Poster Presentation at DAE-2018 International Symposium on Nuclear Physics organized at Bhabha Atomic Research Centre, Mumbai, India.
- 14-17 October, Oral Presentation at 2019 Fall Meeting of the APS Division of Nuclear Physics in Crystal City, VA, U.S.A.  
2019

## Research schools attended

- 15 - 18 Mar, National School cum Workshop in Accelerator Physics held at Panjab University, Chandigarh, India.
- 13 - 23 May, Summer school on Nuclear fission and related phenomena held at Variable Energy Cyclotron Centre, Kolkata, India.
- 6 - 24 Feb, DST-SERC School on Modern trends in nuclear structure and dynamics held at IIT Roorkee, India.

## Publications

### Reviewed Journals

1. Measurement of mass-gated neutron multiplicity for the  $^{48}\text{Ti} + ^{208}\text{Pb}$  reaction at 57.4 MeV excitation energy  
**Meenu Thakur**, B.R. Behera, Ruchi Mahajan, N. Saneesh, Gurpreet Kaur, Priya Sharma, R. Dubey, Kushal Kapoor, A. Yadav, Neeraj Kumar, S. Kumar, Kavita Rani, P. Sugathan, A. Jhingan, A. Chatterjee, M.B. Chatterjee, S. Mandal, A. Saxena, Santanu Pal, S. Kailas  
**Physical Review C. 98, (2018) 014606.**
2. HYTAR: A HYbrid Telescope ARray detection system for heavy ion nuclear reactions around Coulomb barrier  
Akhil Jhingan, Gurpreet Kaur, N. Saneesh, R. Ahuja, Tathagata Banerjee, Rakesh Dubey, Varinderjit Singh, Ruchi Mahajan, **Meenu Thakur**, M. Kumar, Abhishek Yadav, B.R. Behera, P. Sugathan  
**Nuclear Instruments and Methods A 903, (2018) 326.**
3. Systematic study of  $^{192,202,206,210}\text{Po}$  compound nuclei using neutron multiplicity as a probe  
Ruchi Mahajan, B. R. Behera, **Meenu Thakur**, Gurpreet Kaur, Priya Sharma, Kushal Kapoor, A. Kumar, P. Sugathan, A. Jhingan, A. Chatterjee, N. Saneesh, A. Yadav, R. Dubey, Neeraj Kumar, Hardev Singh, A. Saxena, and Santanu Pal

**Physical Review C. 98, (2018) 034601.**

4. Fission dynamics studies of near super-heavy compound nucleus  $^{256}\text{Rf}$   
**Meenu Thakur**, B.R. Behera, Ruchi Mahajan, N. Saneesh, Gurpreet Kaur, Priya Sharma, R. Dubey, Kushal Kapoor, A. Yadav, Neeraj Kumar, S. Kumar, Kavita Rani, P. Sugathan, A. Jhingan, A. Chatterjee, M.B. Chatterjee, S. Mandal, A. Saxena, Santanu Pal, S. Kailas  
**Acta Physica Polonica B 49 (3), (2018) 1001.**
5. Fission dynamics of  $^{192,202,206,210}\text{Po}$  compound nuclei by neutron multiplicity measurements  
Ruchi Mahajan, B. R. Behera, **Meenu Thakur**, Gurpreet Kaur, Priya Sharma, Kushal Kapoor, P. Sugathan, A. Jhingan, A. Chatterjee, N. Saneesh, R. Dubey, A. Yadav, Neeraj Kumar, Hardev Singh, A. Kumar, A. Saxena, and Santanu Pal  
**Acta Physica Polonica B 49 (3), (2018) 645.**
6. Quasi-elastic scattering in the  $^{48}\text{Ti} + ^{232}\text{Th}$  reaction  
Gurpreet Kaur, B.R. Behera, A. Jhingan, R. Dubey, Tathagata Banerjee, **Meenu Thakur**, Ruchi Mahajan, Priya Sharma, Khushboo, N. Saneesh, A. Yadav, K. Kapoor, N. Kumar, Kavita Rani, P. Sugathan, N. Rowley  
**Acta Physica Polonica B 49 (3), (2018) 651.**
7. Binary fragmentation based studies for the near super-heavy compound nucleus  $^{256}\text{Rf}$   
**Meenu Thakur**, B.R. Behera, Ruchi Mahajan, N. Saneesh, Gurpreet Kaur, Priya Sharma, R. Dubey, Kushal Kapoor, A. Yadav, Neeraj Kumar, S. Kumar, Kavita Rani, P. Sugathan, A. Jhingan, A. Chatterjee, M.B. Chatterjee, S. Mandal, A. Saxena, Santanu Pal, S. Kailas, Avazbek Nasirov, Bakhodir Kayumov  
**Eur. Phys. J. A 53 (2017) 133.**
8. Fabrication and characterization of carbon-backed thin  $^{208}\text{Pb}$  targets  
**Meenu Thakur**, R. Dubey, S.R Abhilash, B.R. Behera, B.P. Mohanty, D. Kabiraj, Sunil Ojha, Heena Duggal  
**MethodsX 3 (2016) 542-550.**
9. Evaporation residue cross-section measurements for  $^{48}\text{Ti}$ -induced reactions  
Priya Sharma, B.R. Behera, Ruchi Mahajan, **Meenu Thakur**, Gurpreet Kaur, Kushal Kapoor, Kavita Rani, N. Madhavan, S. Nath, J. Gehlot, R. Dubey, I. Mazumdar, S. M. Patel, M. Dhibar, M. M. Hosamani, Khushboo, Neeraj Kumar, A. Shamlath, G. Mohanto, and Santanu Pal  
**Physical Review C 96, (2017) 034613.**
10. Interplay of fission modes in mass distribution of light actinide nuclei  $^{225,227}\text{Pa}$   
R. Dubey, P. Sugathan, A. Jhingan, Gurpreet Kaur, Ish Mukul, G. Mohanto, D. Siwal, N. Saneesh, T. Banerjee, **Meenu Thakur**, Ruchi Mahajan, N. Kumar, M.B. Chatterjee  
**Physics Letters B 752 (2016) 338-343.**
11. Effect of coupling in the  $^{28}\text{Si} + ^{154}\text{Sm}$  reaction studied by quasi-elastic scattering  
Gurpreet Kaur, B.R. Behera, A. Jhingan, B. K. Nayak, R. Dubey, Priya Sharma, **Meenu Thakur**, Ruchi Mahajan, N. Saneesh, Tathagata Banerjee, Khushboo, A. Kumar, S. Mandal, A. Saxena, P. Sugathan, N. Rowley  
**Physical Review C 94 (2016) 034613.**
12. Breakup effects on alpha spectroscopic factors of  $^{16}\text{O}$   
Sucheta Adhikari, Chinmay Basu, Pullanhiotan Sugathan, Akhil Jhingan, Bivash Behera,

Saneesh Nedumbally, Gurpreet Kaur, **Meenu Thakur**, Ruchi Mahajan, Rakesh Dubey, Ajoy Mitra

**J. Phys. G: Nucl. Part. Phys. 44 (2017) 015102.**

13. Influence of positive Q-value neutron transfer coupling on fusion enhancement in  $^{28}\text{Si} + ^{154}\text{Sm}$  reaction

Gurpreet Kaur, B.R. Behera, A. Jhingan, R. Dubey, **Meenu Thakur**, Priya Sharma, Ruchi Mahajan, Tathagata Banerjee, Khushboo, N. Saneesh, A. Kumar, S. Mandal, B.K. Nayak, A. Saxena, P. Sugathan, N. Rowley

**Acta Physica Polonica B 48, 619 (2017).**

14. Statistical model calculations of pre-scission neutron multiplicity for the heavy ion induced fusion-fission reactions with actinide target  $^{232}\text{Th}$

**Meenu Thakur**, B.R. Behera, Maninder Kaur, Santanu Pal, P. Sugathan, and Akhil Jhingan

**EPJ Web of Conferences 86, 00060 (2015).**

15. Probing dynamics of fusion reactions through cross-section and spin distribution measurement

Maninder Kaur, B.R. Behera, Gulzar Singh, Varinderjit Singh, N. Madhavan, S. Muralithar, S. Nath, J. Gehlot, G. Mohanto, Ish Mukul, D. Siwal, **M. Thakur**, K. Kapoor, P. Sharma, T. Banerjee, A. Jhingan, T. Varughese, Indu Bala, B.K. Nayak, A. Saxena, M.B. Chatterjee and P.D. Stevenson

**EPJ Web of Conferences 117, 08026 (2016).**

16. Barrier distribution from  $^{28}\text{Si} + ^{154}\text{Sm}$  quasielastic scattering: Coupling effects in the fusion process

Gurpreet Kaur, B.R. Behera, A. Jhingan, B.K. Nayak, R. Dubey, Priya Sharma, **Meenu Thakur**, Ruchi Mahajan, N. Saneesh, Tathagata Banerjee, Khushboo, A. Kumar, S. Mandal, A. Saxena, P. Sugathan, and N. Rowley

**EPJ Web of Conferences 117, 08025 (2016).**

17. Study of fusion-fission dynamics in  $^{19}\text{F} + ^{238}\text{U}$  reaction

R. Dubey, P. Sugathan, A. Jhingan, Gurpreet Kaur, Ish Mukul, Davinder Siwal, N. Saneesh, Tathagata Banerjee, Abhishek Yadav, **Meenu Thakur**, Ruchi Mahajan and M.B. Chaterjee

**EPJ Web of Conferences 117, 08023 (2016).**

18. Study the fission dynamics of  $^{225}\text{Pa}$  nuclei around the sub-barrier energy

R. Dubey, P. Sugathan, A. Jhingan, T. Banerjee, N. Saneesh, G. Kaur, **M. Thakur**, R. Mahajan, I. Mukul, D. Siwal

**Acta Physica Polonica B 47 (3), 953 (2016).**

19. Measurement of quasi-elastic scattering: to probe  $^{28}\text{Si} + ^{154}\text{Sm}$  reaction

Gurpreet Kaur, B.R. Behera, A. Jhingan, B.K. Nayak, R. Dubey, Priya Sharma, **Meenu Thakur**, Ruchi Mahajan, N. Saneesh, Tathagata Banerjee, Khushboo, A. Kumar, S. Mandal, A. Saxena, P. Sugathan, N. Rowley

**Acta Physica Polonica B 47 (3), 847 (2016).**

20. Spin distribution as a probe to investigate the dynamical effects in fusion reactions

Maninder Kaur, B.R. Behera, Gulzar Singh, Varinderjit Singh, N. Madhavan, S. Muralithar, S. Nath, J. Gehlot, G. Mohanto, Ish Mukul, Davinder Siwal, **Meenu Thakur**, Kushal

Kapoor, Priya Sharma, Akhil Jhingan, T. Varughese, Indu Bala, M.B. Chatterjee, B.K. Nayak and A. Saxena

**EPJ Web of Conferences 86, 00026 (2015).**

21. The study of  $^{12}\text{C}(\alpha, \gamma)$  astrophysical reaction using  $^{12}\text{C}(^6\text{Li}, d)$  and  $^{12}\text{C}(^7\text{Li}, t)$  reaction at 20 MeV and in the framework of the potential model  
S. Adhikari, C. Basu, P. Sugathan, A. Jhingan, B. R. Behera, N. Saneesh, G. Kaur, **M. Thakur**, R. Mahajan, R. Dubey and A. K. Mitra  
**EPJ Web of Conferences 86, 00001 (2015).**
22. Level density parameter around  $A \sim 50-110$  nuclei  
Maninder Kaur, **Meenu Thakur**, Varinderjit Singh, Gulzar Singh, B. R. Behera  
**AIP Conf. Proc. 1524, 190 (2013).**

**Conference Proceedings**

1. Study of proton-resonances in the  $^{19}\text{Ne}(d, n)^{20}\text{Na}$  reaction using RESONEUT detector system

**Meenu Thakur**, L.T. Baby, I. Wiedenhöver, E. Temanson, K. Hanselman, G. McCann, J. Blackmon

**DNP-2019 Fall Meeting of the APS Division of Nuclear Physics.**

2. Average neutron multiplicity measurement for the  $^{28}\text{Si} + ^{232}\text{Th}$  system  
**Meenu Thakur**, B.R. Behera, Ruchi Mahajan, N. Saneesh, Gurpreet Kaur, M. Kumar, A. Yadav, Neeraj Kumar, Kavita Rani, H. Arora, D. Kaur, S. Narang, Kavita, R. Kumar, P. Sugathan, A. Jhingan, K. S. Golda, A. Chatterjee, S. Mandal, A. Saxena, S. Kailas, and Santanu Pal

**Proceedings of the DAE Symp. on Nucl. Phys. 63, 632 (2018).**

3. Probing the fission dynamics of  $^{208}\text{Rn}$  using mass distribution and neutron multiplicity measurements  
Neeraj Kumar, Shashi Verma, Jhilam Sadhukhan, K. Rojeeta Devi, A. Banerjee, N. Saneesh, M. Kumar, Ruchi Mahajan, **Meenu Thakur**, Gurpreet Kaur, Anjali Rani, Neelam, Abhishek Yadav, Kavita, Rakesh Kumar, Unnati, S. Mandal, Suresh Kumar, B. R. Behera, K. S. Golda, A. Jhingan, and P. Sugathan

**Proceedings of the DAE Symp. on Nucl. Phys. 63, 644 (2018).**

4. Evaporation residue cross-sections studies for  $^{188,190}\text{Hg}$  CN systems  
Devinder Pal Kaur, B. R. Behera, N. Madhavan, M. Kaur, V. Singh, D. Siwal, **M. Thakur**, P. Sharma, I. Mukul, K. Kapoor, S. Nath, J. Gehlot, A. Jhingan, A. Saxena, Santanu Pal

**Proceedings of the DAE Symp. on Nucl. Phys. 64, 339 (2019).**

5. Observation of asymmetric fission in mass distribution of  $^{222}\text{Th}$  Compound nucleus  
S. K. Duggi, P. V. Madhusudhana Rao, P. Sandya Devi, G. Naga Jyothi, A. Tejaswi, M. Ratna Raju, S. Appannababu, V. Vishnu Jyothi, N. Saneesh, A. Jhingan, K. S. Golda, C. Yadav, Mohit Kumar, Divya Arora, P. Sugathan, **Meenu Thakur**, M. Shareef, A. Shamlath, P. V. Laveen, Gurpreet Kaur2 and B. K. Nayak

**Proceedings of the DAE Symp. on Nucl. Phys. 64, 367 (2019).**

6. Quasi-elastic scattering measurement for  $^{28}\text{Si} + ^{232}\text{Th}$  reaction  
Gurpreet Kaur, B. R. Behera, A. Jhingan, N. Saneesh, Mohit Kumar, **Meenu Thakur**, Ruchi Mahajan, Kavita, Shruti, Abhishek Yadav, and P. Sugathan

**Proceedings of the DAE Symp. on Nucl. Phys. 64, 545 (2019).**

7. Fission fragment Mass-TKE distribution of Thorium nuclei  
S. K. Duggi, P. Sandya Devi, G. Naga Jyothi, A. Tejaswi, M. Ratna Raju, V. Vishnu Jyothi, P. V. Madhusudhana Rao, N. Saneesh, A. Jhingan, K. S. Golda, C. Yadav, Mohit Kumar, P. Sugathan, **Meenu Thakur**, M. Shareef, A. Shamlath, P. V. Laveen, Gurpreet Kaur, and B. K. Nayak

**Proceedings of the DAE Symp. on Nucl. Phys. 63, 646 (2018).**

8. Mass-gated neutron multiplicity for  $^{48}\text{Ti} + ^{144,154}\text{Sm}$  systems  
Ruchi Mahajan, B. R. Behera, **Meenu Thakur**, N. Saneesh, Gurpreet Kaur, Priya Sharma, Kushal Kapoor, R. Dubey, A. Yadav, Neeraj Kumar, P. Sugathan, A. Jhingan, Hardev Singh, A. Kumar, A. Saxena, A. Chatterjee, and Santanu Pal

**Proceedings of the DAE Symp. on Nucl. Phys. 63, 666 (2018).**

9. Systematic behaviour of the width of the mass-distribution for  $^{48}\text{Ti} + ^{144,154}\text{Sm}$  systems  
Ruchi Mahajan, B. R. Behera, **Meenu Thakur**, Gurpreet Kaur, N. Saneesh, M. Kumar, Neeraj Kumar, K. Rani, D. Kaur, S. Narang, Kavita, Rakesh Kumar, P. Sugathan, A. Jhingan, K. S. Golda, A. Saxena, A. Chatterjee, and Santanu Pal

**Proceedings of the DAE Symp. on Nucl. Phys. 63, 670 (2018).**

10. Systematic study of pre-scission neutron multiplicity for  $^{48}\text{Ti} + ^{232}\text{Th}$  reaction using statistical model code  
Shruti, B. R. Behera, Ruchi Mahajan, **Meenu Thakur**, and Santanu Pal

**Proceedings of the DAE Symp. on Nucl. Phys. 63, 686 (2018).**

11. Measurement of fission delay time for the near super-heavy nuclei  
**Meenu Thakur**, B.R. Behera, Ruchi Mahajan, N. Saneesh, Gurpreet Kaur, Priya Sharma, R. Dubey, Kushal Kapoor, A. Yadav, Neeraj Kumar, S. Kumar, Kavita Rani, P. Sugathan, A. Jhingan, A. Chatterjee, M.B. Chatterjee, S. Mandal, A. Saxena, Santanu Pal, S. Kailas

**Proceedings of the DAE-BRNS Symp. on Nucl. Phys. 62, 664 (2017).**

12. Entrance channel effects in the fission of  $^{192;202;206;210}\text{Po}$  compound nuclei  
Ruchi Mahajan, B.R. Behera, **Meenu Thakur**, N. Saneesh, Gurpreet Kaur, Priya Sharma, Kushal Kapoor, R. Dubey, A. Yadav, Neeraj Kumar, P. Sugathan, A. Jhingan, Hardev Singh, A. Kumar, A. Saxena, A. Chatterjee, Santanu Pal

**Proceedings of the DAE-BRNS Symp. on Nucl. Phys. 62, 406 (2017).**

13. Fission dynamics of  $^{192;202}\text{Po}$  compound nuclei using fission fragment mass-distribution as a probe  
Ruchi Mahajan, B.R. Behera, **Meenu Thakur**, Gurpreet Kaur, N. Saneesh, M. Kumar, Neeraj Kumar, K. Rani, D. Kaur, S. Narang, Kavita, Rakesh Kumar, P. Sugathan, A. Jhingan, K. S. Golda, A. Saxena, A. Chatterjee, Santanu Pal

**Proceedings of the DAE-BRNS Symp. on Nucl. Phys. 62, 584 (2017).**

14. Study of evaporation residue cross-section for  $^{48}\text{Ti} + ^{140,142}\text{Ce}$  systems  
Devinder Pal Kaur, B. R. Behera, M. Kaur, V. Singh, D. Siwal, **M. Thakur**, P. Sharma, I. Mukul, K. Kapoor, N. Madhavan, S. Nath, J. Gehlot, A. Jhinghan, A. Saxena

**Proceedings of the DAE-BRNS Symp. on Nucl. Phys. 62, 606 (2017).**

15. Investigation of the entrance channel effect through neutron multiplicity measurement for  $^{208}\text{Rn}$

Neeraj Kumar, Shashi Verma, Jhilam Sadhukhan, K. Rojeeta Devi, A. Banerjee, N. Saneesh, M. Kumar, **Meenu Thakur**, Ruchi Mahajan, Gurpreet Kaur, Anjali, Neelam, Abhishek Yadav, Kavita, Rakesh Kumar, Unnati, S. Mandal, Suresh Kumar, B. R. Behera, K. S. Golda, A. Jhingan, and P. Sugathan

**Proceedings of the DAE-BRNS Symp. on Nucl. Phys.** **62, 608 (2017).**

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