

Brief Profile

Name: Dr. Shinjinee Das Gupta

Designation: Assistant Professor, Stage II

Department: Physics

Email: shinjinee14@gmail.com

Highest Qualification : Ph. D., 2011, University of Camerino, Italy

Teaching Experience: 9 Years

Subjects Taught: Mathematical Physics, Physical Optics, Kinetic Theory, Special Theory of Relativity, Quantum Mechanics, Spectroscopy, Nuclear Physics, Laser, Nanomaterials, Scientific Writing, Arduino, Basic Python Programming.

Vidwan id : 493384

Research Experience: 16 Years

- Post Doctoral Experience at Variable Energy Cyclotron Centre (VECC) , Kolkata for 2 years and at Saha Institute of Nuclear Physics, Kolkata for 1 year.
- Completed a Research project titled "Role of Intruder Orbitals for generation of High Spin states in mass 190 region" under the Collaborative Research Scheme, funded by UGC-DAE Consortium, Kolkata Centre (2019-2022).
- Presently working in collaboration with VECC, UGC-DAE-CSR, KC etc

Research Interest: Experimental Nuclear Physics, Gamma Spectroscopy, Conversion Electron Measurement using Mini Orange Spectrometer.

Member of Professional Bodies: a) Life Member of Indian Association of Physics Teachers (IAPT), at present an EC member of IAPT, Regional Council 15

b) Life Member of Indian Science Congress Association

List of Selected Publications:

a) Papers in International Journals : Total – 17

1] " High-spin level structure of ^{209}Rn " published in **Physical Review C 107, 014322 (2024)**

Sneha Das, S. Bhattacharyya, Soumik Bhattacharya, S. Chakraborty, Sakshi Shukla, Praveen C. Srivastava, R. Banik, S. Nandi, G. Mukherjee, Indu Bala, S. S. Bhattacharjee, **S. Das Gupta**, A. Dhal, Debasish Mondal, S. Muralithar, R. Raut, A. Sharma, R. P. Singh, and V. Srivastava

2] "Revealing new structures in odd–odd ^{54}Mn nucleus" published in **The European Physical Journal A (2023) 59:229**

S. Basu, G. Mukherjee, S. Nandi, S. S. Nayak, S. Bhattacharyya, Soumik Bhattacharya, Shabir Dar, Sneha Das, S. Basak, D. Kumar, D. Paul, K. Banerjee, Pratap Roy, S. Manna, Samir Kundu, T. K. Rana, R. Pandey, S. Chatterjee, R. Raut, S. S. Ghugre, S. Samanta, R. Banik, A. Karmakar, S. Chattopadhyay, **S. Das Gupta**, P. Pallav, S. Rajbanshi, S. Ali, H. Pai

3] " Search for the origin of wobbling motion in the $A\approx 130$ region: The case of ^{131}Xe " published in **Physical Review C 107, 064318 (2023)**

S. Chakraborty , S. Bhattacharyya, R. Banik, Soumik Bhattacharya, G. Mukherjee, C. Bhattacharya, S. Biswas, S. Rajbanshi, Shabir Dar, S. Nandi, Sajad Ali, S. Chatterjee, S. Das, **S. Das Gupta**, S. S. Ghugre, A. Goswami, A. Lemasson, Debasish Mondal, S. Mukhopadhyay, A. Navin, H. Pai, Surajit Pal, Deepak Pandit, R. Raut, Prithwijita Ray, M. Rejmund, and S. Samanta

4] "Magnetic rotational band in ^{116}Sb " published in **Nuclear Physics A 1019 (2022) 122382**

Shabir Dar, Soumik Bhattacharya, S. Bhattacharyya, R. Banik, S. Nandi, G. Mukherjee, S. Rajbanshi, **S. Das Gupta**, Sajad Ali, S. Chakraborty, S. Chatterjee, S. Das, A. Dhal, S. S. Ghugre, A. Goswami, D. Mondal, S. Mukhopadhyay, H. Pai, S. Pal, D. Pandit, R. Raut, P. Ray, S. Samanta

5] " First observation of multiple transverse wobbling bands of different kinds in ^{183}Au " published in **Physical Review Letters 125, 132501 (2020)**

S. Nandi, G. Mukherjee, Q. B. Chen, S. Frauendorf, R. Banik, Soumik Bhattacharya, Shabir Dar, S. Bhattacharyya, C. Bhattacharya, S. Chatterjee, S. Das, S. Samanta, R. Raut, S. S. Ghugre, S. Rajbanshi, Sajad Ali, H. Pai, Md. A. Asgar, **S. Das Gupta**, P. Chowdhury, and A. Goswami

6] "Revealing multiple band structures in ^{131}Xe from α -induced reactions" published in **Physical Review C, **101**, 044306 (2020)**

R. Banik, S. Bhattacharyya, S. Biswas, Soumik Bhattacharya, G. Mukherjee, S. Rajbanshi, Shabir Dar, S. Nandi, Sajad Ali, S. Chatterjee, S. Das, **S. Das Gupta**, S. S. Ghugre, A. Goswami, A. Lemasson, D. Mondal, S. Mukhopadhyay, H. Pai, S. Pal, D. Pandit, R. Raut, Prithwijita Ray, M. Rejmund, and S. Samanta

7] "Spectroscopy of a tetrahedral doubly magic candidate nucleus $^{160}_{70}\text{Yb}_{90}$ " published in **J. Phys. G: Nucl. Part. Phys. 46 055102 (2019)**

A Saha, T Bhattacharjee, D Curien, J Dudek, I Dedes, K Mazurek, A Gózdź, S Tagami, Y R Shimizu, S R Banerjee, S Rajbanshi, A Bisoi, G De Angelis, Soumik Bhattacharya, S Bhattacharyya, S Biswas, A Chakraborty, **S Das Gupta**, B Dey, A Goswami, D Mondal, D Pandit, R Palit, T Roy, R P Singh, M Saha Sarkar, S Saha and J Sethi

8] "Yrast and non-yrast spectroscopy of ^{199}Tl using α -induced reactions" published in **Physical Review C **98**, 044311 (2018)**

Soumik Bhattacharya, S. Bhattacharyya, R. Banik, **S. Das Gupta**, G. Mukherjee, A. Dhal, S. S. Alam, Md. A. Asgar, T. Roy, A. Saha, S. Nandi, T. Bhattacharjee, A. Choudhury, Debasish Mondal, S. Mukhopadhyay, P. Mukhopadhyay, S. Pal, Deepak Pandit, I. Shaik, and S. R. Banerjee

9] "Excited negative parity bands in ^{160}Yb " published in **Physica Scripta . **93** (2018) 034001**

A Saha, T Bhattacharjee, D Curien, I Dedes, K Mazurek, S R Banerjee, S Rajbanshi, A Bisoi, G de Angelis, Soumik Bhattacharya, S Bhattacharyya, S Biswas, A Chakraborty, **S Das Gupta**, B Dey, A Goswami, D Mondal, D Pandit, R Palit, T Roy, R P Singh, M Saha Sarkar, S Saha and J Sethi

10] "Deformed band structures at high spin in ^{200}Tl " published in **Physical Review C **95**, 014301 (2017)**

Soumik Bhattacharya, S. Bhattacharyya, **S. Das Gupta**, H. Pai, G. Mukherjee, R. Palit, F. R. Xu, Q. Wu, A. Shrivastava, Md. A. Asgar, R. Banik, T. Bhattacharjee, S. Chanda, A. Chatterjee, A. Goswami, V. Nanal, S. K. Pandit, S. Saha, J. Sethi, T. Roy, and S. Thakur

11] “Shape coexistence in ^{153}Ho ” published in *Physical Review C* **94, 024311 (2016)**

Dibyadyuti Pramanik, S. Sarkar, M. Saha Sarkar, Abhijit Bisoi, Sudatta Ray, **Shinjinee Dasgupta**, A. Chakraborty, Krishichayan, Ritesh Kshetri, Indrani Ray, S. Ganguly, M. K. Pradhan, M. Ray Basu, R. Raut, G. Ganguly, S. S. Ghugre, A. K. Sinha, S. K. Basu, S. Bhattacharya, A. Mukherjee, P. Banerjee, and A. Goswami

12] $^{37}_{97}\text{Rb}_{60}$: The Cornerstone of the Region of Deformation around $A \sim 100$ ” Published in *Physical Review Letters* **115, 172501 (2015)**

C. Sotty, M. Zielińska, G. Georgiev, D. L. Balabanski, A. E. Stuchbery, A. Blazhev, N. Bree, R. Chevrier, **S. Das Gupta**, J. M. Daugas, T. Davinson, H. De Witte, J. Diriken, L. P. Gaffney, K. Geibel, K. Hadyńska-Klęk, F. G. Kondev, J. Konki, T. Kröll, P. Morel, P. Napiorkowski, J. Pakarinen, P. Reiter, M. Scheck, M. Seidlitz, B. Siebeck, G. Simpson, H. Törnqvist, N. Warr, and F. Wenander

13] “Role of p-induced population of medium-mass ($A \sim 150$) neutron-rich nuclei”

Published in *Physical Review C* **91**, 024617 (2015)

D. Banerjee, A. Saha, T. Bhattacharjee, R. Guin, S. K. Das, P. Das, Deepak Pandit, A. Mukherjee, A. Chowdhury, Soumik Bhattacharya, **S. Das Gupta**, S. Bhattacharyya, P. Mukhopadhyay, and S. R. Banerjee.

14] “E0 decay from the first 0_2^+ states in ^{156}Dy and ^{160}Er ” published in *Physical Review C* **90, 044317 (2014)**

N. Blasi, L. Atanasova, D. Balabanski, **S. Das Gupta**, K. Gladinski, L. Guerro, S. Nardelli, and A. Saltarelli.

15] “High Spin Spectroscopy of ^{201}Tl ” Published in *Physical Review C* **88, 044328 (2013)**

S. Das Gupta, S. Bhattacharyya, H. Pai, G. Mukherjee, and S. Bhattacharya, R. Palit, V. Nanal, J. Sethi, and S. Thakur, A. Srivastava, A. Chatterjee, S.K. Pandit, and S. Saha and S. Chanda.

16] “Evidence for a Smooth Onset of Deformation in the Neutron-Rich Kr Isotopes” published in Physical Review Letters, 108, 062701 (2012)

M. Albers, N. Warr, K. Nomura, A. Blazhev, J. Jolie, D. Mucher, B. Bastin, C. Bauer, C. Bernards, L. Bettermann, V. Bildstein, J. Butterworth, M. Cappellazzo, J. Cederkall, D. Cline, I. Darby, **S. Das Gupta**, J. M. Daugas, T. Davinson, H. De Witte, J. Diriken, D. Filipescu, E. Fiori, C. Fransen, L. P. Gaffney, G. Georgiev, R. Gernhuser, M. Hackstein, S. Heinze, H. Hess, M. Huyse, D. Jenkins, J. Konki, M. Kowalczyk, T. Kroll, R. Krucken, J. Litzinger, R. Lutter, N. Marginean, C. Mihai, K. Moschner, P. Napiorkowski, B. S. Nara Singh, K. Nowak, T. Otsuka, J. Pakarinen, M. Pfeiffer, D. Radeck, P. Reiter, S. Rigby, L. M. Robledo, R. Rodriguez-Guzman, M. Rudigier, P. Sarriguren, M. Scheck, M. Seidlitz, B. Siebeck, G. Simpson, P. Thole, T. Thomas, J. Van de Walle, P. Van Duppen, M. Vermeulen, D. Voulot, R. Wadsworth, F. Wenander, K. Wimmer, K. O. Zell, and M. Zielinska.

17] “Discovery of the shape coexisting 0^+ state in ^{32}Mg by a two neutron transfer reaction” published in Physical Review Letters, 105, 252501 (2010)

[Selected for **VIEW POINT in Physics**]

K. Wimmer, T. Kroll, R. Krucken, V. Bildstein, R. Gernhuser, B. Bastin, N. Bree, J. Diriken, P. Van Duppen, M. Huyse, N. Patronis, P. Vermaelen, D. Voulot, J. Van de Walle, F. Wenander, L.M. Fraile, R. Chapman, B. Hadinia, R. Orlandi, J.F. Smith, R. Lutter, P.G. Thirolf, M. Labiche, A. Blazhev, M. Kalkuhler, P. Reiter, M. Seidlitz, N. Warr, A.O. Macchiavelli, H. Jeppesen, E. Fiori, G. Georgiev, G. Schrieder, **S. Das Gupta**, G. Lo Bianco, S. Nardelli, J. Butterworth, J. Johansen, and K. Risager.

b) Papers in International Conference Proceedings: Total -3

1] "Exploring the structure of Xe isotopes in A ~130 region: Single particle and collective excitations" published in EPJ Web of Conferences 232, 04001 (2020)

R. Banik, S. Bhattacharyya, S. Biswas, S. Bhattacharya, G. Mukherjee, S. Rajbanshi, S. Dar, S. Nandi, S. Ali, S. Chatterjee, S. Das, **S. Das Gupta**, S. S. Ghugre, A. Goswami, D. Mondal, S. Mukhopadhyay, H. Pai, S. Pal, D. Pandit, R. Raut, P. Ray, and S. Samanta

2] “Lifetime measurements and decay spectroscopy of ^{132}I ” published in EPJ Web of Conferences 66, 02009 (2014)

S. Bhattacharyya, D. Banerjee, S. K. Das, Soumik Bhattacharya, **S. Das Gupta**, G. Mukherjee, T. Bhattacharjee, A. Chowdhury, P. Das, R. Guin, H. Pai.

3] “E0 decay of the 0^+_2 levels in ^{156}Dy and ^{160}Er ” published in *J. Phys.: Conf. Ser.* 267, 012054 (2011)

G. Lo Bianco, D. L. Balabanski, S. Nardelli, **S. Das Gupta**, N. Blasi, K. Gladnishki, A. Saltarelli and L. Fortunato.