

Curriculum Vitae

PROPOSED POSITION	HEAD OF THE DEPARTMENT (ASST. PROFESSOR)
DEPARTMENT	Dept. of Chemistry
INSTITUTE	Alankar Mahila P.G. Mahavidyalaya,
ADDRESS	Kataria Agriculture Farm, Sirsi Road, Jaipur
NAME	Dr. SHALINI CHAUDHARY
PROFESSION	Educationalist & Counsellor
DATE OF BIRTH	29 th June 1975
YEAR WITH INSTITUTION	15Years



Qualification:

- 1 **PhD (2020)** - (Computational and Theoretical Chemistry) title “**Theoretical computation of periodic descriptors invoking periodic properties**” from Manipal University, Jaipur
- 2 **M. Phil. (Chemistry)** Dissertation’s title “**Studies of Isooxazole as Anti-hypoglycemic agent**” from Madurai Kamaraj University with **65%** in **2006**
- 3 **M. Sc. (Environment)** Dissertation’s the title “**EIA on Cheja Stone mining of Amer region of Jaipur**” from the University of Rajasthan with **74%** in **2014**
- 4 **M. A. (Education)** Dissertation’s topic “**Studies of result assessment of the various type of secondary school**” from Vardhman Mahaveer Kota Open University with **71%** in **2010**
- 5 **M. Sc. (Physical Chemistry)** from University of Rajasthan with **71%** in **2000**
- 6 **B. Ed.** from Banasthali Vidhyapeth with **67%** in **1998**
- 7 **B. Sc. (CBZ)** from University of Rajasthan with **67%** in **1996**
- 8 **Senior Secondary (CBZ)** from Rajasthan Board (Ajmer) with **57%** in **1993**
- 9 **Secondary** from Rajasthan Board (Ajmer) with **73%** in **1991**

PUBLICATIONS

BOOK PUBLISHED

Chakraborty, T., & Chaudhary, S. (Eds.). (2021). *Emerging Trends of Research in Chemical Sciences: Qualitative and Quantitative Studies and Applications*. CRC Press.

Hard ISBN: 9781771889735

E-Book ISBN: 9781003129929

PAPER PUBLISHED

- 1 Chaudhary, S., Tandon, H., & Chakraborty, T. (2021). A quest for effective polarizability as a function of the radii. *Journal of the Korean Physical Society*, 78(11), 1101-1108.
<https://link.springer.com/article/10.1007/s40042-021-00130-1>
- 2 Chaudhary, S., Chaudhary, A., Rajak, S. K., Kaya, S., Elik, M., & Chakraborty, T. (2021). Theoretical computation of normalised radii, density and global hardness as a function of orbital exponent. *Journal of Mathematical Chemistry*, 59(4), 1014-1028.
<https://link.springer.com/article/10.1007/s10910-021-01224-8>
- 3 **Chaudhary, S.,** Ranjan, P., & Chakraborty, T. (2020) Atomic polarizability: A periodic descriptor. *Journal of Chemical Research*, 1747519819889936.
<https://journals.sagepub.com/doi/10.1177/1747519819889936>
- 4 Ranjan, P., **Shalini,** Chakraborty, T. (2019) A Review on Nano alloy Clusters: Theory to Applications, *Bentham Science: Recent Patents on Engineering*.
<https://www.eurekaselect.com/178398/article>
- 5 **Shalini,** Ranjan, P., & Chakraborty, T. (2019). Theoretical Computation of Periodic Descriptors Invoking Periodic Properties. In *Chemical Science and Engineering Technology* (pp. 31-40). Apple Academic Press.
<https://www.taylorfrancis.com/chapters/edit/10.1201/9781351048323-3>
- 6 Tandon, H., **Shalini,** Ranjan, P., Suhag, V., & Chakraborty, T. (2019). A review of a computational study of carbon nanotubes. In *Carbon Nanotubes and Nanoparticles* (pp. 25-38). Apple Academic Press.
<https://www.taylorfrancis.com/chapters/edit/10.1201/9780429463877-2>

- 7 Shalini, Tandon, H., & Chakraborty, T. (2017). Molecular electrophilicity index-A promising descriptor for predicting toxicological property. *J Bioequiv Availab*, 9, 518-527.
<https://www.researchgate.net/publication/321414826>
- 8 Venigalla, S., Dhail, S., Ranjan, P., **Shalini**, Chakraborty, T. (2015) Computational Study about Cytotoxicity of Metal Oxide Nanoparticles Invoking Nano-QSAR Technique. *New Front. Chem.*, 23(2):123-130.
http://newfrontchem.iqstorm.ro/upload/12_NFC-23-2_Venigalla%20et%20al.pdf

LIST OF CONFERENCES AND WORKSHOPS ATTENDED

- 1 **Shalini**, Chakraborty, T.* (2015) “ A New Approach to Compute Atomic Hardness Invoking Other Periodic Properties” Participated and presented a paper in **CONIAPS XVII** on Emerging trends in physical sciences and technology, Jan 16-18, 2015
- 2 **Shalini**, Malik, B., Chakraborty, T*(2015) “A New Scale of Absolute Hardness Based on Force concept.” Participated and presented a paper in **RSC III**, Manipal.
- 3 **Shalini**, Prabhat Ranjan and Tanmoy Chakraborty*(2016) “Computational Analysis of CuAg_n (n=1-8) Nano alloy Clusters: A Density Functional Approach” Participated and presented a paper in DAE-BRNS 6th Interdisciplinary –Symposium on Materials Chemistry (ISMC-2016) held at BARC, Mumbai, during Dec.6-10,2016.
- 4 **Shalini**, Tanmoy Chakraborty* (2016) “A New Scale of Atomic Polarizability and Equalisation of Polarizability Invoking Other Periodic Properties” Participated and presented a paper in **FCASI-2016**, International Conference on Frontiers at the Chemistry -Allied Sciences Interface, April 25th -26th.
- 5 **Shalini**, Tanmoy Chakraborty* (2017) “Anew scale of atomic polarizability invoking other periodic properties” Participated and presented a paper in **I MSRC, MUJ**.
- 6 **Shalini**, Tanmoy Chakraborty* (2017) “A New Scale of Atomic Polarizability Invoking Other Periodic Properties” Participated and presented a paper in **VCCS-2017**
- 7 **Shalini**, Tanmoy Chakraborty* (2017) “An Empirical Approach to Define Atomic Electrophilicity Index” Participated and presented a paper in **FCASI-2017**, 22nd -23rd, July.

- 8 **Shalini, Tanmoy Chakraborty* (2018)** “An approach to improve the efficiency of the dye-sensitised solar cell in terms of conceptual DFT based descriptors” Participated and presented a paper in 24th ISCB INTERNATIONAL CONFERENCE (ISCBC-2018) 11th -13th, January.
- 9 **Shalini, Tanmoy Chakraborty* (2018)** “Empirical approach of molecular polarizability to find real field application” Participated and presented a paper in **FCASI-2018**, International Conference on Frontiers at the Chemistry -Allied Sciences Interface, 21st -22nd December.
- 10 **Shalini, Tanmoy Chakraborty* (2019)** “A New Scale of Atomic Hardness Invoking Periodic Descriptors” Participated and presented a paper in International Conference on Recent Developments in Chemical Research (**RDCR-2019**) 1-2, February.
- 11 **Shalini, Chakraborty, T*(2019)** “A New Scale of Atomic Polarizability Invoking Other Periodic Descriptor” Participated and presented a paper in 16th Theoretical Chemistry Symposium (**TCS- 2019**), BITS, Pilani, 13th -16th February.
- 12 Attended and completed a workshop on Intellectual Property Rights organized by Technology and Innovation Support Centre, **Department of Science and Technology, Government of Rajasthan**, from 12th-13th January **2020** at Jaipur.
- 13 Participated in National Conference on “Advances in Materials Science and Technology (NCAMST-2020”, Organized by Department of Physics, University of Rajasthan, Jaipur, from 29th Feb. and 1st March.
- 14 Attended and participated International Webinar on Multidisciplinary research IWMR-2021, Organized by Dept. of Chemistry, Guru Nanak College, Ballarpur.on 13 March, 2021.
- 15 Attended and Presented a paper titled “Theoretical Computation of Atomic Radii in terms of Density and Specific Gravity” in National e- conference on Sustainable development: Challenges and Opportunities post COVID-19, from St. Aloysius Institute of Technology, JBP. in 1st-2nd, July 2020.
- 16 Attended and participated in webinar on “Exploring online Education: e-Teaching and e-Learning” organized by CDRJM, Haryana on 19th June 2020.
- 17 Attended and participated in International Webinar on Innovations in Science and Technology (IWIST-2021), Organized by Smt. Narsamma Arts, Commerce and Science

College, Amravati and Association of ACT, Mumbai C/O Homi Bhabha Center for Science Education, Mumbai, on 27 Feb., 2021.

- 18 Attended and participated in workshop on “Eight Indo-US workshop on Mathematical Chemistry, (IWMC)” Organized by Sharda University Noida, U.P. on 13-17 September, 2022.

ACADEMIC MEMBERSHIP

- 1 Life time membership of Chemical Research Society of India, **CRSI** REF. NO. LM 2853
- 2 Life time membership of Society of material chemistry, **SMC**, REF. NO. 1004, C/O Chemistry Division, Bhabha Atomic Research Centre, Trombay, Mumbai-400085

Faculty Development Programme

- 1 Successfully completed a 4 Week Induction/Orientation Programme organized by Teaching Learning Centre, Ramanujan College, University of Delhi from June 26- July 24, 2020.
- 2 Successfully completed a 7 day FDP ON “ Institutional Benchmarking of Best Practices” organized by ten premier institutes of india from 8th June to 14th June 2020.
- 3 Successfully completed a Ten Days online FDP on Teaching Learning and Assessment “ Conducted by Central University of Rajasthan, during 15th -25th March, under the scheme of Pandit Madan Mohan Malaviya National Mission on Teachers and Teaching.

Training:

- 1 Internship Completed in APTA Enviro Consultancy Jaipur on EIA in 2013.
- 2 Advanced Training Programme on Green
- 3 Training on Environmental Regulations & Industries, Jaipur)

Degrees Conferred:

- First Division and Merit holder in Rajasthan University

Significant Subjects of Interest:

- Theoretical and computational chemistry
- Quantum Chemistry
- Density Functional Theory
- Periodicity and periodic descriptors
- Green Chemistry

- Methods in Analytical Chemistry
- Synthesis of General aspect of Chemistry
- Laws of Thermodynamics
- History of Law of Conservation Energy
- Education technology

Achievements:

- Report on Environment Impact Assessment (EIA)
- Result of the college in my subject and teaching carrier. The achievement is to establish a Chemistry laboratory in this college.

Employment Record:

21/06/06 to Till Date

**Alankar Mahila P.G.
College, Jaipur**

Designation

: Asst. Professor (Physical Chemistry)
HOD, Department of Chemistry.
ICT-Academy Coordinator

Activities Performed

: Teaching, PowerPoint Presentation (PPT), Practical in Chemistry Lab, Arrange seminar, Teaching (Inorganic, Organic, Physical, Analytical, Environmental Chemistry) of Post Graduate and Under Graduate Classes.
Organized and arranged various placement activities and internships

Dr. Shalini Chaudhary