



# GOVERNMENT GENERAL DEGREE COLLEGE, KESHIARY

PASCHIM MEDINIPUR, PIN 721135, WEST BENGAL

1. Name: DR. SOUMYA SUNDAR MATI
2. Designation: Assistant Professor
3. Department: CHEMISTRY
4. Highest academic degree: Ph.D.
5. Specialization: CHEMISTRY (Physical Chemistry)
6. Contact number: 8697971976
7. E-mail: [soumyamati@gmail.com](mailto:soumyamati@gmail.com)
8. Date of joining to the service: 11.12.2015



9. Colleges served:

Name of the College	From	Till
Govt. General Degree College, Singur	11.12.15	29.07.16
Govt. General Degree College, Keshiary	30.07.16	Present

10. Area of research interest:

- 1 Spectroscopy and Photophysical Studies of bioactive molecules.
- 2 Interaction study of newly synthesised bioactive molecules with sequence specific DNA and oligonucleotides.
- 3 Computational calculations for optimizing ground and excited state molecules, FMO and correlation of spectral data with experimental findings.
- 4 Theoretical modeling of bioactive molecules with biomacromolecules.
- 5 d-block metal cation sensing and complex formation.
- 6 Biomedical application of functionalised nanomaterials

11. Publications:

Paper/Research article		Book/book-chapter		Citation	ΣIF	h-index	i-index	Abstracts
International	National	International	National					
31	1	2	2	753	121	16	21	14

11. Awards/achievement of special mention:

- 1 Awarded DR. D. S. Kothari Post-Doctoral Fellowship, 2015
- 2 CSIR-UGC National Eligibility Test (NET), 2011, 2010, 2010
- 3 GATE, Chemistry, 2010
- 4 Rank 3rd in B.Sc 2008 in The University of Burdwan

12. Research project/extramural grant mobilized:

Funding agency/body	Amount(Rs.)	Name of the research project	From	Till
DST-SERB	5 lakh/year	"A Comprehensive ... Analysis"	November, 2019	30.04.2023

### 13. Patent (International/National)

### 14. Editorial board member/ Reviewer of any journal/literary body:

- 1 Editorial member of "**American Journal of Physical Chemistry(AJPC)**" ISSN: 2327-2430 (Print) ; ISSN: 2327-2449 (Online) October, 2019- October, 2022  
**Reviewer:**
  1. Analytica Chimica Acta (Elsevier), ISSN 0003-2670 (print) 1873-4324 (web)
  2. Heliyon [ISSN: 2405-8440]
  3. Journal of Applied Pharmaceutical Science [ISSN Online 2231-3354 ]
  4. Molecules [ISSN: 1420-3049]

### 15. Member of learned society:

- 1 **American Chemical Society (ACS) [Membership No. 30887030] 08.07.15-08.07.18**

### 16. List of full length publications (year wise in descending order):

- 36 **Soumya Sundar Mati\***, S Chowdhury, S Sarkar, N Bera, N Sarkar, **International Journal of Biological Macromolecules**, **2023**, 242, 124933
- 35 R. R. Reddy, D. Saha, A. Pan, VK Aswal, **Soumya Sundar Mati**, SP Moulik, **Langmuir**, **2023**, 39 (10), 3729-3741
- 34 B. Samai\*, **Soumya Sundar Mati**, Proceedings of Nanomaterials Physics and Chemistry: Recent Development and Applications, LAP LAMBERT Academic Publishing, 17 Meldrum Street, Beau Bassin 71504, Mauritius, Book Chapter 2, **2022**, 14-25. **[ISBN: 978-620-4-98114-7]**.
- 33 A. Pan, B. VN Phani Kumar, **Soumya Sundar Mati**, A. Mal, G. KS Prameela, V. K Aswal, S. P Moulik, **Journal of Molecular Liquids**, **2022**, 354, 118893
- 32 **Soumya Sundar Mati\***, S. Konar, B. Samai, **New Journal of Chemistry**, **2021**, 45, 18459–18471.
- 31 M. Das, P. Brandao, **Soumya Sundar Mati**, S. Roy, A. Anoop, A. James, S. De, U. K. Das, S. Laha, J. Mondal, B. C. Samanta, T. Maity **Journal of Biomolecular Structure and Dynamics**, **2021**, 1-16.
- 30 M. Das, S. Mukherjee, P. Brandao, S. K. Seth, S. Giri, **Soumya Sundar Mati**, B. C. Samanta, S. Laha, T. Maity, **ACS Omega**, **2021**, 6, 3659–3674. ISSN: 2470-1343.
- 29 **Soumya Sundar Mati\***, P. Paul, Chemistry and Biology: Sustainable Progress in Human, Scientific World, Kolkata, West Bengal 700007, Book Chapter 13, **2020**, 174-182. **[ISBN: 978-93-84387-76-1]**.
- 28 **Soumya Sundar Mati\***, Proceedings of Recent Trends in Nanomaterials and Nanobiomaterials, LAP LAMBERT Academic Publishing, 17 Meldrum Street, Beau Bassin 71504, Mauritius, Book Chapter 3, **2020**, 18-22. **[ISBN: 978-620-2-79831-0]**
- 27 P. Paul , **S. S. Mati**, G. S. Kumar, **J. Photochemistry & Photobiology, B.** **2020**, 204, 111804
- 26 B. Samai, A. Basu, **S. S. Mati**, S. C. Bhattacharya, **Materialia** **2019**, 6, 100285
- 25 **Soumya Sundar Mati\***, D. Singharoy, B. Samai, S. Konar, N. Santra, S. Pal, P. Das, S. Murmu **J. Mol. Struct.** **2019**, 1184,102-109
- 24 B. Samai, **S. S. Mati** , D. Singharoy, S. C. Bhattacharya, **Chemistry Select** **2019**, 4, 4739-4746
- 23 B Samai, **S. S. Mati**, S. C. Bhattacharya **J. Indian Chem. Soc.** **2018**, 95, 945-949
- 22 B. Samai, S.Chall, **S. S. Mati**, S. C. Bhattacharya, **Eur. J. Inorg. Chem.** **2018**, 2018, 3224-3231
- 21 D. Singharoy, S. Chowdhury, **S. S. Mati**, S. Ghosh, K. Chattopadhyay, S. C. Bhattacharya, **Chem. Eur. J.** **2017**, 23, 16516 – 16524
- 20 D. Singharoy, **S. S. Mati**, S. Ghosh, S. C. Bhattacharya, **Colloids and Surfaces B: Biointerfaces** **2017**, 160, 84–91.

- 19 S. Chall, **S. S. Mati**, I. Das, A. Kundu, G. De, K. Chattopadhyay, *Langmuir* **2017**, 33, 12120–12129.
- 18 P. Paul, **S. S. Mati**, S. C. Bhattacharyab, G. Suresh Kumar, *Phys. Chem. Chem. Phys.* **2017**, 19, 6636-6653
- 17 P. Paul, **S. S. Mati**, S. C. Bhattacharyya ,G. Suresh Kumar, *Dyes and Pigments* **2017**, 136, 205-218.
- 16 **S. S. Mati**, S. Sarkar, D. Singharoy, 'The Importance of Intermolecular Interactions in Solid-State X-Ray Crystal Structures.' **New Academic Publishers**, New Delhi, **2016**, **Book Chapter** 5, 80-97.
- 15 D. Singharoy, **S. S. Mati**, S. Rakshit, S. Chall, S. C. Bhattacharyya, *J. Mol. Liq.* **2016**, 213, 33-40.
- 14 **S. S. Mati**, S. Chall, S. C. Bhattacharyya, *Langmuir* **2015**, 31, 5025-5032.
- 13 S. Chall, **S. S. Mati**, B. Gorain, S. Rakshit, S. C. Bhattacharyya, *Toxicological Research.* **2015**, 4, 966-975.
- 12 **S. S. Mati**, S. Chall, S. Rakshit , S. C. Bhattacharyya, *J. Fluorescence* **2015**, 25, 341–353.
- 11 A. Sarkar, S. Rakshit, S. Chall, **S. S. Mati**, D. Singharoy, J. Banuelos, I. Lopez Arbeloa, S. C. Bhattacharyya, *RSC Adv.* **2014**, 4, 56361–56372.
- 10 S. Chall, **S. S. Mati**, S. Konar, D. Singharoy, S. C. Bhattacharyya, *Org. Biomol. Chem.* **2014**, 12, 6447–6456.
- 9 **S. S. Mati**, S. Chall, S. Konar, S. Rakshit, S. C. Bhattacharyya, *Sensors and Actuators B* **2014**, 201, 204–212.
- 8 S. Chall, **S. S. Mati**, S. Rakshit, S. C. Bhattacharyya, *J. Phys. Chem. C* **2013**, 117, 25146–25159
- 7 **S. S. Mati**, S. Singha Roy, S. Chall, S. Bhattacharyya, S. C. Bhattacharyya, *J. Phys. Chem. B* **2013**, 117, 14655–14665.
- 6 A. Pan, **S. S. Mati**, B. Naskar, S. C. Bhattacharyya, S. P. Moulik, *J. Phys. Chem. B* **2013**, 117, 7578–7592.
- 5 S. Rakshit, S. Ghosh, S. Chall, **S. S. Mati**, S.P. Moulik, S. C. Bhattacharyya, *RSC Adv.* **2013**, 3, 19348–19356.
- 4 **S. S. Mati**, S. Sarkar, S. Rakshit, A. Sarkara, S. C. Bhattacharyya, *RSC Adv.* **2013**, 3, 8071–8082.
- 3 S. Rakshit, S. Chall, **S. S. Mati**, A. Roychowdhury, S.P. Moulik, S. C. Bhattacharyya, *RSC Adv.* **2013**, 3, 6106–6116.
- 2 **S. S. Mati**, S. Sarkar, P. Sarkar, S. C. Bhattacharyya, *J. Phys. Chem. A* **2012**, 116, 10371–10382.
- 1 **S. S. Mati**, T. K. Mondal, S. Dhar, S. Chall, S. C. Bhattacharyya, *Spectrochimica Acta Part A* **2012**, 92, 122–130.

**17. List of published abstract (year wise in descending order):**

- 14 **S. S. Mati**, Poster Presentation , Dept. of Chemistry , Kalyani University, 28th and 29th March 2023
- 13 **S. S. Mati**, Online Paper Presentation , Dept. of Chemistry , Bagnan College, 30th and 31st August 2020
- 12 **S. S. Mati**, Online Paper Presentation , Dept. of Chemistry , Prabhat Kumar College, 29th and 30th June 2020
- 11 **S. S. Mati**, Online Paper Presentation , Dept. of Physics , Narajole Raj College, 14th and 15th June 2020
- 10 **S. S. Mati**, Poster Presentation , Dept. of chemistry, Jadavpur University, 7th January, 2020
- 9 **S. S. Mati**, Poster Presentation , Dept. of chemistry, The Bhawanipur Education Society College, 4th November 2019
- 8 **S. S. Mati**, Poster Presentation , Dept. of chemistry, University of Calcutta, January 08-10, 2018.
- 7 **S. S. Mati**, Oral Presentation, Department of Chemistry, Haldia Govt. College, August 4-5, 2016.
- 6 **S. S. Mati**, Poster Presentation , Dept. of Chemistry, Jadavpur university, March 16, 2016.
- 5 **S. S. Mati**, Poster Presentation , BARC, Mumbai, January 5-9, 2016.
- 4 **S. S. Mati**, Poster Presentation , Chemistry, IIT Kharagpur, Kharagpur from February 24-25, 2014.
- 3 **S. S. Mati**, Poster Presentation, Dept. of chemistry, University of Calcutta, February 06-08, 2013.
- 2 **S. S. Mati** , Oral Presentation, CSIR-CLRI, Chennai during November 28-30, 2013.
- 1 **S. S. Mati**, Oral Presentation, Department of Zoology, Banaras Hindu University, Varanasi during September 3-4, 2012.

**18. List of Seminar/Workshop/Conference/Symposium attended (year wise in descending order):**

- 19 **Invited Lectur** in Haldia Government College on 'Career Counselling' 19th December, 2023

- 18 National Conference on EMERGING DIMENSIONS IN CHEMICAL SCIENCES (EDCS-23), rganized by Kalyani university 28-29th March, 2023
- 17 International Symposium On " Innovation, Extension, Impacts and Challenges in Chemical and Biological Sciences" ICBS 2023 organized by Surrendranath College 04th January 2023
- 16 Two Days National Webinar on "Recent Trends in Chemistry at the Interface with Biology" organized by Dept. of Chemistry , Bagnan College, 30th and 31st August 2020
- 15 Two Days International Webinar on Chemistry and biology: Sustainable Progress of Human Civilization organized by Dept. of Chemistry , Prabhat Kumar College, 29th and 30th June 2020
- 14 Two Days International Webinar on RECENT TRENDS IN NANOMATERIALS & NANOBIO MATERIALS (RTNN) organized by Dept. of Physics , Narajole Raj College, 14th and 15th June 2020
- 13 An International Seminar on "ITINERARY OF CLASSICAL TO MODERN ERA OF CHEMISTRY" organized by Dept. of chemistry, The Bhawanipur Education Society College, 4th November 2019
- 12 "International Conference on Chemistry for Human Development (ICCHD-2018)" organized by Dept. of chemistry, University of Calcutta, January 08-10, 2018.
- 11 "Recent Development in Bio-Active Molecules" organized by Department of Chemistry, Haldia Govt. College, August 4-5, 2016.
- 10 "Chemistry of Functional Materials of Current Interest" organized by Dept. of Chemistry, Jadavpur university, March 16, 2016.
- 9 "Trombay Symposium on Radiation & Photochemistry(TSRP-2016) incorporating Asia Pacific Symposium on Radiation Chemistry (APSRC-2016)" organized by BARC, Mumbai, January 5-9, 2016.
- 8 "LCMB 2014, LIGHT IN CHEMISTRY, MATERIALS & BIOLOGY" organized by Dept. of Chemistry, IIT Kharagpur, Kharagpur from February 24-25, 2014.
- 7 "Internatinal Symposium on Molecular Organisation and Complexity: A Chemical Perspective" organized by Dept. of chemistry, University of Calcutta during February 06-08, 2013.
- 6 "16th National conference on Surfactants, Emulsion and biocolloids (NATCOSEB-XVI)" organized by CSIR-CLRI, Chennai during November 28-30, 2013.
- 5 "National symposium in recent palestrae in photosciences" organized by Department of Zoology, Banaras Hindu University, Varanasi during September 3-4, 2012.
- 4 "Sustainable Development through Innovative Research in Science and Technology" organized by Dept. of Chemistry, Jadavpur university, Kolkata during September 28-29, 2012.
- 3 "Recent Advances in Chemistry" organized by organized by Dept. of Chemistry, Jadavpur university, Kolkata during February 10-11, 2012.
- 2 "Trends in surface science and related area" organized by ISSST, Jadavpur university, Kolkata during May 03, 2013.
- 1 "1st International workshop on nanomaterials (IWON): Engineering photon and phonon transport" held on Jadavpur University, Kolkata during December 14-15, 2012.

