

CURRICULUM VITAE

Dr. Moni Baskey (Sen)

M.Sc, Ph.D (Chemistry) Assistant
Professor (Stage III)
Department of Chemistry,
The University of Burdwan, Burdwan
713104
Sex: Female
DOB - 20/10/1984
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✚ Research Interests:

- Nanomaterials synthesis and characterization
- Graphene and graphene based nanocomposites and applications
- Polymer nanocomposites and its applications
- Synthesis of different nanocatalysts for environmental remediation

+ **Personal Academic Profile:**

- ❖ Passed Secondary Examination with 1st division in 2001 from Bankura
Mission Girls' High School, West Bengal
- ❖ Passed Higher Secondary examination with 1st division in 2003 from Bankura
Sammilani College, Bankura, West Bengal
- ❖ B.Sc in Chemistry (2004-2007) with 1st division in 2007 from Bankura
Sammilani College, Bankura, West Bengal
- ❖ M.Sc in Chemistry (2007-2009) with 1st division in 2009 from The University
of Burdwan, Burdwan, West Bengal
- ❖ Joined as JRF at Indian Association for the Cultivation of Science
(IACS), Jadavpur, Kolkata on August, 2009
- ❖ Awarded Ph.D degree in Chemistry (**Materials Science**) in May, 2015
from Indian Association for the Cultivation of Science (**IACS**),
Jadavpur, Kolkata under the supervision of *Prof. Shyamal Kumar Saha*.

+ **Professional Information:**

Joined as an Assistant Professor from November, 2012, Department of Chemistry, The University of Burdwan, Burdwan- 713 104 (WB), India.

- Assistant Professor (Stage I): Nov, 2012- June, 2017
- Assistant Professor (Stage II): June, 2017- June, 2022
- Assistant Professor (Stage III): June, 2022- Till date

✚ Research Scholars:



Dr. Sanjukta Ghosh

Sanjukta graduated from Vivekananda Mahavidyalaya, Burdwan (WB) and did her M.Sc in Chemistry from The University of Burdwan. She joined as Ph.D scholar (Honorary fellow) on December, 2014 and her research interest is on SYNTHESIS AND CHARACTERIZATION OF PHOTOACTIVE NANOMATERIALS.

Current Status: Awarded (August, 2021)



Ms. Piu Das

Piu graduated from Raghunathpur College, Purulia (WB) and did her M.Sc in Chemistry from National Institute of Technology, Durgapur. She joined as Ph.D scholar (State funded fellow) on August, 2017 and her research interest is on SYNTHESIS OF DIFFERENT NANOCATALYSTS FOR WASTE WATER MANAGEMENT.

Current Status: Thesis Submitted on February, 2023



Mr. Kartik Tantubay

Kartik graduated from Panchmura Mahavidyalaya, BU (WB) and did his M.Sc. in Chemistry from The University of Burdwan. He joined as Ph.D. scholar (Non-net fellow) on August, 2017 and his research interest is on SYNTHESIS ON DIFFERENT NANOMATERIALS FOR MULTIFUNCTIONAL APPLICATIONS

Current Status: Thesis Submitted on July, 2023



*Sudip graduated from RBC College, North 24 Parganas (WB), and did his M.Sc in Chemistry from Vidyasagar University, WB. He joined as Ph.D scholar on August, 2018 and his research interest is on **METHOD DEVELOPMENT AND VALIDATION OF MULTICLASS MULTI PESTICIDE RESIDUE ANALYSIS FOR VEGETABLE AND RURAL WATER.***

Current Status: Thesis Submitted on June, 2023

Mr. Sudip Bhattacharyya



*Bapan Graduated from Rabindra Mahavidyalaya, Hooghly (WB) and did his M.Sc. in Chemistry from The University of Burdwan. He joined as Ph.D. scholar (CSIR-JRF) on February, 2019 and his research interest is on **GREEN SYNTHESIS PROCEDURES, CHARACTERIZATIONS AND APPLICATIONS OF DIFFERENT NANOMATERIALS***

Current Status: Ongoing

Mr. Bapan Bairy



*Subrata graduated from Panskura Banamali College, VU (WB) and did his M.Sc. in Chemistry from The University of Calcutta. He joined as Ph.D. scholar (Non-net fellow) on May, 2022 and his research interest is on **METAL-OXIDE NANOMATERIALS SYNTHESIS AND APPLICATIONS***

Current Status: Ongoing

Mr. Subrata Maity

List of Publications:

- 1) *"Green Synthesis of recyclable reduced graphene oxide-gold nanocatalyst using Alstonia scholaris: Applications in waste water purification and microbial field"* Piu Das, Bapan Bairy, Sanjukta Ghosh, Raktim Ghosh, Somasri Dam, Avijit Ghorai, **Moni Baskey (Sen)***, Advances in Natural Sciences: Nanoscience and Nanotechnology, July 2023. [**Just Accepted**] *Impact Factor- 2.28 (2022)*. [IOP publishers]
- 2) *"Adsorption kinetics, isotherm and thermodynamics studies for the removal of cationic dyes from environmental wastewater by reduced graphene oxide adsorbent synthesized via greener way"* Bapan Bairy, Piu Das, Kartik Tantubay, **Moni Baskey Sen***, Advances in Natural Sciences: Nanoscience and Nanotechnology 14, 015004 (2023). *Impact Factor- 2.28 (2022)* [IOP publishers]
- 3) *"Efficient fabrication of pH-modified graphene nano-adsorbent for effective determination and monitoring of multi-class pesticide residues in market-fresh vegetables by GC-MS"*, Sudip Bhattacharyya, Rajlakshmi Poi, **Moni Baskey Sen**, Swagata Mandal, Dipak Kumar Hazra, Rajib Karmakar, Journal of Food Composition and Analysis, 118, 105153 (2023). *Impact Factor- 4.52 (2023)*. [Elsevier]
- 4) *"Establishment of modified QuEChERS-GC-MS-LC-MS/MS method for simultaneous screening of multi-class multi-pesticide residues in betelvine and consumer risk assessment"*, Sudip Bhattacharyya, Rajlakshmi Poi, **Moni Baskey Sen**, Dipak Kumar Hazra, Rajarshi Ghosh, Swagata Mandal, Rajib Karmakar, Microchemical Journal 179 (2022), 107444. *Impact Factor- 5.304 (2023)* [Elsevier]

- 5) "Method development, validation, monitoring, seasonal effect and risk assessment of multiclass multi pesticide residues in surface and ground water of new alluvial zone in eastern India", Sudip Bhattacharyya, Rajlakshmi Poi, Swagata Mandal, **Moni Baskey Sen**, Dipak Kumar Hazra, Supradip Saha & Rajib Karmakar, Environmental Science and Pollution Research 29, 17174–17187 (2022). *Impact Factor- 5.19 (2023)* [Springer]
- 6) "Hydrogen peroxide–assisted photocatalytic dye degradation over reduced graphene oxide integrated ZnCr₂O₄ nanoparticles", Kartik Tantubay, Piu Das, **Moni Baskey (Sen)***, Environmental Science and Pollution Research 29, 17309-17318 (2021). *Impact Factor- 5.19 (2023)* [Springer]
- 7) "Exploration of photoreduction ability of reduced graphene oxide–cadmium sulphide heteronanostructures and their intensified activities against harmful microbes` Sanjukta Ghosh, Piu Das, Bapan Bairy, Raktim Ghosh, Somasri Dam, **Moni Baskey Sen***, Journal of Materials Science 56, 16928–16944 (2021). *Impact Factor- 4.5 (2022)*. [Springer]
- 8) "Transformation of CuS/ZnS nanomaterials to an efficient visible light photocatalyst by 'photosensitizer' graphene and the potential antimicrobial activities of the nanocomposite", Piu Das, Kartik Tantubay, Raktim Ghosh, Somasri Dam, **Moni Baskey (Sen)***, Environmental Science and Pollution Research 28, 49125–49138 (2021). *Impact Factor- 5.19 (2023)* [Springer]
- 9) "Plant extract assisted synthesis of reduced graphene oxide sheet and the photocatalytic performances on cationic and anionic dyes to decontaminate wastewater" Sanjukta Ghosh, Piu Das, **Moni Baskey (Sen)***, Advances in Natural Sciences: Nanoscience and Nanotechnology 12, 015008 (2021). *Impact Factor- 2.28 (2022)* [IOP publishers]
- 10) "Ternary reduced graphene oxide–CuO/ZnO nanocomposite as a recyclable catalyst with enhanced reducing capability` Kartik Tantubay, Piu Das, **Moni Baskey Sen***, Journal of Environmental

- Chemical Engineering 8, 103818 (2020). *Impact Factor- 7.968 (2023)*. [Elsevier]
- 11) "Evaluation of Matrix Effect of Chilli, Cabbage and Bitter Gourd in Multiclass Multi-pesticide Residue Analysis Using Gas Chromatography Mass Spectrometry (GC-MS)", Sudip Bhattacharyya, Rajlakshmi Poi, Swagata Mandal, **Moni Baskey**, Subrata Datta Roy, Shuvadeep Halder, Dipak Kumar Hazra, Rajib Karmakar, International Journal of Agriculture, Environment and Biotechnology 13, (April, 2020) 111- 117. *Impact Factor- 3.118 (2023)*.
- 12) "Heterogeneous catalytic reduction of 4-nitroaniline by RGO-Ni nanocomposite for water resource management` Piu Das, Sanjukta Ghosh, **Moni Baskey (Sen)***, Journal of Materials Science: Materials in Electronics 30 (22) 19731-19737(2019) *Impact Factor- - 2.779 (2023)*. [Springer]
- 13) "Madhuca longifolia plant mediated green synthesis of cupric oxide nanoparticles: A promising environmentally sustainable material for waste water treatment and efficient antibacterial agent` Piu Das, Sanjukta Ghosh, Raktim Ghosh, Somasri Dam, **Moni Baskey (Sen)***, Journal of Photochemistry and Photobiology B: Biology 189, 66–73 (2018). *Impact Factor-6.814 (2023)*, [Elsevier]
- 14) "Decorating mechanism of Mn_3O_4 nanoparticles on reduced graphene oxide surface through reflux condensation method to improve photocatalytic performance` Sanjukta Ghosh, Sukalyan Basu, **Moni Baskey (Sen)***, Journal of Materials Science: Materials in Electronics 28, 7860–17870 (2017). *Impact Factor- 2.779 (2023)*. [Springer]
- 15) "Enhanced sunlight photocatalytic activity of silver nanoparticles decorated on reduced graphene oxide sheet` **Moni Baskey (Sen)***, Sanjukta Ghosh, Korean Journal of Chemical Engineering 34, 2079-2085 (2017). *Impact Factor- 3.146 (2023)*. [Springer]
- 16) "Anomalous enhancement in the magnetoconductance of graphene/ $CoFe_2O_4$ composite due to spin-orbit

coupling” Shatabda Bhattacharya, Ramaprasad Maiti, **Moni Baskey Sen**, Shyamal K Saha, Dipankar Chakravorty, Journal of Physics D: Applied Physics 48, 435002 (2015). *Impact Factor-3.409 (2023) [IOP publishers]*

- 17) “Superior Magnetic, Dielectric and Magnetodielectric Effects in Graphene/ZnCo₂O₄Nanocomposites” **Moni Baskey**, Ramaprasad Maiti, Shyamal K Saha, Dipankar Chakravorty, Journal of Applied Physics 115, 094306 (2014). *Impact Factor-2.877 (2023) [AIP publishers]*
- 18) “A demonstration of half-metallicity in graphene using Mn₃O₄ nanosheet” Sumit Mandal, **Moni Baskey**, Shyamal K Saha; Carbon 61, 254 – 259, (2013). *Impact Factor-11.307(2020) [Elsevier]*
- 19) “A Graphite-Like Zero Gap Semiconductor with an Interlayer Separation of 2.8 Å” **Moni Baskey**, Shyamal K Saha; Advanced Materials 24, 1589-1593, (2012). *Impact Factor- 32.086 (2023). [Wiley]*
- 20) “Epitaxial Growth of Crystalline Polyaniline on Reduced Graphene Oxide” Dipanwita Majumdar, **Moni Baskey**, Shyamal K Saha; Macromolecular Rapid Communications 32, 1277–1283, (2011). *Impact Factor- 5.006 (2023) [Wiley]*
- 21) “Graphene Quantum Sheets: A New Material for Spintronic Applications” Shyamal K Saha, **Moni Baskey**, Dipanwita Majumdar; Advanced Materials 22, 5531-5536, (2010). *Impact Factor- 32.086 (2023). [Wiley]*

Vacant Positions:

Candidates having M.Sc. degree in chemistry with CSIR/UGC fellowships can directly apply to Dr. Baskey (Sen) (moni.baskey@gmail.com) for PhD positions.

Last updated on 25th July, 2023

Group Images from our Materials Research Laboratory

