



School : School of Physical Sciences
Department : Department of Chemistry
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Personal Webpage Link:
https://www.ggu.ac.in/Admin/Files/Resume/CV_Dr%20Subhash%20Banerjee.pdf

Qualifications:

- **Doctor of Philosophy (Ph. D.) in Synthetic Organic Chemistry** from Department of Organic Chemistry, Indian Association for the Cultivation of Science, Jadavpur, Kolkata, India: March, 2008.
- **M.Sc. (Organic Chemistry Specialization)**, The University of Burdwan, West Bengal, India, 2002 (1st Class).
- **B. Sc. (Chemistry Honors)**, The University of Burdwan, West Bengal, India, 2000 (1st Class).

Area of Interest/Specialization:

- **Green Synthesis:** Design and Development of Green Catalysts and Reagents For Organic Transformations.
- **Green Synthetic Tool:** Organic Synthesis using Green Synthetic Tools Such as MW, Ball Milling, Sonicator, Visible Light etc.
- **Nano-Catalysis:** Development of Novel Hybrid Nanomaterials for Organic Synthesis.
- **Heterogeneous Catalysis:** Catalysis by MCM-41/4, SBA-15 and Carbon-Supported Metal Nanoparticles Materials, Biomass Rice Husk Derived Carbon Supported Materials.
- **On-Water Synthesis:** Exploration of Organic Transformations in Water.

Experience:

Present Employment:

August, 2011 – Present: Department of Chemistry, Guru Ghasidas Vishwavidyalaya (A Central University), Bilaspur, C. G., India

Post Doctoral Experience:

June, 2009 – June, 2011: Post-Doctoral Research Associate, Department of Chemistry, USD, South Dakota, USA

July, 2007 – May, 2009: Post-Doctoral Research Associate, NanoScience Technology Center, UCF, Florida, USA

Awards and Honors:

- **Young Scientist Award** by Solid State Chemistry & Allied Area during 11th National Conference (NCSCA-2019), Nagpur, December 20-21, 2019
- **DST Fast Track Fellowship** from DST, Govt. of India, **2012**.
- **USA Post Doctoral Fellowship**, Department of Chemistry, The University of South Dakota, USA, June **2009** – June **2011**.
- **USA Post Doctoral Fellowship**, NanoScience Technology Center, The University of Central Florida, USA, July **2007** – June **2009**.

Research Projects:

- *Fast Track Scheme for Young Scientist* from Department of Science & Technology (DST), New Delhi on “*Novel Mesoporous Ru-MCM-48 materials for the Development of Green Synthetic Methodologies*” (SB/FT/CS 023/2012): 25 lacs
- *UGC-BSR Research Start-Up-Grant for Newly Recruited faculty* from UGC, New Delhi on “*Design and Synthesis of Novel Amino Acids Modified Imidazolium Based Chiral Ionic Liquids for Asymmetric Synthesis*” F. No. 20-1/2012(BSR)/20-8(3)/2012(BSR): 6 lacs
- CCOST Mini Research Project on “*Development of Rice-husk Feedstock Supported Nanomaterials for the Synthesis of Privileged Medicinal Scaffolds*” (ENDT No 2096/CCOST/MRP/2017) dated 19.09.2017 Grant Amount 4,85,000/-

International Collaboration:

Professor Swadeshmukul Santra

Director, Materials Innovation for Sustainable Agriculture (UCF-MISA Center)
Professor, Department of Chemistry, NanoScience Technology Center,
Department of Materials Science and Engineering and Burnett School of Biomedical
Sciences, University of Central Florida, 4353 Scorpis St., Suite 245, Orlando, FL 32816,
USA.

Email: ssantra@ucf.edu

Professor Sami H. Mahmood

Affiliation: Department of Physics, The University of Jordan, Amman 11942, Jordan.
Department of Physics and Astronomy, Michigan State University, East Lansing, MI
48824.

Email: s.mahmood@ju.edu.jo

Professor Ahmed A. Abdala

Chemical Engineering Programme, Texas A & M University at Qatar POB 23784, Doha,
Qatar.

Email: ahmed.abdalla@qatar.tamu.edu

Professor Ranjit Koodali

Department of Chemistry, University of South Dakota, Vermillion, South Dakota, USA

Email: ranjit.koodali@usd.edu

Best Peer Reviewed Publication (up-to 10)

1. Hierarchical Mesoporous RuO₂/Cu₂O Nanoparticle-Catalyzed Oxidative Homo/Hetero Azo-Coupling of Anilines
A. Saha, S. Payra, B. Selvaratnam, S. Bhattacharya, S. Pal, R.T. Koodali, and [S. Banerjee*](#)
ACS Sustainable Chemistry & Engineering, 2018, 6, 11345.
(Citation: 30, Impact Factor: 8.198)


2. On Water Cu@g-C₃N₄ Catalyzed Synthesis of NH-1,2,3-Triazoles Via [2+3] Cycloadditions of Nitroolefins/Alkynes and Sodium Azide
S. Payra, A. Saha, and [S. Banerjee*](#)
ChemCatChem, **2018**, *10*, 5468–5474.
(Citation: 35, Impact Factor: 5.686)
3. One-Pot Multicomponent Synthesis of Highly Functionalized Bio-Active Pyrano[2,3-*c*]pyrazole and Benzylpyrazolyl Coumarin Derivatives Using ZrO₂ Nanoparticles as Reusable Catalyst
A. Saha, S. Payra and [S. Banerjee*](#)
Green Chemistry, **2015**, *17*, 2859.
(Citation: 135, Impact Factor: 10.18)
4. TiO₂–SiO₂ Mixed Oxides: Organic Ligand Templated Controlled Deposition of Titania and Their Photocatalytic Activities for Hydrogen Production
R. Peng, [S. Banerjee*](#), G. Sereda, R. Koodali
International Journal of Hydrogen Energy, **2012**, *37*, 17009-17018.
(Citation: 25, Impact Factor: 5.816)
5. Pd-MCM-48: A Novel and Recyclable Heterogeneous Catalyst for Selective Hydrogenations and Coupling Reactions
[S. Banerjee*](#), V. Balasanthiran, R. Koodali and G. Sereda
Organic Biomolecular Chemistry **2010**, *8*, 4316-4321.
(Citation: 64, Impact Factor: 3.876)
6. Quantum Dots Based ON/OFF Probe for Detection of Glutathione
[S. Banerjee](#), S. Kar, M. J. Pereze and S. Santra – *Journal Physical Chemistry C*, **2009**, *113*, 9659–9663.
(Citation: 109, Impact Factor: 4.126)
7. A Simple Strategy for Qdot Assisted Selective Detection of Cd²⁺
[S. Banerjee](#), S. Kar and S. Santra
Chemical Communications, **2008**, 3037-3039.
(Citation: 75, Impact Factor: 6.222)
8. Ionic Liquid as Reagent. A Green Procedure for the Regioselective Conversion of Epoxides to *vicinal*-Halohydrins using [AcMIm]X under Catalyst- and Solvent-Free Conditions
B. C. Ranu and [S. Banerjee](#),
Journal of Organic Chemistry, **2005**, *70*, 4517- 4520.
(Citation: 125, Impact Factor: 4.354)

9. Ionic Liquid as Catalyst and Reaction Medium. The Dramatic Influence of a Task Specific Ionic Liquid [bmIm]OH in Michael Addition of Active Methylene Compounds to Conjugated Ketones, Carboxylic Esters and Nitriles
B. C. Ranu, and [S. Banerjee](#)
Organic Letters, **2005**, 7, 3049-3052.
(Citation: 605, Impact Factor: 6.005)
10. Indium (I) Iodide-Promoted Cleavage of Diphenyl Diselenide and Disulfide and Subsequent Palladium (0)-Catalyzed Condensation with Vinylic Bromides. A Simple One-Pot Synthesis of Vinylic Selenides and Sulfides
B. C. Ranu, K. C. Chattopadhyaya and [S. Banerjee](#), *J. Org. Chem.* **2006**, 71, 423-425.
(Citation: 96, Impact Factor: 4.354)

Recent Books/Book Chapters/Monographs.

1. Hydroxyapatite Packed Chitosan-PMMA Nano-composite: A Promising Material for Construction of Synthetic Bone - A. Bhowmick, [S. Banerjee](#), R. Kumar, P. P. Kundu – Multifaceted Development and Application of Biopolymers for Biology, Biomedicine and Nanotechnology Volume 254 of the Series *Advances in Polymer Science*, Publisher: Springer-Verlag Berlin Heidelberg, **2013**/1/1; Page 135-167 (Impact Factor: 3.890).
2. Ball Milling: A Green Tool in Synthetic Organic Chemistry- [S. Banerjee](#), G. Patel, M. K. Patel –Catalysis: Current and Future Development, Vol-1: Fundamental and Prospects of Catalysis, Publisher: Bentham Science, **2020**1; Page 1-203.
3. ZrO₂-Nanoparticle-catalyzed one-pot Multicomponent Synthesis of Bio-active Organic Scaffolds - [S. Banerjee](#) – Chapter 17, Versatile Solicitation of Material Science in Diverse Science Fields 2021, Publisher: Nova Science Publisher Inc, **2020**1; Page 257-266.

Research Supervision

Sl. No.	Name of Student	Research Topic/Thesis Title	Status
1.	 Dr. Arijit Saha	Development of Synthetic Protocol for MCRs leading to Bio-active Molecules	Degree Awarded on April, 04, 2018 Currently doing Post-Doc under DS-Kothari Fellow at HCU

2.



Dr. Soumen Payra

Heterogeneous nano-Catalysts in Organic Synthesis

Degree Awarded on June 14, 2018

Currently Research Scientist at Jubilant Biosys, Greater Noida, UP, former Post doc of IIT, Madras, and IIT, Kanpur

3.



Mrs. Archana Asatkar

Studies on Catalytic Activity of Biomass Rice Husk Derived Activated Carbon in Organic Transformations

Degree Awarded on January 22, 2021

Currently Working as Assistant Professor, SVNS Govt College, Raigarh, CG

4



Mr. Ashok Raj Patel

Development of Novel Support for Nano-Catalysts and their Applications in Organic Transformations

PhD (Ongoing)

5.



Ms. Geetika Patel

Sustainable Development of Methodologies for Organic Transformations Using Green Tools

PhD (Ongoing)

Administrative Responsibilities:

- Academic coordinator of department of Chemistry, GGV
- Member of Board of Studies, Dept. of Chemistry, GGV: 2018-2019
- Member of Proctor board, GGV, July 2018 to present

- Member of implementation committee of smart class/E-class room in GGV- 2019
- Subject Coordinator of CSIR-NET Coaching Class in the Dept. Of Chemistry, 2017-18
- Coordinator of Skill Development Cell of School of Physical Sciences, GGV 2016- 2019
- Member of DST-FIST Project Implementation Committee - 2016-2020
- Member of Departmental Research Committee (DRC), GGV: 2013-Present
- Assistant Center Superintend in End Semester Examination, 2015, 2016, 2017
- Member of Design & Innovation Center, GGV, Bilaspur
- Assistant Center Superintend in VET, VRET, GGV, 2014, 2018
- Observer for the VET, in the Kolkata Examination Center, 2014, 2017, 2018
- Assistant Center Superintend in UGC-NET Exam., 2013
- Member of Departmental Purchase Committee, GGV, 2012-Present
- Member of Departmental Discipline Committee, GGV, 2013-Present
- Member of Scrutiny Committee for the selection of teachers in Chemistry, GGV, 2013
- Member of Scrutiny Committee for the selection of Teachers in Commerce, GGV, 2017
- Member of verification Committee for the selection of Teachers in Commerce, 2017
- Time Table in-Charge of Department of Chemistry 2013-2022
- Teacher in Charge for Preparation of Annual Report/NIRF/NAAC of Dept of Chemistry
- Member of Anti-Ragging Committee
- Member of CSR committee
- Member of MoU monitoring Committee
- Member of starting of B.Voc course in the university

Additional Information:

- Appointed as **Bentham Brand Ambassador 2018**
- **Guest Editor of theme issue of *Current Organic Chemistry*, Bentham Publisher**
- **Guest Editor of theme issue of *Current Nanoscience*, Bentham Publisher**
- **Member of Editorial board of “Modern Research in Catalysts” (ISSN Online: 2168-4499; ISSN Print: 2168-4480), Scientific Research Publishing Inc. USA.**
- **Member of American Chemical Society (ACS) 2009-2011**
- **Member of Indian Chemical Society, 2017**