

## **DR. SASADHAR MAJHI**

Assistant Professor

M. Sc. (Chemistry), Ph. D.

Email: [sasadharmajhi@tdbcollege.ac.in](mailto:sasadharmajhi@tdbcollege.ac.in)

### » **Overview:**

Dr. Majhi currently serves as the coordinator of the PG department of chemistry of Triveni Devi Bhalotia College (Government Sponsored and Affiliated to The Kazi Nazrul University, Asansol, previously affiliated with the University of Calcutta and the Burdwan University), Raniganj, West Bengal, India, 713347. He worked as an assistant lecturer also at Patha-Bhavana, Visva-Bharati University, Santiniketan, and West Bengal. With more than fifteen years of teaching experience, Dr. Majhi has published several research papers in national and international journals of high reputation. He has also participated in various national and international conferences and symposia. His research interest focuses on the isolation and characterization of natural products, semisynthetic products, total synthesis, and promising organic molecules as well as green chemistry. He is also interested in the field of biological activities of phytochemicals. He performs as a good reviewer in international journals of high impact.

### » **Date of appointment to the present job:**

29-04-2015

### » **Other Academic/ Administrative post:**

- PG coordinator of the Department of Chemistry

### » **Academic background:**

Dr. Sasadhar Majhi received B.Sc. (Honours) degree in Chemistry and M.Sc. (Organic specialization) both from Visva-Bharati University (a Central University). Dr. Majhi qualified for CSIR-NET in December 2008 and devoted himself to research work at Visva-Bharati University. He obtained a Ph.D. from Visva-Bharati University under the supervision of Prof. Goutam Brahmachari (FRSC) in the area of natural products. He also earned his M. Phil in Chemistry in 2009.

### » **Information about Ph. D.:**

- **Date of Award:** 17-01-2020
- **Ph. D. Topic:** *Studies on Phytochemical Constituents of Some Traditionally Used Indian Medicinal Plants: Isolation, Structural Elucidation and Chemistry.*

### » **Professional Qualifications:**

- **NET:** CSIR-NET, 2008

### » **Publications in Journals:**

1. S. Majhi\*, Discovery, Development, and Design of Anthocyanins-Inspired Anticancer Agents-A Comprehensive Review, *Anti-cancer Agents in Medicinal Chemistry*, 2022, 22, 3219-3238. DOI:10.2174/1871520621666211015142310.

2. S. Majhi, \* Synthesis of bioactive natural products and their analogs at room temperature—an update, *Physical Sciences Reviews*, 2022 DOI: [org/10.1515/psr-2021-0094](https://doi.org/10.1515/psr-2021-0094).
3. S. Majhi, \* Recent developments in the synthesis and anti-cancer activity of acridine and xanthine-based molecules, *Physical Sciences Reviews*, 2022 DOI: [org/10.1515/psr-2021-0216](https://doi.org/10.1515/psr-2021-0216).
4. S. Majhi\*, Applications of ultrasound in total synthesis of bioactive natural products: A promising green tool, *Ultrasonics Sonochemistry*, 2021, 77, 105665. DOI: [org/10.1016/j.ulsonch.2021.105665](https://doi.org/10.1016/j.ulsonch.2021.105665).
5. S. Majhi\*, Applications of Norrish type I and II reactions in the total synthesis of natural products: a review, *Photochemical & Photobiological Sciences*, 2021, 20, 1357-1378. DOI: [10.1007/s43630-021-00100-3](https://doi.org/10.1007/s43630-021-00100-3).
6. S. Majhi\*, D. Das, Chemical derivatization of natural products: semisynthesis and pharmacological aspects-A decade update, *Tetrahedron*, 2021, 78, 131801. DOI: [org/10.1016/j.tet.2020.131801](https://doi.org/10.1016/j.tet.2020.131801).
7. S. Majhi\*, The Art of Total Synthesis of Bioactive Natural Products via Microwaves. *Current Organic Chemistry*, 2021, 25, 1047-1069. DOI: [10.2174/1385272825666210303112302](https://doi.org/10.2174/1385272825666210303112302).
8. S. Majhi\*, Applications of Yamaguchi method to esterification and macrolactonization in total synthesis of bioactive natural products, *ChemistrySelect*, 2021, 6, 4178-4206. DOI: [org/10.1002/slct.202100206](https://doi.org/10.1002/slct.202100206).
9. S. Mahji\*, Diterpenoids: Natural Distribution, Semisynthesis at Room Temperature and Pharmacological Aspects-A Decade Update, *ChemistrySelect*, 2020, 5, 12450-12464. DOI: [org/10.1002/slct.202002836](https://doi.org/10.1002/slct.202002836).
10. K. Sinha, S. Chowdhury, B. Mandal, M. Mandal, S. Mahji, G. Brahmachari,\* S. Banerjee, J. Ghosh, P. C. Sil,\* Lupeol alters viability of SK-RC-45 (RCC cell line) by modulating its mitochondrial dynamics, *Heliyon (Elsevier)*, 2019, 5, e021074. DOI: [org/10.1016/j.heliyon.2019.e021074](https://doi.org/10.1016/j.heliyon.2019.e021074).
11. G. Brahmachari,\* S. Majhi, B. Mandal, M. Mandal, A. Kumar, A. K. Srivastava, R. B. Singh, N. Misra, Stigmasterol from the Flowers of *Peltophorum pterocarpum* (DC.) Backer ex K. Heyne (Fabaceae)- Isolation, Spectral Properties and Quantum Chemical Studies, *Journal of Indian Chemical Society*, 2018, 95, 1-14.
12. **S. Majhi**,\* I. Saha, Visible Light-promoted Synthesis of Bioactive *N, N*-heterocycles, *Current Green Chemistry*, **2022**, 9, 127-144. DOI: <https://doi.org/10.2174/2213346110666221223141323>.
13. **S. Majhi**,\* Neomangiferin: Semi-synthesis and antidiabetic potential, *Journal of Organic and Biomolecular Chemistry*, **2015**, 3, 34 - 37. Weblink: [https://drive.google.com/file/d/1TejDtLN0ECbgRfHcAux77\\_yP0PbPxAvt/view?usp=sharing](https://drive.google.com/file/d/1TejDtLN0ECbgRfHcAux77_yP0PbPxAvt/view?usp=sharing).
14. S. K. Jash, R. K. Singh, **S. Majhi**, A. Sarkar, D. Gorai, *Peltophorum Pterocarpum* : Chemical and Pharmacological Aspects, *International Journal of Pharmaceutical*

Sciences and Research, **2014**, 5, 26-36. DOI: [http://dx.doi.org/10.13040/IJPSR.0975-8232.5\(1\).26-36](http://dx.doi.org/10.13040/IJPSR.0975-8232.5(1).26-36).

15. Dilip Gorai, Shyamal K. Jash, Raj K. Singh, A. Sarkar, **S. Majhi**, Chemical and pharmacological aspects of *Limnophila rugosa*: An update, International Journal of Natural Products Research, **2013**, 3, 120-124.
16. G. Brahmachari,\* L. C. Mandal, R. Roy, S. K. Jash, A. Mondal, **S. Majhi** and D. Gorai, Lupeol, a pharmaceutically potent triterpenoid, from the ripe fruits of *Rauvolfia tetraphylla* L. (Apocynaceae), *Journal of Indian Chemical Society*, **2011**, 88, 303-305.
17. G. Brahmachari,\* L. C. Mandal, D. Gorai, A. Mondal, S. Sarkar, **S. Majhi**, A new labdane diterpene from *Rauvolfia tetraphylla* Linn. (Apocynaceae), *Journal of Chemical Research*, **2011**, 35, 678-680. DOI: [org/10.3184/174751911X13220462651507](http://dx.doi.org/10.3184/174751911X13220462651507).
18. G. Brahmachari,\* N. C. Mandal, S. K. Jash, R. Roy, L. C. Mandal, A. Mukhopadhyay, B. Behera, **S. Majhi**, A. Mondal, A. Gangopadhyay, Evaluation of Antimicrobial Potentiality of Two Flavonoids from *Limnophila* Plants. *Chemistry and Biodiversity*, **2011**, 8, 1139-1151. DOI: [10.1002/cbdv.201000264](http://dx.doi.org/10.1002/cbdv.201000264).

» **Books and Chapters:**

• **Books:**

1. S. Majhi\*, Drug Discovery and Development—A Lucid Approach Science and Technology: A Concise History and Evolution, 2020, Delhi, India.
2. S. Majhi\*, Green Chemistry and Prominent Greener Technologies Science and Technology: A Concise History and Evolution, 2020, Delhi, India.
3. A. K. Dey, S. Majhi\*, Amyrin and its natural derivatives: Biological activities and potential natural inhibitors, 2022, India.
4. S. Majhi,\* Synthesis of bioactive natural products and their analogs at room temperature—an update, 2022, De Gruyter, Germany.
5. S. Majhi,\* Recent developments in the synthesis and anti-cancer activity of acridine and xanthine-based molecules, 2022, De Gruyter, Germany.

• **Chapters:**

1. Dr. Majhi is the author of the book entitled ‘Green Chemistry and Sustainability: A Unified Approach’, ISBN: 978-81-8487-737-3, Narosa Publishing House, Daryaganj, New Delhi, 2022.
2. Dr. Majhi is co-author of the book entitled ‘Modern Sustainable Techniques in Total Synthesis of Bioactive Natural Products’, World Scientific publisher, ISBN: 978-981-126-868-7.

3. Dr. Majhi is co-author of the book entitled 'Semisynthesis of Bioactive Compounds and their Biological Activities', Elsevier, Amsterdam, ISBN: 9780443152696.
4. Dr. Majhi is one of the editors of the book entitled 'Science and Technology: A Concise History and Evolution' bearing ISBN: 978-81-945060-3-4, KUMUD PUBLICATIONS, Delhi-110053.
5. Chapter 10- Applications of nanoparticles in organic synthesis under ultrasonication, Elsevier, 2023, Pages 279-315, DOI: [10.1016/B978-0-323-95921-6.00014-7](https://doi.org/10.1016/B978-0-323-95921-6.00014-7)
6. Chapter 3 - Nanoparticles in multicomponent reactions toward green organic synthesis, Elsevier, 2023, Pages 75-102, DOI: [org/10.1016/B978-0-323-95921-6.00002-0](https://doi.org/10.1016/B978-0-323-95921-6.00002-0)

» **Seminars, Conferences, Webinars and workshops attended:**

- Seminars (National/ International): 06
- Webinars (National/ International): 0
- Conferences (National/ International): 0
- Workshops (National/ International): 0

» **Life Membership:**

N. A.

» **Awards/Academic Achievements:**

- Outstanding Assistant Professor, Indian Excellence Awards, 2022

» **Professional Courses:**

- **Orientation Programme/FDP/FIP:** 01
- **Refresher Course:** 01
- **Short Term Course:** 01

» **Others/ Miscellaneous:**

N. A.