# **Curriculum Vitae**

# Dr. Tarun Ghosh

Assistant Professor Department of Chemistry Aghorekamini Prakashchandra Mahavidyalaya Subhasnagar, Bengai, Hooghly, PIN – 712611 E-mail ID: tghosh47@rediffmail.com



### **Academic Details:**

- > Ph. D. : University of Calcutta
- > M. Sc. : University of Calcutta
- **B. Sc.**: University of Calcutta

#### **Research Interests:**

- Synthesis and Reactivity Study of Heterocyclic Compounds.
- > Vanadium Chemistry: Synthesis, Structure and Solution Chemistry.
- Theoretical Chemistry.

## **Refereed Scientific Publications:**

- 1. Recent trends in the application of Chromones, T. Ghosh, JOI, 2022, 71, 178-190.
- 2. A prediction based on recent trends in strategies for sustainable development, T. Ghosh, JOI, 2022, 71, 96-104.
- Study on the heat gain through a Twin Glass Window (TGW) using an Organic PCM, D. Sudha, A.K. Maddali, Sowmiya J. K., Kannadasan B, P. Narayane, T. Ghosh, Materials Today: Proceedings, 2022, 69, 927-933.
- 4. The Present COVID-19 Pandemic: Living on the Edge, T. Ghosh, VIIRJ, 2020, 3, 314-319.
- The Dendrimers Molecularly Engineered Spherical Nanomolecules : Novel Engineering Applications and Some Revised Thoughts on Such Molecules, S. Kole and T. Ghosh, Indian Science Cruiser, 2020, 34, 47-52.
- Insights into Forces on Interfacial Chain Molecules, Adsorption Isotherms, and Emerging Nanomaterials and Nanotechnologies, S. Kole and T. Ghosh, Indian Science Cruiser, 2019, 3, 41-46.

- Chemoselective reduction of some condensates derived from chromone-3-carbaldehyde using Sm and Zn, S. Saha, T. Ghosh and C. Bandyopadhyay, Synthetic Commun., 2008, 38, 2429-2436.
- Synthesis, structure and solution chemistry of a family of dinuclear hydrazonato-vanadium (V) complexes with [OV(μ-O)VOJ]<sup>4+</sup> core, B. Mondal, T. Ghosh, M. Sutradhar, G. N. Mukherjee, M. G. B. Drew and T. Ghosh, Polvhedron, 2008. 27, 2193-2201.
- Formation of N,N'-bis[1-(2-hydroxyphenyl)ethylidene]ethylenediamine in the reaction of 1-(2 hydroxyphenyl)-3-(N,N-dimethylamino)propenone with ethylenediamine, P. Karmakar, S. Santra, T. Ghosh, and C. Bandyopadhyay, J. Indian Chem. Soc., 2008, 85, 577-579.
- Synthesis and reactivity of 3-(1-hydroxy-3-buten-1-yl) chromone, P. Karmakar, T. Ghosh, D.Chakraborty, S. Maity and C. Bandyopadhyay, J. Chem. Res., 2008, 208-211.
- Synthesis of dispiropyrrolidines from chromone-3-carbaldehyde using sarcosine and ninhydrine as the source of an azomethine ylide, S. K. Panja, P. Karmakar, J. Chakraborty, T. Ghosh and C. Bandyopadhyay, Tetrahedron Lett., 2008, 49, 4397-4401.
- Synthesis, structure, solution chemistry and the electronic effect of *para* substituents on the vanadium center in a family of mixed- ligand [V<sup>V</sup>O(ONO)(ON)] complexes, T. Ghosh, B. Mondal, T. Ghosh, M. Sutradhar, G. N. Mukherjee and M. G. B. Drew, Inorg. Chimica Acta, 2007, 360, 1753-1761.
- 13. Reaction of sarcosine with chromone-3-carbaldehyde and 6,6'-(polymethylenedioxy)di(chromone-3 carbaldehyde), T. Ghosh and C. Bandyopadhyay, J. Chem. Res., 2007, 190-192.
- Reactions of 2-amino-4*H*-1-benzopyran-4-one with 4-Oxo-4*H*-1-benzopyran-3-Carbaldehydes, T. Ghosh and C. Bandyopadhyay, J. Heterocycl. Chem., 2006, 43, 1431-1434.
- A facile transformation of 2-aminochromone to 4-chlorocoumarin and its reaction with ethylenediamine, T. Ghosh, K. R. Sur and C. Bandyopadhyay, J. Chem. Res., 2006, 651-654.
- 16. Synthesis of 6,6'-[(α,ω-alkanediol)bisoxy]bis[4-oxo-4*H*-1-benzopyran-3-carbaldehyde] and its reaction with methanol under different conditions, T. Ghosh, P. Debnath and C. Bandyopadhyay, J. Indian Chem. Soc., 2006, 83, 822-825.
- 17. Al/Hg Mediated reductive dimerisation of 3-methoxycarbonyl-4-oxo-4*H*-1-benzopyran, T. Ghosh, K. R. Sur and C. Bandyopadhyay, J. Chem. Res., 2005, 366-368.
- Synthesis of 2,2'-Diaminobischromones Using a Modified Procedure for the Rearrangement of 5-(2hydroxyphenyl)isoxazole to 2-Aminochromone, T. Ghosh, S. Saha and C. Bandyopadhyay, Suthesis, 2005, 1845-1849.
- 19. Rearrangements of N-alkyl-/aryl-nitrones derived from 4-oxo-4H-1-benzopyran-3-carboxaldehyde-a solvent-dependent process, T. Ghosh and C. Bandyopadhyay, Tetrahedron Lett., 2004, 45, 6169-6172.
- 20. Study of differences in the reactivity of alkyl and aryl nitrones derived from 4-oxo-4*H*-1-benzopyran-3-carboxaldehyde, T. Ghosh, R. Patra and C. Bandyopadhyay, J. Chem. Res., 2004, 47-49.

#### **Books:**

- "Advanced Nano-Biotechnology" by Dr. T. Ghosh, Dr. Bai M. K., Dr. Chavan M., Mr. I. Chatterjee. ISBN: 978-93-5757-505-8, Scientific International Publishing House, 2023.
- "Engineering Chemistry" by Dr. J. P. Dhal, Dr. G. B. Bagihalli, Dr. G. Vimala, Dr. T. Ghosh. ISBN: 978-93-5625-267-7, Scientific International Publishing House, 2022.

# **Papers Presented in Conferences/Seminars:**

- 1. Special Lecture on "Aliphatic Hydrocarbons: Preparations; Properties; Structures and Reactions", organized by Department of Chemistry, Hooghly Women's College, Hooghly, September 15, 2022.
- 2. International seminar on "Pollution and Biosafety: Issues and Concern", organized by Department of Chemistry, Raja Rammohun Roy Mahavidyalaya, Radhanagar, Hooghly, August 03, 2022.
- International seminar on "Tools in Sciences", organized by A.K.P.C. Mahavidyalaya, Hooghly, June 25, 2022.
- "99th Foundation Day Celebration of Indian Chemical Society & International Research Scholars' Meet", organized by the Indian Chemical Society and the Department of Chemistry, University of Calcutta, May 09, 2022.
- 5. International e-conference on "Revisiting Strategies for Sustainable Development", organized by Department of Chemistry, B. B. College, Asansol, December 21-22, 2021.
- 6. International e-Conference on "SRI-SAPTCHCT: 2020", organized by Nagarjuna Science and Environment Forum, Oct 02-03, 2020.
- Virtual International Conference on "Emerging Research Trends in Chemical Sciences", organized by Department of Chemistry, Govt. Post Graduate College, Rajouri, University of Jammu, July 24-26, 2020.
- 8. National Webinar on "Current Trends in Chemical Research and their Correlation with UG Courses", organized by Department of Chemistry, Basirhat College, North 24-Pgs, June 23, 2020.
- 9. International e-conference on "Revisiting Strategies for Sustainable Development", organized by Department of Chemistry, B. B. College, Asansol, June 13-14, 2020.
- International Webinar on "COVID-19, the Facts and Findings", organized by Department of Chemistry, SKBU, Purulia, June 08, 2020.
- 11. National Seminar on "Critical Thinking and Philosophizing", organized by A.K.P.C. Mahavidyalaya, Hooghly, Feb 26, 2020.
- 12. "International Chemistry Seminar on "Itinerary of Classical to Modern Era of Chemistry", organized by The Bhawanipur Education Society College, Kolkata, November 2019.
- National Conference on "Trends and Advances in Mechanical Engineering", organized by Kalyani Govt. Engg. College, Kalyani, February 2019.
- National Seminar on "Trends in Surface Science and Related Areas", organized by Department of Chemistry, Sarojini Naidu College for Women, Kolkata and ISSST, Kolkata, October 2018.

- 15. International Science Seminar on "Science: Past, Present & Future", organized by Department of Chemistry, Shyamsundar College, Burdwan and Indian Chemical Society, Kolkata, December 2017.
- "International Science Seminar", organized by Department of Chemistry, Burdwan Raj College, Burdwan and Indian Chemical Society, Kolkata, October 2017.
- 17. "Modern Trends in Chemistry ", organized by Department of Chemistry, Ramakrishna Mission Vivekananda Centenary College, Rahara, Kolkata-700 118, March 2013.
- "Interdisciplinary Approach In College Level Chemistry", organized by Department of Chemistry, Ramakrishna Mission Vivekananda Centenary College, Rahara, Kolkata-700 118, September, 2011.
- 19. "International Webiner", organized by Department of Chemistry, VSM, Jhargram, July 2020.
- 20. "Fifth Chemical Research Society of India (Kolkata Chapter) Symposium", organized by Department of Chemistry, Jadavpur University Kolkata- 700 032, August 2, 2007.
- 21. "National Symposium on Current Trends in Chemistry", organized by Department of Chemistry, University of Kalyani, Kalyani-741235, January 30-31, 2007.
- "International Symposium on Current Perspectives in Organic Chemistry", organized by Department of Chemistry, Indian Association for the Cultivation of Science, Jadavpur, Kolkata-700 032, December 7-9. 2006.
- 23. National Symposium on Organic Chemistry-III (NSOC-III): Recent Trends and Perspectives organized by Department of Chemistry, Jadavpur University, Kolkata-700 032, February 22-23, 2006.
- 24. "Nineteenth National Symposium on Organic Chemistry (NASOC-XIX)", organized by Department of Chemistry, University Of Calcutta, 92, A.P.C. Road, Kolkata-700 009, March 29, 2005.
- 25. "7th CRSI National Symposium in Chemistry", organized by Indian Association for the Cultivation of Science, Kolkata-700 032, February 4-6, 2005.
- 26. "Eighteenth National Symposium on Organic Chemistry (NASOC-XVIII)", organized by Department of Chemistry, University Of Calcutta, 92, A.P.C. Road, Kolkata-700 009. March 26, 2004.
- 27. "National Symposium on Organic Chemistry-II (NSOC-II): Current Trends and Prospects", organized by Department of Chemistry, Jadavpur University, Kolkata-700 032. December 17, 2003.

#### **Academic Achievements:**

- UGC NET
- ➢ GATE
- First Position in the three-day International Conference on Emerging Research Trends in Chemical Sciences, organized by Govt. Post Graduate College Rajouri, University of Jammu, July 24-26, 2020.

I certify that information furnished above is true to the best of my knowledge and belief.

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