Dr. YADAGIRI BHONGIRI

Phone: 91-7032909546

Email: bygiriou@gmail.com **and** bygiri@osmania.ac.in

Professor
Department of Chemistry
University College of Science
Osmania University
Hyderabad
INDIA

Career conspectus

- **Professor (2022-Till date):**
  Department of Chemistry, Osmania University, Hyderabad –500007, Telangana, India.
- **Associate Professor (2019-2022):**
  Department of Chemistry, Osmania University, Hyderabad –500007, Telangana, India.
- **Assistant Professor (2007-2019)**:
  Department of Chemistry, Osmania University, Hyderabad –500007, Telangana, India.
- **Ph.D. (2004-2010):**
  Indian Institute of Chemical Technology (CSIR), Tarnaka, Hyderabad –500007, Telangana, India.
- **Project Assistant (2002-2004):**
  Indian Institute of Chemical Technology (CSIR), Tarnaka, Hyderabad –500007, Telangana, India.

Awards & Affiliations

- Qualified in National Eligibility Test (**NET**) for Research Fellowship and Eligibility for Lectureship in India in the year 2001.
- Qualified in Graduate Aptitude Test in Engineering (**GATE**), conducted by Human Resource Development (HRD), India in the year 2001.
- Qualified in OU Ph. D. Entrance test, conducted by Osmania University, Hyderabad, India
  2000.

Areas of Interest:

- Synthesis of various bioactive heterocyclic compounds and Lipids.
- Design and synthesis of new chemical entities in the area of cancer. Inflammation (PDE-4 inhibitors) and antimicrobial agents
- Tandem/Cascade Catalytic reactions

Supervision of Masters Dissertation: Doctoral Supervision: 01 (Awarded) and 06 (On going)

Proficiency Forte:

- Finalization of synthetic schemes for various novel molecules
- Utilizing the resources like scifinder and search engines like google.
- Guiding team members for planning of experiments and also conducting the experiments.
- Understanding overall process for new products and guiding the team.
- Framing the work as per the publication formats / patents.
- Identification and liaisoning with external Institutions for collaborative research.

Projects:

1. UGC SERO Minor research Project. (Completed)
2. DST SERB-SUR Project (30 Lakhs). (Ongoing)

Patents

1. A process for the preparation of phytosteryl ferulate, B L A Prabhavathi Devi, **B Yadagiri**, Sanjit Kanjilal, S Rama Krishna, K Madhusudhana, P V Diwan, R B N Prasad, US Publication No. US 2012/0108833 A1, Pub Date May 3, 2012).
2. A process for the preparation of phytosteryl ferulate, B L A Prabhavathi Devi, **B Yadagiri**, Sanjit Kanjilal, S Rama Krishna, K Madhusudhana, P V Diwan, R B N Prasad, JP2012518681A (2012-08-16).
3. A process for the preparation of phytosteryl ferulate, B L A Prabhavathi Devi, **B Yadagiri**, Sanjit Kanjilal, S Rama Krishna, K Madhusudhana, P V Diwan, R B N Prasad, CN102421788 A (18-4-2012).

4. A process for the preparation of phytosteryl ferulate, B L A Prabhavathi Devi, **B Yadagiri**, Sanjit Kanjilal, S Rama Krishna, K Madhusudhana, P V Diwan, R B N Prasad, PCT/IN2010/000109 dt/ 25/02/2010 (Pub. No. WO/2010/097810 (A3), publication date: 21/10/10) [PT-542, NF-202/08].

Publications

1. Ag-Li-ZnO nanostructures for efficient photocatalytic degradation of organic dyes and textile wastewater under visible light treatment. Keshavulu Masula, Ranjith Kore, Yadagiri Bhongiri, Someshwar Pola, Manohar Basude. [**Journal of Molecular Structure** ***1305, 137750*** **(2024)]**
2. Synthesis and biological evalution of 8-hydroxyquinoline incorporated schiffs bases as antimicrobial agents. Rambabu, J Ramchader, B Sakram, **B Yadagiri [*WJPPS* (in Press)]**
3. Evolution of Photocatalytic Properties of NiO-Bi_2O_3 Nanocomposite Material and comparison with pristine Oxides for visible light-induced efficient photocatalytic removal of dyes and agricultural soil pollutants. Keshavulu Masula, Sreedhar P, Vijay Kumar P, **Yadagiri Bhongiri,** Someshwar Pola, Manohar Basude. **[*Materials Science in Semiconductor Processing, 160, 107432 (2023)*]**
4. Synthesis, Spectroscopic Characterization, DNA binding and DFT/PCM calculations of New Hydrogen-bonded Charge Transfer complex between 4-Dimethylaminopyridine and Chloranilic acid. Sundarpal Vudutha, Shashi kanth Boddu, Rajitha Nampally, **Yadagiri Bhongiri* [*Result in Chemistry, 5, 100694*** **(2023)]**
5. Microwave Assisted Synthesis of Benzoxazole-Triazole Hybrid Derivatives as Antimicrobial Agents. Amool Halwale and **B. Yadagiri*.** [***Asian Journal of Chemistry****, 34, 4 (***2022***)***]
6. Organic material based on hetero polycyclic aromatic hydrocarbons for organic thin-film transistor applications. Suresh Kilaru, Ramesh Gade, **Yadagiri Bhongiri,** Anuj Tripathi, Prabhakar Chetti, Someshwar Pola. [***Materials Science in Semiconductor Processing****, 147, 106730* **(2022)]**
7. Evolution of photocatalytic activity of Ce_2O_2-Bi_2O_3 composite material for waste water degradation under visible-light irradiation. Keshavulu Masula, **Yadagiri Bhonagiri,** G. Raghav Rao, P. Vijay Kumar, Someshwar Pola, Manohar Basude. **[*Optical Materials, 126, 112201*** **(2022)]**
8. Synthesis of new Zn (II) complexes for photo decomposition of organic dye pollutants, industrial wastewater and photo-oxidation of methyl arenes under visible-light. Jakeer Ahemed, Jakeer

Pasha, Venkateshwar Rao D, Ranjith Kore, Ramesh Gade, **Yadagiri Bhongiri***, Prabhakar Chetti, Someshwar Pola. **[*Journal of Photochemistry & Photobiology, A: Chemistry 419 113455,* (2021*)*]**

9. New indolo[1,2-*c*]quinazolines for single-crystal field-effect transistor: A united experimental and theoretical studies. Venkat Swamy Puli, Suresh Kilaru, **Yadagiri Bhongiri**, Sreenath Reddy Marri, Anuj Tripathi, Prabhakar Chetti, Anindita Chatterjee, Kiran Kumar Vukoti, Someshwar Pola, **[*Journal of Physical Organic Chemistry, 34, 12, e4276,* (2021*)*]**
10. A new Zn(II) complex-composite material: piezoenhanced photomineralization of organic pollutants and wastewater from the lubricant industry. Venkateshwar Rao D. Mahesh Subburu, Ramesh Gade, Manohar Basude, Prabhakar Chetti, Narendra Babu Simhachalam, Penumaka Nagababu, **Yadagiri Bhongiri*,** and Someshwar Pola. **[*Environ. Sci.: Water Res. Technol., 7, 1737,* (2021)]**
11. Novel zinc oxide supported lithium oxide catalyst for solvent free Knoevenagel condensation with high catalytic activity A Manohar Basude, Prasad Sunkara, Keshavulu M, Veerasomaiah Puppala;,**Yadagiri Bhonagiri,** Vijay Kumar P, **[*Journal of Chemical Science* 133, 67, (2021)]**
12. Micellar effects on the kinetics and mechanism of ceric ammonium nitrate oxidation of bicyclic monoterpenes under acid free conditions, Rajitha Nampally, Shylaja Somannagari,, Chinna Rajanna Kamatala, **Yadagiri Bhongiri**, Umesh Kumar Utkoor **[*Chemical Data Collections 3, 100645*, (2021)].**
13. New Indolo[3,2-b]indole based small organic molecules for Organic Thin Film Transistors (OTFTs): A Combined Experimental and DFTStudy. Venkat Swamy Puli, Mahesh Subburu, **Bhongiri Yadagiri,** Anuj Tripathi, K. R. S. Prasad,Anindita Chatterjee, Someshwar Pola, and Prabhakar Chetti**. [*Journal of Molecular Structure 1229, 5, 129491, (*2021*)*].**
14. Acetylation of Phenols,Alcohols and Amines Catalyzed by Monoammonium Salt of 12-Tungstophosphoric Acid under Ambient Conditions. Nampally Rajitha, Banothu Jeevanlal, Sunkari Jyothi and **Bhongiri Yadagiri***, **[*Journal of Applicable Chemistry 8(1), 146-153* (2019)].**
15. Evolution of physical and photocatalytic properties of new Zn(II) and Ru(II) complexes. Venkanna Gugulothu, Jakeer Ahemed, Mahesh Subburu, **Bhongiri Yadagiri**, Ritu Mittal, Chetti Prabhakar, Someshwar Pola, **[*Polyhedron 170, 412–423 (*2019*)*].**
16. Poly ethylene glycols as efficient catalysts for the oxidation of bicyclic monoterpenes by ceric

ammonium nitrate in acetonitrile under acid free conditions Kinetic and mechanistic approach. N. Rajitha, S. Shylaja, K. C. Rajanna*, **B. Yadagiri.** **[International *Journal of Chemical Kinetics 10, 21168* (2018)].**

17. Ultrasonically Assisted Substitution and Oxidation Reaction with Camphor. N. Rajitha, K. C. Rajanna*, **B. Yadagiri** and J. Ramchander **[Rasayan *Journal of Chemistry10 (1), 206-217* (2017)].**

18. Synthesis of New Fused Heterocyclic Aromatic Hydrocarbons via C-S and C-C bonds formation by C-H Bond Activation in the Presence of New Pd(II) Schiff's Base Complexes. **Yadagiri Bhongiri**, Ramchander jadhav, Prabhakar Ch, Venkanna G. **[*RSC Adv., 6, 88321-88331* (2016)]**

19. A Mild and an Efficient Synthesis of Bis(indolyl)methane Derivatives Catalyzed by Monoammonium Salt of 12-Tungstophosphoric Acid. **B. Y. Giri,** B. L. A. Prabavathi Devi, K. Vijaya Lakshimi, R. B. N. Prasad N. Lingaiah, P. S. Sai Prasad. **[*Indian Jr. of hemistry 51B, 1731-1737* (2012)].**

20. A Mild and an Efficient Method for the Synthesis of Quinoxaline Derivatives Catalyzed by Monoammonium Salt of 12-Tungstophosphoric Acid. Bethala Lakshmi anu Prabhavathi Devi, Kunkuma Vijayalakshmi, **Bhongiri Yadagiri**, Rachapudi Badari Narayana Prasad, Potharaju Seetharamanjaneya Sai Prasad, **[*European Journal of Chemistry2(4) 495-498* (2011)].**

21. Preparation of Biodiesel from High FFA Rice Bran Oil using Solid Acid Catalyst. **B. Y. Giri**, B. L. A. Prabavathi Devi, N. Lingaiah, P. S. Sai Prasad and R. B. N. Prasad **[*Jr. Lipid Sci. & Tech.*, Vol.41, No.3, 98-101 (2009)]**.

22. A Simple and an Efficient Method for the Synthesis of Benzimidazole Derivatives using Monoammonium Salt of 12-Tungstophosphoric Acid. **B. Y. Giri,** B. L. A. Prabavathi Devi, K. N. Gangadhar, K. Vijaya Lakshimi, N. Lingaiah, P. S. Sai Prasad and R. B. N. Prasad **[*Synth. Commun.* 37: 14, 2331-2336 (2007)].**

23. An Efficient Method for the Synthesis of 1, 5-Benzodiazepine Derivatives Catalyzed by Monoammonium Salt of 12-Tungstophosphoric Acid. **B. Y. Giri,** B. L. A. Prabavathi devi, K. Vijaya lakshmi, N. Lingaiah, P. S. Sai Prasad, R. B. N. Prasad, **[*synth. commun.* 36, 3797-3801 (2006)]**.

24. Selective Esterification of Aliphatic Carboxylic Acids in Presence of Aromatic Carboxylic Acids over Ammonium Salt of 12-Tungstophospharic Acid. **B. Y. Giri**, B. L. A. Prabhavathi devi, K.

N. Gangadhar, K. Narasimha rao, N. Lingaiah, P. S. Sai Prasad, R. B. N. Prasad, **[*Synth. Commun*. 36, 7-11 (2006)]**.

25. Esterification of Palmitic Acid on the Monoammonium Salt of 12-Tungstophosphoric Acid the Influence of Partial Proton Exchange on the Activity of the Catalyst. **B. Y. Giri,** K. Narasimha Rao, B. L. A. Prabhavathi Devi, N. Lingaiah, I. Suryanarayana, R. B. N. Prasad, P. S. Sai Prasad, **[*Cat. Commun.* 6, 788–792, (2005)].**

Publications to be communicated

1. Synthesis, Anticancer activity and molecular Docking Studies of Coumarin, Thiazolidine-2-thiones and 1,2,3-triazole Hybrids. Amool Halwale, Vishnu Thummu, Rajitha Nampally, Manohar Basude and **Yadagiri Bhongiri*** **[**Communicated to ***Chemistry Select*****]**
2. Charge Transfer Interaction Dynamics between MHQ and DNP: Synthesis, Spectroscopic Characterization, DNA Binding and Density Functional Theory Studies. Sundarpal Vudutha, Shashi kanth Boddu, Rajitha Nampally, Someshwar Pola, Manohar Basude and **Yadagiri Bhongiri***. **[**Communicated to ***Journal of the Indian Chemical Society*****]**
3. An efficient Synthesis of heterocyclic–fatty acid hybrid derivatives of 2(1, 3-dioxoisindolin-2-yl) ethyl ester, Biological evaluation and their molecular Docking studies. Manohar Barla, Rajitha Nampally and **Yadagiri Bhongiri*** **[**To be Communicated to Chemical Biology & Drug Design**]**
4. Synthesis, biological activity and molecular Docking Studies of Coumarin, Indolyl-1,2,3-triazole derivatives. Amool Halwale, Rajitha Nampally and **Yadagiri Bhongiri*** **[**To be Communicated to ***Result in Chemistry*****]**
5. Synthesis and biological activities of Methyl Salicylate Conjugated Triazole Heterocyclic Compounds. Hanuma, N. Rajitha and **B. Yadagiri*** **[**To be communicated to ***Journal of Molecular Structure*****]**
6. Enzymatic Esterification of Long-chain Fatty Acids with Fatty Alcohols in Water for the Preparation of Wax Esters. **B. Yadagiri,** N. Rajitha B. L. A. Prabhavathi Devi, and R. B. N. Prasad **[**To be communicated to ***Green Chemistry*****]**

Presentations & Participations

1. Poster Presented in “Indian Analytical Congress (IAC-2024)” jointly organized by Indian

Society of Analytical Scientists-Delhi chapter and CSIR IIP Dehradun, during 05-07th June, 2024 at CSIR IIP Dehradun, Uttarakhand. Manohar, B. Rajitha, N. **Yadagiri, B.**

2. Poster Presented in "A Two days National seminar on Emerging Trends in Chemical and Material Science and research" organized by Department of Chemistry, SR & BGNR Govt. Arts and Science College Khammam, on 25 & 26th February 2022.
3. Poster Presented in "Advanced in Chemical Research" organized by Department of Chemistry Kakatiya University, Warangal, on 29 & 30th March 2019.
4. Poster Presented in "International Conference for Development Discourse ICDD-2019" held at EFLU and NIN, Hyderabad on 8-10, February 2019.
5. Oral Presented in the Two Day National Seminar on "Synthetic Methodology and Modern Approaches in Chemical Science and Technology" organized by Department of Chemistry, GDC, Sadasivapet on 29th and 30th January 2019.
6. Oral Presented in International Conference on "Trend Setting Innovation in Chemical Sciences & Technology Nature Inspired Chemistry & Engineering (TSCST-NICE 2016) organized by JNTUH, Hyderabad, Telangana State, India. October 4th to 6th, 2016.
7. Oral Presented in the National Seminar on "Recent Applications in Medicinal and Material Device" (NSRAMMD) on 2nd July 2016 at Nizam College OU, Hyderabad, Telangana State, India.
8. Oral Presented in the Conference NCSCB – 2015 held at Mahatma Gandhi Institute of Technology, Hyderabad, India, March 19-20, 2015. Acetylation of Phenols, Alcohols and Amines Catalyzed by Mono Ammonium salt of 12-Tungstophosphoric acid under Solvent-Free Conditions. **B. Yadagiri, N.Rajitha**
9. Participated in the National seminar on "New Dimensions in Chemical sciences" NDCS-2010 Post Graduate College of Science, Saifabad, Osmania University, Hyderabad, India, 30th January 2010
10. Participated in Indo-Us CCNP 2006 Conference on "New Bioactive Molecules in Pharmaceutical Research-Contribution of Natural Products" Scientific Programme Indian Institute of Chemical Technology, Hyderabad, India, November 13-14, 2006
11. Poster Presented in International Seminar on "New Horizons In Lipids and Specialty Oleochemicals" and "Lipids Expo 2005" Indian Institute of Chemical Technology, Hyderabad, India, December 2-3, 2005. Preparation of Biodiesel from High FFA Rice Bran Oil using Solid

Acid Catalyst. **B. Y. Giri**, B. L. A. Prabhavathi devi, P. S. Sai prasad and R. B. N. Prasad.

12. Poster Presentation in International Conference on "Technological Developments in the Field of Oils, Fats and Allied Products" Park Hotel, Kolkata, India, November 21-23, 2003
    Selective Esterification of Aliphatic Carboxylic Acids in Presence of Aromatic Carboxylic Acids over Monoammonium Aalt of 12-Tungstophospharic acid**. B. Y. Giri,** B. L. A. Prabhavathi Devi, K. N. Gangadhar, K. Narasimha Rao, N. Lingaiah, P. S. Sai Prasad and R. B. N. Prasad.
13. Participated in Otai-Jocs Asian Conference – 2002 and International Exhibition on Lipids, Fats and Oils, Hotel Le-Meridian, Janpath, New Delhi, India, December 6-8, 2002.