

## GMU - Faculty & Staff Profile Templet



### **Dr. Kiran M S**

Assistant Professor in Chemistry

#### **Faculty**

Faculty of Basic and Applied Sciences

#### **School / Program**

School of Biological and Applied sciences/  
B.Tech

#### **Faculty Introduction**

Dr. Kiran M. S is an Assistant Professor at G. M. University, Davanagere, specialized in Nanotechnology and Material Science. He holds a Ph.D. from Visvesvaraya Technological University (VTU), Belgaum, with research focused on the synthesis, characterization, and application studies of metal and metal nanocomposite materials. Dr. Kiran has published several research papers in reputed international journals and has presented his work at various national conferences. His research primarily explores the biological and catalytic applications of nanomaterials. Prior to joining academia, he served as a Deputy Officer (QC & QA) at Grasim Industries Ltd., and other industries, gaining eight years of valuable industrial experience. A dedicated educator and researcher, Dr. Kiran is committed to promoting scientific innovation, research excellence, and student development.

#### **Qualifications**

##### **Ph.D. (Chemistry)**

Visvesvaraya Technological University (VTU), Belgaum, 2021

##### **M. Sc. (Analytical Chemistry)**

Davanagere University – Davanagere, Karnataka, 2014

##### **B.Sc (PCM)**

Davanagere University – Davanagere, Karnataka, 2012

#### **Experience**

##### **Teaching**

- 1.9 Years at G. M. University, Davanagere

##### **Industry**

- 2.5 Years at G M Agro & Beverages Pvt. Ltd – Davanagere
- 5.5 Years at Grasim Industries Ltd, Aditya Birla Group, Kumarappattanam, Haveri.

### Research

- Synthesis of Metal Nanoparticles from Medicinal Plants Extracts and Comparative Study of their Biological Applications

### Training Program Attended

- Two-day workshop on LATEX held on 22nd and 23rd of July 2016 organized by Department of Computer Science and Engineering in G M Institute of Technology, Davangere, India.
- Workshop on 'Managing Research Literature using Mendeley' organized by Amity University Madhya Pradesh and Elsevier on 5th Feb, 2022.

### Research Interest

- Nanomaterials
- Material Science
- Phytochemistry
- Medicinal Chemistry
- Biological and Catalytical Applications

### Awards & Achievements

- University second rank in MSc – 2014
- Best Employ - 2022

### Publication / Patents

- Ph.D. Dissertation:
- National Conference Papers: 02
- International Conference Papers: 01
- National Journal Papers:
- International Journal Papers: 10
  - **M. S. Kiran**, V. S. Betageri, C. R. R. Kumar, S. P. Vinay, M. S. Latha, In-Vitro Antibacterial, Antioxidant and Cytotoxic Potential of Silver Nanoparticles Synthesized Using Novel *Eucalyptus tereticornis* Leaves Extract, *J. Inorg. Organomet. Polym.*, 30 (2020), 2916–2925.  
**DOI:** 10.1007/s10904-020-01443-7
  - **M. S. Kiran**, V. S. Betageri, C. R. R. Kumar, S. P. Vinay, M. S. Latha, Synthesis of gold nanoparticles using novel *Eucalyptus tereticornis* and their in-vitro antibacterial, antioxidant and anticancer studies, *Advances in Natural Sciences: Nanoscience and Nanotechnology*, 11 (4) (2020).  
**DOI:** 10.1088/2043-6254/abc0f5
  - M. S. Kiran, C. R. R. Kumar, U. R. Shwetha, H. S. Onkarappa, V. S. Betageri, M. S. Latha, Green synthesis and characterization of gold nanoparticles from *Moringa oleifera* leaves and assessment of antioxidant, antidiabetic and anticancer properties, (2021): 100714.  
**DOI:** 10.1016/j.cdc.2021.100714
  - M. S. Kiran, M. S. Latha, N. B. Gokavi, G. H. Pujar, C. R. R. Kumar, Facile Green Synthesis and Characterization of *Moringa Oleifera* Extract-Capped Silver Nanoparticles (MO-Agnps) And Its

Biological Applications, IOP Conference Series: Materials Science and Engineering, 925 (1) (2020).

DOI: 10.1088/1757-899X/925/1/012055.

- C. R. R. Kumar, V. S. Betageri, G. Nagaraju, B. P. Suma, M. S. Kiran, G. H. Pujar, M. S. Latha, One-Pot Synthesis of ZnO Nanoparticles for Nitrite Sensing, Photocatalytic and Antibacterial Studies, *J. Inorg. Organomet. Polym.*, 30 (2020), 3476–3486. DOI: 10.1007/s10904-020-01544-3
- U. R. Shwetha, M. S. Latha, C. R. Kumar, M. S. Kiran, V. S. Betageri, Facile Synthesis of Zinc Oxide Nanoparticles Using Novel Areca catechu Leaves Extract and Their In Vitro Antidiabetic and Anticancer Studies. *J. Inorg. Organomet. Polym*, 30 (2020), 4876–4883. DOI: 10.1007/s10904-020-01575-w
- M. S. Kiran, V. S. Betageri, D. G. Prakasha, P. Veerasha, S. Kumar, A mathematical analysis of ongoing outbreak COVID-19 in India through non-singular derivative, *Numer. Meth. Partial Differ. Equ.*, (2020). DOI: 10.1002/num.22579
- U. R. Shwetha, C. R. Kumar, M. S. Kiran, V. S. Betageri, et al., Biogenic synthesis of NiO nanoparticles using areca catechu leaf extract and their antidiabetic and cytotoxic effects, *Molecules* 26 (2021). DOI: 10.3390/molecules26092448
- U. R. Shwetha, M. S. Latha, V. S. Betageri, G. H. Pujar, C. R. Kumar, M. S. Kiran, M. S. Sunita, N. B. Gokavi, Shiva Prasad Kollur, Facile green synthesis of ZnO–CuO nanocomposites using areca catechu leaves and their in vitro antidiabetic and cytotoxicity studies, 12 (2021) 045011. DOI: 10.1088/2043-6262/ac44a1
- Chapter: P. Veerasha, M. S. Kiran, L. Akinyemi, M. Yavuz, A Unified Approach for the Fractional System of Equations Arising in the Biochemical Reaction without Singular Kernel, *Fractional Calculus: New Applications in Understanding Nonlinear Phenomena*, Bentham Science Publisher, (2022), 210-231. DOI: 10.2174/9789815051933122030012
- **Communicated:** B. N. Veerabhadraswamy, N. P. Bhagya, K. Swaroop, M. S. Kiran\*, *Eucalyptus Tereticornis* Mediated Silver-doped Zinc oxide Nanostructures: Multifunctional agent for Antioxidant, Anticancer and Anticorrosion Applications, *Next Materials*.

#### Professional Membership

- Nil

#### Awards & Recognitions

- Second prize for the poster presentation in 14th state level ISTE students annual convention and 5th National Conference On Emerging Trends in Engineering Research and Management (NCETERM), held on 8th and 9th September 2017 at GMIT, Davanagere.
- Best paper presentation for the paper titled Facile Green Synthesis and Characterization of Moringa Oliefera Extract-Capped Silver Nanoparticles (MOAgnps) And Its Biological Applications in the 1st international conference on Computational Engineering And Material



Science – (ICCEMS 2020) organised by GM Institute of Technology, Davanagere.

#### **Administrative Responsibilities**

- Department Level: Time table Coordinator, Research Coordinator, Placement Coordinator
- University Level: Member, Centre for Industry / Government Sponsored Research and Development (CIGSRD)

#### **Workshops / FDPs / Seminars Attended**

- Two day workshop, Greenovate “25”, Zero waste society – Bengaluru.
- Paper presented at International conference on Computational Engineering and Materials science ICCEMS 2020, GM Institute of Technology, Davangere, India.
- "Rasaayan Sangooshti", the research symposium organized by the Department of Chemistry at IIT DHARWAD.
- One day faculty development programme - Revised syllabus of applied chemistry, VTU.

#### **Workshops / FDPs / Seminars Organized**

- Two-day workshop on “Intellectual Property Rights” organized by KSCST-GMIT IPR cell in association with patent information center, Karnataka state council for Science and Technology (KSCST) held on 17th and 18th September 2023.

#### **Projects Guided**

- UG Projects: 02
- PG Projects: 01

#### **Funded Projects / Grants Received**

- Extraction of nanocellulose from areca husk for pharmaceutical formulations – Nain – KTECH.
- Seed Money for research – R & I, G M University – Davanagere.

#### **Any Other Contributions**