Faculty Profile

I have teaching experience in key Chemical Engineering subjects including Thermodynamics, Chemical Reaction Engineering, Particulate Technology, and Heat Transfer. My academic contributions extend beyond teaching, with research papers published in reputed Scopus-indexed and Web of Science journals. My work reflects a blend of theoretical insight and practical relevance, contributing to advancements in the field. In addition to publications, I have several patents to my credit, both published and granted, highlighting the applied nature of my research. I am committed to academic excellence, innovation, and fostering student engagement through a combination of rigorous instruction and research-informed teaching practices.



Personal Information

Name: Dr VIDYA C

Designation: Assistant ProfessorDepartment: Chemical Engineering

• **Email:** vidyac@rvce.edu.in

Phone: 9620166222

Google Scholar: https://scholar.google.co.in/citations?user=qcqz-hAAAAAJ&hl=en/ Q-1064-2016 /

Linkedin: https://www.linkedin.com/in/vidya-c-4a4b9bba/?originalSubdomain=in,

ORCID: https://orcid.org/0000-0002-7384-965X

Domain of Expertise

Research Focus

Primary Area: Nanotechnology, Water treatment

Allied Areas: Nano biotechnology

Academic Qualifications

• Ph.D.:Nanotechnology, VTU, 2018,

• M.Tech: Chemical Engineering, VTU, 2002

• **B.E.**: Chemical Engineering, Bangalore University, 1988

Professional Experience

Experience			
Duration (From- To)			
2000-2007			
or 2007-till date			

Publications & Patents

Journal Publications

PUBLICATIONS

- Vidya C,Ajith P. Arun, Swarna M. Patra, Vinutha Moses, Prashantha Kalappa & Sudeep Mudhulu, Promising nanomaterials for biosensing applications: a review of nanomaterials, sensor design strategies, and sensing mechanisms, IONICS, Springer Nature, 7th June 2025, https://doi.org/10.1007/s11581-025-06412-z, Impact Factor 2.4, Q2, indexed in Web of Science.
- Shilpa Hiremath, Sudeep Mudhulu, C. Vidya, M. N. Chandraprabha, Vinutha Moses & C. Manjunatha, Green synthesized nano-TiO2 from Tamarindusindica leaf extract for photodegradation of combination of dyes by suspension and immobilization on inert supports, Green Chemistry Letters and Reviews, 2024, VOL. 17, NO. 1, 2420711 https://doi.org/10.1080/17518253.2024.2420711, Q1, Impact Factor 5.8. Indexed in Web of Science.

- 3. M.R. Rajani, R. Ravishankar, Srinidhi Raghavan., K Asha, C. Vidya, G.R. Suma, K. Prashantha Effective removal of Cr (VI) from an aqueous solution using a carbon coated NiFe2O4 nano-adsorbent, Colloids and Surfaces A: Physicochemical and Engineering Aspects 693 (2024) 134012
- 4. Rajani M R, Ravishankar R, Maya Naik K, Srinidhi Raghavan M, Vidya C, Girish Kumar S, Manjunatha C, Carbonaceous MnFe2O4 nano-adsorbent: Synthesis, characterisation and investigations on chromium (VI) ions removal efficiency from aqueous solution, Applied Surface Science Advances 16 (2023) 100434
- 5. Gayitri H M, Murad Q. A. Al Gunaid, Suma G R, Vidya C, Manimozhi R, Kumar J R PVA Polymer (Cao/Cdo/Al₂O₃) nanocomposites: toward improved super capacitor and opto electrical properties, Eur. Chem. Bull. 2023, 12(Special Issue 10), 671 684
- Ashni Melissa Mery Prabhu, Ujwal Shreenag Meda², Anupama V Joshi, Vidya C and Ranganath D, Competitor Analysis of Hydrogen Sensing Systems, 2022 ECS - The ElectrochemicalSociety, <u>ECS Transactions</u>, <u>Volume 107</u>, <u>Number 1</u>Citation Ashni Melissa Mery Prabhu *et al* 2022 ECS Trans. 107 4377
- 7. Vidya C, C. Manjunatha, A. Pranjal, I. Faraaz & K. Prashantha, A multifunctional nanostructured molybdenum disulphide (MoS2): an overview on synthesis, structural features, and potential applications, MATERIALS RESEARCH INNOVATIONS, Taylor and Francis, Aug 2022, https://doi.org/10.1080/14328917.2022.2109887
- 8. Vidya C, Kiran Shenoy H2, Vinutha Moses, Chetan N, Nanomaterials For Hydrogen Generation: A Review, Journal of University of Shanghai for Science and Technology, Volume 24, Issue 3, March 2022 ISSN: 1007-6735
- 9. C. Manjunatha, N. Srinivasa, S. Samriddhi, C. Vidya, S. Ashoka Studies on anion-induced structural transformations of iron(III) (Hydr) oxide micro-nanostructures and their oxygen evolution reaction performance, Solid State Sciences 106 (2020) 106314, https://doi.org/10.1016/j.solidstatesciences.2020.106314,ISSN 1293-2558
- 10. C. Vidya, C. Manjunatha, M Sudeep, S. Ashoka, M A Lourdu Antony Raj, Photo-assisted mineralization of titan yellow dye using ZnO nanorods synthesized via environmental

- benign route, Journal: Springer Nature, Received: 26 October 2019 / Accepted: 14 March 2020, https://doi.org/10.1007/s42452-020-2537-2, E-ISSN: 25233971
- Akhil Punneri Madathil, Siddarth Krishnaraja Achar, Vinutha Moses, Ujwal Shreenag Meda, N Chetan, C Vidya, Lourdu Antony Raj, Manjula Sarode, Use of Keratin Present in Chicken feather as a Hydrogen Storage Material: A Review, 2020, Vol 5(4), pp.148-155. E-ISSN: 0128-1852. https://doi.org/10.26776/ijemm.05.04.2020.04
- 12. Shilpa Hiremath, Antony Raj MAL, Chandra Prabha, C Vidya Tamarindus indica mediated biosynthesis of nano TiO2 and its application in photocatalytic degradation of Titan yellow, Journal of environmental chemical engineering, 6(6), 7338-7346, 2018, ISSN:2213-3437 https://doi.org/10.1016/j.jece.2018.08.052
- 13. Vidya C., Manjunatha C., Chandraprabha M N., Megha Rajshekar., Antony Raj M AL., 2017. Hazard free green synthesis of ZnO nanophotocatalyst using Artocarpus Heterophyllus leaf extract for the degradation of Congo Red dye in water treatment applications., Journal of Environmental Chemical Engineering., 5 (2017) 3172–3180, ISSN:2213-3437, http://dx.doi.org/10.1016/j.jece.2017.05.058
- Vidya C., M.N. Chandra Prabha, M.A.L. Antony Raj. Green mediated synthesis of zinc oxide nanoparticles for the photocatalytic degradation of Rose Bengal dye. 2016.
 Environmental Nanotechnology, Monitoring & Management 6 (2016) 134–138.
 ISSN:2215-1532
- 15. Vidya C, S. Hiremath, M.N. Chandraprabha, M.A.L. Antonyraj, I.V. Sabaraya, A. Jain and K. Bansal, "Photo-catalytic degradation of Reactive Yellow 81 using bio-synthesized Zinc Oxide nanoparticles", International Review of Applied Biotechnology and Biochemistry, Vol. 2, No. 1, pp. 159-168, 2014.

Conference Papers

• S Varun, B Karthik, C Manjunatha, C Vidya, Z-scheme photocatalyst for reduction CO2 to renewable fuels: a promising and powerful strategy to curb carbon footprints, SGS-Engineering & Sciences, 2021/9/16, Vol (1) Issue(1)

Books/Book Chapters

 Lingayya Hiremath, Vijaya Kumar G and Vidya C "Development of Nano Bio-composite Membranes for Wastewater Treatment" is accepted for book Chapter in, Advanced Engineering Research and Applications (AERA) by Research India Publications, 2017

Patents [Filed / Published / Granted]

- 1. Novel Nano Coating Based Opto Electronic Devices, Application No.202241026152 A, The Patent Office Journal No. 20/2022 Dated 20/05/20, published
- 2. Construction of an Aerobic Pyrolyzer for the generation of guaiacol from Lignin Sludge Agrawal, Application No: 202341018953, Published
- 3. A Novel Apparatus for Enzymatic Hydrolysis of Organic Waste to Enhance Nutrient Content. Application No.202341082027.Filing Date:01/01/2024.

Ongoing & Completed Consultancy Projects

- Development of the prototype of Municipal Waste Segregator Funding Agency: Greeneria
 Pvt Ltd Jayanagar East End Bangalore 560069, Duration: 2023.
- Improvisation in PFD Funding Agency: Greeneria Pvt Ltd Jayanagar East End Bangalore 560069, Duration: 2023-2025.

Professional Memberships

- IIChE
- ISTME

Awards & Recognitions

- Honored by RSST for PhD completion in 2018.
- Honored by ISTE Chapter, RVCE for PhD completion in 2018.

Student Supervision

Ph.D. Candidates: NIL

M.Tech/M.Sc. Students: 04

Undergraduate Research Mentees: 16

Professional Roles

- Chaired session at the Fifth International Conference on Recent Advances in Engineering Sciences (ICRAES 2024) organised by M S Ramaiah Institute of Technology, Bengaluru held on 14th and 15 November 2024
- Chaired session in International Conference on Advanced Materials for Sustainable Technologies(ICAMST-2024) at MSRIT organised in collaboration with King Mongkut's University of Technology North Bangkok (KMUTNB)) held between 22-23 August 2024

Teaching

Core Courses: [Current semester]

• CH234AI, Chemical Engineering Thermodynamics

Advanced/Lab Courses:

- Chemical Reaction Engineering
- Particulate Technology
- Heat Transfer

Professional Roles

Responsibilities

- **Academic:** Skill Lab Coordinator, NPTEL Coordinator, Syllabus Coordinator, Lab In-charge for Chemical Reaction Engineering Lab
- Administrative: Sports Committee Member, IQAC Member,