


K. S. SCHOOL OF ENGINEERING & MANAGEMENT

15, Mallasandra, Off. Kanakapura Road, Bengaluru-560109, Karnataka, INDIA.

Faculty Name	Dr. SWARNA S	
Designation	ASSOCIATE PROFESSOR & HOD- CHEMISTRY	
Educational Qualification	M.Sc., Ph.D.	
Experience in Years	Teaching: 18 years (14.7 Years in KSSEM)	
Areas of Interest	Organic Chemistry, Biodiesel, Nanomaterials, Renewable energy	
E-mail	Swarna.s@kssem.edu.in	

PHOTO

Educational Details

Examination/ Degree	College / University	Year of Passing
UG	A.E.S.National College/Bangalore	2003
PG	NMKRV/Bangalore	2005
Ph.D	SaIT/VTU	2022

Publications

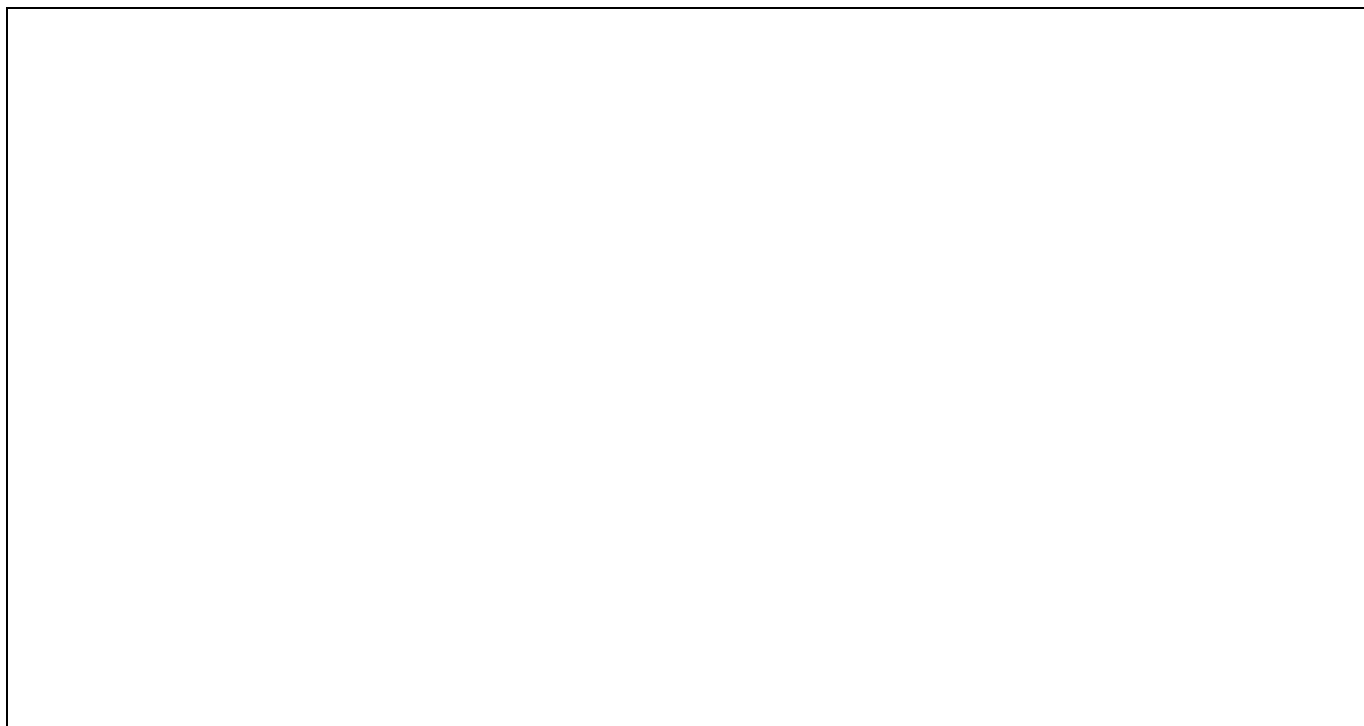
Journal Publications:

1. S. Swarna, Biodiesel synthesis from mixed non-edible oil feedstock using K_2CO_3 in NH_4OH Catalyst mixture, Energy Sources, Part A: Recovery, Utilization, and Environmental Effects, **Taylor & Francis**, 2023, 6901-6917(45), doi: 0.1080/15567036.2023.2216163.
2. S. Swarna S, Phase Transition, Molecular Polarization and Histogram Equalization Studies on Two Liquid Crystals of Same terminal group and different linkage and end chains, Indian Journal of Natural Sciences, 2023, Vol.14/80/Oct/2023, ISSN: 0976-0997.
3. S. Swarna. Experimental assessment of ternary fuel blends of diesel, hybrid biodiesel and alcohol in naturally aspirated CI engine. International Journal of Environmental Science and Technology. **Springer**. 2021; Published online on 9-08-2021. <https://doi.org/10.1007/s13762-021-03586-7>
4. S. Swarna. K_2CO_3 in NH_4OH as an Effective Catalyst Mixture for the transesterification of High Acid Value Mahua Oil. Asian Journal of Chemistry. 2021;33(11)2807-2812. <https://doi.org/10.14233/ajchem.2021.23395>

5. Swarna S, Methanolysis of castor oil using potassium carbonate in ammonium hydroxide as a catalyst. International Journal of Scientific Research and Review. 2019 ;7 (5):31-238. UGC Journal No.: 64650.
6. Swarna S, Synthesis of Pongamia oil Biodiesel using Potassium carbonate as a Catalyst in Presence of Liquor Ammonia as a Catalyst Promoter, IJRAR. 2018; 5(4):231-236. www.ijrar.org (E-ISSN 2348-1269, P- ISSN 2349-5138)

Conference Papers:

1. **Swarna S**, Synergistic Catalysis of Neem Oil for Biodiesel Production Using a K_2CO_3 - NH_4OH System, International Conference on Recent Innovations in Engineering Science & Technology(ICRIET-2025),9th-10th May 2025.KSIT, Bengalore.
2. **Swarna S**, Antibacterial and antifungal activities of Ag nanoparticles prepared by Artocarpus gomezianus fruit mediated facile green combustion method. International Conference on Frontiers in Engineering, Management and Science 27th & 28th April 2022, ISBN: 978-93-92105-59-3.
3. **Swarna S**, Phase Transition, Molecular Polarization and Histogram Equalization Studies on Two Liquid Crystals of Same terminal group and different linkage and end chains. International Conference on Green Technology by Research Education Solutions-Virtual mode from 16th to 17th July 2022, E-ISBN:978-93-94779-26-6
4. **Swarna S**, K_2CO_3 in NH_4OH an effective catalyst mixture for the Transesterification of Non-edible oils, National E-Conference on Advanced Research in Materials Science, (NCARMS-2021), Feb 2021, Kamaraj college Thoothukudi, Tamilnadu. (**Awarded with best oral presentation certificate**).
5. **Swarna S**, Methanolysis Of Castor Oil Using Potassium Carbonate in Ammonium Hydroxide as A Catalyst, .International Conference on Latest Advancement and Future trends in Engineering, Science and Management held on 3rd and 4th May 2019 at Sambram Institute of Technology, Bangalore.
6. Swarna S, Poster presentation on ‘Synthesis of Biodiesel from Neem oil and Comparison of the Performance of n-Hexane blended Biodiesel with unblended Biodiesel’. KSTA National Conference on Impact of Science and Technology on Society and Economy". Held during 8 - 9 of 2017 at Sri Krishnadevaraya University, Ballari.
7. **S. Swarna**,“Synthesis, spectral studies and biological activities of citalopram cobalt metal complexes”.National Conference on Applied Science and Humanities NCASH-15 held on 5th may 2015 at KSSEM., Bangalore.



Patents:

1. Sustainable -Cost effective and disposable CDFE204NPS-Graphite electrode for heavy metal Mercury detection, Indian, Filed and published, 202441000018A, 26/01/2024
2. Title of Invention: COMPOPAV,
Field of Invention: Chemical
Application No: 202241069574A,
Applied date: 02-12-2022
Published date: 09-12-2022.

Awards

1. **Teacher Of Excellence for 100% results in VTU Examination for Engineering Chemistry in the year 2010-2011.**
2. **Teacher Of Excellence for 100% results in VTU Examination for Engineering Chemistry in the year 2012-2013.**
3. **Awarded with best oral presentation certificate, National E-Conference on Advanced Research in Materials Science, (NCARMS-2021), Feb 2021, Kamaraj college Thoothukudi, Tamilnadu.**
4. **Appreciation letter for the role as a Resource Person in delivering a session on *Insight on 2022 Scheme* during the Induction Program for First Year B.E. Students, 2024–25 batch.**
5. **Appreciation letter for conducting Free online CET Classes for PU Students, organized by KSGI,2021-22**

Other Accomplishment

1. Served as **VTU-BOE Member** for the Chemistry Board during the academic year **2023–24**.
2. **Ph.D. Supervision** – One research scholar enrolled under my guidance.

Online Certification Courses:

1. Completed **Innovation Ambassador (IA) Training – Foundation Level** in online mode, organized by **MoE's Innovation Cell & AICTE (ICC 2024–25)**.
2. NPTEL-AICTE- 8 weeks Course on Energy Resources, Economics, and Sustainability: Completed the Course with Silver Elite Certificate.
3. NPTEL-AICTE- 12 weeks Course on Renewable Energy; Renewable Energy Engineering: Solar, Wind And Biomass Energy Systems : Completed the Course with Elite Certificate.
4. SPSS Masterclass: Learn SPSS from Scratch to Advanced, Duration: 32.5 Hours
Certificate url: Ude.my/UC-ce444a12-3a7e-46be-a6b1-b5ff577edcbc

Seminars / Workshops / Conferences /FDP Attended

1. State Level One Day Workshop on “Upgradation and Revision of Applied Chemistry Syllabus” hosted by Department of Chemistry, held at Maharaja Institute of Technology Mysore on 12th July 2025.
2. NPTEL-AICTE- 8 weeks Course on Energy Resources, Economics, and Sustainability Feb-Apr 2025 by SWAYM NPTEL-AICTE
3. National Webinar on Ratan Tata’s Leadership: A Modern Reflection of Bharatiya Wisdom in Management, CESS Talk Series ,October 26,2024
4. International webinar series on cutting edge engineering research, Department of Electrical and Electronics Engineering CIT, Gubbi ,NOV-2024
5. NPTEL-AICTE- 12 weeks Course on Renewable Energy; Renewable Energy Engineering: Solar, Wind And Biomass Energy Systems
6. Two-day Online Workshop on Emerging Trends In Applied Sciences-2024 held on 1st and 2nd August 2024 organized By Department of Basic Science and Humanities in association with IQAC at Moodlakatte Institute of Technology Kundapura-576217
7. FDP on “Current Trends in Applied Sciences”, at APS College of Engineering from 4th Dec 2023 to Dec 2023.
8. National Webinar on Best Preparation & Practices for Improving National Institutional Ranking Framework (NIRF) in Higher Education Institutions Organized by Ashok Goel Library, Rishihood University, Sonipat 29th January, 2024.
9. Logical Thinking and Problem Solving, KSSEM, 30/05/2024.
10. Insight to the leaders , KSSEM, 24TH Nov 2023
11. “Need of IPR Literacy for Academia and Research Institutions” , CSIR-NAL, 27TH July 2023.
12. “Casting Simulation Fundamentals” organized by Department of Mechanical Engineering, KSIT in association with “The Institute of Indian Foundrymen” , Bangalore chapter on 27th September 2023
13. Two day National Seminar on “Applications of Augmented Reality and Virtual Reality in Engineering” held on 14 and 15th Sep 2023, KSSEM.
14. FDP on “Recent Trends in Engineering materials, Nano Science and Nano Technology “Global Academy of Technology, held from 9th to 13th November 2020.
15. Five days e-FDP on “Recent trends in Material science”, from 2 to 11th October 2020 organized by Sapthagiri college of Engineering. Bangalore.
16. “Virtual labs-VTU Faculty Development Programme”, VTU, 19th-23rd October 2020,
17. One Week FDP on “Advancements in Science and it’s Applications in Engineering”, HITM, 22nd -26th June 2020.
18. Three days FDP-Workshop on “Recent Advances in Basic Sciences for Engineering Applications”, DSAM, 8th-10th Jan 2018
19. Quality Improvement Programme, Short term Course on “Physical Chemistry” IISc, 26-30th Dec-2016
20. Five Days FDP on Animation and Coreldraw,KSSEM,11th-15th July 2016
21. Two days FDP on Research Proposal Preparation towards Ph.D.,KSSEM,24th-25th June 2016
22. FDP on “Outcome Based Education & Bloom’s Taxonomy”,KSSEM,4th-5th December 2015
23. FDP on “Training the Trainer Workshop on Intellectual Property Right Significance for Academia”,KSSEM,31st July 2015
24. FDP on “Recent Advances in Nano Devices & Sensor Technology”,KSSEM,8th to 11th July 2013

25. Learning and Teaching Methodologies, KSSEM, 20-22 July 2011

Professional Membership

1. IWSA Life Member
2. Asia Society of Researchers
(ASR) Membership No.
R219093214
3. IAAC – FRTJQC-
CE001302.

Contact Details

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