

# Faculty Profile



**Dr. B. Yamini , M.Sc., M.Phil., Ph.D**

Assistant Professor and Department of Chemistry

## **HIGHLIGHTS:**

- Number of Journal Publications: 06
- H-Index: 02
- Project Funding Received: Nil
- Patents Published: 01
- Patents Granted: Nil

## **PROFESSIONAL LINKS:**

- Scopus ID: 60109341
- Scopus Link: <https://www.scopus.com/pages/organization/60109341>
- Google Scholar ID: C\_R5ZxIAAAAJ&gmla
- Anna University Faculty ID: 2122057
- AICTE Faculty ID: 479184719
- Anna University Supervisor ID:
- LinkedIn: <https://www.linkedin.com/in/dr-b-yamini-balasubramanian-a60a0b342/>

## **PROFESSIONAL BACKGROUND:**

- Teaching Experience till date: 16 years 3 months
- Industrial Experience: Nil

## **AREA OF SPECIALIZATION:**

1. Polymer chemistry
2. General Chemistry

### **Research Interests:**

1. Aliphatic polyesters
2. Drug delivery
3. Biodegradable polymers
4. Biocompatible polymers

## **PAPERS PUBLISHED:**

- Dr. Karnan Chandran, Kabilan R.V., Arunagiri C., Ramkumaar G.R., and B. Yamini Combined experimental and Theoretical Investigations on 1,4-Diazabicyclo [2.2.2] octane 4-nitrophenol (DONP) crystals, Journal of Molecular Structure, 1299 (2024) 137122.

- K. N. Marimuthu., Ruby thomas, B. Yamini, S. Bharathi and K. Murugavel, Water pollution due to dying effluents in Noyyal river, Tirupur-A case study, International Journal of Chem Tech Research, Sphnix Knowledge House, Vol.7, No.7, 3075- 3080, 2015.
- B.Yamini, R. Nanthini, Development of New Aliphatic Biocompatible Polymers from PEG 400 for their Applications, J. Indian Chem. Soc., Vol 96, 209 - 214, Jan 2019.
- B. Yamini, R. Nanthini, Synthesis, characterization and cytotoxicity of Certain PEG400 based biodegradable aliphatic Copolyesters, Rasayan Journal of Chemistry, Vol. 11, No. 2, 440 - 451, April - June, 2018.
- B. Yamini, R. Nanthini, Synthesis, characterization and comparison of Biodegradablealiphatic copolyesters: poly Ethylene glycol octanediolsebacate and Polyethylene glycol dodecanedioladipate, Rasayan Journal of Chemistry, Vol. 11, No. 1 ,413 - 425, January – March, 2018.
- B. Yamini, R. Nanthini, Synthesis and Spectral Characterization of Bio-compatible Copolyester using 1, 4 Cyclohexane Diol, Adv. Mater. Proc., Volume 5, Issue 1, 20010392 - 20010394, March - June, 2020.

#### **PATENTS PUBLISHED/GRANTED: 01 Published**

- LIPID NANOPARTICLES FOR DELIVERY OF NUCLEIC ACIDS AND ITS PERFORMANCE ANALYSIS, Application No.202441019708 and Publication Date: 29/03/2024

#### **COURSES CERTIFIED:**

- IUCEE International Engineering Educator certification Programme Completed Spring Aug 2023.
- NPTEL course completed for Industrial Inorganic Chemistry in the year April 2024.

#### **CONFERENCES/SEMINARS/WORKSHOPS ATTENDED:**

- Participated in the 5-day Virtual Research Development Programme on “AI Integrated Research” Organised by the Research & Development Cell and IntellectualProperty Rights Cell, Fatima College, Madurai between December 9 – 13, 2024.
- One day International Webinar on Multifunctional Materials- 2024” on 28th September 2024, organized by Department of Physics, SRM Institute of Science and Technology, Ramapuram, Chennai.
- Faculty Development Programme on “Recent Advancements in Chemistry” organized by the Department of Chemistry, Easwari Engineering College, Autonomous from 24.06.2024 – 29.06.24.
- “Participated in 7 DAYS NATIONAL LEVEL FDP ON PYTHON” organized by Star International Foundation for Research and Education on 19.03.2024 to 25.03.2024.
- Webinar on E-Waste Management organized by Rajeev Gandhi College of Management Sudies on 23<sup>rd</sup> March 2024.
- Participated in Five days online Faculty Development Program on “Recent Trends in chemical Science”, organized by PG and Research Department of Chemistry, Theivanai Ammal College for Women (Autonomous), Villupuram, Tamilnadu, India from 19.01.2024 to 24.01.2024.

- Faculty Development Programme on Recent Advances and Applications in Chemical Sciences” conducted by Department of Chemistry, Mohamed Sathak A.J. College of Engineering from 14.08.2023 to 18.08.2023.
- In Vitro Applications Of Polyethyleneglycol Succinate -Co- 1, 12- Dodecane Succinate Copolyesters, Simats School of Engineering, Chennai, 9<sup>th</sup> - 10th January 2023.
- Faculty Development Programme on Advanced Green Computing Technology in Healthcare, conducted by Saveetha IEEE student branch, Department of Medical Electronics, Saveetha Engineering College from 26.12.22 to 30.12.22.
- National Workshop on Art of Diversity and Inclusivity, conducted by Saveetha Teaching Learning Centre on 29th October 2022.
- 2nd Indo-Korea Virtual International Conference on Development of Advanced Materials for Future Technologies, conducted by Vellore Institute of Technology, Chennai, India on 14th – 15th May 2021.
- International Webinar on Cyclic and Linear Sweep Voltammetry -Fundamentals & Applications, organized by Bhaktavatsalam Memorial college for women, Affiliated to university of Madras accredited at ‘b+’ grade by NAAC, Chennai - 80, 31st May 2020.
- Assessment planning for Outcome based Education, conducted by Teaching Learning Center(TLC), IIT Madras, 21st Feb 2020.
- Biomedical and Pharmaceutical Applications of PEG 400 Copolyesters Using Dodecanedioic acid and Dodecane diol, PG and Research dept of Physics and Chemistry, Tiruvannamalai, 26 -27 Sep 2019.
- Synthesis and spectral characterization of Aliphatic Polyesters from Polyethylene glycol (PEG-400) and Aliphatic Acids, Dept. of Chemistry, Saveetha Engg. College, 22nd March 2019.
- National level seminar on Advances and Future Challenges in Material Science, Rajalakshmi Engineering College, Thandalam, 22nd Nov 2019.
- National level technical seminar on CHEMSORBS 19, Dr. M.G.R Educational and Research Institute, 26th September 2019.
- One day National Workshop on Microscale Analysis in Organic and Inorganic Chemistry, Sri Venkateshwara College of Engineering, Chennai, 19th July 2019.
- Synthesis and Spectral Characterization of Biocompatible Copolyester Using 1, 4 Cyclohexane Diol, Dept. of Physics, Saveetha Engg. College, 11 - 12 Dec 2018.
- Developments of New Aliphatic Biocompatible Polymers from PEG 400 for their Applications, Dept. of Inorganic Chemistry University of Madras, Guindy Campus, Chennai - 600025, 8th- 9th June 2018.
- Synthesis and Characterization of Biocompatible Aliphatic Polyester from Polyethylene glycol diol (PEG400) and 1,4 - cyclohexanediol, Dept. of Analytical Chemistry University of Madras, Guindy Campus, Chennai, 15th-17th Mar 2018.
- Preparation, Synthesis and Characterization of aliphatic polymers from 1, 4 - cyclohexanediol, Dept. of Chemistry, School of Basic Sciences VISTAS, Chennai - 600117, 28th Feb - 1st Mar 2018.
- An investigation into the synthesis and characterization of certain random aliphatic polyesters from Polyethyleneglycol-diol (PEG-400), PG & Research Department of Chemistry, Pachaiyappa’s College, Chennai 600030, 2nd& 3rd Feb 2018.

- Faculty Development Programme on Research Methodology - Tools and Techniques in Engineering, conducted by Dept. of Biomedical Engg, Saveetha Engineering College, and 26th - 27th Nov 2018.
- Faculty Development Programme conducted by Teaching Learning Centre, IIT Madras 22nd - 24th Nov 2018.
- Workshop on Engineering Instruments and Application conducted by Dept. of Physics, Saveetha Engineering College on 31st Aug 2018.
- National Seminar on Research and Innovations in Nanoscience and Nanotechnology [RINSNT - 2018], Saveetha Engineering College, 21st Apr 2018.
- Pedagogy for Online and Blended Teaching-Learning Process from IIT Bombay, Remote Center 1045 Saveetha Engineering College, Chennai, 14th Sep to 12th Oct 2017.
- FDP on Foundation Programme in ICT for Education-FDP101x from IIT Bombay, Remote Center 1045 Saveetha Engineering College, Chennai, Sep -2017.
- IEEE sponsored National Level Two Days FDP on Designing Research Projects, Proposal writing, Grants & Funding Agencies, Saveetha Engineering College, 26th - 27th Apr 2017.
- National seminar on Recent Analytical Techniques in Research of Chemistry, Saveetha Engineering College, Chennai, 2nd April 2016.
- Role of water-soluble Polymers used in Biomedical Applications, International Conference on Recent Trends in Analytical Chemistry, University of Madras, and 28th-30th December 2015.
- Water Pollution Due to Dyeing Effluents in Noyyal River, Presidency College (Autonomous), 5- 6 Feb 2015.
- ISTE short term Training Program on Environmental Physics, IIT Bombay, Remote Center 1045 Saveetha Engineering College, Chennai, 8th - 18th December 2015.
- ISTE short term Training Program on Environmental Studies, IIT Bombay, Remote Center 1045 Saveetha Engineering College, Chennai, Chennai, 2nd - 12th June 2015.
- National seminar on Hybrid Renewable Energy System, Saveetha Engineering College, Chennai, 19th - 21st February 2014.
- Synthesis and Characterization of Novel Biodegradable Aliphatic Copolyesters, Saveetha Engineering College, 5th Apr 2013.
- National Seminar on Modern Techniques for the Characterization of Polymeric Materials, VIT University, Chennai, 2nd March 2013.
- National seminar on Recent trends in Biomaterials for Tissue Engineering in association with Indian council of medical research, Velammal Institute of Technology, Chennai, 27th July 2012.
- ISTE WORKSHOP on Aakash for Education, Saveetha Engineering College, 10th & 11th Nov 2012.
- International Conference on Recent Advances in Biomaterials, Saveetha University, 17th & 18th Dec 2010.
- FDP on Pronunciation and Effective Communication, Saveetha Engineering College on 2nd - 4th Dec 2010.

#### **PROFESSIONAL MEMBERSHIPS:**

- Member in Indian Society for Technical Education from 2011 - LM 7836.