JSS Mahavidyapeetha

JSS Academy of Technical Education

Dr. Vishnuvardhan Road, Srinivasapura post Bangalore 560060
www. Jssateb.ac.in

FACULTY PROFILE

Department: Chemistry

1. Personal Details

NAME	Dr. Kathyayani D
DEPARTMENT	Chemistry
DESIGNATION	Assistant Professor
PHONE	+91 6360041236
EMAIL ID	kathyayanid@jssateb.ac.in
Date of Joining (JSSATEB)	17-02-2010

2. Experience

Total Experience in Years	Teaching: 16 Years	Industry: Nil	Research: 10 Years

3. Qualifications

COURSES	SPECIALIZATION	Year of Award	INSTITUTION	UNIVERSITY
B.E. / B.Sc.,	PCM	2007	JSS College for Women, Mysuru-09	University of Mysore
M.E. / M.Tech. / M.Sc.	General Chemistry	2009	Yuvaraja College Mysore-05	University of Mysore
Ph.D	Synthetic Organic Chemistry	2023	JSSATEB	VTU University
Post Doc.				

4. Research & Publications

Papers Published in Web of Science indexed Journals	International: 15	National: 00
Papers Published in SCOPUS indexed Journals	International: 00	National: 00
Papers Published in other Journals	International: 00	National: 00
Papers Presented in Conferences / Symposium	International: 08	National: 00
Books / Book chapters Published	Name of the book: Publisher: Year of Publication:	

5. Research Guidance

PhD Guide? Give field & University		
PhDs / Projects Guided		Projects at Master's Level: Nil Projects at Bachelor's Level: Nil

6. Grants

i. Funds Received (Projects): Nil
ii. Patents: Nil
iii. Consultancy: Nil

7. **Awards Received:**
Awarded a silver medal under the category "Healthy Society" for the project titled "Design of innovative wound healing materials from synthetic polypeptides with collagen" InnoWings 2023 exhibition held on June 15-16, 2023, Centrum Innowacji Naukowo-Edukacyjnych ul. Agatowa 19/57, 20-571 Lublin (Poland)
Awarded a silver medal under the category "Healthy Society" for the project titled "Insights into the physicochemical characteristics and miscibility of chitosan/polypeptide blends: Promising material for wound healing in Sprague-Dawley rats" InnoWings 2024 exhibition held on June 6-7, 2024, Centrum Innowacji Naukowo-Edukacyjnych ul. Agatowa 19/57, 20-571 Lublin (Poland)

8. Publications
i. International Journals

Sl. No.	Title of the paper	Name(s) of Author(s)	Name of the Journal	Volume No. Issue No. Year	WOS / Scopus / Both	Impact Factor	Publisher
1	Root-driven gold: characterisations and biological activities of nanoparticles synthesised using medicinal plant extracts	M Mahadeva Swamy, KS Shruthi, AS Sowmyashree, GK Prashanth, ND Rekha, **D Kathyayani**	Journal of the Australian Ceramic Society	1-9, (2026). https://doi.org/10.1007/s41779-026-01346-9	Scopus	2.6	Springer Nature Singapore
2	Decoding the Mechanisms of Dyes and Heavy Metals via NiO Nanoparticles: Kinetic and Isothermal Perspectives.	M Mahadeva Swamy, B Roopashree, Bincy Rose Vergis, AS Sowmyashree, **D Kathyayani**	Topics in Catalysis	1-14, (2025). https://doi.org/10.1007/s11244-025-02215-8	Both	3.0	Springer
3	Eco-Friendly Synthesis of CuO Nanoparticles Using Plant Extract: Structural, Functional, and Graph Theory-Based Analysis for Advanced Applications	M Mahadeva Swamy, GK Prashanth, CD Shilpa, AS Sowmyashree, Mallikarjun Chougala, K Gurushantha, Mohan Kumar, **D Kathyayani**, Shilpa Patil, HS Lalithamba, B Prashanth	Chemistry Africa	Volume: 8, Issue Pages:3909-3923, 2025	Both	2.2	Springer
4	Green-synthesized YSZ/polypyrrole nanocomposites for enhanced electrochemical and butane gas sensing applications	S Pavithra, **D Kathyayani,** G.S Nanjundaswamy, T.L Soundarya, R Thejas, Gouri	*Ionics*	Volume 31, pages 12257–12270, (2025) https://doi.org/10.1007/s11581-025-06684-5	Both	2.6	Springer

		Mirji, B.S Krishna, G Nagaraju					
5	Examination of physicochemical characteristics of blends of synthetic elastin-mimetic polypentapeptide with chitosan: Inhibitory potential on pancreatic α-amylase	HR Lokesh, **D Kathyayani,** B Mahesh, P Suhas, CS Mahadeva Prasad, ND Rekha, Alina Sionkowska, D Channe Gowda, Tomasz Klepka	Materials Chemistry and Physics	131529, 2025 https://doi.org/10.1016/j.matchemphys.2025.131529	Both	4.7	Elsevier
6	Influence of Sodium lauryl sulphate as surfactant on structural, morphological, electrical, and biological properties on Polypyrrole/CeO_2 composites	S Pavithra, **D Kathyayani,** HN Anil Rao, TL Soundarya, BS Krishna, G Nagaraju	Solid State Communications	Volume 400, 1 June 2025, 115918 https://doi.org/10.1016/j.ssc.2025.115918	Scopus	2.4	Elsevier
7	Insights into the Physicochemical Characteristics and Miscibility of Chitosan/Polypeptide Blends: Promising Material for Wound Healing in Sprague-Dawley Rats.	**Kathyayani, D**., Mahesh, B., Sionkowska, A., Manjula, S. N., Veeranna, S., & Vicini, S.	*Biomaterials science & engineering*.	2024 Sep 9;10(9):5807-5821. doi: 10.1021/acsbiomaterials.4c01123	Both	5.61	*ACS*
8	Investigation of miscibility and physicochemical properties of synthetic polypeptide with collagen blends and their wound healing characteristics.	**Kathyayani, D.,** Mahesh, B., Gowda, D. C., Sionkowska, A., & Veeranna, S.	Journal of Biological Macromolecules	Vol: 246, Page:125704. Year:2023 https://doi.org/10.1016/j.ijbiomac.2023.125704	Both	8.2	Elsevier
9	Interaction between synthetic elastin-like polypeptide and collagen: Investigation of miscibility and physicochemical properties.	Mahesh, B., Lokesh, H. R., **Kathyayani, D**., Sionkowska, A., Gowda, D. C., & Adamiak, K. (2023).	Polymer	*Vol: 272*, Page: 125833. https://doi.org/10.1016/j.polymer.2023.125833.	Both	4.6	Elsevier
10	Synthesis and structural characterization of elastin-based polypentapeptide/hydroxypropylmethylcellulose blend films: Assessment of miscibility, thermal stability and surface characteristics	**D.Kathyayani** B.Mahesh N.A.Chamaraja B.S.Madhukar D. ChanneGowda	Colloids and Surfaces A: Physicochemical and Engineering Aspects	Vol:649 Year: 2022 https://doi.org/10.1016/j.colsurfa.2022.129503	Both	5.518	Elsevier
11	Miscibility and thermal stability of synthetic glutamic acid comprising polypeptide with polyvinyl alcohol: Fabrication of nanofibrous electrospun membranes	B. Mahesh. **Kathyayani D.** D Channe Gowda Alina Sionkowska Seeram Ramakrishna	Materials Chemistry and Physics	Vol. 281, https://doi.org/10.1016/j.matchemphys.2022.125847	Both	4.094	Elsevier

12	Insights into the miscibility characteristics of plastic-mimetic polypeptide with hydroxypropylmethylcellulose : Investigation of thermal degradability and intermolecular interactions	B. Mahesh, **D. Kathyayani**, H.R. Lokesh, D. Channe Gowda, Alina Sionkowska	Colloids and Surfaces B: Biointerfaces	Vol. 205, May, 2021, https://doi.org/10.1016/j.colsurfb.2021.111877	Both	4.389	Elsevier
13	Blends of synthetic plastic-derived polypeptide with Hydroxypropylmethylcellulose and polyvinyl alcohol: unraveling the specific interaction parameters, morphology and thermal stability of the polymers couple	B. Mahesh, **D. Kathyayani,** D. Channe Gowda, K. Mrutunjaya	Journal of Polymer Research	27,278(2020) https://doi.org/10.1007/s10965-020-02191-5	Both	2.426	Springer
14	Miscibility studies of plastic-mimetic polypeptide with hydroxypropylmethylcellulose blends and generation of non-woven fabrics	B. Mahesh, **D. Kathyayani,** G.S. Nanjundaswamy, D.C. Gowda, R. Sridhar,	Carbohydrate Polymers	212,129-141, (2019) http://dx.doi.org/10.1016/j.carbpol.2019.02.042	Both	7.182	Elsevier
15	Impact of Blend Proportion on the Miscibility and Thermal Characteristics of Synthetic Plastic-Derived Polypentapeptide with Commercially Available Polyvinyl Alcohol	B. Mahesh, G. S. Nanjundaswamy, **D. Kathyayani**, D. Channe Gowda & Siddaramaiah	Journal of Polymers and the Environment	27,2267–2280(2019) https://doi.org/10.1007/s10924-019-01511-1	Both	2.765	Springer

ii. National Journals: Nil

iii. Conferences

Sl. No.	Title of the paper	Name(s) of Author(s)	Name of the Journal	Volume No. Issue No. Year	WOS / Scopus	Impact Factor	Publisher
1	"Eco-Friendly Synthesis of YSZ/Polypyrrole Nanocomposites for Improved Electrochemical Performance and Butane Gas Detection"	**Kathyayani D**., and Pavitra S	DAE–BRNS 4th Symposium on Current Trends in Analytical Chemistry (CTAC-2026)	2026	-	-	DAE Convention Centre, Anushaktinagar, Mumbai – 400094
2	Impact of Surfactant on Structural, Morphological, Electrical, and Biological Properties of Polypyrrole and its Composites	**Kathyayani D**., and Pavitra S	3rd International Conference on Advances in Materials Science and Technology (ICAMST-2025)	2025	-	-	M.S. Ramaiah University of Applied Sciences, Bengaluru, India
3	Exploration of miscibility and physicochemical properties between plastic-like polypeptide and Collagen	**Kathyayani D**., Mahesh B and Channe Gowda D.	2nd International Conference on Advanced Materials for Health, Energy and Environment.	2023	-	-	JSS Science and Technology University, Mysuru

4	Investigation of miscibility studies of synthetic polypeptide with collagen and its physicochemical properties	**Kathyayani D**., Mahesh B and Channe Gowda D.	24th ISTE Karnataka state level faculty convention & 32nd Dr.L.S.Chandrakant memorial lecture series	2022	**-**	**-**	JSS Academy of technical education, Bengaluru.
5	Quantitative Analysis of Intermolecular Interactions of PLPs with PVA Blends	**Kathyayani D**, Mahesh B, and Channe Gowda, D	*Second International conference on Material science and Technology*	2, 216-217, (2020)	-	-	ICMAT, Dept of PS&T, JSS S&T University, Mysuru-proceedings.
6	Synthesis and Miscibility Characteristics of Peptide-based Polymer Blends with Commercial Available Polymer	Rajeshwari, P.R. **Kathyayani, D**.Channe Gowda, D and Mahesh B	*International conference on Advances in Materials Research (ICMAR-2019)*	(2019)	-	-	M S Ramaiah University of Applied sciences, Bengaluru-proceedings
7	Plastic-derived polypentapeptides: Synthesis and investigation of physicochemical characteristics of miscible blends in solution phase method.	**Kathyayani D**, Nanjundaswamy GS, B. Mahesh and Channe Gowda D	3rd international conference on Recent advances in material chemistry	106 (2019)	-	-	SRM University, Chennai-proceedings
8	Study on the miscibility characteristics of synthetic polypeptide blends with a commercially available polymer for biomedical applications	B. Mahesh, Nanjundaswamy GS, **Kathyayani D**, Channe Gowda D and Siddaramaiah	One day International Symposium on "Advanced Materials" (ISAM-2017) Dept of Chemistry, JSS Science and Technology University, Mysore	8, 2017	-	-	Dept of Chemistry, JSS Science and Technology University, Mysuru-proceedings
9	Miscibility study on synthetic elastin based polypeptide with a commercially available polymer	B. Mahesh , G.S. Nanjunda swamy, **Kathyayani. D** and Channe Gowda. D	Advanced Polymers for Science & Technology-2016, October 24 – 26, 2016, Department of Chemistry, School of Advanced Sciences VIT University, Vellore, INDIA	5, 2016			Department of Chemistry, School of Advanced Sciences VIT University, Vellore, INDIA-proceedings

iv. Workshops /Conferences Attended

Sl. No.	**Name of the workshop / Conference**	**Organiser**	**Date**
1	Recent Advances in Applied Sciences	SJBIT, Bengaluru	14-18th Nov 2022
2	The role of advanced materials & nanotechnology in present scenario	Vemana Institute Of Technology, Bengaluru	22-26th June 2020
3	Insights on writing research proposals and funding opportunities	ST Joseph Engineering College, Manguluru	20-24th July 2020
4	Materials and Medicinal Chemistry-2020 (MMC)	DBIT, Bengaluru	10-15th August 2020

5	Capacity building for women managers in higher education.	SJCE,Mysuru.– 570 006, Karnataka.	4th – 8th June 2018
6	Advanced Analytical Techniques for Polymer Characterization	SJCE,Mysuru.	29th January 2018
7	Research Methodology	Vijnana Bhavana, KSTA, DST, Bengaluru.	17th & 18th July 2017
8	Workshop on intellectual property rights and patents	JSSATEB and BITES	8th June 2017
9	Recent advances in the chemistry of materials for engineering applications	BMSCE, Bengaluru.	11th -15th July 2016
10	Plagiarism program	SJBIT, Bengaluru.	25th July 2015
11	Effective teaching skills and instructional strategies for college teachers.	Christ University, Bengaluru.	18-21 July 2012
12	One day workshop on "Recent advances in electrochemical and surface science & engg	BNM IT, Bangalore	26-08-2010

Workshops / Conference (Orgainsed):

I) Organized **Student Development program** in association with Centre of Excellence, GTTC, GOK, on "Skill and Upskilling" for II semester students of ECE, ME, R&A, and EIE streams on 24th June 2022 and an industrial visit from 27th June to 6th July 2022.

II) Organised "National Science Week -2023" Celebration from 21.02.2023 to 03.03.2023 and expert talk by Shri Hemanth Kumar Reddy N, Group Director, Space Navigation Group, URSC/ISRO on 03.03.2023

III) Organised "National Science Week -2024" Celebration from 27.03.2024 to 06.04.2024 and expert talk by Mr. Rajeev Deekshit, CMD, Pyro eco-green technologies PVT Ltd, Bengaluru on 06.04.2024

IV) **International Conference on Polymers for Sustainable Development"** was organised by the Department in association with Nicolaus Copernicus University, In Torun, Poland on 07.02.2025 in online mode.

V) **National Science Week -2025"** Celebration from 07.04.2025 to 19.04.2025 and expert talk by Dr. Gurumurthy Hegde, FRSC, Director, Centre for Advanced Research and Development, Christ University, Bengaluru on 19.04.2025

Conference Attended (those sponsored by AICTE / ISTE/IETE/TEQIP or any other sponsoring body): Nil

9. Details of NPTEL / COURSERA courses completed

Sl. No.	Name of the subject	Organised by	Date of completion / Award	Grade / Marks
1	Nanotechnology and Nanosensors, Part 1	Technion - Israel Institute of Technology	17th December 2021	95
2	ARPIT 2020: Online Refresher Course in Chemistry for Higher Education	Swayam	1st December 2020	70
3	Chemistry	Coursera, University of Kentucky	9th November 2020	100
4	Chemicals and Health	Coursera, Johns Hopkins University	22nd October 2020	100
5	Metals in Biology	Swayam	September 2019	83

10. Membership of Professional Bodies:

1. Materials Today

11.

Publon link : https://publons.com/researcher/4574638/kathyayani-devappa/
Researcher id : http://www.researcherid.com/rid/AAT-9671-2021
ORCID : http://www.orcid.org/0000-0001-6744-742X
Google scholar link : http://scholar.google.co.in/citations?user=H0rxm-IAAAAJ
Vidwan id : 101754
AICTE Faculty id : 1-475902828

Kathyayani D
Assistant Professor
Department of Chemistry
JSS Academy of Technical Education
Bengaluru