

Curriculum Vitae



1. Name(Block letters) : Dr.SEEMA S.PATTANSHETTI

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2. Academic Qualifications: (from UG course)

Sl. No.	Qualification	University	Result	Class
1	Ph.D (chemistry)	Shivaji University, Kolhapur		
2	M.Sc. (Chemistry)	Karnatak University, Dharwad	78.00%	First to the University
3	B.Sc.(Chemistry, Physics, Maths)	S.S.Arts & T.P.Science College Sankeshwar, Karnatak University, Dharwad	65%	First Class

3. Service/ Work Experience particulars:

Sl. No.	Position held	Name of the Institution	UG/ PG	Year		Total experience
				From	To	
1	Assistant Professor	Dept. of Chemistry, KLE's S. Nijalingappa College, Rajajinagar, Bengaluru-10	UG/PG	31-05-2022	Till date	Presently working
2	Assistant Professor	Dept. of Chemistry, S. Nijalingappa Sugar Institute, College of Sugar Sci & Technology, Belagavi.	UG	24-08-2018	30-4-2022	3 Year 8 months
3	Quality Control Incharge	Worked in quality control department in Advance Tapes Pvt. Ltd., Belgaum	-	01-3-2008	28-2-2010	3 years
4	Assistant Professor	S.S.Arts & T.P.Science College Sankeshwar.	UG	01-06-2007	27-2-2008	9 months

4.

Research Profile :

Doctor of Philosophy (PhD)

Thesis Title: *"SYNTHESIS AND CHARACTERIZATION OF NANO COMPOSITE POLYMERIC DENSE MEMBRANES FOR PERVAPOURATION APPLICATION.*

The focus of my research is mainly on polymer modification, development of mixed matrix membranes, development of nanocomposite dense membranes and their application in aqueous-organic Separation using pervaporation separation techniques. To develop the mixed membrane matrices, used filler particles we have prepared in nano size or as nanoparticles, their characterization have been done by using various methods like SEM (Scanning Electron Microscopy), TGA (Thermo gravimetric analysis), AFM (Atomic force microscopy), DSC (Differential scanning calorimetry), X-ray diffraction method (XRD), Fourier transform infrared spectroscopy (FTIR), Universal testing machine (UTM), Contact angle measurement, Gas chromatography etc. In addition to this we have studied proton conducting properties of these dense membranes, their characterizations, properties and their applications have been studied. These membranes have wide range of applications in industry as well as in laboratory level.

- Completed UGC- Major Research Project & worked as research associate at University level “Synthesis and application of polymeric membranes as a methanol barrier in fuel cells” in department of chemistry, Shivaji university, Kolhapur.

- **Research Publications:**

Publications

- 1.A.V. Raghu, G.S. Gadaginamath, M. Priya, P. Seema, H.M. Jeong, T.M. Aminabhavi, Synthesis and Characterization of Novel Polyurethanes Based on N'1, N'4-Bis[(4-hydroxyphenyl)methylene]succinohydrazide Hard Segment, (2008) J Appl Polym Sci. 110, 2315-2320. [IF: 1.866].

- 2.Veeresh T. M. Seema S. Pattanshetti, Gavisiddappa S. Gokavi, Mallikarjuna N.Nadagouda, Tejraj M. Aminabhavi, Proton conducting properties of nanocomposite membranes of chitosan. (2012), Chemical Engineering Journal, 189–190, 1, 1-4.

- 3.Seema S. Pattanshetti, Gavisiddappa S. Gokavi, Pervaporation dehydration of ethanol using nanocomposite membranes prepared from Poly(vinyl alcohol) and Poly(vinyl pyrrolidone) blends incorporated with Cellulose nanocrystals. (2017). Chem Sci Trans., 6(3), 405- 410

- 4.Seema S. Pattanshetti, Gavisiddappa S. Gokavi, Hybrid nanocomposite membranes of polyvinyl alcohol/3-glycidyloxypropyl trimethoxysilane Incorporated with chemically modified phosphotungstic acid used in pervaporative dehydration of methanol. Imperial Journal of Interdisciplinary Research (IJIR) (2017) 3, 5, 302-306.

5. Seema S. Pattanshetti, Gavisiddappa S. Gokavi, Hybrid nanocomposite membranes of polyvinyl alcohol/3-glycidyloxypropyl trimethoxysilane Incorporated with chemically modified phosphotungstic acid used in pervaporative dehydration of methanol. Imperial Journal of Interdisciplinary Research (IJIR) (2017) 3, 5, 302-306.

6. Seema S. Pattanshetti, Role of Naac re-accreditation in quality expansion of higher education, ISBN: 978-81-958846-0-5(2022).

Paper under Publications:

1. Physico-chemical and proton conducting properties of organic-inorganic hybrid membranes of PVA.
2. Proton conducting properties of organic/inorganic mixed membrane matrices: preparation and characterization
3. Blend mixed matrix membranes of poly (vinyl alcohol) and poly (styrene sulfonic acid) for pervaporation separation of dimethyl carbonate/methanol mixtures.
4. Proton conducting properties of mixed membrane matrices of PVA-PSSA- (Cs-STA): Their Preparation and characterizations.

5.Seminars/Conferences/International Conferences /Workshops/Webinar Presented & Attended:

NATIONAL CONFERENCES:

- Participated in national seminar on Advances in Co-ordination Chemistry organized by Rajarshi Chatrapathi Shahu College, Kolhapur held on 17th and 18th August 2010.
- Participated and paper presented in national seminar on Advances in synthetic Methodologies and New Materials organized by department of chemistry, Shivaji University on 21-22nd January 2011.
- Participated in two days Nation seminar on Energy Crises: Solutions organized by S.S. Arts & T.P. science institute, Sankeshwar, held on 19-20th September 2011.
- Participated and paper presented in national seminar on Recent Advances in Synthetic Chemistry and nanomaterials, on January 21-22nd 2012, organized by Shivaji University, Kolhapur.
- Participated and got first prize in poster presentation in National seminar on Advances in Polymeric Materials on 16th and 17th March-2012, organized by Sri Krishnadevaraya University, Anantapur, Andra Pradesh.

- Participated in national conference on Current Research in Chemical Sciences on 22nd and 23rd January 2013, organized by department of chemistry, Shivaji University.
- Participated in national conference on Frontiers in chemical and material sciences held on 16 -17th Jan-2015, organized by department of chemistry, Kolhapur.
- Paper presented in National level seminar on NAAC Revised accreditation frame work (RAF) and its relevance to NEP-2020 on 29th September 2022 conducted by RLS college Belagavi .

INTERNATIONAL CONFERENCES:

- Participated and paper presented in International conferences on Emerging Trends in Chemical Sciences on 2-4th November 2012, held at Solapur University.
- Participated in International Conference on Physics of materials and material based devices fabrication held on 13-15th January, 2014 organized by Department of Physics, Shivaji University, Kolhapur.
- Participated and poster paper presented in International conference on Advanced and Applied material Science on 15th - 16th January 2014, organized by Gopal Krishna Gokhale College , Kolhapur.
- Participated in international conference on “Improving the sustainability of the extraction process” on 5th February, 2020, organized by Bharat Ratna Sir M. Vishveshvaraiya Sugarcane Research Institute, Mandya and S. Nijalingappa Sugar Institute, Belagavi.

WORKSHOPS:

- Participated in two days workshop on Research writings, Ethics, Plagiarism and publish ability Organized by Shivaji University, Kolhapur, held on 26th and 27th July 2012.
- Participated in the Avishkar 2011-2012 Research project competition held at Shivaji University Kolhapur.
- Participated in the academic & interaction sessions during the “5th Science Conclave/ INSPIRE Internships Program - A Congregation of Nobel Laureates and Eminent Scientists”, held on 8 -14th December 2012, organized by IIT, Allahabad, Uttar-Pradesh.
- Participated in one day workshop on Frontier areas in Physical Sciences held 17th January, 2020 organized by School of Basic Sciences and School of Mathematics and Computing

Sciences in Vision Group on Science and Technology (VGST), Rani Channamma University, Belagavi.

- Participated in “transformation through NAAC Accreditation process a national level two days workshop for higher educational institutions conducted by institute of academic excellence Hyderabad in collaboration with collegiate education & technical education dept, Telangana, on June 21st & 22nd 2021.
- National level workshop on greener & safer Chemistry labs organised by PG dept. of chemistry, Kanya Maha vidyalaya, Jalandhar on 22 October 2022.

WEBINARS:

- International Webinar Doctrina-13, “The art of Synthesizing Organic compounds a Researchers Perspective” on 4th June 2020, conducted by IQAC Sir Syed College, Taliparamba, Kerala.
- Webinar on “Effective use of Sugar Laboratory Techniques for Sugar Mill Working Assessment and Control” conducted by S.Nijalingappa Sugar Institute, Belagavi on 9th June 2020.
- International webinar on “Advancements in Chemical Science towards Covid- 19” (ACSC-2020) on 12th & 13th June. 2020. Organized by Department of Chemistry, Rani Channamma University, Belagavi.
- Webinar on “Biogas Generation from Sugarcane Press Mud/Filter cake J & F Biogas invites Stakeholders Across Sugar Industry on Usage of Filter Cake/Press Mud as a Value added by-product” on 12th June 2020 by J & F Biogas Directors Germany.
- Webinar on “Evaluation of C/B – Heavy molasses quality by traditional vis-a vis gas chromatography technique with visual demonstrations” on 20th January 2021 organized by The Sugar Technologists Association (STAI) & in association with MAARC labs Pvt.Ltd.
- A national level guest lecture on Nanoscience and technology on 10th February, 2023 conducted by Department of physics, Koneru Lakshmaiah Education Foundation, Guntur & material research society of India (MRSI) India.

FACULTY DEVELOPMENT PROGRAMMES (FDP):

- Online faculty development programme (FDP) on “Post Covid Challenges in Science and Technology” on 15th to 19th June, 2020, organized by Department of Chemistry, Basic Sciences, Jain University, Bangalore.
- webinar on various sessions on Materials Characterization using Time of Flight Secondary Ion Mass Spectroscopy (TOF-SIMS), Hybrid Machining Processes, Nanoplastics: The Tiny Emerging Contaminant, Nano materials for Health Care Sector, Evolution of Texture in Materials organized by National Institute of Science and Technology (Autonomous), DEPARTMENT OF MECHANICAL ENGINEERING Affiliated to Biju Patnaik University of Technology, Odisha from 17th to 22nd June 2020.
- Online Faculty Development Program (FDP) on “Advanced or Smart Processing Technology” organized by Department of Polymer Science and Technology, from 10th to 14th August 2020.
- TEQIP-III Sponsored One Week Online Faculty Development Program (FDP) on “Quality Control and Safety in Polymer & Allied Industries” from 27th to 31st July 2020.

6. Knowledge of Instrumentation:

- Gas Chromatography (Netel India, Model: Ultima-2100)
- Pervaporation Unit (Indigenously designed)
- Universal Testing Machine.
- Double wedged Polarimeter used in sugar chemistry laboratory.
- Spectrophotometer.

7. Scientific Instruments Handled:

- Scientific Computational literacy.
- Chemical Structure: Chem Draw, Chem Windows, Chem Sketch, ISIS Draw, Origin 6.1.
- Text Processing: power point, MS-Word etc.
- Edmodo online teaching application.

DECLARATION:

I declare that all the information furnished above is correct and true to my knowledge. I accept that an appointment given to me on this basis can be revoked and/or terminated at any time in future if any information has been misstated or false.

Place:

Date:

Dr. Seema S. Pattanshetti