CURRICULUM VITAE

Dr. Priti Shukla
Flat No. H-2206
Ajnara Ambrosia, Sector 118
Noida, Uttar Pradesh- 201301, INDIA
E-mail: **pritishu85@gmail.com,** Contact No: 8920687066, 9971888361

Strength: Sincere, hardworking and capability to do the assigned work in time.
Able to work in a diverse, multi-functional project team.
Excellent project management, time management, team collaboration and organizational skills

Computer Skills: MS Office, Excel, PowerPoint, Outlook and several windows-based packages like origin, Chem Sketch, Adobe Photoshop, Coral Draw and Chem station etc.

EDUCATIONAL & TECHNICAL QUALIFICATION:

Exam passed	Subject	Board/University	Year of passing	Division/ %age of marks
10th	English, Sanskrit, Mathematics, Science, Social Science	C.B.S.E.Board	2001	Ist/ 70%
12th	Hindi, English, Physics, Chemistry, Biology	U.P.Board	2003	Ist/ 72.2%
B.Sc.	Chemistry, Zoology	P.P.N.,College, Kanpur, Affiliated to C.S.J.M. University, Kanpur	2006	Ist/ 74.4%
M.Sc. .	Chemistry	A.N.D, College Kanpur, Affiliated to C.S.J.M. University, Kanpur	2008	Ist/ 71.3%
Ph.D.	Applied chemistry (Plastic- Technology-Polymers)	H.B.T.I., Kanpur affiliated to U.P. Technical University, Lucknow	2014	Awarded

Work Experience

1. Worked as **Research and Development Specialist** in **Alok Masterbatch Pvt Ltd, New Delhi**
(From Sept'22 -May 2023)

- New product development, identifying domestic and international vendors and make comparatives of the quotations received from them and identifying the best products, procurement of bulk raw material, quality control and manage all technical data related with them.
- Resolve technical queries of customers related with Polypropylene (PP) and Polyethylene (PE) masterbatch formulations, design specification for procurements of high-end instruments as per requirements.
- Technical support to sales of different application based Masterbatch

2. Worked as **Manager R & D** in **Saan Global Ltd., NOIDA** **(**From March'22- Sept'22)

- Synthesis of biodegradable Superabsorbent Polymeric Hydrogels for agriculture, epoxy adhesive for coating application and worked in the area of thermosetting polymers.
- New product innovation / technical support to sales/customers and procurement of raw materials from domestic and international vendors, assisting purchase team in preparing documentation and custom clearance of the chemicals and high-end instruments.
- Study and forecast the market requirement / technology platform.
- Worked with customers for new product trials and field technical service.
- Customer seeding for launch of new product introduction.

3. Worked as a **Technical Officer** in **National Tobacco Testing Laboratory (NTTL)**
NICPR NOIDA **(**From Dec'17-March'22)

- Procurement of basic raw materials, chemicals and heavy-duty instruments from international market and involved in their custom clearance process.
- Part of the core team in establishing the laboratory (procurement of machineries, raw materials, conducting trainings and preparing SOPs, Statement of Expenditure (SOE) .
- Carried out scientific work on instrumental analysis and tobacco protocol development
- Conduct routine laboratory tests for smoked and smokeless tobacco products
- Hands on experience in using various analytical instruments i.e. Gas Chromatograph (GC), Continuous Flow Auto analyzer (CFA), Infrared Analyzer, Smoking Machine and quantum Neo machine, Environmental Chamber.

4. Worked as a **Research Scientist** in **Jubilant Generics NOIDA** (Feb'2017 - Nov'17)

- Managed all reference and pharmacopeial standards and ensure their timely qualification
- Expertise in using various analytical and chromatographic techniques like FT-IR, NMR, DSC, TGA, GC-FID, HPLC and Capillary Electrophoresis
- Experience in preparing Standard Test Procedures, Certificate of Analysis and Method development reports

5. Worked as **Senior Research Fellow** in **Indian Agricultural Research Institute (IARI), New Delhi** in Nanotechnology Superabsorbent polymeric hydrogel project. (Aug'13 - Jan'17)

- Synthesized silver nano-particle from agriculture waste, pea peel instead of synthetic agents.
- Also developed nano-superabsorbent hydrogels for the application in agriculture.
- Synthesized rice straw coated and uncoated hydrogels with different conditions (pH, temp., and alkali, acidic and different solvent conditions.
- Determined the silica content in Rice straw-based polymeric hydrogels. Studied the swelling behaviour of synthesized hydrogels. Comparative study is also done for rice husk and corn cob-based hydrogels.
- Synthesized Rice straw-based Nano whiskers and studied their swelling behaviour. Optimization is also done for specific reaction conditions. Also synthesized Nano whiskers-based hydrogels also studied their thermal, mechanical, and morphological behaviour by Rheometer and SEM analysis. Characterization is also done for every step by FTIR, NMR, XRD, SEM and Rheological studies done by Rheometer.

6. Worked as **Research Intern** in Indian Journal of Chemistry at **CSIR - NISCAIR** (April'13 - July'13)

7. Worked as **Research Scholar in HBTI, Kanpur** and also worked as **Project Fellow** in the **UGC sponsored Project (Development of Modified, Epoxy Matrix from Renewable Resource Material)** (Jan'2009 – Dec'12)

Title of the thesis: Studies on Vinyl ester resins based on Phenol-cardanol Novolacs.

(Vinyl ester resins were synthesized using phenol-cardanol based novolac epoxy resins, and methacrylic acid (MA) catalyzed by triphenylphosphine (TPP). Cardanol, derived from CNSL, has been used as a renewable resource material during the synthesis. VEPCNs were synthesized using phenol-cardanol-based epoxidized novolac resin (EPCN), which in turn was synthesized from the novolacs prepared using phenol, cardanol and formaldehyde catalyzed by p-toluene sulphonic acid (PTSA).

8. **Worked with DMSRDE Kanpur in the project of Bulletproof Jackets. I have worked in Glass-fiber and Carbon-fiber reinforced composites based on epoxy resins. I have also used pultrusion technique to produce composites.**

9. **Award and / or Outstanding Achievements:**

- Received Gold Medal in M.Sc. (Chemistry) from AND College, Kanpur (Uttar Pradesh)

- I have also qualified following Six M.Tech. Papers for Pre. Ph.D. Course work:

    1. Environmental Pollution and Waste Management (BE-31)
    2. Advances in Bio-Chemical Engineering (BE-23)
    3. Soaps and Synthetic Detergents (OT-25)
    4. Fat based Lubricants (OT-12)
    5. Quality Control Technique in the Oils & Allied industries (OT-14)
    6. Advanced Alcoholic Fermentation (BE-12)

- Received Travel Scholarship by 12th Asia-Pacific Conference on Tobacco or Health (APACT 12th), Bali Indonesia, during 12-15th Sept' 2018.

- Received Certificate of Achievement by WHO on Tobacco product regulation: Building laboratory testing capacity for achieving more than 80% Marks.

- Received Certificate of Achievement by WHO on Tobacco product regulation: Basic handbook for achieving more than 80% Marks.

LIST OF PUBLICATIONS

INTERNATIONAL JOURNALS

1. **Priti Shukla**, S.B.Yadaw and Deepak Srivastava **(2010)**
   A Study on the Kinetics of Condensation Reaction of Phenol Modified Cardanol-Formaldehyde Resin, **International Journal of Chemical Kinetics** (Wiley Publications), **42**, pp 380–389.

2. **Priti Shukla**, S.B.Yadaw and Deepak Srivastava **(2010)**
   Effect of phenol concentration on cure and epoxide equivalent weight (EEW) of cardanol based epoxidized novolac type phenolic resins**, Paint India, 60** (9), pp 85-96.

3. **Priti Shukla and Deepak Srivastava (2012)**
   Mechanical and Morphological study of the modification of Phenol-Cardanol Based epoxidized novolac resin, **International Journal of Chemtech Research**, 4(4), pp1522-1526.

4. **Priti Shukla and Deepak Srivastava (2012)**
   Synthesis, Characterization and Curing Behaviour of Phenol-Cardanol Based Vinyl Ester Resin, **Malaysian Journal of Chemistry**, 14(1), pp 005-020.

5. **Priti Shukla and Deepak Srivastava (2014)**
   Reaction Kinetics of Esterification of Phenol-Cardanol Based Epoxidized Novolac Resins and Methacrylic Acid, **International Journal of Plastic Technology**, June 2014, Volume 18, Issue 1, pp 1-15, **DOI No.** 10.1007/s12588-014-9060-5

PAPERS PRESENTED IN SEMINARS/ CONFERENCES

1. Minakshi Sultania, Ranjana Yadav, **Priti Shukla** and Deepak Srivastava
   Studies on the condensation reactions of cardanol and formaldehyde by mathematical models to be held on Indian Chemical Engg. Congress (CHEMCON 2008) organised by IIChE Regional Centre, Chandigarh during Dec. 27-30.

2. Ranjana Yadav, Minakshi Sultania, **Priti Shukla**, Rajesh Bajpai and Deepak Srivastava
   Environment impact of biobased polymeric materials, National seminar on the Environmental science and engineering, 23 Jan 2009 at Brahmavart P.G. college, Mandhana, Kanpur.

3. Ranjana Yadav, Minakshi Sultania, **Priti Shukla** and Deepak Srivastava Future development in bioencapsulation with synthetic polymers for application in biosensors, National Symposium/Workshop on New trends of Biosensors Technology (NSNTBT-2009), 17-19 Jan. 2009 at Mathura.

4. Ranjana Yadav, Minakshi Sultania, **Priti Shukla** and Deepak Srivastava
Development of Polymer membrane useful for improving the lifetime of implantable biosensors, National Symposium/Workshop on New trends of Biosensors Technology (NSNTBT-2009), 17-19 Jan. 2009 at Mathura.

5. Ranjana Yadav, Minakshi Sultania, **Priti Shukla** and Deepak Srivastava
Synthetic mimics of biomacromolecules, National Symposium/Workshop on New trends of Biosensors Technology (NSNTBT-2009), 17-19 Jan. 2009 at Mathura.

6. Ranjana Yadav, Archana Devi, Minakshi Sultania, **Priti Shukla** and Deepak Srivastava Thermal, chemical and morphological characteristics of cardanol-based modified epoxy resin for use in surface coatings, 25th Annual meeting of the polymer processing society, Panaji, Goa, March 1-5, 2009, organized by IIT Delhi and IIT Bombay.

7. Minakshi Sultania, Ranjana Yadav, **Priti Shukla** and Deepak Srivastava
Synthesis of vinyl ester resin using cardanol-based epoxidized novolac resins and methacrylic acid: A kinetic study, 25th Annual meeting of the polymer processing society, Panaji, Goa, March 1-5, 2009, organized by IIT Delhi and IIT Bombay.

8. **Priti Shukla**, Ranjana Yadav, Minakshi Sultania, S.B. Yadaw and Deepak Srivastava
Effect of Phenol concentration on cardanol-formaldehyde resin: A synthetic approach, 25th Annual meeting of the polymer processing society, Panaji, Goa, March 1-5, 2009, organized by IIT Delhi and IIT Bombay.

9. Ranjana Yadav**,** Minakshi Sultania**, Priti Shukla** and Deepak Srivastava (2009)
Studies on thermotropic side – chain Liquid Crystalline Polyesters**.** 16th National Conference on Liquid crystals, organized by Indian liquid crystal society and University of Lucknow , held during Oct 26-28, 2009.

10. Minakshi Sultania, Ranjana Yadav. **Priti Shukla**, J.S.P. Rai, and Deepak Srivastava (2009)
Mathematical Modeling of condensation reaction of cardanol and formaldehyde**,** Ist Annual Conference on Enabling Technologies for chemical process industries, organized by IIChE-KRC, at CSJM University Kanpur, during Nov13-14, 2009.

11. Ranjana Yadav, Minakshi Sultania, **Priti Shukla** and Deepak Srivastava (2009)
Studies on the process variables of the condensation reaction of cardanol and formaldehyde by Statistical Design and Response Surface Techniques, Ist Annual Conference on Enabling Technologies for chemical process industries, organized by IIChE-KRC, at CSJM University Kanpur, during Nov 13-14, 2009

12. Minakshi Sultania**, Priti Shukla**, J S P Rai and Deepak Srivastava (2009)
Environmentally Preferred Coatings From Cardanol-Based Epoxidized Novolac Vinyl Ester Resin (*VER*), National Seminar on Contribution of Chemistry to the society, organized by DBS College, Kanpur held on Dec. 4, 2009.

13. **Priti Shukla**, Minakshi Sultania and Deepak Srivastava (2009)
A study on cardanol based novolac resin: ^{1}H-NMR Spectroscopic analysis, National

Seminar on Contribution of Chemistry to the society, organized by DBS College, Kanpur, to be held on Dec. 4, 2009.

14. Ranjana Yadav, Minakshi Sultania, **Priti Shukla** and Deepak Srivastava
Studies On The Cardanol-Based Epoxidized Resole Resin, APA-2009 at IIT Delhi from 17-20 Dec, 2009.

15. Minakshi Sultania**,** Ranjana Yadav, **Priti Shukla**, J.S.P. Rai, Deepak Srivastava
Studies on the curing kinetics of cardanol-based vinyl ester resin/styrene system by an isoconversional method, Seventeenth National Symposium & Workshop on Thermal Analysis**,** THERMANS 2010, held at Kurukshetra University, Haryana from March 9-13, 2010.

16. Ranjana Yadav, Minakshi Sultania, **Priti Shukla** and Deepak Srivastava
A comparative study on thermal properties of blends of cardanol-based epoxidized novolac resins with different carboxyl-terminated liquid rubbers, Seventeenth National Symposium & Workshop on Thermal Analysis**,** THERMANS 2010, held at Kurukshetra University, Haryana from March 9-13, 2010.

17. Priti Shukla, Ranjana Yadav, Minakshi Sultania, S. B. Yadaw and Deepak Srivastava
Effect of phenol concentration on the thermal behaviour of cardanol-based epoxidized novolac resin, Seventeenth National Symposium &Workshop on Thermal Analysis**,** THERMANS 2010, held at Kurukshetra University, Haryana from March 9-13, 2010.

18. Priti Shukla, Minakshi Sultania , S.B.Yadaw and Deepak Srivastava
Phenol- cardanol-formaldehyde based epoxidized novolac resin: a study on thermal behaviour, Conference on Embracing Technological Advances in surface Coatings, organized by IIChE-KRC and OTA, at CSJM University Kanpur, during Mar 20-21, 2010.

19. Priti Shukla , Minakshi Sultania, Neelam Pal, and Deepak Srivastava
Renewable resource based green polymer composites: A critical viewpoint, National Seminar on Introduction to Green Chemistry Education: Theory and Practice (Green Chem 2010) held at U.P. Merchants Chamber Auditorium, Kanpur during 22-23 Oct'10.

20. Priti Shukla, Minakshi Sultania and Deepak Srivastava
Effect of phenol concentration on the synthesis of vinyl ester resin from cardanol, International Conference on Polymer Science and Engineering: Emerging Dimensions (PSE-2010) organized by University Institute of Chemical Engineering and Technology, Panjab University, Chandigarh, 26-27 Nov'10.

21. Priti Shukla, Minakshi Sultania and Deepak Srivastava
Studies on the kinetic parameters of modified vinyl ester resin (Macro-2010) held during December 15th to 17th, 2010 Organized by Centre for Polymer Science and Engineering, Indian Institute of Technology and Society for Polymer Science, India

22. Minakshi Sultania, **Priti shukla**, J.S.P. Rai, Deepak Srivastava
Effect of CTBN concentrations on thermal and mechanical characteristics of blends cardanol – based vinyl ester resin, Macro-2010 held during December 15th to 17th, 2010 Organized by Centre for Polymer Science and Engineering, Indian Institute of Technology and Society for Polymer Science, India

23. Shrawan Kr. Shukla, **Priti Shukla**, Kavita Srivastava, and Deepak Srivastava

Bio-mass based polymer from renewable resource: A critical viewpoint , Third conference on Recent Advances in Polymer Technology (RAPT-2011), 15 Jan'11 at NMU, Jalgaon.

24. Priti Shukla, Shrawan K. Shukla, Kavita Srivastava S. K. Tripathi and Deepak Srivastava, Study on Physico-mechanical and physico-chemical properties of acrylic based adhesive, Third conference on Recent Advances in Polymer Technology (RAPT-2011), 15 Jan'11 at NMU, Jalgaon.

25. Priti Shukla, Shrawan Kr. Shukla, Riya Srivastava, and Deepak Srivastava
Studies On Phenol/Cardanol-Based Novolac-Type Phenolic Resin: Structural Elucidation By Spectroscopic Techniques, National Seminar on Multifaceted Scope of Chemistry and Human welfare, 22-23 Jan'11 at D.B.S. P.G. College, Kanpur.

26. Shrawan Kr. Shukla, **Priti Shukla**, Riya Srivastava, and Deepak Srivastava
Studies on the Modified Cardanol Bioplastic with Good Thermoplasticity and High Durability Properties, National Seminar on Multifaceted Scope of Chemistry and Human welfare, 22-23 Jan'11 at D.B.S. P.G. College, Kanpur.

27. Priti Shukla, Shrawan Kr. Shukla, Riya Srivastava, and Deepak Srivastava
Phenol/Cardanol-Based Novolac-Type Phenolic Resin: A Study on its Synthesis and Characterization, International conference on Chemistry : Frontiers and Challenges , 5-6th March'11, held at AMU, Aligarh.

28. Priti Shukla and Deepak Srivastava
Blends Of Cardanol-based Epoxidized Novolac Resin and CTBN : A Study On Curing And Degradation Characteristics, National Conference on Advanced Polymers, Fibers and Fabrics, APF^2- 2011, held during 26-28th Dec, 2011 at D.M.S.R.D.E., Kanpur.

29. Riya Srivastava, Shrawan K. Shukla, **Priti Shukla**, Minakshi Sultania and Deepak Srivastava, Studies on water-based polyurethane dispersion: A biomass derived system for applications in surface, APA International congress on Human Healthcare Systems Healthcare 2012 Organized by IIT, Delhi & Jamia Hamdard, Feb. 20-23, 2012.

30. Shrawan K. Shukla, Riya srivastava, **Priti Shukla**, Minakshi Sultania and Deepak Srivastava, 2012b, Synthesis and characterization of phenolic based resole resin from cardanol, APA International congress on Human Healthcare Systems Healthcare 2012 Organized by IIT, Delhi & Jamia Hamdard, Feb. 20-23, 2012.

31. Shrawan K. Shukla, **Priti Shukla**, Kavita Srivastava, Deepak Srivastava, (2012) "A study on the influence of the temperature on the formation of cardanol-based phenolic resin" 1st International conference on functional Materials for defence (ICFMD-2012), organized by Defence Institute of Advanced Technology,(DIAT), Pune, India during 18-20 May 2012.

32 Priti Shukla and Anupama Singh, "Cellulose nanowhiskers from Rice Straw and Corncob: potential carriers in agrochemical formulations" 3rd International IUPAC conference on "Agrochemicals Protecting Crops, Health and Natural Environment – New Chemistries for Phytomedicines and Crop Protection Chemicals" during 6-9 April 2016.

33. Priti Shukla, Ravi Kaushik, Mausumi Bharadwaj, H. M. Chawla, L. Swasthicharan and Ravi Mehrotra "Optimization of Nicotine Estimation Methods in Smokeless Tobacco Products in India" 12 th Asia-Pacific Conference on Tobacco or Health (APACT12th), Bali Indonesia, during 12-15th Sept' 2018.

Referee 1: . **Dr. Deepak Srivastava**
Professor/ Head
Department of Plastic Technology,
HBTU (Formerly H.B.T.I.) Kanpur- 208002 (U.P.), INDIA
Email: dsri92@gmail.com
Mobile: (+91) 9415727382

Referee 2: **Dr Anupama**
Head & Principal Scientist
Division of Agricultural Chemicals
Indian Agricultural Research Institute
New Delhi, INDIA
Email: anupama.chikara@gmail.com
Mobile: (+91) 9968449395

Referee 3: **Dr Mausumi Bharadwaj**
Scientist F & Incharge, NTTL
Division of Molecular Biology
National Institute of Cancer Prevention & Research (NICPR), NOIDA, INDIA
Email: mausumi.bharadwaj@gmail.com
Mobile: (+91) 9811860996