

# DR. VANDANA GUPTA

SCIENTIFIC EDITOR | TECHNICAL EDITOR | RESEARCH CONTENT SPECIALIST

Noida, Uttar Pradesh, India | [vgupta.che@gmail.com](mailto:vgupta.che@gmail.com) |  +91- 8602106575

Detailed-oriented Scientific Editor with Ph.D. in Chemical Engineering and extensive experience in scientific writing, peer-reviewed publications, content development, and research mentoring. Strong background in membrane technology, wastewater treatment, electrochemical processes, and environmental engineering. Demonstrated expertise in editing technical manuscripts, simplifying complex scientific concepts, ensuring data accuracy, and maintaining publication quality standards. Experienced in collaborating with researchers, reviewers, and academic teams to deliver high-quality scientific content.

## DOMAIN EXPERTISE

- Chemical Engineering & Process Technology
- Membrane Science & Separation Processes
- Water & Wastewater Treatment
- Environmental & Sustainable Technologies
- Electrochemical Treatment
- Polymer, Ceramic & Composite Materials

## WORK EXPERIENCE

### Online Tutor – Chemical Engineering

UrbanPro | July 2023 – Present

- Design structured study material and **prepare concise, concept-based notes and explanations.**
- Simplify technical content for diverse learners while maintaining scientific accuracy.
- Assist students in **project reports, assignments, and technical documentation editing.**
- Ensure clarity, logical flow, and correctness in all learning resources.

### Guest Faculty –

VisionIAS, New Delhi | Oct 2021 – June 2023

- Develop high-quality and updated content on science domains, Perform extensive literature review and topic analysis on emerging technologies, environmental science and applied sciences.
- Conduct **in-depth literature review, data verification, and content structuring** for accuracy and clarity.
- Evaluate written content and provide **detailed editorial feedback** to improve quality and coherence. Support national-level mock examinations (ABHYAAS).

### Temporary Faculty – Chemical Engineering

National Institute of Technology, Raipur, Chhattisgarh | Jan 2020 – May 2021

- Taught B.Tech. & M.Tech. courses including Fluid Mechanics, Fluidization Engg, Heat transfer, Non-Conventional Energy sources, Process Design and Membrane separation.
- Reviewed and edited **research reports, dissertations, and laboratory documentation.**
- Guided students in **scientific writing, data presentation, and result interpretation.**
- Prepared course materials, manuals, and assessment content with high editorial standards.
- Served as In-charge of Analytical Instruments Lab: handling FTIR,

## CORE COMPETENCIES

- Scientific writing, Editing & Proofreading
- Technical Writing & Content Development
- Manuscript Review & Quality Control
- Research Analysis & Literature Review
- Data Interpretation & Validation
- Plagiarism Checking & Reference Management
- Scientific Formatting (APA, Elsevier, Springer styles)
- Teaching & Curriculum Design

## EDUCATION

- Ph.D. (2019) | Chemical Engineering – NIT Raipur  
*Thesis Title: Synthesis, Characterization and Applications of Fly-ash Supported Thin Film Composite Membranes*
- M.Tech. (2014) | Chemical Process Design – NIT Raipur, (Gold Medalist, CPI 8.63)
- B.E. (2008) | Chemical Engineering – GGV Bilaspur (Honors, CPI 8.32)

## TECHNICAL SKILLS

- Microsoft word, Excel, PowerPoint.
- Reference Management (Mendeley, EndNote)
- Plagiarism Tools (Turnitin)
- ChemDraw, MATLAB, RSM

- UV-Vis, AAS, HPLC, Rheometer, Contact Angle Analyzer and Particle Size Analyzer
- Assisted in **academic audits**, departmental documentation, admission activities and accreditation-related activities.
- Assisted in organizing international conferences and workshops.

**Assistant Professor (Adhoc) – Chemical Engineering**  
**Guru Ghasidas Vishwavidyalaya (Central University), Bilaspur, Chhattisgarh | Jul 2019 – Dec 2019**

- Delivered lectures in core Chemical Engineering.
- Supervised UG project work, seminars, and technical presentations.
- Mentored UG, PG and Ph.D. students in research planning, experimental methodology, and report writing.

**Contract Faculty – Chemical Engineering**  
**National Institute of Technology, Raipur, Chhattisgarh | Oct 2009 – May 2011**

- Conducted lectures and laboratory sessions for undergraduate Chemical Engineering courses.
- Assisted in curriculum planning, syllabus implementation, and academic scheduling. Prepared and reviewed lecture notes, laboratory manuals, and academic content.
- Guided students in practical experiments, data analysis, and technical documentation.

**Graduate Engineer Trainee**  
**Shree Nakoda Ispat & Power Ltd. (SNIL), Raipur, Chhattisgarh | Aug 2008 – Feb 2009**

- Industrial exposure in power plant, and water treatment sections.
- Assisted in process monitoring, operational control, and routine troubleshooting of plant units including boilers, cooling towers, DM plant, and effluent treatment systems.
- Performed **laboratory analysis** and **technical documentation** of process and water samples.

### KEY STRENGTHS [SCIENTIFIC EDITOR ROLE]

- Strong command over **technical language and scientific structure**
- High attention to **detail, accuracy, and consistency**
- Ability to work with **large technical documents and datasets**
- Experience handling **peer-reviewed research and academic publications**
- Excellent **written communication and analytical skills**

- Online Teaching Tool: Google meet, MS Team, Zoom
- FTIR, UV-Vis, AAS, HPLC, Rheometer, Contact Angle Analyzer etc.

### PUBLICATIONS & RESEARCH

#### PATENT:

- Industrial Liquid Extraction AI machine.**  
 Indian Design Patent no.456509-001; issued on 25/07/2025

#### BOOK CHAPTER:

- Gupta V.** *Membrane integrated BES for wastewater reclamation*  
<https://doi.org/10.1016/B978-0-323-88505-8.00014-0>,
- Gupta V.**, Anandkumar J. *Membrane Processes*  
<https://doi.org/10.1201/9781003165019>
- Gupta V.**, Dharampal. *Biochar as an adsorbent for removal of pharmaceutical compounds from wastewater.*  
<https://doi.org/10.1515/9783110734003-016>

#### SELECTED PUBLICATIONS (SCI/Scopus):

- Gupta V.**, Raja C., Anandkumar J. (2020), *Periodica Polytechnica Chemical Engineering.*  
<https://doi.org/10.3311/PPch.14126>
- Gupta V.**, Anandkumar J. (2019), *Journal of Serbian Chemical Society.*  
<https://doi.org/10.2298/JSC180424083G>.
- Gupta V.** Anandkumar J. (2019) *Membrane Water Treatment.*  
<https://doi.org/10.12989/mwt.2019.10.6.431>

Actively Participated and presented in various conference

Scopus id: 57212178168 for publication details

### FDPs AND WORKSHOPS

FDPs on Emerging Technologies, Digital Education, Energy Applications  
 STTPs on Membrane Technology & Process Simulation

### Declaration

I, Dr. Vandana Gupta, hereby declare that the information provided is true and accurate to the best of my knowledge.

Dr. VANDANA GUPTA