

## ***CURRICULUM VITAE***

### **Dr. Pankaj Sen**

Associate Professor, Assistant Dean (SOBAS), Coordinator Research (SOBAS) Department of Chemistry

Sangan University Bhilwara

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Scopus ID – 58022103300

Vidwan ID – 581843

ABC ID – 900432754021

Mo. No. 91-7791994360

### **Academic Profile**

*“I am, Associate Professor Chemistry, Department of Chemistry, Assistant Dean School of Basic and Applied Science, Sangam University, Bhilwara, Rajasthan. I hold Ph.D. in water and wastewater treatment and nanotechnology. I am expert in the green synthesis of metal nanoparticles. I have 19 years of Experience in Teaching with a Specialization in Organic Chemistry, have not only taught but also has academic, and research field experience. I published more than 10 research papers in globally reputed journals, and 12 Patents have been granted and published at National and International levels. I have attended more than 15 workshops, and Seminars, and has presented many papers in national and international conferences, I am life member of the Indian Science Congress, and Indian Water Works Association.”*

## Education:

- **Ph.D.**

**Topic:** Elucidation of Water Quality Parameters with Emphasis on Fluoride Content and its Removal by Natural Adsorbent

University: Sangam University Bhilwara

Year: 2023

- **M.Phil**

**Topic:** Analysis of water quality parameters of Deoli Tehsil Tonk

University: VMU Salem TN

Year: 2009

- **M.Sc.**

**Specialization:** Organic Chemistry

University: MDSU Ajmer

Year: 2006

- **B.Sc.**

**Courses:** Chemistry, Botany, Zoology

University: University of Kota, Kota

Year: 2004

## Academic Appointments

- Associate Professor, Department of Chemistry, Sangam University Bhilwara, [2018 - Present]
- Assistant Professor, Department of Chemistry, Devkanya college Deoli [2016- 2018],
- Lecturer, Department of Chemistry, The Imples College Lalsot Dausa [2015-2016]
- Director, Harsh Coaching for Neet Jee Advance Deoli [2011-2014]
- Lecturer, Department of Chemistry Govt college Deoli [2008-2010]
- Lecturer, Department of chemistry, Alok science College Kekri [2006-2008]





## Research Interests

- Water analysis, Soil analysis
- Water and Graywater treatment
- Nanotechnology
- Organic Synthesis

## Publications

### A. Research Paper Publication:

- ANALYSIS OF WATER QUALITY PARAMETERS OF SOME VILLAGES OF DEOLI TEHSIL (TONK) VILLAGES OF DEOLI TEHSIL (TONK) VILLAGES OF DEOLI TEHSIL (TONK) Pankaj Sen\* and Rajeev Mehta Department of Chemistry, Sangam University Bhilwara-311001, Rajasthan, (INDIA) E-mail : pankajsen\_deoli@rediffmail.com Received: 1 September 2019 / Revised: 21 September 2019 / Accepted: 19 Dec 2019 (PDF) *Journal of Current Discovery in Chemistry* |. Available from: [https://www.researchgate.net/publication/350837868\\_Journal\\_of\\_Current\\_Discovery\\_in\\_Chemistry](https://www.researchgate.net/publication/350837868_Journal_of_Current_Discovery_in_Chemistry) [accessed Jan 29 2025].
- WASTE WATER TREATMENT OF SANGAM UNIVERSITY WITH THE HELP OF NATURAL FILTERS\* Pankaj Sen and Rajeev Mehta Department of Chemistry, Sangam University, Bhilwara, Rajasthan E-mail – [pankaj.sen@sangamuniversity.ac.in](mailto:pankaj.sen@sangamuniversity.ac.in) *Journal of Applied Geochemistry* Vol. 22, No. 4 (2020). pp. 350-352 (PDF) *WASTE WATER TREATMENT OF SANGAM UNIVERSITY WITH THE HELP OF NATURAL FILTERS*. Available from: [https://www.researchgate.net/publication/355424613\\_WASTE\\_WATER\\_TREATMENT\\_OF\\_SANGAM\\_UNIVERSITY\\_WITH\\_THE\\_HELP\\_OF\\_NATURAL\\_FILTERS](https://www.researchgate.net/publication/355424613_WASTE_WATER_TREATMENT_OF_SANGAM_UNIVERSITY_WITH_THE_HELP_OF_NATURAL_FILTERS) [accessed Jan 29 2025].
- IMPACT OF COVID-19 LOCKDOWN ON PHYSICO-CHEMICAL WATER QUALITY PARAMETERS: TEXTILE CITY BHILWARA April 2021 *sodth Sanchar bulletin* Vol 10 issue 40 Oct. -Dec. 2020 page no. 44-52
- CHANGES IN GROUND WATER QUALITY OF TEXTILE CITY BHILWARA AFTER COVID-19 LOCKDOWN *Journal of Applied Geochemistry* Vol. 23, No. 3 (2021). pp. 214-218
- Water quality assessment of Banas River, eastern-south region of Rajasthan, using water quality index December 2022 [Proceedings of the Indian National Science Academy](#) 89(2), DOI: [10.1007/s43538-022-00145-7](https://doi.org/10.1007/s43538-022-00145-7)

- Analysis of Groundwater Quality in Semi-arid Region of Eastern -South Rajasthan on the Basis of Water Quality Index (WQI), October 2024, DOI: [10.58825/jog.2024.18.2.112](https://doi.org/10.58825/jog.2024.18.2.112)
- Impact of Textile Dyeing Effluent on Soil Quality Parameters February 2025 DOI: [10.11648/j.ie.20250901.11](https://doi.org/10.11648/j.ie.20250901.11)
- The Analysis of Water Quality Index with Study of the Effect of Textile Effluents on the Groundwater of Bhilwara City [Mahesh Kumar Singh](#), [Pankaj Sen](#)\*, [Shweta Dadheech](#), [Rajeev Mehta](#), [Preeti Mehta](#) Published in *Modern Chemistry* (Volume 13, Issue 1) Received: 10 February 2025 Accepted: 24 February 2025 Published: 18 March 2025 DOI: [10.11648/j.mc.20251301.11](https://doi.org/10.11648/j.mc.20251301.11)
- Synthesis and Characterization of Ether-Dimer Impurity of Drug - Ranolazine Using 2, 2'- (oxybis (methylene)) Bis (Oxirane) [Nand Lal Mali](#)  [Rajeev Mehta](#) , [Preeti Mehta](#) , [Pankaj Sen](#)\*  Published in *American Journal of Applied Scientific Research* (Volume 11, Issue 2) Received: 9 March 2025 Accepted: 25 March 2025 Published: 29 April 2025

## B. Patent Publication / Grant:

| S.No. | Patent / Design Title  | Name of Applicant(s)   | Patent No.     | National / International | Status    |
|-------|--|--|----------------|--------------------------|-----------|
| 1.    | Composition of activated charcoal of Hibiscus populneus and copper nano particles for removing fluoride from water | <b>Dr. Pankaj Sen</b> , Prof Rajeev Mehta, Pro. Preeti Mehta, Dr. Nirma Dhaker                 | 202311051823A  | National                 | Published |
| 2.    | Crab legs styled height- adjustable table  | <b>Dr. Pankaj Sen</b>  | 395391-001     | National                 | Granted   |
| 3.    | A method of production of hydrogen gas from <i>prosopis juliflora</i> plant using dilute nitric acid               | <b>Dr. Pankaj Sen</b> , Prof Rajeev Mehta, Pro. Preeti Mehta, Dr.Nirma Dhaker, Dr. Manoj Joshi | 202311068634 A | National                 | Published |
| 4.    | Composition of green synthesized silver nanoparticles for removing contaminants from industrial Wastewater         | Abhilasha Bhatt, Pro. Preeti Mehta, Prof Rajeev Mehta, <b>Dr. Pankaj Sen</b> , Nirma Dhaker,   | 202311072526 A | National                 | Published |
| 5.    | Precision gravimetric instruments for accurate capsule dosing in Pharmaceuticals                                   | <b>Dr. Pankaj Sen</b> , Prof. Preeti Mehta   | 6322048        | International            | Granted   |
| 6.    | Drug Waste Management Device for safe and efficient medicine Disposal  | <b>Dr. Pankaj Sen</b> , Prof. Preeti Mehta, Nirma Dhaker, Abhilasha Bhatt                      | 6329603        | International            | Granted   |
| 7.    | Dual Tong: Modified Test Tube and Ignition Tube Holder   | <b>Dr. Pankaj Sen</b> , Dr. Rajeev Mehta, Dr. Preeti Mehta                                     | 397261-001     | National                 | Granted   |
| 8.    | Evaporative watch glass  | Dr. Preeti Mehta, <b>Dr. Pankaj Sen</b> , Dr. Rajeev Mehta                                     | 399218- 001    | National                 | Granted   |
| 9.    | Futuristic AI- Enhanced Air Purifier for Next-Generation Indoor Environmental Solutions                            | <b>Dr. Pankaj Sen</b>  | 6332516        | International            | Granted   |
| 10.   | Piperidine – Based Anit-cancer Formulation   | <b>Nand Lal Mali</b> , <b>Dr. Pankaj Sen</b> , Prof.   | 202411098792 A | National                 | Published |

|     |   |  |                |          |           |
|-----|---|--|----------------|----------|-----------|
|     | Publication – 03/01/2025  | <b>Rajeev Mehta, Prof. Preeti Mehta</b>  |                |          |           |
| 11. | Green Synthesize Nanoparticle based system for Groundwater Quality Treatment and Monitoring Published- 03/01/2025   | <b>Shweta Dadheech, Dr. Pankaj Sen, Prof. Rajeev Mehta, Prof. Preeti Mehta</b> | 202411100375 A | National | Published |
| 12  | Method for green synthesis of Cu and Ni oxide nanoparticles using Syzygium cumini Leaf Extract for textile effluent treatment Publication – 31 January 2025 | <b>Mahesh Kumar, Dr. Pankaj Sen</b>  | 202411098324A  | National | Published |

### C. Books Publication:

| Title of Book                                   | ISBN No.          | Publisher          | Year |
|---|-------------------|--------------------|------|
| Drinking water Chemistry – A Practical guide    | 978-1-957302-18-8 | walnut publication | 2022 |
| Basic Analytical Chemistry - A Textbook         | 978-81-970242-4-5 | SU Publication     | 2024 |
| Industrial Chemical and Environment A Hand Book | 978-81-970242-1-4 | Su Publication     | 2025 |

### Conference Proceedings: Attended/paper presented in Seminar/Symposium/Workshop etc.:

| Title of paper  | Details of Seminar/Symposium/Workshop etc.  | Organized by  |
|---|---|---|
| Appreciation Certificate  | National Conference on Research & Innovation Trends in Applied Sciences [NCRIAS18]                    | School of Basic and Applied Sciences, Sangam University, Bhilwara |
| Attend  | National Conference on Research & Innovation Trends in Applied Sciences [NCRIAS18]                    | School of Basic and Applied Sciences, Sangam University, Bhilwara |
| Attend  | NPTEL Awareness workshop  | IIT, Kanpur   |
| Analysis of water quality parameter of some village of Deoli Tehsil (Tonk)- Published | National Conference on "Trends and Innovation in Chemistry " (NCTIC - 2019)                           | RNT P.G. College, Kapasan (Chittorgarh)                           |
| Analysis of Water Quality Parameters  | International Conference on Environmental & Climatic Consequences: Challenges & Mitigation Strategies | Sangam University, Bhilwara                                       |
| Attend  | Intellectual Property Right (IPR) Seminar   | Mrs Susmita Samanta- At Sangam University, Bhilwara               |

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|---|---|---|
| Attend  | Series of Guest lecturers-2020 on outcome-based Education   | School of Basic and Applied Sciences, Bhilwara  |
| Attend  | National Webinar on "Sustainable Utilization of Herbal Resources: Conservation & Challenges"                        | Department of Botany, Govt. College, Bundi  |
| Attend  | International Webinar on "Role of Teachers in National Building"  | S.D. Govt. College Beawar   |
| Attend  | International Webinar on Synthetic Organic Electrochemistry: Basic Concept and Scale-up                             | Claire Francis  |
| Attend  | Seminar on National Mathematics Day   | Department of Mathematics, Sangam University, Bhilwara  |
| Attend  | Seminar on Trace Gases in Atmosphere  | Department of Physics, Sangam University, Bhilwara  |
| Organizing Member(Session)  | International Conference on "Analytical and Interdisciplinary Research" (ICAIR-2021)                                | NIIT Ghana, BlueCrest University Liberia and Sangam University, Bhilwara                              |
| Water Quality Assessment of Banas River, Eastern –South Region of Rajasthan, Using Water Quality Index                  | International Conference on Modern Approaches in Sciences & Technology Presenting Date- 02/ 04/ 2022                | School of Engineering & Sciences, GD Goenka University, Gurugram Sohna Road, Gurugram, Haryana, India |
| The Ancient Indian Chemistry- 25-27 April, 2022   | National Seminar on Possibilities of Multidisciplinary Research in Linguistics Literature- <b>Best Paper Award</b>  | School of Arts and Humanities, Sangam University, Bhilwara  |
| Attend National workshop  | Challenges before HEIs in remote areas for achieving quality improvement through Assessment & Accreditation process | Sangam University Bhilwara  |
| Paper Present<br>Water Quality Assessment of Banas River, Eastern –South Region of Rajasthan, Using Water Quality Index | ICAIR - 2022  | Sangam University Bhilwara  |

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|--|--|---------------------------------|
| paper present<br>Managing parameters and mechanisms of groundwater quality variation in semi-arid region of eastern - south rajasthan: a health risk assessment of fluoride and water quality index (wqi) based strategy | Recent innovation in biotechnological, chemical & Environmental sciences | MLSU Udaipur                    |
| Attend two days National Seminar on Use of Hindi terminology in science- related subjects  | 15/9/2023 – 16/9/2023  | Pacific University Udaipur      |
| Organizing Secretary in International conference RTIAS 2024  | 20- 22 Dec. 2023   | Sangam University Bhilwara      |
| Attend Six days FDP on outcome-based Education   | 16 – 20 Oct. 2024  | Sangam University Bhilwara      |
| Food committee In charge Six days FDP on Indian knowledge system   | 16 – 20 Dec. 2024  | Sangam University Bhilwara      |
| Oral paper presentation in 57 <sup>th</sup> IWWA Convention Raipur Chhattisgarh  | 10 -12 Jan 2025  | IWWA Raipur Center Chhattisgarh |

## Grants & Funding

- For three days International Conference by SERB; Amount – 200000; Year - 2024
- For National Symposium on Patent filling (IPR) by DST Rajasthan; 0.70 lakh; Year - 2025

## Supervision & Mentorship

- Supervisor of PhD students - 6
- Supervisor of Master's students Research Projects - 15

## Awards & Honors

- Best faculty Award 2019; 2020; 2021; 2022
- Research honorarium award by Sangam University Bhilwara- 2022; 2023; 2024; 2025
- Indian Education Award for outstanding achievement in education field - 2023

## Professional Memberships

- Life membership of Indian Science Congress

- Life Member, Indian water works association
- Member, Indian chemical society Kolkata

### **Editorial & Review Activities**

- Reviewer for:  
Journal of Global Ecology and Environment  
International Journal of Environmental Chemistry
- Editorial Board Member - **International Journal of Environmental Chemistry**
- Editorial Board Member – **World Journal of Applied Chemistry**

### **Conference & Seminar Participation**

- Session Organizing Member – ICAIR 2022 Sangam University Bhilwara
- Resource Person in two-day workshop on CHEMDRAW hands on practices
- Organizing Secretary – RTIAS 2024 Sangam University Bhilwara
- Invited Speaker, Indian Water Works Association Raipur: Jan 10-12 2025

### **Skills & Competencies**

- Research Methodologies: Mixed method Research approach including Experimental Research, Analytical Research, and Environmental Engineering Research.
- Software & Tools: ANNOVA, WQI, CORELATION, CHEMDROW etc. & UV-Visible Spectro photo meter, pH meter, Conductivity meter, etc.
- Languages: Both Hindi and English

### **Personal Detail**

- Name – Dr. Pankaj Sen
- Mothers Name- SMT Manmoji Devi
- Fathers Name – SH. Mahaveer Prasad Sen
- Spouse Name – MS Sunita Sen
- DOB – June15, 1985
- Hometown – Deoli, Tonk Rajasthan 304804



**Date:** .....

**Place:** .....

**Dr. Pankaj Sen**