

# Dr. Swati Dubey

M.Sc. (Applied Chemistry),  
PhD (Chemical Sciences)  
Mobile No.: +91 8120924010  
Email: drswati.chem@satiengg.in , swatidubey82@gmail.com  
Research Gate: [https://www.researchgate.net/profile/Swati\\_Dubey7](https://www.researchgate.net/profile/Swati_Dubey7)

## PERSONAL DETAILS:

Husband's Name : Mr. Ritesh Dubey  
Date of Birth : 10-June-1989  
Nationality : Indian  
Gender : Female  
Marital Status : Married  
Language known : English & Hindi

**CURRENT POSITION:** Working as an Assistant Professor & Training and Placement officer in Applied Chemistry Department of Samrat Ashok Technological Institute (SATI), Vidisha [M.P.].

## EDUCATIONAL QUALIFICATION:

Degree	University/Board	Year	Subject	Percentage (%)
<b>Ph.D.</b>	Academy of Scientific and Innovative Research (under institutions of national importance), CSIR-Advanced Materials and Processes Research Institute, Bhopal – M.P., India	2019	Chemical Sciences	83.88
<b>M. Sc.</b>	Barkatullah University, Bhopal [M.P]	2013	Applied Chemistry	75.1
<b>B. Sc.</b>	Barkatullah University, Bhopal [M.P]	2011	Chemistry, Bio-technology, Botany	79.91

## INDUSTRIAL TRAINING/PROJECTS:

- Training in Quality Control Department in IPCA Pharmaceuticals Laboratory, Indore [M.P] of one and a half months from 23<sup>rd</sup> July 2013 to 05<sup>th</sup> Sept. 2013.

- Three months training in Water Testing Laboratory of Central Ground Water Board, North Central Region Block-1 Bhopal [M.P] from 06<sup>th</sup> April 2017 to 06<sup>th</sup> July 2017.
- CSIR-800 project entitled “Rural Sustainable Entrepreneurship Development in Semri Village” based on rural area development.

### RESEARCH PAPERS (SCI):

S.No	Details	Impact factor (updated 2021)	Citation Index
1.	I.B Singh, Akanksha Gupta, <b>Swati Dubey</b> , M. Shafeeq, P. Banerjee, A.S.K Sinha. Sol gel synthesis of nanoparticles of gamma alumina and their application in defluoridation of water. Journal of Sol-Gel Science and Technology. Volume 77, Issue 2, 2016, 416-422.	2.606	24
2	<b>Swati Dubey</b> , Archana Singh, Bhumika Nim and I.B Singh. Optimization of molar concentration of AlCl <sub>3</sub> salt in the sol-gel synthesis of nanoparticles of gamma alumina and their application in the removal of fluoride of water. Journal of Sol-Gel Science and Technology. Volume 82, Issue 2, 2017, 468-477.	2.606	14
3	Vikas Shrivastava, <b>Swati Dubey</b> , Gaurav Kumar Gupta and I.B Singh. Influence of Alpha nano-alumina reinforcement content on the Microstructure, Mechanical and Corrosion properties of Al6061-Al <sub>2</sub> O <sub>3</sub> composite. Journal of Materials Engineering and Performance. Volume 26, Issue 9, 2017, 4424-4433.	2.036	13
4.	Swapnamoy Dutta, Cheryl Bernice Pohrmen, Ishita Banerjee, Ankita Trivedi, Ravikant Verma, <b>Swati Dubey</b> . Bioderived metal and metal oxide incorporated biopolymer nanocomposites for dye degradation application. Octa Journal of Biosciences. Volume 9, Issue 1, 2021, 30-36.	National Academy of Agricultural Sciences (NAAS) rating (3.05)	5
5.	Krishna Kumar Jaiswal, Swapnamoy Dutta, Ishita Banerjee, Cheryl Bernice Pohrmen, Ram Kishore Singh, Himadri Tanaya Das, <b>Swati Dubey</b> , Vinod Kumar. Impact of aquatic microplastics and nanoplastics pollution on ecological systems and sustainable remediation strategies of biodegradation and photodegradation. Science of the total Environment. Volume 806, Part 3, 2022, 151358. DOI: <a href="https://doi.org/10.1016/j.scitotenv.2021.151358">https://doi.org/10.1016/j.scitotenv.2021.151358</a>	10.754	29

## PATENT FILED:

<b>S.No</b>	<b>Title</b>	<b>Filed in</b>
<b>1</b>	“Nanoadsorbent based user-friendly household filter for the purification of fluoride and arsenic contaminated drinking water”.  <i><b>Inventors:</b> Indra Bhushan Singh, Archana Singh, Swati Dubey, Akshay Singh Tomar, Priyanka Arya, Avanish Kumar Srivastava.</i>	<b>USA Ref. No. 0131NF2018.</b>

## CONFERENCE ATTENDED

1. Poster presentation on the topic of “**Low cost nanoadsorbent incorporated defluoridation filter for providing safe drinking water**” under **Swasth Bharat** theme in **India International Science Festival (IISF)** held at Chennai, October 13-17, 2017.
2. Poster presentation at CSIR-AMPRI, Bhopal (M.P) on National Science Day, 28 Feb 2018 on the topic of “**Synthesis of nanoparticles of gamma alumina and their effectiveness in the removal of Fluoride, Arsenic & Chromium**”.
3. Poster presentation on the topic of “**Alcohol-based sol-gel synthesis of nanoparticle of  $\gamma$ -Al<sub>2</sub>O<sub>3</sub> and their defluoridation potential in the purification of drinking water**” in National seminar on Recent innovations in advanced materials: Physics of advanced materials- (RIAMS-2018), 18-19 September 2018 at CSIR-AMPRI, Bhopal (M.P).
4. Poster presentation on the topic of “**Removal of toxic inorganic contaminants using nanoparticles of gamma alumina for the purification of drinking water**” under **Swastha Bharat** theme in **India International Science Festival (IISF)** held at Kolkata, November 5-8, 2019.

## AWARDS & SCHOLASTIC ACHIEVEMENTS

1. Achieved award for the **second highest** number of research publications in SCI journals amongst students in AcSIR-AMPRI, Bhopal on **CSIR FOUNDATION DAY** at CSIR-AMPRI on **27 September 2016**.
2. Received certificate for the research publications in SCI journals amongst students in AcSIR-AMPRI, Bhopal on **CSIR FOUNDATION DAY** at CSIR-AMPRI on **26 September 2017**.
3. Best poster presentation award in **India International Science Festival (IISF)** held at Chennai, October 13-17, 2017.

4. Best poster presentation award in **National Science Day on 28 Feb 2018** at CSIR-AMPRI Bhopal (M.P).
5. Secured first prize and Best poster presentation award in **National seminar on “Recent innovations in advanced materials: Physics of advanced materials-(RIAMS-2018)”** 18-19 September 2018 at CSIR-AMPRI, Bhopal (M.P).

## **TECHNOLOGY TRANSFER**

1. Know-how titled “**Defluoridation of Drinking Water Using Nano-adsorbent Based Domestic Filter**”, transferred to “M/S MSW Social Enterprises Private Ltd. Indore, M.P.” on 1 January 2018.
2. Know-how titled “**Nano-alumina Adsorbent Based Water Filter for Arsenic and Fluoride Removal**” transferred to “M/S Marcus Projects Private Limited, Lucknow, U.P.” on 18 September 2018.

## **MEMBERS OF THE SCIENTIFIC COMMUNITY:**

- Life time member of Vigyan Bharti (Vibha), **Ref No. 537**.

## **SKILLS/EXPERTISE**

- Work knowledge in Nano-science and technology.
- Experience in Synthesis of Nanoparticles, Al-based nano-adsorbents, Particle size analysis.
- Different Defluoridation techniques, Arsenic, Chromium and Lead removal from water.
- Water-Treatment and testing using different physicochemical techniques.
- Expert in different characterization techniques like X-Ray Diffraction, BET Surface area, Transmission Electron Microscopy, Field Emission-Scanning Electron Microscopy, Infra-red Spectroscopy, UV-Visible spectrophotometer.

## **AREA OF INTEREST:**

- Nano-Science and Nanotechnology.
- Organic Chemistry.
- Pharmaceutical Chemistry
- Engineering Chemistry.
- Environmental Chemistry, Green & Sustainable Chemistry and related areas.
- Industrial Chemistry.

- Analytical Chemistry.
- Instrumentation.

#### **ADMINISTRATIVE EXPERIENCE:**

- Training and Placement officer (Applied Chemistry) since 2022.
- Member of BOS Applied Chemistry since 2023.
- Co-coordinator of Dramatic Club since 2022.
- Departmental Library Incharge since 2022.