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## **Curriculum Vitae**

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**Dr. Aastha Gupta**

Assistant Professor (Chemistry)  
Department of Higher Education, Govt. of H.P. (India).

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**Father's name:**

**Sh. Dhan Dev Gupta**

**Date of Birth:**

**11<sup>th</sup> April 1995**

**Permanent Address:**

**Village & P.O. Upper Lambagaon, Tehsil Jaisinghpur,  
Distt. Kangra, (HP), PIN-176096, India**

**Designation:**

**Assistant Professor (Chemistry), since July 2023**

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### **Academic Qualifications:**

- **Ph. D. (Chemistry)** IIT Mandi (2023)
- **M.Sc. (Chemistry)** Himachal Pradesh University, Shimla (2018)
- **B.Sc. (Medical)**, Himachal Pradesh University, Shimla (2016)

### **Achievements:**

- Qualified **CSIR UGC NET** (Chemical Sciences), Dec 2019 with AIR 34.
- Qualified **GATE** (Chemistry), Jan 2020 with AIR 836.
- Qualified **SET** (Chemistry), Himachal Pradesh, 2018.
- **Topper** of the college (MLSM Sundernagar) in B.Sc. Chemistry.
- **Best Poster Award** at APA Bioforum International e-Conference on Polymeric Biomaterials & Bioengineering - 27<sup>th</sup>-28<sup>th</sup> August, 2021.
- **Best Poster Award** at Chemical Sciences Symposium (CSS-2022), SBS IIT Mandi - 23<sup>rd</sup>-24<sup>th</sup> May, 2022.

### **Fellowship/Incentive:**

- **Mukhya Mantri Protsahan Yojana-Himachal Pradesh** in 2021
- **HTRA fellowship** from September 2020 to July 2023.

### **Research Interest:**

- Functional polymers-based nanoparticles for cancer therapy.
- Published **11 research papers** in various international journals.

### **Member of Academic Bodies:**

- Life Time member of Asian Polymer Association (APA).

### **Teaching Experience:**

- Worked as a Teaching Assistant at IIT Mandi from 2020 to 2023.
- Teaching Chemistry (Inorganic, Organic and Physical Chemistry) to B.Sc. students since July 2023.
- Organized various coaching classes for competitive examinations and taught Chemistry.

### **Paper Presentations in Conferences:**

- APA Bioforum International e-Conference on Polymeric Biomaterials & Bioengineering – 27<sup>th</sup>-28<sup>th</sup> August, 2021.
- International e-Conference on Nanomaterials & Nanoengineering APA Nanoforum 2022 – 24<sup>th</sup>-26<sup>th</sup> February, 2022.
- Bio-X Annual Conference 2022, IIT Mandi – 13<sup>th</sup>-14<sup>th</sup> May, 2022.
- Chemical Sciences Symposium (CSS-2022), SBS, IIT Mandi – 23<sup>rd</sup>-24<sup>th</sup> May, 2022.
- International Online Conference on Nanomaterials, Mahatma Gandhi University, Kerala – 12<sup>th</sup>-14<sup>th</sup> August, 2022.
- International Conference on Recent Trends in Bio and Material Sciences, HSCA, SPU Mandi – 10<sup>th</sup>-11<sup>th</sup> October, 2022.

### **Seminars/Webinars/Workshops Attended:**

- RSC Desktop Seminar Lectureship with Polymer Chemistry - 20<sup>th</sup> April, 2021.
- Reaxys Predictive Retrosynthesis – Speed Matters - 26<sup>th</sup> May, 2021.
- Drive high quality and fast extraction of critical information from Patents with Reaxys - 2<sup>nd</sup> June, 2021.
- Open science trends and how they influence the impact of your journal - 9<sup>th</sup> June, 2021.
- Encapsulation – A novel preservation technique - 17<sup>th</sup> June, 2021.
- Recent Advances and Applications of Conducting Polymer Nanostructures and Nanocomposites (RA<sup>2</sup>CPNC) – 23<sup>rd</sup>-24<sup>th</sup> June, 2021.
- Journal Citation Reports (JCR) Certification Series – 2021 - 8<sup>th</sup> July, 2021.

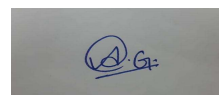
### **List of Publications:**

#### **a) Publications related to thesis**

1. A. Sood, A. Gupta, G. Agrawal,\* Recent advances in polysaccharides based biomaterials for drug delivery and tissue engineering applications, **Carbohydrate Polymer Technologies and Applications** **2021**, 2, 100067. (IF 5.86)
2. A. Gupta, A. Sood, E. Fuhrer, K. Djanashvili, G. Agrawal,\* Polysaccharide-based theranostic systems for combined imaging and cancer therapy: recent advances and challenges, **ACS Biomaterials Science and Engineering** **2022**, 8, 2281. (IF 5.395)
3. A. Sood,<sup>†</sup> A. Gupta,<sup>†</sup> R. Bharadwaj, P. Ranganath, N. Silverman, G. Agrawal,\* Biodegradable disulfide crosslinked chitosan/stearic acid nanoparticles for dual drug delivery for colorectal cancer, **Carbohydrate Polymers** **2022**, 294, 119833. (<sup>†</sup>equally contributing first authors) (IF 10.723)
4. A. Gupta, A. Sood, A. Dhiman, N. Shrimali, R. Singhmar, P. Guchhait, G. Agrawal,\* Redox responsive poly(allylamine)/eudragit S-100 nanoparticles for dual drug delivery in colorectal cancer, **Biomaterials Advances** **2022**, 143, 213184. (IF 7.9)
5. A. Gupta, A. Dhiman, A. Sood, R. Bharadwaj, N. Silverman, G. Agrawal,\* Dextran/eudragit S-100 based redox sensitive nanoparticles for colorectal cancer therapy, **Nanoscale** **2023**, 15, 3273. (IF 8.307)
6. A. Gupta, A. Sood, D. Bhardwaj, N. Shrimali, R. Singhmar, S. Chaturvedi, P. Guchhait, G. Agrawal,\* Functionalized chitosan decorated hafnium oxide@gold core-shell nanoparticles for multimodal cancer therapy, **Advanced Therapeutics** **2023**. (IF 5.003)
7. A. Gupta, R. Singhmar, A. Sood, D. Bhardwaj, S. S. Kumaran, S. Chaturvedi, G. Agrawal,\* Gd/hafnium oxide@gold@chitosan core-shell nanoparticles as a platform for multimodal theranostics in oncology research, **Chemical Communications** **2023**, 59, 11819. (IF 6.065)

#### **b) Other Publications**

1. S. Murab, A. Gupta, M.K.W. Biegun, A. Kumar, P.V. Rijn, P. Whitlock, S.S. Han, G. Agrawal,\* Alginate based hydrogel inks for 3D bioprinting of engineered orthopedic tissues, **Carbohydrate Polymers** **2022**, 296, 119964. (IF 10.723)
2. A.K. Sharma, A. Gupta, A. Dhiman, M. Garg, R. Mishra, G. Agrawal,\* Fe<sub>3</sub>O<sub>4</sub> embedded κ-carrageenan/sodium alginate hydrogels for the removal of basic dyes, **Colloids and Surfaces A: Physicochemical and Engineering Aspects** **2022**, 654, 130155. (IF 5.518)
3. A. Dhiman, A. Gupta, S.K. Sethi, G. Manik, G. Agrawal,\* Encapsulation of wax in complete silica microcapsules, **Journal of Materials Research** **2023**, 38, 814. (IF 3.0)
4. A. Gupta, A. Dhiman, S.K. Samal, G. Agrawal,\* Stimuli-responsive microgels as drug carriers and theranostics **2023**, in press. (Book Chapter).



Dated: 20/12/2023

(Dr. Aastha Gupta)