

# **Dr. Sukriti Chaudhary**

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## **1. Academic Qualification**

<b>Degree obtained</b>	<b>Discipline</b>	<b>University</b>	<b>School/ Institute</b>	<b>Year of Passing</b>	<b>% or GPA</b>
10 <sup>th</sup>	Science	CBSE	D.A.V, Palampur , H.P	2004	82.6 %
12 <sup>th</sup>	PCB	CBSE	D.A.V, Palampur , H.P	2006	82.8 %
B. Sc. (Hons) chemistry	Chemistry	Panjab University, Chandigarh	Panjab University, Chandigarh	2010	70.7%
M. Sc. (Hons) chemistry	Chemistry	Panjab University, Chandigarh	Panjab University, Chandigarh	2012	68.8%
B.Ed	Science	Panjab University, Chandigarh	Panjab University, Chandigarh	2013	75.9%
Ph.D	Chemistry	Dr B R Ambedkar NIT, Jalandhar, Punjab	Dr B R Ambedkar NIT, Jalandhar, Punjab	2018	8.27%

## **2. Experience**

### **a) Research Experience**

<b>Name of the organization</b>	<b>Position held</b>	<b>Period from</b>	<b>Period to</b>	<b>Nature of working</b>
Panjab University, Chandigarh	Project Intern	July, 2011	April, 2012	Research
Dr B R Ambedkar NIT, Jalandhar, Punjab	Junior Research Scholar	September, 2013	September, 2015	Research
Dr B R Ambedkar NIT, Jalandhar, Punjab	Project Intern	September, 2016	March, 2017	Research
Dr B R Ambedkar NIT, Jalandhar, Punjab	Senior Research Scholar	September, 2015	September, 2017	Research

## b) Teaching experience

Name of the organization	Position held	Period from	Period to	Nature of working
IIIT Una, H.P	Guest faculty	14/10/2019	Present	Teaching
Indus International University, Bathu, Una	Assistant professor	11/01/2019	13/10/2019	Teaching

## 3. Publications

### a) International Journals

- Mittal H, Raya S S, Kaith B S, Bhatia J K, **Sukriti**, Sharma J, Alhassan S M, Recent progress in the structural modification of chitosan for applications in diversified biomedical fields. *European Polymer Journal*, 109 (2018) 402–434.
- **Sukriti**, Sharma J, Kaith B S, Satender, Sharma A K, Goel A, Gum xanthan-psyllium-cl-poly(acrylic acid-co-itaconic acid) based adsorbent for effective removal of cationic and anionic dyes: Adsorption Isotherms, Kinetics and thermodynamic studies. *Ecotoxicology and Environmental Safety*, 148 (2018) 150-158.
- **Sukriti**, Kaith B S, Jindal R, Kumari M, Kaur M. Biodegradable-stimuli sensitive Gum xanthan based hydrogel: Evaluation of antibacterial activity and controlled agro-chemical release. *Reactive and Functional Polymers*, 120 (2017) 1-13.
- **Sukriti**, Kaith B S, Jindal R. Controlled Biofertilizer release kinetics and moisture retention studies for gum xanthan based IPN. *Iranian Polymer Journal*, 26 (2017) 563-577.
- **Sukriti**, Sharma J, Chaddha A P S, Anand P, Pruthi V, Bhatia J, Kaith B S. Sequestration of dyes from artificially prepared textile effluent using RSM-CCD optimized hybrid backbone based adsorbent-kinetic and equilibrium studies. *Journal of Environmental management*, 190 (2017) 176-187.
- **Sukriti**, Kaith B S, Jindal R. Ag<sup>+9</sup> swift heavy ion irradiation: Augmented removal of auramine-O dye and bactericidal activity. *International Journal of Theoretical & Applied Sciences*, 9 (2017) 11-24.
- Sharma J, **Sukriti**, Chaddha A P S, Anand P, Pruthi V, Bhatia J, Kaith B S. RSM-CCD optimized adsorbent for the sequestration of carcinogenic rhodamine-B: Kinetics and equilibrium studies. *Materials Chemistry and Physics*, 196 (2017) 270-283.

- Sharma J, **Sukriti**, Kaith B S, Bhatti M S. Fabrication of Biodegradable Superabsorbent Using RSM Design for Controlled Release of KNO<sub>3</sub>. *Journal of Polymers and the Environment*, 1 (2017) 1-14.
- **Sukriti**, Sharma J, Chaddha A P S, Anand P, Pruthi V, Bhatia J, Kaith B S. Surface response methodology—central composite design screening for the fabrication of a Gx-psy-g-polyacrylic acid adsorbent and sequestration of auramine-O dye from a textile effluent. *RSC Advances*, 6 (2016) 74300- 74313.
- Kaith B S, **Sukriti**, Sharma J, Kaur T, Sethi S, Shanker U, Jassal V. Microwave-assisted green synthesis of hybrid nanocomposite: removal of Malachite green from waste water. *Iranian Polymer Journal*, 25(2016) 787–795.
- Kaith B S, Sharma J, **Sukriti**, Sethi S, Kaur T, Shanker U, Jassal V. Fabrication of green device for efficient capture of toxic methylene blue from industrial effluent based on K<sub>2</sub>Zn<sub>3</sub>[Fe(CN)<sub>6</sub>]<sub>2</sub>·9H<sub>2</sub>O nanoparticles reinforced gum xanthan-psyllium hydrogel nanocomposite, *Journal of the Chinese Advanced Materials Society*, 4 (2016) 249-268.
- Kaith B S, Sharma R, Sharma K, **Sukriti**, Kumar V, Lochab SP. Effects of O<sup>7+</sup> and Ni<sup>9+</sup> swift heavy ions on polyacrylamide grafted Gum acacia thin film and sorption of methylene blue. *Vacuum*, 111 (2015) 73-82.

#### **b) International conference:**

- **Poster presentation on** “Fabrication of biocompatible hydrogel membrane as a controlled drug delivery device for anti-tubercular drugs: ethambutol and rifampicin.” ISFM 13-15 April 2018, Chandigarh.
- **Poster presentation on** “Selective sorption of water from petroleum fraction - water emulsions with O<sup>7+</sup> and Ni<sup>9+</sup> ions beam irradiated Ga-g-poly(AAm)superabsorbent prepared under vacuum.” 7-8 Feb. 2015. *ISF College of Pharmacy*, Moga, Punjab.
- **Poster presentation on** “Effects of O<sup>7+</sup> and Ni<sup>9+</sup> swift heavy ions bombardment on the structural and morphological properties of green Ga-g-poly (AAm) thin films – Treatment of Textile Effluents.” 5-6 Feb. 2015. *Plast-India foundation*, Gandhinagar, Gujarat.

#### **c) National conference:**

- **Oral presentation on** “Effective removal of Eriochrome Black-T using sorbent based on psyllium-xanthan-cl- Poly(acrylic acid-co-itaconic acid) Hydrogel: Isotherms, Kinetic Models and thermodynamic studies.” 23-24 April 2017, NCAST, IMA Dehradun.
- **Oral presentation on** “Micro-wave assisted synthesis of Gum xanthan-psyllium-g-poly(AA)-K<sub>2</sub>Zn<sub>3</sub>[Fe(CN)<sub>6</sub>]<sub>2</sub>·9H<sub>2</sub>O based nano-superabsorbent for the efficient removal of malachite green from Industrial effluents.” 11-12 April, 2015. IIT Mandi (H.P.).

- **Poster presentation on** “Effect of  $O^{7+}$  and  $Ni^{9+}$  ions beam irradiation on Ga-g-poly(AAm) thin films prepared under vacuum.” 27-28 Feb. 2014. Arni University, Kangra (H. P).
- **Oral presentation on** “Effect of  $O^{7+}$  and  $Ni^{9+}$  swift heavy ions irradiation on graft co-polymerized gum acacia thin films.” 30 may, 2014. Bahra University, wagnaghat, Solan (H.P).
- **Poster presentation on** “Hydrogel : A review”. 13-14 Nov. 2013. Multani Mal Modi College, Patiala, Punjab.

#### 4. Short-term Courses/Workshops Attended

Name of the course	Period from	Period to	Institute	Sponsored by	Category
Advances in Material Science and Material Engineering	August 08, 2016	August 14, 2016	Department of Chemistry by NIT-Jalandhar	NIT- Jalandhar	STC
Natural Materials for Biomedical Applications	November 7, 2016	November 11, 2016	Department of Chemistry by NIT-Jalandhar	NIT- Jalandhar	STC
Nanotechnology: Synthesis, Characterization, Fabrication and Applications	June 6, 2016	June 11, 2016	Department of Chemistry by NIT-Jalandhar	NIT- Jalandhar	STC
Current Opportunities and New Directions In Chemical Sciences and Technology	December 07, 2015	December 13, 2015	Department of Chemistry by NIT-Jalandhar	NIT- Jalandhar	STC
Frontiers in Chemical Sciences and Technology	December 08, 2014	December 14, 2014	Department of Chemistry by NIT-Jalandhar	NIT- Jalandhar	STC

Advances in Nanoscience and Technology	October 11, 2013	October 11, 2013	Department of Chemistry by NIT-Jalandhar	NIT- Jalandhar	Workshop
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## 5. Awards & Achievements

- Qualified Graduate Aptitude Test in Engineering (GATE) (Jointly conducted by IITs and IISc) in Chemistry, June 2012.

## 6. Research Interests

- Super-absorbents / Smart Materials.
- Biodegradable Green Composites.
- Nano-Science and Technology.

## 7. Memberships

Life Member of Asian Polymer Association.

## 8. Academic Social Networking Site

- <https://scholar.google.com/citations?user=2Qu21g8AAAAJ&hl=en>