

School of Chemistry

Research and Publications

1. Bharati B, Kalia S, Kumar S, Kumar A, Mittal H. Surface Functionalization of Sisal Fibers using Peroxide Treatment Followed by Grafting of Poly(ethyl acrylate) and Copolymers. *Int. J. Polym. Anal. Charact.* 2013, **18**:596-607. (IF:1)
2. Bhardwaj P, Kalia S, Kumar A, Mittal H. Peroxide treatment of soy protein fibers followed by grafting of poly(methyl acrylate) and copolymers. *J. Renew. Mater.* 2014, **1(4)**: 302-310.
3. Chauhan A, Kaith BS, Singha AS, and Pathania D, Induction of Morphological changes in Hibiscus Sabdariffa graft copolymerization with acryl nitrate and co-vinyl monomers in binary mixture. *Malay. Polym. J.* 2010, **5**:140-150. (IF: 0.4).
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11. Gupta D, Singh D, Kothiyal NC, Saini AK, Pathania D. Microwave induced synthesis of chitosan-g-poly(acrylamide)/ZnS nanocomposite for controlled drug delivery and antimicrobial activity. *Int. J. Biol. Macromol.* 2014, **74**:547-557. (IF: 3.2).
12. Gupta VK, Agarwal S, Pathania D. acrylic acid grafted Luffa Cylindrica fiber for the removal of dye and metal ions, *Carbohydr. Polym.* 2013, **98**: 1214-1221. (IF: 4.33)
13. Gupta VK, Agarwal S, Tyagi I, Pathania D, Rathore BS, Sharma G. Synthesis, characterization and analytical application of cellulose acetate-tin (IV) molybdate nanocomposite ion exchanger: binary separation of heavy metal

- ions and antimicrobial activity. *Ionics*, 2014 *In press*. DOI: 10.1007/s11581-015-1368-4 (IF: 1.836)
14. Gupta VK, Agarwala S, Pathania D, Kothiyal NC, Sharma G. Use of pectin–thorium (IV) tungstomolybdate nanocomposite for photocatalytic degradation of methylene blue. *Carbohydr. Polym.* 2013, **96**: 277- 283. (IF: 4.330)
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 16. Gupta VK, Pathania D, Kothiyal NC, Sharma G. Polyaniline zirconium (IV) silicophosphate nanocomposite as absorbent for removal of methylene blue dye from waste-water. *J. Mol. Liquid.* 2014, **190**:139-145. (IF: 2.083).
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Patents

1. Dr. Deepak Pathania and Rishu Katwal: Nanocomposite for removal of dye based water pollutants, Patent filing number: 1537/DEL/2015.
2. Deepak Pathania and Divya Gupta, chitosan-g-poly (acrylamide)/copper nanocomposite for controlled drug delivery, Filing number TEMP/E-1/18765/2015-DEL.
3. Deepak Pathania, Rishu Katwal, Gaurav Sharma, Nanocomposite for antimicrobial treatment of drinking water, Filing No. TEMP/E1/18937/2015-DEL.
 - o Dr. Pradeep Singh, Pankaj Raizada & Pooja Shandilya: Novel nano graphine based composite for water treatment application and method of synthesis thereof, Filing No. 1819/DEL/2015.

School of Biological and Environmental Sciences

Recent Research Publications for School of Biological and Environmental Sciences:

1. Bhattacharya S, Puri S, Jamwal A, Sharma S. Studies on seed germination and seedling growth in Kalmegh (*Andrographis paniculata* Wall. Ex Nees) under abiotic stress conditions. *International Journal of Science, Environment and Technology*. 2012.1(3), 197-204.
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