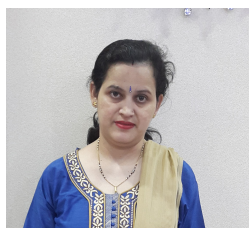


STAFF PROFILE



Dr. Seema Tiwari

Assistant Professor

Applied Science & General Engineering

stiwari@aitpune.edu.in

Date of Joining
18/01/2010

Nature of Appointment
Regular

Educational Details

Qualification	Degree	University	Grade	Year
Doctoral	Ph.d	RDVV, Jabalpur, MP	Excellent	2005

Areas of Interest

Polymers, Composites, Nanomaterials, Nanocomposites for different applications

Experience Details

Total : 16.70 years	Teaching : 12.70 years	Research : 4.00 years	Industry : 0.00 years
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Type	Duration/ Period	Designation/ Organisation Name	Brief Job Profile
Research	2.00 Years April 2007-March 2009	Research Associate R&DE(Engrs), DRDO, Pune	Research & Development
Research	1.00 Years April 2006-March 2007	Senior Research Fellow (CSIR funded project) Govt Model Science College, Jabalpur, M.P	R & D
Educational	1.00 Years July 2004-May 2005	Asst Professor D.N Jain College, Jabalpur, M.P	Teaching
Educational	10.70 Years 2010- till now	Asst Professor AIT, Pune	Teaching
Educational	1.00 Years 2002-2003	Lecturer Govt Model Science College, Jabalpur, M.P	UG and PG Teaching
Research	1.00 Years 2003-2004	Researcher Govt Model Science College, Jabalpur, M.P	R&D

Journal Publications

- SK Bajpai, Aniteshma, Seema Dubey Tiwari, (2020). [Magnetically driven poly\(sulfur/oil\) composite as an efficient oil adsorbent. Part-I: Synthesis, characterization and preliminary oil removal study.](#) *Environmental Nanotechnology, Monitoring & Management*. 13(10293), 293. ISBN/ ISSN No : 2215-1532. URL : <https://doi.org/10.1016/j.enmm.2020.100293>.
- Dr Seema Tiwari, Dr Nidhi Jain, Aniket, (2020). [Terpolymeric Nanocomposites of Silver for Wound Healing Applications.](#) *International Journal of Innovative Technology and Exploring Engineering (IJITEE)*. 9(6), 2278-3075. ISBN/ ISSN No : 2278-3075. URL : <http://www.ijitee.org/wp-content/uploads/papers/v9i6/L37701081219.pdf>.
- Dr Seema Tiwari, Nishu Rai, Khushi, (2020). [Hand Sanitizer: Effectiveness & Characterization.](#) *INTERNATIONAL JOURNAL OF ENGINEERING RESEARCH & TECHNOLOGY*. 9(4), 841-843. ISBN/ ISSN No : 2278-0181. URL : <https://www.ijert.org/hand-sanitizer-effectiveness-characterization>.
- Dr Seema Tiwari, Nishu Rai, Khushi, (2020). [Hand Sanitizer: Effectiveness & Characterization.](#) *INTERNATIONAL JOURNAL OF ENGINEERING RESEARCH & TECHNOLOGY*. 9(4), 841-843. ISBN/

- ISSN No : 2278-0181. URL : <https://www.ijert.org/hand-sanitizer-effectiveness-characterization>.
5. Dr Seema Tiwari, Nishu Rai, Khushi, (2020). [Hand Sanitizer: Effectiveness & Characterization](#). *INTERNATIONAL JOURNAL OF ENGINEERING RESEARCH & TECHNOLOGY*. 9(4), 841-843. ISBN/ISSN No : 2278-0181. URL : <https://www.ijert.org/hand-sanitizer-effectiveness-characterization>.
 6. Dr Seema Tiwari, Manish Kumar, Amit Kumar, (2020). [Regenerative Shock Absorber: Research Review](#). *INTERNATIONAL JOURNAL OF ENGINEERING RESEARCH & TECHNOLOGY*. 9(5), 565-569. ISBN/ISSN No : 2278-0181. URL : <https://www.ijert.org/regenerative-shock-absorber-research-review>.
 7. Nidhi Jain, Seema Tiwari, (2020). [Extrapolation of data by mathematical calculation for removal of fluoride, Arsenic, lead by non conventional absorbents](#). *Journal of Engineering Sciences*. 11(05), 231-238. ISBN/ISSN No : 0377-9254. URL : <https://jespublication.com/upload/2020-110537.pdf>.
 8. Sujata Marathe, Seema Tiwari, Vitthal Hivrale, Mridula Chandola, Sachin Tanwade, (2018). Size based comparison of colloidal silver nanoparticles as coolants. *International Journal of Scientific Research and Review*. 7(5), 195. ISBN/ISSN No : ISSN -2279-543x.
 9. Seema tiwari, (2017). [Controlled release of Doxycycline from Gum acacia/poly\(sodium acrylate\) microparticles for oral drug delivery](#). *International Journal of Biological Macromolecules*. 104(Part A), 1064-1071. ISBN/ISSN No : ISSN: 0141-8130. URL : <http://www.sciencedirect.com/science/article/pii/S0141813017312114>.
 10. seema tiwari, (2017). [17. Controlled Release of Gentamycin From a Interpolyelectrolyte Complex Film for Wound Healing Management](#). *BIOACCENT, BAOJ (Chemistry)*. 3(1), 33-44. ISBN/ISSN No : 000022. URL : <https://bioaccent.org/chemistry/chemistry22.pdf>.
 11. Sujata Marathe, Mridula Chandola, Seema Tiwari, Vitthal Hivrale, (2016). Controllable refractive index of PVA-Ag films. *International Journal of Innovative and emerging research in engineering*. 3(4), 43. ISBN/ISSN No : ISSN-2394-3343.
 12. Sujata Marathe, Seema Tiwari, Mridula Chandola, Nikhil Thakur, Ravindra Rathore, (2016). Synthesis and Characterization of nanocomposites for drug delivery applications. *IOSR Journal of Polymer and Textile Engineering*. 3(6), 1 - 7. ISBN/ISSN No : ISSN 2348-019.
 13. Sujata Marathe, Seema Tiwari, Mridula Chandola, Nikhil Thakur, Ravindra Singh, (2016). Synthesis and characterization of nanocomposites. *International Journal for Scientific Research and Development*. 4 (7), 919. ISBN/ISSN No : ISSN 2321-0613.
 14. Seema Tiwari, (2016). [16. Synthesis and Characterization of Nanocomposites for Drug Delivery Applications](#). *IOSR Journal of Polymer and Textile Engineering (IOSR-JPTE)* . 3(6), 01-07. ISBN/ISSN No : ISSN:2348-0181 . URL : <http://www.iosrjournals.org/iosr-jpte/papers/Vol3-Issue6/A03060107.pdf>.
 15. seema tiwari, (2016). 15. Synthesis and Characterization of Nano Composites. *International Journal for Scientific research & Development* . 04(07), 23-25. ISBN/ISSN No : 2321.
 16. Seema Tiwari, (2016). [Synthesis, characterization and antimicrobial applications of zinc oxide nanoparticle loaded gum acacia/poly\(SA\) hydrogels](#). *Carbohydrate Polymers*. 153(60), 60-65. ISBN/ISSN No : 0000. URL : <http://www.sciencedirect.com/science/article/pii/S0144861716308086>.
 17. Seema Tiwari, Sujata Marathe, (2015). 11. Synthesis & characterization of polymeric beads for drug delivery systems. *SS Int. Journal of multidisciplinary research*. 2(5), 49. ISBN/ISSN No : ISSN 2395-7964.
 18. Sujata Marathe, Seema Tiwari, Sushma Mishra, (2015). Synthesis and Characterization of polymeric beads for drug delivery systems. *S S International Journal of Multidisciplinary Research*. 2(5), 168. ISBN/ISSN No : ISSN 2395-7964.
 19. Seema Dubey, (2007). [9. Dynamic release of vitamin B2 from floating Barium Alginate Beads for Gastric Delivery](#). *Journal of Macromolecular Science*. 44(9), 1005-1011. ISBN/ISSN No : 1060-1325. URL : <https://doi.org/10.1080/10601320701424362>.
 20. seema dubey, SK Bajpai, (2006). [Flow Through Diffusion Cell Method: A Better Approach To Study Drug Release Behavior As Compared To Traditional Dissolution Test Method](#). *Journal of Macromolecular Science – Pure and Applied Chemistry* . 43(6), 627-636. ISBN/ISSN No : -. URL : <https://www.tandfonline.com/doi/full/10.1080/10601320600598795>.
 21. Seema dubey , sk bajpai, (2006). [Flow through diffusion cell \(FTDC\) method : A novel approach to in vitro drug release study](#). *Polymer International* . 55(1), 12-18. ISBN/ISSN No : -. URL : <https://onlinelibrary.wiley.com/doi/pdf/10.1002/pi.1954>.
 22. Seema Dubey, SK Bajpai, (2006). [Poly\(methacrylamide-co-acrylic acid \) hydrogels for gastrointestinal delivery of theophylline : Part – I : Swelling Characterization . .](#) *Journal of Applied Polymer Science* 101 (5), pp. , 2006.. 101(5), 2995-3008. ISBN/ISSN No : 10974628. URL : <https://onlinelibrary.wiley.com/doi/abs/10.1002/app.23542>.
 23. Seema Dubey, SK Bajpai, (2005). [In vitro dissolution studies for release of vitamin B12 from poly \(N-vinyl- 2-pyrrolidone -co- acrylic acid\) hydrogels](#). *Reactive and Functional Polymers (Elsevier)*. 62(1), 93-104. ISBN/ISSN No : -. URL : <https://www.sciencedirect.com/science/article/abs/pii/S1381514804001774>.
 24. SK Bajpai, Seema Dubey, Sutanjay Saxena, (2005). [Flow through diffusion cell \(FTDC\) method : A novel approach to in vitro drug release study . .](#) *Polymer International* . 55(1), 12-18. ISBN/ISSN No : 10970126, 09598103. URL : <https://onlinelibrary.wiley.com/doi/pdf/10.1002/pi.1954>.
 25. Seema Dubey, SK Bajpai, (2004). [Modulation of dynamic release of vitamin B2 from a model pH-sensitive terpolymeric hydrogel system](#) . *Polymer International* . 53(12), 2178-2187. ISBN/ISSN No : -. URL : <https://doi.org/10.1002/pi.1651>.

26. SK Bajpai, Seema Dubey, (2004). [Synthesis and swelling kinetics of a pH-sensitive polymeric hydrogel system](https://www.sid.ir/en/journal/ViewPaper.aspx?id=12614). *Iranian Polymer Journal*. 13(3), pp. 249. 2004. 13(3), 189-203.. ISBN/ ISSN No : 1026-1265. URL : <https://www.sid.ir/en/journal/ViewPaper.aspx?id=12614>.

Conference Publications

1. Seema Tiwari, Sujata Marathe, Mridula Chandola, Ravindra Rathore, Nikhil Thakur, Sandeep Garg, (2014). Synthesis & characterization of Novel Polymeric Nano Materials. *National conference on recent advances in Basic Sciences*, -(-), -. ISBN/ ISSN No : -.
2. M. Chandola, S. Tiwari, S. Marathe, (2012). Synthesis of polyvinyl alcohol - silver nanoparticle - silica hybrid films with controllable refractive index. *National conference on nanotechnology, Communication and Pattern Recognition "NCONCPR"*, -(-), -. ISBN/ ISSN No : -.
3. Sujata Marathe, Seema Tiwari, Mridula Chandola, (2011). Sol-Gel Hybrids with controllable refractive index: Preparation and characterization. *National conference on nanotechnology and communication and pattern recognition (NCONCPR – 2012)*. 1(B 29 S), 49. ISBN/ ISSN No : ISBN-978-81-920427-0-1.

Patent

1. Dr Seema Tiwari, Dr Nidhi Jain, (2020). 201921015201. [IN-HOUSE BIOGAS PLANT](#). 03/07/2020, India.
2. Dr Seema Tiwari, Dr Nidhi Jain, Aniket, Yash Mishra, (2020). 201921015203. [nanocomposite for wound healing application](#). 26/06/2020, India.
3. Dr SK Bajpai, Dr Seema Tiwari, Aniteshma, Dr M Bajpai, (2020). 202021008947. [PROCESS FOR PREPARATION OF MAGNETITE LOADED SULFUR OIL \(MLSO\) COMPOSITE ADSORBENT](#). 20/03/2020, India.

Conference

1. Virtual International conference (Attended), " International Conference on Research Outlook, Innovations and Research Trends (ICROIRT-2020), 2020, Pune(online)

Guest Lecture

1. TEDxAITP (Organized), TED talk, 2018, AIT

Seminar

1. National Webinar (Attended), Revised Assessment and Accreditation process of NAAC for Higher Education Institutions, 2020, IQAC of Tarsadia University, Bardoli, Gujarat
2. International Seminar(online) (Attended), International seminar on application of physics on biosciences, 2020, Rajaram college, Kolhapur, govt of maharashtra

Workshop

1. 15 DAYS FDP on ICT tools conducted by Electronics & ICT Academies NIT Patna, MNIT Jaipur, PDM IIITDM Jabalpur, IIT Guwahati and IIT Roorkee from 10th - 21st August, 2020 (Attended), ICT TOOLS FOR ONLINE TEACHING, 2020, PUNE
2. One Week Faculty Development Programme (online) (Attended), Future Materials: Nanocomposites, 2020, BHARATI VIDYAPEETH, Pune
3. One Week National Level Online Faculty Development Program (online) (Attended), Research Methodology: Data Collection Methods, Research Tools and Techniques, 2020, AISSM, Pune
4. One Week National Level Online Faculty Development Programme (Attended), Moodle Learning Management System, 2020, D.Y.PATIL UNIVERSITY, PUNE
5. one week Programme for Faculty(online) (Attended), NAAC Awareness Programme, 2020, MMIT, Pune
6. INNOVATION LECTURE SERIES(ONLINE) (Attended), 17 INNOVATION LECTURES BY MHRD, AICTE, INDIA, 2020, PUNE
7. One month course (Attended), Chemoinformatics, 2020, PUNE
8. NPTEL online certification by SWAYAM (Attended), NBA Accreditation and Teaching - Learning in Engineering (NATE), 2020, Pune
9. ISTE & IEI Approved National Level One Week Online FDP (Attended), FDP on Advanced Teaching Tools, Techniques, 2020, Pune
10. One week FDP on Nanomaterials (Attended), FDP on Nanomaterials: Synthesis, characterization and

applications, 2019, COEP,Pune,MH

11. workshop (Organized), workshop on IPR, 2019, AIT,Pune
12. workshop by IIT Bombay (Attended), Python (Attended), 2019, Pune
13. one week training program on "Patent filing,proceedings,patent search,specification,claim writing,trademarks,GI,copyright & design filing" (Attended), IPR, 2019, Nagpur

Research Grants

Title Of Project	Funding Agency	Duration		Sanctioned Amount	Role of Investigator
synthesis and characterization of nanocomposites for anticancer drugs	BCUD,SPPU,Pune	01/08/2013	30/10/2015	180000.00	Principal Investigator

Consultancy

Title Of Project	Funding Agency	Duration	Sanctioned Amount	Investigator Role
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Professional Memberships

Society	Membership No	Duration
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Achievements/ Contribution

Year	Details
2017	Best Teacher award on 24th feb 2017
2011	Best FE result award on 24th feb 2011
2007	Research Associate Award by DRDO
2006	Senior Research Fellow award by CSIR,New Delhi
2004	Best Paper presentation award in a National Conference of Science Congress, Bhopal,MP

No of PhD Students Guided : 2 **No of PG Students Guided** : 0
No of PhD Awarded Students : 0