




Shivaji College Faculty Details Proforma

Title	Mr.	First Name	Avneet	Last Name	Singh	Photograph
Designation		Assistant Professor				
Address		5/C-16, Vishnu Garden, New Delhi-110018				
OfficePhone No.						
Residence						
Mobile		7838376923				
Email		Singh.avneet89@gmail.com				
Web-Page						
Educational Qualifications		M. Sc. (Physics)				
Degree		University/Institute			Year	
Ph.D.		University of Delhi			Persuing	
M.Phil./M.Tech.						
PG		University of Delhi			2012	
UG		University of Delhi			2010	
Any Other Qualification						
Career Profile						
<p>JRF/SRF at Department of Physics and Astrophysics, University of Delhi from December 2012 to July 2017. Assistant Professor at Shivaji College, University of Delhi from August 2017 till date.</p>						

Administrative Assignments
Areas of Interest/Specialisation
Material Science, Solid state physics, Electronic Devices, Sensors and detectors
Subjects Taught
Mathematical Physics and Communication systems
Innovation Project/Research Projects (Major Grants/Research Collaboration)
Publications Profile (Research Papers/Books)
<p>· Avneet Singh, Anjali Sharma, Monika Tomar, Vinay Gupta, 2017, "Tunable nanostructured columnar growth of SnO₂ for efficient detection of CO gas" Nanotechnology, https://doi.org/10.1088/1361-6528/aa9bc0. I.F.:3.44</p> <p>· Avneet Singh, Anjali Sharma, Monika Tomar, Vinay Gupta, 2017, " Growth of highly porous ZnO nanostructures for carbon monoxide gas sensing", Surface & Coatings Technology, 10.1016/j.surfcoat.2017.11.020. I.F.:2.589</p> <p>· Avneet Singh, Anjali Sharma, Monika Tomar, Vinay Gupta, 2017, " Reduced graphene oxide-SnO₂ nanocomposite thin film based CNG/PNG sensor" Sensors and Actuators B: Chemical 245, 590-598 I.F.: 4.75</p> <p>· Avneet Singh, Anjali Sharma, Monika Tomar, Vinay Gupta , 2014, "Pd loaded SnO₂ Thin film based Methane gas sensor" Advanced Science Letters 20, 1056-1060. I.F.: 1.253</p> <p>" A SENSITIVE AND RAPID SENSOR FOR INFLAMMABLE FUEL GASES", Vinay Gupta, Monika Tomar, Anjali Sharma, Avneet Singh, Parivesh Chugh, Jaivinder Singh, Bharathy Subramanian, filed complete patent in Indian Patent Office on 29th June 2017 (Application No. 201711011941).</p> <p>· " ELECTRIC FIELD ASSISTED LOW POWER CONSUMING CONDUCTOMETRIC GAS SENSOR", Vinay Gupta, Monika Tomar, Anjali Sharma, Avneet Singh, filed provisional patent in Indian Patent Office on 20th February 2018 (Application No. 201811006329).</p>

Conference/Seminar/Faculty Development Programme/Workshop

“Enhanced response of Ag doped ZnO thin film Ultra-Violet Photodetector”, Akshta Rajan, Avneet Singh, Gurpreet Kaur, Monika Tomar and Vinay Gupta, presented (oral talk) at 1st Winter Workshop on Engineering at Nanoscale: From Materials to Bio-sensors, held at Indian Institute of Technology, Indore, India from 10-12 December 2012.

“Pd loaded SnO₂ Thin film based Methane gas sensor”, Avneet Singh, Anjali Sharma, Monika Tomar, Vinay Gupta, presented at International Conference for Nanoscience and Nanotechnology (2013), held at BBAU, Lucknow, India from 18th - 20th November 2013

"RF sputtered SnO₂ thin film based CO gas sensor", Avneet Singh, Anjali Sharma, Monika Tomar, Vinay Gupta, presented at IUMRS-ICA 2013, held at IISc, Bangalore, India from 16th - 20th December 2013

"Effect of variation in catalyst thickness on SnO₂ thin film based Methane gas sensor" Avneet Singh, Anjali Sharma, Monika Tomar, Vinay Gupta, presented at National conference/ Workshop on synthesis, characterization and application of Advance Nanomaterials - 2014 held at Hindustan College of Sciecne and Technology, Farah, Mathura, India, from 17 to 19 jan, 2014

"GLAD assisted nano-crystalline SnO₂ thin film based CO gas sensor" Avneet Singh, Anjali Sharma, Monika Tomar, Vinay Gupta, presented at Multifunctional Advance Materials - 2014, held at Shoolini University, Solan, India, from 11 to 13 June, 2014

Presented Poster in International Conference on Electron Microscopy and XXXV Annual meeting of Electron Microscopy Society of India (EMSI) 2014, held at University Of Delhi, Delhi from 9 to 11 July, 2014

Participated in two days workshop titled “Indigeneously developed low cost surface plasmon resonance technique and its applications” held at University of Delhi, Delhi, India, May 2014.

“GLAD assisted nano-crystalline SnO₂ thin film based CO gas sensor”, Avneet Singh, Anjali Sharma, Monika Tomar, Vinay Gupta, poster presented at 2nd National Conference on Multifunctional Advanced Materials (MAM-2014) held at Shoolini University, Solan, Himachal Pradesh.

“Design and Fabrication of MEMS based microheater for gas sensing application”, Avneet Singh Anjali Sharma, Namrata Soni, Reema Gupta, Lokesh Rana, Anil Arora, Vinay Gupta and Monika Tomar, delivered oral presentation at NANOCON 2014 held at BVU, Pune from 14-15th October 2014.

“Columnar growth of SnO₂ thin film using GLAD configuration for CO gas sensing”, Avneet Singh, Anjali Sharma, Monika Tomar, Vinay Gupta, delivered oral presentation at National Seminar on Ferroelectrics and Dielectrics (NSFD 2014) held at Manipur.

“GLAD assisted SnO₂ columnar structures for efficient detection of CO gas”, Avneet Singh, Anjali Sharma, Monika Tomar, Vinay Gupta, poster presented at National Conference on Microscopy and Advances in Material Sciences (NCMAMS-2015) held at University of Jammu from 2-4 March 2015.

“LTA zeolite-metal oxide based carbon monoxide gas sensor”, Avneet Singh, Hanan Mir, Rudra Chaudhary, Anjali Sharma, Monika Tomar, Vinay Gupta, poster presented at International workshop on Thin-films for electronics, electro-optic energy and sensors held in Suzhou, Peoples Republic of China from July 4-6, 2015.

Attended Explosive detection workshop held at IIT Mumbai from February 22-23, 2016.

“rGO-SnO₂ composite based CH₄ gas sensor”, Avneet Singh, Anjali Sharma, Monika Tomar, Vinay Gupta, 2nd Conference on MICROSCOPY IN MATERIALS SCIENCE held in Thapar University, Patiala from Feb. 25-27, 2016.

“GLAD Assisted Columnar Growth of SnO₂ Thin Film for Gas Sensing Application”, Avneet Singh, Anjali Sharma, Monika Tomar, Vinay Gupta, 16th International Meeting on Chemical Sensors, held in Jeju Island, Korea from July 10 to 13, 2016.

“Refractive Index Sensor using Long Range Surface Plasmon Resonance with Prism Coupler”, Avneet Singh, Ayushi Paliwal, Monika Tomar, Vinay Gupta, 16th International Meeting on Chemical Sensors, held in Jeju Island, Korea from July 10 to 13, 2016.

"Growth of ZnO columnar nanostructures for carbon monoxide gas sensing application", Avneet Singh, Anjali Sharma, Monika Tomar, Vinay Gupta, poster presented at EMRS, held at Strasbourg, France from 22 to 26 May, 2017.

" Array of Pd-SnO₂ hetrostructures for the efficient detection of CO gas", Avneet Singh, Monika Tomar, Vinay Gupta, oral presentation at ISIF-2017, held at New Delhi, India from 10 to 13 December, 2017.

Research Guidance (*Supervision of Doctoral Thesis/Dissertations*)

--

Awards and Distinctions

Awarded with best oral presentation titled "Array of Pd-SnO₂ hetrostructures for the efficient detection of CO gas" at ISIF-2017, held at New Delhi, India from 10 to 13 December 2017.

Memberships

Student member of IEEE society
Student member of SPIE society

Other Academic Activities

Cultural/ Extracurricular Activities

Signature of Faculty Member