# **Brief Biodata**

	<u>Name:</u> Dr. Vikash Sharma	
Designation:	Senior Technical Officer 1	
DP No. and Name:	3.03, Biomedical metrology section	100
DU No. and Name:	3.0, Env. Sci. & Biomedical metrology	
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# **Research Area/ Interest**

- Chemiresistive and field effect transistor (FET) biosensors based on carbon nanomaterials (CNT/Graphene) for biomedical applications.
- Fabrication of biochips (Lab-on-a-chip) that include Impedimetric, Amperometric, Potentiometric, Chemiresistive biosensor.
- Biomedical Metrology for defibrillator analyser and Infusion pump etc.

# **Educational Qualifications**

(Please write latest qualification first)

Degree	Subject	University/ Institute	Year
Ph.D	Physics	Delhi Technological University (DTU), Delhi	2017
M.Sc.	Physics	M.D.U, Rohtak (HR)	2003
B.Sc.	Physics, Maths, Computer Sci.	M.D.U, Rohtak (HR)	2001

## Academic / Research Experience

Grade / Post	Institute	Duration		Research Field
		From	То	
Senior Technical Officer 1	CSIR-NPL, N. Delhi	2018	Till date	Basic research related to Chemiresistive/FET sensor, Biosensors & Biomedical Metrology
Technical Officer	CSIR-NPL, N. Delhi	2006	2018	Research work related to biosensors, Microfluidics, Soft- lithography.

### No. of Publications

No. of Publications in SCI Journals	No. of Publications in non-SCI Journals	No. of Publications in Conference Proceedings	Books	Total
16	-	44	-	60

## **Selected Publications**

- Journal of Materiomics, Vol. 7, Issue 5, 904-919, 2021
- Applied Physics Letters, Vol. 109, Issue 24, 243504, 2016
- Material Research Express, 3, 035006, 2016
- Sensors & Transducers Journal, Vol. 197, Issue 2, 34-38, 2016
- Applied Physics Letters 104,043705, 2014
- Applied Physics Letters 103,203703, 2013

#### Patents

• Chemiresistive biosensor for the quantitative detection of human cardiac biomarker and the process thereof Vikash Sharma, VK Tanwar, A.M. Biradar, Rajesh

#### **Current Activities**

(Not more than 100 words)

Development of various types of biosensors and also working in the field of Biomedical Metrology i.e. Defibrillator analyzer, Infusion pump etc.

Honour(s)/Award(s)/ Fellowship(s)

- Got best poster award in The 2nd Asian Symposium on Cutting-edge Biotechnology and Chemistry (2nd ASCBC) organized by Kyushu Institute of Technology & Kyushu Dental University held at Japan from 5-6th December 2019.
- Got best poster award in India-Japan Workshop on Biomolecular Electronics and Organic Nanotechnology for Environment Preservation (IJWBME-2018) organized by National Physical Laboratory, N.Delhi from 6-9<sup>th</sup> December 2018
- Got best poster award in India roadshow and Symposia series organized by Royal Society of Chemistry held at Indian Institute of Technology (IIT), Delhi, 2014.
- Got best poster award in the 25<sup>th</sup> Annual General Meeting of Material Research Society of India held at Indian Institute of Science (IISc), Banglore, 2014
- Got best poster award in Conference on Recent Advance in Analytical Sciences held at Himachal Pradesh University, Shimla, 2010
- Got best poster award in Symposium on Recent trends in biophysics held at Banaras Hindu University (BHU), Varanasi, 2010.
- Got Merit in M.Sc. (Physics) and B.Sc. at University level

# **Contributions to AcSIR**

Contact Angle Measurement and Electrochemical impedance spectroscopy (EIS) techniques for characterization of materials as a part of coursework in curriculum of Ph.D students registered in AcSIR

## Any other Information

(Not more than 100 words)