

Brief Bio-data

1. Name: Dr. Vikram Singh

2. Date of Birth: 04-08-1989

3. Current Position and Address (Include Email ID and Contact Number):

Scientist, Environment Emission and CRM Section

CSIR-CIMFR (Digwadih Campus), Dhanbad, 828118

Email ID: vikramsingh@cimfr.nic.in; vikku.010@gmail.com

Contact No: 9452369265; 8840208162

4. Educational qualifications: (Graduation and above)

Sl. No.	Degree	Year of Passing	University/Institute	Subject
1	B.Sc.	2008	University of Allahabad	Physics, Chemistry
2	M.Sc.	2010	University of Lucknow	Chemistry
3	Ph.D.	2016	IIT Madras, Chennai	Chemistry

5. Work experience:

Designation	Institute/company	From	To	Nature of Work
Research Associate	IIT Madras, Chennai	19-05-2016	05-08-2016	Research
National-PDF (DST-SERB)	CSIR-CDRI Lucknow	11-08-2016	10-08-2018	Research
Institute-PDF	IIT Kanpur	30-08-2018	28-02-2021	Research
Senior Project Scientist	IIT Kanpur	10-03-2021	14-07-2021	Research

6. Work Area(s)/ Specialization: Fluorescence spectroscopy, Synthesis and multifunctional applications of fluorescent carbon-based nanomaterials, White light emitting materials, Detection and removal of heavy metals Mining waste to nanotechnology.

7. Major contributions: (Max. 100 words):

I have achieved white light emitting materials from a mixture of two suitably chosen plant extracts in acidic ethanol, acidic aqueous, neutral aqueous medium and in PVA film aided by a FRET cascade with good CIE values. I have also synthesized fluorescent carbon nanoparticles, quantum dots and multiwalled carbon nanotubes from glucose, beetroot juice and chickpea peel extracts and explored its application as a green and cheap sensor for selective sensing of Fe in ppb level the aqueous medium, *in vivo* live imaging in *C. elegans* and BALB/c mice and bioimaging application in human prostate carcinoma cell line respectively.

8. No. of Research Publications: 13

- Papers in Journals: 13
- In conference proceedings: Nil

- Invited lectures delivered: 04
 - List of best 05 publications
1. V. Singh, S. Chatterjee, M. Palecha, P. Sen, B. Ateeq and V. Verma, *Carbon Letters*, **2021**, 31, 117. [I. F. 2.00]
 2. V. Singh, K. S. Rawat, S. Mishra, T. Baghel, S. Fatima, A. A. John, N. Kalleti, D. Singh, A. Nazir, S. K. Rath and A. Goel, *Journal of Materials Chemistry B*, **2018**, 6, 3366. [I. F. 6.33]
 3. V. Singh and A. K. Mishra, *Journal of Materials Chemistry C*, **2016**, 4, 3131. [I. F. 7.39]
 4. V. Singh and A. K. Mishra, *Sensors and Actuators B: Chemical*, **2016**, 227, 467. [I. F. 7.46]
 5. V. Singh and A. K. Mishra, *Scientific Reports*, **2015**, 5, 11118. [I. F. 4.38]
- Books/Chapters authored/edited: Nil

9. List of 5 Major Contract R&D Projects:

1. Applications of Common Vegetables Derived Fluorescent Carbon Nanoparticles in *in-vivo* Multianalyte Sensing SERB, Govt of India, 19,20,000/- CSIR-Central Drug Research Institute Lucknow, Project Completion Date: 10-08-2018

10. (a) Name of Patents/Copyrights applied /granted/commercialized: Nil

(b) Technologies/Products /knowhow/Services developed: Nil

11. Honors/Awards/Recognitions/Fellowships/Scholarships/Professional Memberships received:

1. Awarded Gandhian Young Technological Innovation Award (GYTI) at *Rastrapati Bhawan* New Delhi, by BIRAC-SRISTI with research grant of 15 Lakhs: Mar 2017
2. Awarded National Postdoctoral Fellowship (N-PDF) by DST-SERB Govt. of India: Jul 2016
3. Received Langmuir Best PhD Thesis Award in Physical & Theoretical Chemistry from, Indian Institute of Technology Madras, Chennai: Jul 2016
4. Received Best Poster Award, at Trombay Symposium on Radiation & Photochemistry Conference (TSRP), BARC Mumbai: Jan 2016
5. Qualified for Junior and Senior Research Fellow of Council for Scientific and Industrial Research (CSIR/UGC exam) in Chemical Science: May 2011.
6. Qualified for Graduate Aptitude Test in Engineering (GATE) Fellowship in Chemistry, All India Rank-247: Mar 2011.
7. Lifetime Member of Chemical Research Society of India (LM 2185)
8. Lifetime Member of Materials Research Society of India (LMB 3142)

12. Societal Contributions

1. I have worked as a member of the mess monitoring committee in IIT Madras, Chennai from 2014-2015.
2. I have worked as Ph.D. science councilor in IIT Madras, Chennai from 2013-2014.
3. I worked as an NSS candidate in my graduation (University of Allahabad) from 2005-2007.