



Dr. Vineet Kumar Rai
Professor
Department of Physics
Indian Institute of Technology (ISM), Dhanbad
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Phone: +91-326-223 5282 (O)
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Qualification: M. Sc. (Physics), M. Sc. (Mathematics)
Ph. D. (Physics) – Banaras Hindu University (BHU), Varanasi

Google citations

- | | | |
|------|-------------------------|-------|
| i. | Total no. of citations: | >5300 |
| ii. | h-index: | >40 |
| iii. | i-10 index: | 105 |

CURICULAM VITAE OF DR. VINEET KUMAR RAI (V. K. Rai)

1. **Name:** Dr. Vineet Kumar Rai
2. **Designation:** Professor
3. **Date of Birth:** July 12, 1976
4. **Address (Office):** Dr. Vineet Kumar Rai
Professor
Department of Physics
Indian Institute of Technology (Indian School of Mines)
Dhanbad – 826004, India
Phone: +91-326-223 5282 (O)
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Mobile: 09470194790
5. **Academic Qualifications/Exam passed:**
 - Throughout First class from High School to M.Sc. (M.Sc. in Physics & Mathematics)
 - Qualified NET (National Eligibility Test) in Physics- 2001, Council of Scientific & Industrial Research (CSIR), India
 - Ph. D. (Physics)– 2003, Banaras Hindu University (BHU), Varanasi
6. **Professional record:** (a) Post Doctoral Fellow in CNPq, Departamento de Fisica, UFPE, 50670-901 Recife, PE - Brasil (b) Research Associate & Senior Research Fellow, C.S.I.R. India (c) RET Fellowship, B. H. U., Varanasi, India
7. **Awards for excellence in research/academic**
 - 1) Honorary Rosalind Membership of London Journal Press, 2020.
 - 2) India Top cited author award in 2019 by Methods Appl. Fluoresce (IOP publishing) for one of the top 1% most cited papers published over the period of 2016-2018. Paper title: $\text{Er}^{3+}\text{-Tm}^{3+}\text{-Yb}^{3+}\text{:CaMoO}_4$ phosphor as an outstanding upconversion based optical temperature sensor and optical heater, Methods and Applications in Fluorescence, 5 (2017) 015006.
 - 3) Canara Bank Research Publication Award (for excellence in research)-2018, IIT (ISM), Dhanbad
 - 4) Canara Bank Research Publication Award (for excellence in research)-2017, IIT (ISM), Dhanbad
 - 5) Canara Bank Research Publication Award (for excellence in research)-2016, IIT (ISM), Dhanbad
 - 6) Canara Bank Research Publication Award (for excellence in research)-2015, IIT(ISM), Dhanbad

- 7) Bharat Shiksha Ratan Award (for excellence in Academic)-2013, by Global Society for Health & Educational growth (GSHEG), New Delhi

8. Other recognitions

- Among top 2% of scientists worldwide based on their research publications, link. <https://elsevier.digitalcommonsdata.com/datasets/btchxktzyw/3>, August 2021 data-update for "Updated science-wide author databases of standardized citation indicators, Published: 19 October 2021, Version 3, DOI:10.17632/btchxktzyw.3; Contributors: Jeroen Baas, Kevin Boyack, John P.A. Ioannidis 15 Oct 2021. Licence- CC BY NC 3.0. Elsevier BV, Stanford University.
- Among top 2% scientists from India in Applied Physics: An independent study done by Stanford University scientists (for methodology and data visit, 2020). <https://elsevier.digitalcommonsdata.com/datasets/btchxktzyw/2> or <https://journals.plos.org/plosbiology/article?id=10.1371/journal.pbio.3000918>. Version 2, Published 8 Oct, 2020; DOI: 10.17632/btchxktzyw.2. Cite this dataset: Baas, Jeroen; Boyack, Kevin; Ioannidis, John P.A. (2020), "Data for "Updated science-wide author databases of standardized citation indicators"", Mendeley Data, V2, doi: 10.17632/btchxktzyw.2. Elsevier BV, Stanford University.
- Among top 2% of scientists worldwide: A standardized citation metrics author database annotated for scientific field" (PLoS Biology 2019). <https://elsevier.digitalcommonsdata.com/datasets/btchxktzyw/1>. Version 1, Published: 7 Jul 2019; DOI:10.17632/btchxktzyw.1. Cite this dataset: Ioannidis, John; Baas, Jeroen; Klavans, Richard; Boyack, Kevin (2019), "Supplementary data tables for "A standardized citation metrics author database annotated for scientific field" (PLoS Biology 2019)", Mendeley Data, V1, doi: 10.17632/btchxktzyw.1. Elsevier BV, Stanford University.
- Chairperson, Senate Postgraduate Committee (SPGC) at IIT(ISM) Dhanbad.
- **Senate Nominee** in Senate Postgraduate Committee (SPGC) at IIT(ISM) Dhanbad.
- Chairman, Health Centre Committee (HCC) & Health Centre Purchase Committee (HCPC).
- Member in Departmental Faculty Screening Committee (DFSC).
- **Research Advisor** of Nan Yang Academy of Sciences, Singapore w.e.f. 23rd October 2018 (Certificate No.: 226-5-045).
- **Senate member**
- Recorder of the Physical Sciences for 2018-19 & 2019-20 (106th and 107th sessions of the Indian Science Congress), Indian Science Congress Association, Kolkata; Section-Physical Science.
- Awarded by BK-21 fellowship (2008), South Korea (not joined).
- Member in Academic Council, IIT(ISM), Dhanbad.
- Writeoff Committee Chairman (department level)
- Member in National Advisory Committee of National conference on Functional materials and applications-2019 (NCFMA-2019), organized at Department of Physics, NIT Mizoram, 22-23 November, 2019
- Journal of Applied Physics (JAP) by American Institute of Physics (AIP) has recognized as an Outstanding JAP Author in 2013 for the research (Paper) contribution entitled "Photoluminescence study of $\text{Y}_2\text{O}_3\text{-Er}^{3+}\text{-Eu}^{3+}\text{-Yb}^{3+}$ phosphor for lighting and sensing Applications".

- Upconversion based near white light emission, intrinsic optical bistability and temperature sensing in $\text{Er}^{3+}/\text{Tm}^{3+}/\text{Yb}^{3+}/\text{Li}^+:\text{NaZnPO}_4$ phosphors published in New Journal of Chemistry is in the top 10% of highly cited authors in General chemistry portfolio of journals.
 - Awarded as *Recognized Reviewer Status* by Materials Research Bulletin November 2014 in recognition of the review made for the journal.
 - Recorder of the Physical Sciences for 208-19 & 2019-20 (106th and 107th sessions of the Indian Science Congress), Indian Science Congress Association, Kolkata; Section-Physical Science.
 - Certificate of outstanding contribution in reviewing by Journal of Industrial and Engineering Chemistry in recognition of the contributions made to the quality of the journal, Journal of Industrial and Engineering Chemistry, Elsevier ACS publications awards for ACS publications reviewing activity in 2016, American Chemical Society.
 - Delivered several invited talks in National & International academic activities at different academic Institutions/Universities.
 - Qualified the prestigious 'National Eligibility Test (NET)' Conducted by "Council of Scientific & Industrial Research (C.S.I.R.), New Delhi, India.
- 9. Membership of Professional Societies:** (1) Indian Science Congress Association, Kolkata; Section- Physical Science; Life member- L30124. (2) Indian Association of Physics Teachers Association (Regd. No. K1448 Under section XXI of Societies Act 1860, Life member (Life membership number 10995 L7139). (3) Laser and Spectroscopy Society of India (LASSI), Life member (4) Global Society for Health & Educational Growth (GSHEG)-2013.
- 10. Editorial Board:** Editorial Board Member in International Journal of Applied and Natural Sciences (IJANS); ISSN (Print): 2319-4014 ; ISSN(Online): 2319-4022
- 11. Thesis guided:** (i) Ph.D. guided/completed under the supervision (Sole Guide) -13
(ii) Dissertations completed: M. Phil.-02, B. Tech. Engineering Physics -03 & M.Sc. Physics- 22.
- 12. Principal Investigator of Research Projects (funded by DST/UGC/SERB, etc.):** 05 (Five)
- 13. Details of Training Program/Course work organized:** 03 (Three)
Conference organized (Convener/Co- Convener/Secretary): 03 (Three)
Research & teaching experience
 (i) **Three years** of research & teaching at the level of Assistant Professor (since 20-06-2008 to 20-06-2011) at IIT(ISM), Dhanbad.
 (ii) **More than Seven years** of research & teaching at the level of Associate Professor (since 20-06-2011) IIT(ISM), Dhanbad.
 (iii) Working as Professor since 06/06/2019 at Department of Physics, IIT(ISM), Dhanbad
- 14. Research Expertise/interest:** Frequency Upconversion, Spectroscopic studies of lanthanides doped materials and their applications, Optical thermometry, Laser Spectroscopy.
- 17. Publications**
- | | |
|---------------------------------------------------------------------|-----|
| (i) Research papers published in reputed international journals: | 154 |
| (ii) Publications in National/International Conference Proceedings: | 29 |
| (iii) Contributions to National/International/workshop/conferences: | 93 |
| (iv) Publication of Book chapters/Review articles: | 04 |