Curriculum Vitae

Personal Detail:

1.	Name and full correspondence address	:	Dr. Tripti Richhariya Assistant Professor C/O. V. N. Tiwari, Th. Pyarelal Ward, Mangal Bazar, Tiwari Bada, Raipur (CG)
2.	Email(s) and contact number(s)	:	triptirichhariya21@gmail.com 8770253316, 8878688594
3.	Institution	:	SoS in Physics and Astrophysics, Pt. Ravishankar Shukla University, Raipur (C.G.)
4.	Date of Birth	:	21/12/1990
5.	Mother's Name	:	Mamta Richhariya
	Father's Name	:	Shailendra Richhariya
	Marital Status	:	Unmarried
6.	Gender (M/F/T)	:	F
7.	Category Gen/SC/ST/OBC	:	Gen
8.	Whether differently abled (Yes/No)	:	No
	Academic Qualification (Undergraduate Onwards)	:	

S. No.	Degree	Year	Subject	University/ Institution	% of marks
1.	Bachelor of Science	2012	PCM	Govt. N. P. G. Science College, Raipur (CG)	67
2.	Master of Science	2014	Physics	Govt. N. P. G. Science College, Raipur (CG)	82.37
3.	PhD	2022	Solid-State Physics	Pt. Ravishankar Shukla University, Raipur, (CG)	Awarded

Thesis Title : Study of Structural and Luminescence properties of Impurities doped Alkaline Earth Alumino Silicate Phosphors

10. Work Experience (in chronological order)

S.No.	Name of the Institute	Position held	From	To
1.	Govt. Nagarjun P.G. Science College, Raipur (C. G.)	Guest Faculty	16/09/2014	30/05/2015
2.	SoS in Physics and Astrophysics, Pt. Ravishankar Shukla University, Raipur (C.G.)	Guest Faculty	07/08/2015	30/04/2016
3.	Govt. D. B. P.G. Girls College, Raipur (C.G.)	Guest Faculty	01/08/2017	20/04/2018
4.	Kalinga University	Assistant Professor	05/01/2022	30/06/2024
5.	SoS in Physics and Astrophysics, Pt. Ravishankar Shukla University, Raipur (C.G.)	Assistant Professor (Guest Faculty)	17/09/2024	continue

11. Administration:

Departmental IQAC coordinator, Department of Physics, Kalinga University, Raipur (C.G.)
From 11/07/2022 to 30/06/2024

Work as a Lab In-charge of different UG, PG Laboratories.

Overall departmental activity In-charge

12. Professional Recognition/Award//Prize/Certificate, Fellowship received

S.No.	Name of the Award	Awarding Agency	Year
1.	CSIR-UGC NET JRF/SRF (AIR-74)	Joint CSIR-UGC, India	2017
2.	State Eligibility Test (CGSET)	CG Vyapam	2018
3.	2nd Prize in Oral Presentation	Kalinga University	2019

4.	3rd Prize in Oral Presentation	Luminescence Society of India/ Govt. V. Y. T College Durg	2021
5.	1st Prize in Oral Presentation	Govt. N. P. G. College of Science, Raipur	2022
6.	IAAM Young Scientist Medal	International Association of Advanced Materials" Sweden	2022
7.	Kalpana Chawla Diamond Jubilee Young Scientist Medal	International Association of Advanced Materials" Sweden	2022

13. **Membership of Academic Association:** Life member: Luminescence Society of India (LM No. 832).

14. Invited Talk

- Delivered an **Invited Talk** on **"Preparation Strategy for CSIR/NET-JRF"** jointly Organized by Department of Physics, Mathematics and Botany at Govt. Pt. Shyamacharan Shukla College, Dharsiwa, Raipur (C.G.) on 19th April 2022.
- Delivered an **Expert Lecture on "Luminescence and its Applications"** in one day National Webinar on Fundamental and Introductory Physics Organized by Department of Science, Lakshmi Narain College of Professional Studies, Indore on 22nd Dec 2023.
- Delivered an **INVITED TALK** on the topic entitled **"Exploring the applicability of phosphors in various fields"** at 2nd International Conference on Recent Trends in Materials Science & Devices 2023 (ICRTMD-2023) held in Online Mode from 29-31 December 2023 organized by Research Plateau Publishers in association with Sat Kabir Institute of Technology & Management, Bahadurgarh, Haryana, India.
- Delivered a **Talk** on **"How to Crack NET: Preparation Strategy and career opportunities"** Organized by Department of Physics, Bilasa Girls College, Bilaspur (C.G.) on 8th Jan 2024.
- Delivered an **INVITED TALK** on the topic entitled **" Structural and luminescence behavior of Tb3+ doped Alumino silicate phosphor"** at International Conference on Composite Materials for Environment Protection & Remediation (ICCMEPR-2024) held in Online Mode from 2- 3 Jul 2024 organized by

Research Plateau Publishers in association with Department of Chemistry of G. B. College Ramgarh, VKS University, Ara, Bihar, India.

15. Faculty Development Program (FDP)

Online FDP on **Polymer Matrix based Nanostructures for Targeted Drug Delivery Application,** Central Institute of Petrochemicals Engineering and Technology (CIPET) : CSTS Guwahati **07/02/2022** to **11/02/2022**

16. Refresher Course

Online Refresher Course on "Physics" Organized by Teaching Learning Centre, Ramanujan College, University of Delhi and K. L. E. Society's Shri Kadasiddheshwar Arts College & H. S. Kotambri Science Institute Vidyanagar, Hubballi, Karnataka (580031) under the aegis of Scheme of Pandit Madan Mohan Malaviya National Mission on Teachers and Teaching, Ministry of Education, India on April 10-24, 2022.

17. Research Profile:

Researchgate link: https://www.researchgate.net/profile/Tripti-Richhariya

Google Scholar link:
https://scholar.google.com/scholar?hl=en&as_sdt=0%2C5&q=tripti+richhariya&oq=tr
Web of Science Researcher ID: https://publons.com/researcher/ABG-2332-2020/

LinkedIn: https://www.linkedin.com/feed/

Orcid ID: **0000-0002-0713-7857**

Reviewer:

- **Journal of Material Science: Material in Electronics (Publisher: Springer Nature)**
- **Journal of Fluorescence (Publisher: Springer Nature)**
- **Materials Chemistry and Physics (Publisher: Elsevier)**
- **Optical and Quantum Electronics (Publisher: Springer Nature)**
- **ECS Journal of Solid State Science and Technology (Publisher: IOP)**
- **NSSEMA Conference proceeding**

Research Paper Published in International/National Journals:

Total Research articles: 20

Citation: 139 h index: 8 i10:7

1. **Tripti Richhariya**, Nameeta Brahme, D. P. Bisen, Anil Choubey, Yugbodh Patle, Ekta Chandrawanshi, A comparative photoluminescence and Judd–Ofelt study on alumino silicate phosphors Journal of Material Science: Materials in Electronics, Vol: 31, Year: 2020, Pg No.: 13667-13679, Impact Factor: -2.22.
2. Ekta Chandrawanshi, D. P. Bisen, Nameeta Brahme, Ganesh Banjare, **Tripti Richhariya,** Yugbodh Patle Photoluminescence and Comparative Thermoluminescence studies of UV/γ-irradiated Dy3+ doped bismuth silicate phosphor: Journal of Material Science: Materials in Electronic, Vol: 31, Year: 2020, Pg No.: 14454–14465, Impact Factor: -2.22
3. Yugbodh Patle, Nameeta Brahme, D. P. Bisen, **Tripti Richhariya**, Ekta Chandrawanshi, Anil Choubey, Manju Tiwari Study of Photoluminescence, Thermoluminescence, and Afterglow properties of Dy3+ doped Ba2ZnSi2O7 phosphor: Optik- International Journal of Light and Electron Optics, Vol: 226, Year: 2021, Pg No.: 165896, Impact Factor: - 2.18 ISSN: 0030-4026.
4. **Tripti Richhariya**, Nameeta Brahme, D. P. Bisen, Yugbodh Patle, Ekta Chandrawanshi, Nikeeta Shah Luminescence properties of blue-emitting Ce3+ -doped series of Ca2Al2SiO7 and Sr2Al2SiO7 phosphors: Journal of Material Science: Materials in Electronics, Vol: 32, Year: 2021, Pg No.: 20793–20803 Impact Factor: - 2. 47
5. **Tripti Richhariya**, Nameeta Brahme, D. P. Bisen, T. Badapanda, Anil Choubey, Yugbodh Patle, Ekta Chandrawanshi Synthesis and optical characterization of Dy3+ doped barium alumino silicate Phosphor, Material Science and Engineering B,Vol: 273, Year: 2021, Pg No.: 115445, Impact Factor: - 4.05 ISSN: 0921-5107
6. Sanjay Baghel, Nameeta Brahme, D. P. Bisen, Yugbodh Patle, **Tripti Richhariya**, Ekta Chandrawanshi, Chitrakant Belodhiya Luminescence properties of a novel cyan-blue light emitting Ce3+ doped SrZrSi2O7 phosphor: Optical Materials, Vol: 126, Year: 2022, Pg No.: 112141, Impact Factor: - 3.08 ISSN: 0925-3467

7. **Tripti Richhariya**, Nameeta Brahme, D. P. Bisen, T. Badapanda, Kanchan Tiwari, Ekta Chandrawanshi, Analysis of thermoluminescence glow curve and evaluation of trapping parameters of cerium activated M2Al2SiO7 (M= Ca and Sr) phosphor for TLD application: Materials Chemistry and Physics, Vol: 287, Year: 2022, Pg No.: 126273 Impact Factor: - 4.09 ISSN: 0254-0584
8. R. Paikaray, T. Badapanda, H. Mohapatra, **T. Richhariya**, Satya N. Tripathy, Nameeta Brahme Investigation of structural, photoluminescence, and thermoluminescence properties of Praseodymium doped CaWO4 phosphor Materials Today Communications, Vol: 31, Year: 2022, Pg No.: 103802, Impact Factor: -3.3 ISSN: 23552-4928
9. R. Paikaray, T. Badapanda, H. Mohapatra, **T. Richhariya** Investigation of Structural, Photoluminescence and Thermoluminescence Properties of Scheelite-Type CaWO4 Phosphor Transactions on Electrical and Electronic Materials Year: 2022, Impact Factor: -2.8 ISSN: 2092-7592
10. **Tripti Richhariya**, Nameeta Brahme, D. P. Bisen, T. Badapanda, Kanchan Tiwari, Asmita Jain Investigation of photoluminescence, thermoluminescence, and energy transfer mechanism in Ce/Dy co-doped Sr2Al2SiO7, Materials Science in Semiconductor Processing Year:2023, Impact Factor: -4.6 ISSN: 1369-8001
11. R. Paikaray, T. Badapanda, H. Mohapatra, **T. Richhariya**, Nameeta Brahme, Satya N. Tripathy, Satya N. Tripathy Structural, photoluminescence, and thermoluminescence behaviors of Samarium doped CaWO4 phosphor, Material Science and Engineering B Vol: 294, Year: 2023, Pg No.: 116511, Impact Factor: 3.08 ISSN: 0921-5107
12. Kamlesh Thakkar, Ravi Sharma, Nameeta Brahme, D. P. Bisen, Anita Verma, and **Tripti Richhariya** Luminescence studies of Sm3+ doped CdB4O7 phosphors Journal of Material Science: Materials in Electronics Vol: 34, Year: 2023, Pg No.: 1151
13. R. Paikaray, T. Badapanda, H. Mohapatra, **T. Richhariya**, K. Tiwari, Nameeta Brahme, Satya N. Tripathy, Satya N. Tripathy Exploration of crystal structure, and luminescence behaviors of Terbium-activated CaWO4 phosphor: Journal of Molecular Structure, Vol: 1290,Year: 2023, Pg No.: 135902
14. S. Lenka, T. Badapanda, S.P. Ghosh, **T. Richhariya**, S. Sarangi, Satya N. Tripathy Understanding of structural evolution, dielectric performance and photoluminescence

behavior of Sm modified $Na_{0.5}Bi_{0.5}TiO_3$: Materials Today Communications: vol: 36, pg no. 106738

15. Anita Verma, Ravi Sharma, D. P. Bisen, Nameeta Brahme, **Tripti Richhariya**, Kanchan Tiwari, Kamlesh Thakkar Luminescence Studies of CaY2Al4SiO12:Eu3+ Phosphor by Sol–Gel Method: Journal of Electronic Materials, vol: 52 pg no. 6769–6777
16. Kanchan Tiwari, B.G. Sharma, Nameeta Brahme, D.P. Bisen, **Tripti Richhariya**, Anita Verma, Somnath Sahu, Akash Sinha: Study of morphological, elemental, optical and excitation wavelength dependent red photoluminescence in Eu^{3+} doped Li_2SrSiO_4 for solid state lighting: Materials Science in Semiconductor Processing Vol: 171, pg no. 107997
17. R. Paikaray, T. Badapanda, **T. Richhariya**, S. Behera, Satya N. Tripathy "Analysis of structural, photoluminescence and colorimetric performance of Gd incorporated BNT ceramic" Journal of Fluorescence, https://doi.org/10.1007/s10895-023-03544-1
18. Kanchan Tiwari, B.G. Sharma, Nameeta Brahme, D.P. Bisen, **Tripti Richhariya**, Anita Verma, Somnath Sahu, Raunak Tripathi, Akash Sinha: Investigation of Latent Fingerprint Detection and Cheiloscopy Development Using $Li_2SrSiO_4:Tb^{3+}$ Phosphor for Forensic-Based Applications, ACS Applied Optical Materials https://doi.org/10.1021/acsaom.3c00453
19. R. Paikaray, T. Badapanda, H. Mohapatra, **T. Richhariya**, Satya N. Tripathy, Investigations of structural, photoluminescence, colorimetric, lifetime, and luminous efficiency of Tb^{3+} and Sm^{3+} co-doped calcium tungstate for WLEDs, Materials Today Communication, 2024 https://doi.org/10.1016/j.mtcomm.2024.109296
20. Kanchan Tiwari, Balgopal Sharma, Nameeta Brahme, Durga Prasad Bisen, **Tripti Richhariya**, Dipti Sahu, Kiran Verma, Garima Dewangan, and Akesh Kumar Unveiling the Potential of Sm3+ Doped Li2SrSiO4 Phosphor for UVC Dosimetry: Comprehensive Analysis with Synthesis, Morphological, Elemental and Thermoluminescence Studies ACS Applied Optical Materials https://doi.org/10.1021/acsaom.4c00125

Research Paper/Poster presented in National/International Conferences: - 17

International Conferences

S. No.	Conference/Seminar Title	Organizers	Title of Research Paper
1.	"6th International Conference on Luminescence and its Applications" held on 7th to 10th Jan 2019	SoS in physics and Astrophysics, Pt. Ravishankar Shukla University, Raipur (C.G.)	Paarticipated
2.	Recent Advances in Material Science and Nanotechnology (RAMAN-2021) February 7-9,2021	Department of Physics, Arts, Commerce and Science College, Maregaon, In Association with P. N. College, Pusad	**Study on Ce^{3+}/Dy^{3+} co-doped $Sr_2Al_2SiO_7$ phosphor for WLED**"
3.	Presented in 1st international conference on Advances in Materials Science (ICAMS-2021)	School of Applied Sciences, Department of Physics, Reva University Bengaluru India	**"Impact of RE^{3+} doping on Calcium aluminosilicate phosphor**

4.	Presented in International Conference on Advances in Materials Processing (ICAMP-2022)	Department of Metallurgical and Materials Engineering in association with Department of Chemical Engineering, National Institute of Technology Raipur	**Luminescence properties of Ce^{3+} activated Barium alumino silicate phosphor**
5	International Interdisciplinary Conference on Science for Society (IICSS2022)	Faculty of Science, Kalinga University, Naya Raipur (C.G.) 492101 India	**Investigation of Optical Properties of Cerium Activated Strontium Alumino Silicate Phosphor**
6	International Conference on Current Trends in Advanced Materials and their Applications for Societal Development (ICTAMASD-2022) Organized by the	Department of Physics, Dr. Harisingh Gour Vishwavidyalaya Sagar (MP).	**Analysis of Cerium activated $Ba_2Al_2SiO_7$ phosphor for display devices and TLD application**
7	International Conference on Functional Materials" (ICFM-2022)	SoS in Physics & Astrophysics, Pt. Ravishankar Shukla University, Raipur (C.G.)	**Investigation of Glow curve & kinetic parameters of alumino silicate phosphor doped with cerium**
8	International Conclave on Materials, Energy and Climate" (ICMEC-2022)	International Association of Advanced Materials" Sweden	**Luminescence: An application from solid-state lighting to radiation dosimetry**

9.	2nd International Conference on Recent Trends in Materials Science & Devices 2023	Research Plateau Publishers & Sat Kabir Institute of Technology & Management Bahadurgarh, Haryana, India	Exploring the applicability of phosphors in various fields **(Invited Talk)**
10.	International Conference on Composite Materials for Environment Protection & Remediation (ICCMEPR-2024)	Research Plateau Publishers in association with Department of Chemistry of G. B. College Ramgarh, VKS University, Ara, Bihar, India.	Structural and luminescence behavior of Tb^{3+} doped Alumino silicate phosphor **(Invited Talk)**

National Conferences

S. No.	Conference/Seminar Title	Organizers	Title of Research Paper
1.	National Conference on Advanced Material & Environmental Science (NCAMES-2019)	Department of Physics, Kalinga University, Raipur (C. G.)	**Photoluminescence & Thermoluminescence studies of Dy activated $Ca_2Al_2SiO_7$ phosphor**
2.	National Conference on Advanced Materials and Applications (NCAMA-2019)	NIT, Raipur (C. G.)	**Study on Luminescence properties of Eu^{3+} doped Calcium Alumino Silicate phosphor**
3.	National seminar on Advanced Materials for Sustainable Industrial and Social Applications (NSAMSISA2020)	Govt. Pt. Shyamacharan Shukla College, Dharsiwa, Raipur (C. G.)	**Synthesis and Photoluminescence studies of Barium Alumino Silicate phosphor**

4.	National Conference on Luminescence and its Applications (NCLA-2020) organized by	NIT Warangal (Telangana) in association with Luminescence Society of India	**Comparative study on Photoluminescence properties of Alkaline Earth Alumino Silicate phosphor**
5.	National seminar on Characterization and Processing of Advanced Materials (NSCPAM-2021)	Govt. Pt. Shyamacharan Shukla College, Dharsiwa, Raipur (C. G.)	**Energy Transfer mechanism and Luminescence properties of Ce/Dy doped Strontium aluminosilicate phosphor**
6.	National Conference on Luminescence and its Applications (NCLA-2021)	Govt. V. Y. T. P. G. Science College, Durg (C.G.) in association with Luminescence Society of India	**Impact of Ce/Dy co-doping on Calcium aluminosilicate phosphors**
7.	Virtual National Seminar on Advanced Materials & Characterizations-2022 (NSAMC-2022),	Jointly organized by Govt. N. P. G. College of Science & Govt. Pt. Shyamacharan Shukla College, Dharsiwa (C.G.)	**Photoluminescence studies and evaluation of Judd-Ofelt parameters of Calcium alumino silicate phosphor**

References:

1. Prof. Nameeta Brahme

Professor & Head

SoS in Physics & Astrophysics

Pt. Ravishankar Shukla University, Raipur (C. G.)

2. Prof. D. P. Bisen

Professor

SoS in Physics & Astrophysics

Pt. Ravishankar Shukla University, Raipur (C. G.)

3. Dr. Tanamaya Badapanda

Associate Professor

Department of Physics

C. V. Raman Global University, Bhubaneswar, Odisha

(Dr. Tripti Richhariya)