

## CURRICULUM VITAE

Dr. Puspanjali Tripathy  
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Scientific Editor, Indian Journal of Chemical Technology (IJCT)  
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### EDUCATIONAL QUALIFICATIONS:

Name of Examination	Division	% of marks	Subjects taken	Year of passing	Board/University
Secondary School Certificate	First	75.06	Math, Sci, Hist, Geog., Eng., Odia, Sanskrit	1995	Board of Secondary Education Odisha
Higher Secondary	First	64.55	Phy, Math, Chem, Biology	1997	C.H.S.E, Odisha
B. Sc.	First	66.38	Chem (H), Phy, Math	2000	Utkal University
M. Sc.	First	73.0	Inorganic Chem (Spl.)	2002	Utkal University
Ph. D.*	Degree awarded	-	Materials Science	2008	IIT Kharagpur

\*Title of the thesis: **Synthesis, structure and optical properties of gold reinforced polymer nanofluids and films**

### PROFESSIONAL CAREER:

- **Project Assistant:** July 2003 - February 2004 at CSIR-Institute of Mineral and Materials Technology Bhubaneswar, Odisha, India.
- **Junior Research Fellow: (UGC-CSIR)** February 2004 – February 2006 at Materials Science Centre, Indian Institute of Technology Kharagpur, India.
- **Senior Research Fellow: (UGC-CSIR)** February 2006 – February 2009 at Materials Science Centre, Indian Institute of Technology Kharagpur, India.
- **Post Doctoral Researcher:** June 2009 – March 2010 at **Faculty of Chemistry and Biochemistry, Ruhr University Bochum, Germany.**
- **DST-Women Scientist:** June 2013 – June 2016 at Chemistry Department, Indian Institute of Technology Delhi, India.
- **Research Associate:** June 2016 – Dec 2016 at Chemistry Department, Indian Institute of Technology Delhi, India.

- **DST-SERB NPDF:** July 2017- July 2019 at Chemistry Department, Indian Institute of Technology Delhi, India.
- **Senior Scientist, CSIR-National Institute of Science Communication and Policy Research (CSIR-NIScPR)** (Erstwhile CSIR-NISCAIR and CSIR-NISTADS): November 2019-November 2024
- **Principal Scientist, CSIR-NIScPR:** November 2024-till date

#### **RESEARCH INTERESTS:**

Science Communication Studies, Science Education, Nanomaterials, Quantum dots, Photocatalysis

#### **DOCTORAL THESIS SUPERVISED:**

##### **Thesis completed: 1**

Thesis title: Science communication in pandemic times: A critical analysis of COVID-19

Name of the Research Scholar: Dr Kavita Verma, Year: 2025

##### **Thesis work on progress: 3**

#### **PROJECTS:**

Sl. No.	Title of the Project	Duration		Total Cost	Funding Agency
1	Choosing Scientific Research as a Career: Why & How	From 18 October 2021	To 22 October 2021	1.5 Lakh	DST-SERB
2	STEM awareness programs and their impact on the scientific temperament of rural school students in the state of Punjab	Aug-2025	Aug 2026	38.1 Lakh	NCSTC, DST

#### **PROFESSIONAL AFFILIATIONS:**

- Life member of Material Research Society of India

#### **SCHOLARSHIPS AND AWARDS:**

- ❖ Qualified CSIR-UGC NET in Chemical Sciences (2003)
- ❖ Qualified Lectureship CSIR-UGC NET in Chemical Sciences (2004)
- ❖ Best poster presentation award in International conference on MEMS and semiconductor nanotechnology (held during Dec. 20-22, 2005, Advanced Technology Centre, IIT Kharagpur, India).
- ❖ Received fellowship from BRNS-DAE, Govt. of India during July 2003 – February 2004 as Project Assistant.

- ❖ Received JRF/SRF fellowship from UGC, Govt. of India during February 2004 – February 2009 for pursuing Ph.D.
- ❖ Received Postdoc fellowship (2009-10) from **Ruhr-University, Bochum Germany.**
- ❖ CSIR/INSA/CCSTDS full air fare travel grant award to attend the 3<sup>rd</sup> International Conference on Surfaces, Coatings and Nanostructured Materials (NanoSMat2008) held during October 21-24, 2008 at **Barcelona, Spain.**
- ❖ Travel fellowship from Max Plank society Germany to participate as a Young Scientist in International Workshop on “Nonequilibrium Nanostructures” held during Dec. 1-7, 2008 at **Max Plank Institute of Physics for Complex Materials, Dresden, Germany.**
- ❖ DST full air fare grant award to attend the 33<sup>rd</sup> International Conference & Exposition on Advanced Ceramics & Composites (ICACC-2009) held during January 18-23, 2009 at **Daytona Beach, Florida, USA.**
- ❖ Received Financial support from the American Ceramic Society to attend the 33<sup>rd</sup> International Conference (ICACC-2009) held during January 18-23, 2009 at Daytona Beach, Florida, USA.
- ❖ **DST-DFG award** for participation in the meeting of **Nobel Laureates and Students (Chemistry)** held during June 28-July 03, 2009 at **Lindau, Germany.**
- ❖ Travel Fellowship to attended "**Humboldt Kolleg**" during Nov. 7-9, 2008 at Banaras Hindu University (BHU), Varanasi.
- ❖ Received 3 years (2013-2016) project grant under Women Scientist Scheme "A" from DST, India
- ❖ Received 2 years National Postdoctoral Fellowship (2017-2029) from SERB, DST, India

## List of Publications:

### In Journals:

1. A. Gautam, P. Tripathy and S. Ram, “Microstructure, topology and X-ray diffraction in Ag-metal reinforced polymer of polyvinyl alcohol of thin laminates”, *J. Mater. Sci.* 41 (2006) 3007-3016.
2. P. Tripathy, S. Ram and H.- J. Fecht, “Gold nanoparticles from induced  $\text{Au}^{3+} \rightarrow \text{Au}^0$  reaction in polyvinyl alcohol molecules in presence of sucrose in hot water” *Plasmonics* 1 (2006) 121-127.
3. S. Ram, P. Tripathy, and H.-J. Fecht, “Gold nanoparticles reinforced poly(vinyl alcohol) of self-standing optical films” *J. Nanosci. Nanotech.* 7 (2007) 3200-3206.
4. P. Tripathy, A. Mishra, and S. Ram, “Immobilizing Au-nanocolloids in co-branched polymer molecules in presence of gluconic acid in poly (vinyl alcohol) in hot water” *Mater. Chem. Phys.* 106 (2007) 379-386.
5. P. Tripathy, A. Mishra, S. Ram, and H.-J. Fecht, “Mechanical properties under nanoindentations in gold-reinforced poly (vinyl alcohol) nanocomposite of free standing films”, *NSTI-Nanotech*, 1, (2008) pp. 308-311.
6. A. Mishra, P. Tripathy, S. Ram, and H.-J. Fecht, “Synthesis and X-ray photoelectron spectroscopy studies of poly(vinyl pyrrolidone) capped gold nanoparticles in a hybrid composite”, *NSTI Nanotech*, 1 (2008), pp. 487- 490.

7. P. Tripathy, A. Mishra, and S. Ram, "Mechanism of growing shape controlled gold nanocrystals in support over a polymer template" NICE Journal of Emerging Technologies, Vol. 3 (1) (2008) 14-18.
8. P. Tripathy, S. Ram, H.-J. Fecht, J. Bansmann and R. J. Behm, "X-Ray photoelectron spectrum in surface interfacing of gold nanoparticles with polymer molecules in a hybrid nanocomposite structure" Nanotechnology 20 (2009) 075701. (10 pages)
9. A. Mishra, P. Tripathy, S. Ram, and H.-J. Fecht, "Optical properties in nanofluids of gold nanoparticles in poly(vinylpyrrolidone)" J. Nanosci. & Nanotech. 9 (2009) 4342-4347.
10. U. Soni, P. Tripathy, and S. Sapra, "Photocatalysis from Fluorescence-Quenched CdSe/Au Nanoheterostructures: A Size-Dependent Study" J. Phys. Chem. Lett. 5 (2014) 1909-1916.
11. S. Yadav, B. Adhikri, P. Tripathy and S. Sapra, "Efficient Charge Extraction from CdSe/ZnSe Dots-on-Plates Nanoheterostructures" ACS Omega 2 (2017) 2231.
12. K. Verma & P. Tripathy, "Health Communication Strategies of India in the times of Covid-19: A Critical Review", Communicator Journal, Published in Vol. LIX (2): 44-50, April-June 2024.
13. K. Verma, P. Tripathy & S. Aggarwal, Pandemic in the Age of Social Media: A Critical Analysis of Covid-19 in India", Communicator Journal, LX (2), 136-140,. April-June 2025
14. K. Verma, **P. Tripathy**, S. Aggarwal & N Dutta, "Scientoons: The Comic Relief in the COVID-19 Science Saga!", Journal of Scientific Temper 13(2), 75-95, April-June 2025 , DOI : 10.56042/jst.v13i2.14458.
15. K. Verma & P. Tripathy, "A Study of the Effectiveness of Scientoons in Combating the COVID-19 Infodemic" Bharatiya Vaigyanik evam Audyogik Anusandhan Patrika, 33(1), 49-60, June 2025, DOI : 10.56042/bvaap.v33i1.16747.
16. A Sharma & P. Tripathy, "A review on sssessment of scientific attitude of school students: A case study of Indonesia", Journal of Scientific Temper, Vol. 13(1), Jan-March 2025, pp. 5-24.