CV of Professor Tarasankar Pal

- 1. **Name and Address:** Dr. Tarasankar Pal, Professor, Department of Chemistry, IIT, Kharagpur
- 2. Date of Birth and Age: 01-09-1952; 63 years and 7 months
- 3. **Present salary:** Rs1,21654.00 per month
- 4. Length of the service rendered: 32 years, since 1984 in the Department of Chemistry, IIT, Kharagpur
- 5. Academic Qualifications:

Sl.No	Degree	Subject	Year	University
1	D. Sc	Chemistry	2006	Visva-Bharati (Santiniketan)
2	Ph. D	Chemistry	1979	Burdwan
3	M. Sc	Inorganic Chemistry	1973	Burdwan
4	B. Sc	Chemistry (Honours)	1971	Visva-Bharati (Santiniketan)

6. Awards:

- (i) Award from West Bengal Board of Secondary Education, 1968
- (ii) National scholarship for B.Sc. result, 1971(1st Class 1st)
- (iii) Two Indian Chemical Society Medals (1994 Analytical & 1999 Inorganic Chemistry, 1994)
- (iv) R & D -100 award, USA, 1994
- (v) INSA Visiting Fellowship, 1997, Manchester University, UK
- (vi) CRSI Bronze medal, 2007
- (vii) President's Award from Tokyo University of Science, 2 times (2013 & 2014)
- (viii) Gold medal (Indian Society for Solid State Science), 2014
- (ix) Dr. J N Mukherjee Endowment Medal, Indian Chemical Society, 2015
- (x) Science without Border Program Fellowship from Govt. of Brazil, 2015

7. Fellowship

- (i) Fellow of the National academy of Sciences, Allahabad
- (ii) West Bengal Academy of Science and Technology
- 8. Visiting Professor Positions Held: Oak Ridge National Laboratory, Georgia Institute of Technology, Duke Univ. (USA); University of Kent & Manchester Univ. (UK); Univ. Paris-sud & Lee Mans Univ. (France); Tokyo Univ. Sci, (Japan); NUS (Singapore); Xiamen Univ. (China); NTU, NCKU, Cheng Kung Univ. (Taiwan); Univ. Santa Catarina (Brazil).

- 9. **Recognition by the American Chemical Society:** Selected among the top 20 Indian Chemists.
- **10. Fields of Interests:** Inorganic chemistry, Spectroscopy, Catalysis, Nanoparticle Chemistry, Electrochemistry and Environmental Chemistry
- **11. Ongoing Project: One DST** (Rs.49.6 lakhs) & **one SERB** (Rs.48.4 lakhs). **DBT** Twining project (Rs.62.2 lakhs). Completed a no. of **CSIR**, Two **BRNS**, Two **DST** projects and one **Tata Steel project**, Purchased one micro Raman spectrometer (Rs100 lakhs) with **DST** grant.
- 12. **Publications: 324** (*H Index*: 49); Typical Citations (*year*): 1372 (2007), 474 (2007), 459 (2002), 358 (2009) etc. for a few published papers.

13. PhD produced: 26; Ongoing: 05 and Completed 2 B.Tech and 33 M.Sc projects.

14. Original Contribution:

- a) Initiated Nanoparticle Research in India from IIT Kharagpur
- b) 'YES'/'NO' type Arsenic Detection Kit developed for poor people
- c) 'Bench Mark Model Reaction' proposed to test any nanoparticle catalyst
- d) 'First Inorganic Gel' Reported
- e) SERS (surface enhanced Raman scattering) with transition metal proposed
- f) 'One Step Hydrolysis Reaction' by metal oxide nanoparticle
- g) 'Seed Mediated Nanoparticle' synthesis proposed for the 1st time
- h) Porous nanoparticle induced reduction by weak reducing agent at room temperature
- i) 'First Aromaticity Driven Reaction' developed for new catalyst synthesis
- j) 'Dissolution of Gold in Water' reported through Fermi level shifting
- k) 'Clock Reaction' made demonstrable
- 1) 'Fluorescing Metal Cluster (sub-nanometer particle)' reported
- m) 'Metal Enhanced Fluorescence' in solution phase
- n) 'Special Charge Storage '2-D Supercapacitor' Material
- o) 'Ensemble Effect' for new catalyst development
- p) 'Reactor Designed for MHT' reaction
- q) Introduced Ion-Exchange Mechanism for Metal Nanoparticle Synthesis
- r) New metal/non-metal alloying platform reported

15. Book Chapters: 10

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