

SHORT CURRICULUM VITAE DR. ANJALI PAL

Personal Information and Present Position

Professor, Department of Civil Engineering, IIT Kharagpur 721302

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Education

1988	Ph. D. (Chemistry), Calcutta University
1978	M. Sc. (Chemistry), Calcutta University
1976	B. Sc. (Hons. in Chemistry), Calcutta University
1973	H. S., WBBSE*

Awards and Scholarship

(1) National Scholarship* (HS Exam.); (2) Convention Award (INDIAN CHEMICAL SOCIETY) (1988); (3) Advanced Technology Award / International Hall of Fame Award (INVENTORS CLUB OF AMERICA) (1993); (4) R & D 100 -Award (DOE, USA) (1994)

Research Experience

- In India and abroad (USA & JAPAN) more than 30 years

Teaching Experience

Taught TWELVE (UG & PG) different courses in Civil Engineering Department and in Chemistry Department during the last 20 years & Taught in other Universities as a guest teacher.

Guidance in B. Tech. / M. Tech. / Ph. D. Levels

Guided B.Tech, M.Tech and Ph.D. students covering different topics *viz.*

(1) Arsenic remediation; (2) Pollution abatement; (3) Nanomaterials synthesis, characterization and application; (4) Adsorption / Adsorbubilization; (4) Catalysis; (5) Advanced oxidation processes

- Guidance at Doctoral level: 12 (Completed); 02 (undergoing)
- Guidance in Masters level: 35 (Completed); 04 (undergoing)

Research Publications

- In Standard National / International Journals: > **235** (including Book chapters and Monographs) (11 papers are Single authored)
- Citation: >**15026**
- In National / International Conferences: > **110**

Research Field of Interest

(1) Pollution abatement and Environmental Engineering; (2) Nanomaterials syntheses and applications; (3) Catalysis and Spectroscopy; (4) Analytical Chemistry; (5) Natural Product Chemistry

Position of Authority Held

- *“Editorial Advisory Board of Recent Patents on Nanotechnology” (Bentham Science Publications Ltd.)*
- *“Editorial Advisory Board of Recent Patents on Engineering” (Bentham Science Publications Ltd.)*
- *Co-Editor in the journal “Research Journal of Chemistry and Environment”*
- *“Bentham Ambassador” (Bentham Science Publications Ltd.)(2018-2019)*
- *“Guest Editor” for the SI in “Catalysis Today” (Elsevier) (2019)*
- *Reviewer for the many ACS, RSC, Elsevier & other International/National Journals*

Foreign Invitation/Collaboration

- (1) Visiting Scientist to work with Dr. Tuan Vo-Dinh in the Oak Ridge National Laboratory, USA*
- (2) Visiting Fellow to work with Prof. Kunio Esumi in the Tokyo University of Science, Japan*
- (3) Professional Advisor to Work with Prof. C. P. Wong in Georgia Institute of Technology, Atlanta, USA*
- (4) National University of Singapore to deliver a talk on “Nanogold Dissolution”*
- (5) Invited speaker for Faraday Discussion 132 to be Held in the Imperial College London to deliver a talk on “Synthesis and Characterization of SERS Gene Probe for BRCA-1 (Breast Cancer)”*
- (6) Invited to deliver talks on “Synthesis of Coinage Metal Nanoparticles and its Application to SERS” to The University of Catania (Italy) and National Nanotechnology Laboratory of CNR-INFN (Italy)*
- (7) Invited to deliver a series of lectures in different universities in Taiwan*
- (8) Invited for scientific collaboration with Prof. Tuan Vo-Dinh in Duke University, NC, USA*
- (9) Invited for scientific collaboration with Prof. Thomas Thundat in University of Alberta, Canada*
- (10) Invited for scientific collaboration with Prof. Yuichi Negishi in Tokyo University of Science, Japan*

Sponsored Research Projects Undertaken

- (1) DST sponsored project entitled “Development of a low-cost technology for arsenic-removal and an easy to detect method for arsenic analysis for the rural areas of West Bengal” (Project value: 5.6 Lakhs) (2003-2006)*
- (2) Investigator of ISIRD project entitled “Synthesis and characterization of mono- and bimetallic nanoparticles on supported systems and their application for the degradation of organic pollutants” (Project value: 5.0 Lakhs) (2007-2010)*
- (3) Co-investigator for the Calcutta University sponsored project entitled “Determination of leishmanicidal potential of metal nanoparticles and their conjugates” (Project value: 2.0 Lakhs) (2010-2012)*

(4) Co-PI for DST sponsored project entitled “*Development of microbial fuel cell for direct electricity recovery during waste water treatment*” (2012-2016) (Project value: 61.1 Lakhs)

(5) Co-PI for SERB sponsored project entitled “*Development of Bioactive 3D scaffold with Nano/micro hierarchy for bone tissue engineering through combinatorial approach*” (2015-2018) (Project value: 45.45 Lakhs)

(6) Co-PI of a SERB sponsored project entitled “*Plasmonic Nanoparticles Decorated Heterogeneous Magnetic Nano-Catalysts for Removal of Pesticides: A Road Map towards Water Purification.*” (2019-2022) (Project value: 19 Lakhs)

Teaching Interest (Subjects taught / teaching)

At the UG level:

(1) Environmental Science (Breadth) (EV20001 & EV10003); (2) Environmental Engineering (Elective) (CE31302); (3) Hazardous Waste Management (Elective) (CE41603); (4) Environmental Engineering & Science (Breadth) (CE31314); (5) Water & Wastewater Eng. Lab. (Core) (CE39011 / CE23001); (6) Common Design Project (Core) (CE37002)

At the PG level:

(1) Environmental Chemistry & Microbiol. (Elective)(CE60131 / CE60067); (2) Hazardous Waste Management (Elective) (CE60148 / CE60076); (3) Environmental Engineering Lab (I) (CE69023 / CE69011); (4) Advanced Engineering Monitoring Lab. (II) (CE69008); (5) Water Management Lab. (WM69003); (6) Introduction to Nano-science & Technology (NT70002)