

Thalappil Pradeep

Institute Professor

Deepak Parekh Institute Chair Professor and Professor of Chemistry

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<https://pradeepresearch.org>

Professor in-charge, International Centre for Clean water

<http://iccwindia.org>

Born on July 8, 1963 at Panthavoor, Kerala, India

Padma Shri (2020) awarded by the Government of India in the category of Science & Engineering**Mission**

Enabling clean environment and affordable clean water through advanced research and translating technological outcomes through start-ups, empowering youth in the process

Education and training

BSc., MSc. Calicut University, 1980-1985; Ph.D. Indian Institute of Science, Bangalore, 1986-91; Post Doctoral Fellow, Lawrence Berkeley Laboratory, University of California Berkeley, 1992-93; Post Doctoral Fellow, Purdue University, West Lafayette, Indiana, 1993

Employment details

Technical Officer, CWRDM, 1/86-8/86; JRF/CSIR SRF, IISc., Bangalore, 8/86-12/90; Research Associate, IISc., Bangalore, 1/91-3/91; Scientific Officer, IISc., Bangalore, 3/91-2/92; Visiting Faculty, IIT Madras, 01/12/1993-10/09/1995; Asst. Professor, IIT Madras, 11/09/1995-25/09/2000; Assoc. Professor, IIT Madras, 26/09/2000-11/01/2004; Professor, 12/01/2004-

Other titles

Adjunct Professor, Institute of Life Sciences, Ahmedabad University, 2013-2016; Distinguished Visiting Professor, PSG Institute of Advanced Studies, Coimbatore, 2013-; Appointed to the Graduate Faculty, Purdue University, 2015-; Visiting Professor, Manipal University, 2018-

Institute Professor, 01/05/2015-; Institute Chair Professor, 01/04/2016-; Deepak Parekh Institute Chair Professor, 12/04/2017-

Visiting positions

Visiting Scientist, Purdue University, Indiana 1994; Fulbright Scholar, Purdue University, 1998; Visiting Scientist, Institute of Chemistry, Academia Sinica, Taipei, Taiwan, 1999; Visiting Scientist, Department of Chemistry, Pohang University of Science and Technology, Korea, 2000; Visiting Professor, University of Leiden, 2002 (2 times); Visiting Scientist, EPFL, Lausanne, Switzerland 2002; Visiting Scientist, Institute of Molecular Science, Okazaki, Japan 2006; JSPS Fellow, Hyogo University, Japan 2006

Awards, prizes and professional recognitions

Nikkei Asia Prize, 2020; The World Academy of Sciences (TWAS) Prize in Chemistry, 2018; Shanti Swarup Bhatnagar Prize, 2008

Fellowships: Elected Fellow of the Indian Academy of Sciences (FASc.), 2009-; Elected Fellow of the Indian National Academy of Engineering (FNAE), 2014-; Fellow of the Royal Society of Chemistry (FRSC), 2014-; J. C. Bose National Fellowship, 2015-; Elected Fellow of the Indian National Science Academy (FNA), 2016-; Elected Fellow of The National Academy of Sciences (FNASc), 2015; Elected Fellow of the American Association for the Advancement of Science (AAAS), 2018-; Elected Fellow of The World Academy of Sciences (TWAS), 2019-

Other awards: National Talent Test Award, 1975-78; Mr. P. Chitran Namboodiripad Fellowship, 1978; Calicut University Merit Scholarship, 1983-85; Best Student Award, Farook College, 1985; Indo-US Science and Technology Fellowship

1992-93, University of California and Lawrence Berkeley Laboratory, Berkeley; Rajiv Gandhi Award for Innovative ideas in Science and Technology, 1995; Young Affiliate of the International Union of Pure and Applied Chemistry, 1996; Senior Fulbright Fellow, Purdue University, 1998; Tamil Nadu Scientist Award, 2000; Swarnajayanti Fellowship (Project) of the DST, 2000; Materials Research Society of India Medal, 2002; Young Scientist Award of the Chemical Research Society of India, 2003; B. M. Birla Science Prize, 2003; Bronze medal, Chemical Research Society of India, 2004; JSPS Fellow, Hyogo University, Japan, 2006; Swadeshi Sastra Puraskaram, 2007; Swadeshi Science Movement of Kerala, part of Vijnana Bharati; National Research Award in Nano Science and Technology by the Department of Science and Technology, Government of India, 2008; Kerala Sahitya Academi Award for Knowledge Literature, 2011 (for popular science writing in *Malayalam*); President's award, Tokyo Science University, 2011; Professor S. S. Deshpande National Award, 2011; India Nanotech Innovation Award, 2012 by the Government of Karnataka; Eminent Mass Spectrometrists Award of the Indian Society for Mass Spectrometry, 2013; Lifetime Achievement Research Award of IIT Madras, 2015; Silver Medal of the Chemical Research Society of India, 2020; National Water Award, 2020; IISc Distinguished Alumnus Award, 2021; Vishwakarma Medal of the Indian National Science Academy, 2021

Editorial Boards: *Asian Journal of Spectroscopy*, 2000-; *Oriental Journal of Chemistry*, 2000-; *Nano Reviews*, 2010- *ACS Applied Materials and Interfaces*, 2012-2015; *Particle*, 2012-; *Surface Innovations*, 2012-; *Nanoscale*, 2014-; *Chemistry – An Asian Journal*, 2014-; *Scientific Reports (Nature Group)*, 2015-; *International Journal of Water and Wastewater Treatment*, 2015-; *Chemistry of Materials*, 2018-; *ACS Nano*, 2018-; *Nanoscale Advances*, 2019-; *Analytical Chemistry*, 2020-; *Chemical Communications*, 2020-

Associate Editor of the journal, *ACS Sustainable Chemistry & Engineering*, 2014-

Membership of important committees

Member of several committees of Central and State governments, funding agencies such as DST
Chairman, BoG of INST, Mohali (under DST)

Publications

510 articles in journals, 7 published books, 13 chapters in books; Total citations >30,000, h-index 83, h5-index 59 (Google Scholar); citations >22,500, h-index 71 (Scopus)

125+ patents or patent applications in all including Indian, PCT and US patents, including >70 issued Indian, PCT and US patents; 23 patents licenced, earned Rs. 4.5 crores of royalty for the institute and over 450 cores for the nation
Popular science articles in English and Malayalam with 3 books, two chapters in books and several articles in magazines

Start-ups, technology incubation

InnoNano Research Private Limited, Safewater Nano Pte. Limited, InnoDI Water Technologies Private Limited, VayuJal Technologies Private Limited, Aqueasy Innovations Private Limited, Hydromaterials Private Limited, EyeNetAqua Private Limited

Training

Taught undergraduate and graduate level courses at IITM for 27 years and trained over 300 students at various levels to conduct research, including 52 completed and 30 ongoing PhDs, 120 MSc/MTech theses, 40 postdocs and several visiting students from India and abroad

Funding, science infrastructure, outreach

Completed over 25 research projects worth Rs. 100 crores, established facilities benefiting science in the region; Delivered >500 invited/plenary and keynote lectures

Publicity

Research featured in CNN, Scientific American, The Guardian, New Scientist, C&E News, Indian newspapers, especially The Hindu