

Professor Tarun Kant

Date of birth: 1 July 1946

Place of birth: Ballia (Uttar Pradesh), India

Parents' names: (Late) Shambhu Nath and (Late) Krishna Devi

Education

High School	1958	Queen's College, Varanasi, UP Board
Intermediate	1960	KE Govt Inter College, Deoria, UP Board
BSc	1962	Allahabad University (Phy, Chem & Maths)
BTech	1967	IITBombay (Civil Engg with Honours)
MTech	1969	IITKanpur (Structural Engineering)
PhD	1977	IITBombay (Thick Elastic Shells)

Employment

March 1969 - August 1969	Research Assistant, IIT Kanpur
August 1969 - January 1971	Sr Design Engineer-cum-Programmer Builders' Associates, Consulting Engineer, Bombay
January 1971 - May 1978	Lecturer, IIT Bombay
May 1978 - May 1986	Assistant Professor, IIT Bombay
October 1979-September 1982	Visitor, University of Wales, Swansea, UK
May 1986 - December 2009	Professor, IIT Bombay
Feb 1993 - Sep 1993	Visiting Professor, Cambridge University, UK
July 2005 - December 2005	Visiting Professor, University of California, Los Angeles, USA
December 2009 - present	Institute Chair Professor

Major Administrative Responsibilities Held

Chairman, Joint Entrance Examination-1998 [JEE-98] (June 97- September 98)
Chairman, Central Library Committee [1995 - 1999]
Head of Department, Civil Engineering [8 March 2000 - 18 January 2002]
Dean (Planning) of the Institute [18 December 2001 - 3 December 2003]

Significant Honours

- First engineering academic in the country to receive of the prestigious 1979 Jawaharlal Nehru Memorial Trust (U.K) Scholarship Award by the Government of India.
Visiting Faculty at the Department of Civil Engineering, University of Wales, Swansea SA2 8PP, United Kingdom under the auspices of the above from October 1979 to October 1982.
- Recipient of the 1992-'93 European Community (EC) Post-Doctoral (Senior) Fellowship Award by the Government of India.
Visiting Professor at Cambridge University Engineering Department, March-August 1993 under the auspices of the above exchange program.

- Elected a *Fellow of the Indian National Academy of Engineering (INAE)* in 1998.
- Elected a *Fellow of the Indian Academy of Sciences (IASc)* in 2003.
- Elected a *Fellow of the Indian National Science Academy (INSA)* in 2006.
- Recipient of *Professor H.H. Mathur IIT-Bombay Award of Rs. 1.50 lakh and a Citation for Excellence in Research in Applied Sciences* for the year 2006.
- Recipient of *IIT Roorkee's Khosla National Award 2009* of Rs. 51,000, a Citation and a Gold Medal for his Life Time Achievements in the field of Engineering.
- Recipient of *IIT Bombay Research Paper Award for the year 2010*. The award consists of a cash incentive of Rs. 20,000/- and a citation. In addition, the awardee is invited to submit a research proposal up to a maximum of Rupees Five lakhs which will be reviewed by IRCC for possible funding.
- *Elected a Fellow of The National Academy of Sciences, India (NASI)* in 2011.
- Recipient of *Life Time Achievement Award of IIT Bombay* in 2012.
- ICCS17 (17th International Conference on Composite Structures, Porto, Portugal, 17-21 June 2013) honoured him by calling him a *legend* and recognized him as a pioneer in initiating a new direction in mechanics of composites.

Other Honours

Research & Citation Standing in terms of h-index of 25 on Web of Science

Total citations of over 1800 on Web of Science

Elected *President* of the Indian Society of Theoretical and Applied Mechanics (ISTAM) for the year 1999.

Re-elected *President* of the Indian Society of Theoretical and Applied Mechanics (ISTAM) for the year 2000.

Nominated *Founder Life Member* of International Society for Computational Engineering and Science (ISCES)

Founded the Indian Association for Computational Mechanics (IndACM) on 1 January 2000.

Elected *Founder President* of the Indian Association for Structural Engineering (IASE) on 8 January 2000.

Nominated a member of the National Committee for International Union of Theoretical & Applied Mechanics (IUTAM) by the Indian National Science Academy (INSA) for a period of 3 years with effect from 1 July 2000.

Member of National Committee of IUTAM for a period of 4 years w.e.f. 1 January 2008 (constituted by INSA Council at its meeting on 4 October 2007).

Cited in most of the editions of *Marquis Who's Who in the World* which includes the biographies of most influential and important people in the international community.

Nominated for citation in the 2000 Outstanding People of the 20th Century published by the International Biographical Centre in Cambridge, England in late 1998 and in later years.

Nominated a Fellow of The World Innovation Foundation (U.K) in October 2001.

Member, General Assembly of IUTAM [2008 – 2012].

Member, Sectional Committee on Engineering and Technology, Indian Academy of Sciences (IASc), Bangalore [2009 -2013].

Member, Sectional Committee on Engineering & Technology, Indian National Science Academy (INSA), Delhi [2012].

Convener, Sectional Committee on Engineering & Technology, Indian National Science Academy (INSA), Delhi [2013].

Member of the Governing Council of Dr. Fixit Institute of Structural Protection & Rehabilitation (DFI-SPR) since April 2011.

Member, Joint Science Education Panel of IASc, INSA and NASI for Summer Research Fellowship (SRF) selections [2008-present].

Awards

Recipient of the Burmah Shell Best Paper Award for a contribution in the Journal of The Aeronautical Society of India (1975).

Recipient of PARAM Second Prize Award in the category of Scientific & Engineering Applications on 1 April 1995 by the C-DAC Awards Committee for the work entitled *Parallel Finite Element Based Composite Analysis Package on PARAM*

Members of Editorial Boards of Scientific Journals

Member, Editorial Advisory Board, Computational Mechanics - An International Journal (Retired).

Member, Editorial Board, Structural Engineering and Mechanics - An International Journal, Techno Press, Daejeon, Korea.

Member, Board of Editors, International Journal for Engineering Analysis and Design.

Member, Board of Editors, Computer Modeling in Engineering Sciences (CMES), Tech Science Press, Forsyth, GA, USA.

Member, Editorial Board, International Journal for Computational Methods in Engineering Science and Mechanics (CMESM).

Member, Editorial Board, Advances in Civil Engineering – An Open Access Journal, Hindawi Publishing Corp.

Member, Editorial Board, International Journal of Computational Methods, World Scientific, New Jersey.

Participation in Conferences and Invited Talks

Participated and gave talks at several conferences, visited and lectured at universities and research laboratories within and outside the country including United Kingdom, Germany, United States, Canada, Thailand, Japan, Korea, Singapore, Australia, Hungary and Greece.

Experience

43 years of teaching & research experience. Supervised 24 PhD and 71 MTech students. Refereed over 75 PhD theses. Published over 130 technical papers in refereed international journals. Presented over 140 papers at national/ international conferences and which are published in conference proceedings.

Taught Engineering Mechanics, Solid Mechanics, Structural Mechanics, Matrix & Finite Element Methods, Computational Mechanics and Design courses to undergraduate students.

Taught Numerical Methods, Plates, Shells, Finite Element Methods, Elasticity, Nonlinear Analysis and Stability courses to postgraduate students.

Organized short term courses on *Numerical Analysis of Plates and Shells* on 9-28 May 1977, *Finite Element Methods* on July-September 1996 and 1-5 December 1997, an International Conference on *Finite Elements in Computational Mechanics* on 2-6 December 1985, the 2nd *Structural Engineering Convention (SEC-2000)* on 5-8 January 2000 and the *3rd International Congress on Computational Mechanics and Simulation (ICCMS09)* on 1-5 December 2009.

Completed 10 major sponsored, over 50 consultation projects and a significant consultation project on finite element analysis of fibre reinforced composite laminates involving transfer of technology under which a FEMCOMP software is being marketed by C-DAC, Pune. Two on-going sponsored projects including an USIF funded one with an outlay of Rs 55.25 lacs over a period of ten years.

Members of Government Appointed Committees

Member of High Rise Committee appointed by Government of Maharashtra (June07-June10).

Member of State Expert Appraisal Committee (SEAC) constituted by Environment Department, Government of Maharashtra (7 July 2011-) on behalf of Ministry of Environment and Forest (MOEF), Government of India.

Member of Joint Technical Committee constituted by Government of Maharashtra under Resolution No. ENV-2011/CR-55/TC3 dated 30th June 2011 (July11- Dec11).

Professional Affiliations

Fellow, The Institution of Engineers

Fellow, The Aeronautical Society of India

Member, The Indian Society of Theoretical & Applied Mechanics

Member, The Indian Society for Technical Education

Founder Member, Indian Association for Structural Engineering

Founder Member, Indian Association for Computational Mechanics

Member, International Association for Computational Mechanics

Founder Member, International Society for Computational Engineering and Science

Reviewer, International Journal for Numerical Methods in Engineering, Finite Elements in Analysis & Design, International Journal of Solids and Structures, Journal of Sound and Vibration, European Journal of Solid Mechanics: A Solids, Communications in Applied Numerical Methods, Engineering Computations: An International Journal, Composites Engineering, International Journal for Engineering Analysis and Design, ASME Journal of Applied Mechanics, Structural Engineering and Mechanics - An International Journal, Computational Mechanics, Journal of Partial Differential Equations, SADHANA, Proceedings of INSA, Advances in Civil Engineering – An International Open Access Journal, etc.

Executive Committee Member, The Aeronautical Society of India (1985-'86)

Hon. Secretary, The Aeronautical Society of India (1986-'94) Bombay Branch)

Vice President, The Aeronautical Society of India (1994-'95) Bombay Branch)

Committee Member: Research Council of Structural Engineering Research Centre, Madras (1991-94), Building and Works Committee, National Institute of Industrial Engineering, Bombay 1994-present), VASVIK Awards Selection Committee (1993-1999), AERB Safety Research Programmes (2000-present), Expert on the Selection Committees for faculty appointments of IITs at Delhi, Guwahati, Kanpur and Madras and universities/NITs at Bombay, Nagpur and Indore. Advisory Board Member of many national and international conferences, Chairman/Member of several AICTE-NBA accreditation committees, Member of many UPSC committees, Member of high powered High Rise committee of Government of Maharashtra (2006-'10), Member of a DST committee, Member of Sectional Committee of Indian Academy of Sciences (2008-'12), Member of IUTAM General Assembly.

Academic Administration

Coordinator, Illyr seminars	1972-'74
Coordinator, Illyr works and visits	1971-'73
Member, Departmental UG Curriculum Development Committee	1972-'73
Member, Departmental PG Curriculum Development Committee	1973-'74
Faculty Adviser, UG Programme	1973-'78
Coordinator, BTech Projects	1974-'75
Member, Institute's First Accommodation Advisory Committee	1975-'77
Secretary, Departmental Faculty Meetings	1977-'78
Incharge, Heavy Structures' Laboratory	1977-'79, 2007-'08
Coordinator, Structures' Group Laboratories	1978-'79
Faculty Adviser, PG Programme	1983-'84
Member, Departmental committee charged with the task of preparing a report on rotating heads of departments	1984
Member, Departmental Staff Student Committee	1984-'85
Incharge, Departmental XEROX Facility	1984-'93
Secretary, Departmental Faculty Meetings	1984-'85
Member, Departmental committee charged with the task of preparing a report on administrative reforms in IIT-B	1985
Member, Departmental UG Committee	1986
Member, Departmental PG Committee	2009, 2011
Member, Departmental Staff Student Committee	1986-'87
Faculty Adviser, PG Programme	1986-'88, 2007-
Coordinator, Structures' Group	1977-'79, 1986-'88, 2007-
Incharge, Experimental Mechanics Laboratory	1986-'88, 1997-'99, 2003-'05
Departmental Coordinator for Central Computing Cyber System	1987-'93
Member, Institute Committee for Tendering - Building & Works	
Member, Energy Systems Interdisciplinary Group	1989-'95
Convenor, Departmental Coordination Committee for Civil Works	1992-'95
Member, Accommodation Advisory Committee	1993-'95
Member, Institute's Training & Placement Committee	1994-'96
Chairman, Central Library Committee 1995-1999.	1995-'99
Responsible for introducing Journals' Resourse Sharing amongst BARC, IITs and TIFR. Also instumental in the introduction of submissions of dissertations and theses in electronic form ETD.	
Convenor and Incharge, Departmental Computing and Communication Facility Revamped and developed the Departmental Computer Laboratories for UG-PG, RS and Faculty	1994-'98
Convenor of a committee to give recommendations for staff structure to provide administrative	April 1995

and technical support at the departmental level Chairman, Joint Entrance Examination	1998
Head of Department	2000-2002
Member, Institute Committee for Parking of 2 & 4 Wheeler Vehicles in in the Campus	2001
Member, Institute Task Force for the Restoration of the Glory of the Powai Lake	2001
Dean (Planning)	2001-2003
Member/Convenor, Senate Nominations Committee	2006-2009
Member, IRCC Advisory Committee	2005-pres
Member, IRCC Awards Committee	2006-2008
Convenor, Department Review Committee	2008-2009
Incharge, Heavy Structures' Laboratory	2007-2008
Structures' Group Coordinator	2007-2010
Chairman, IRCC Awards 2007 & 2008	2009-2010
Member of Infrastructure Planning Advisory Committee	Jan2010-
Member, Department UG Program Review Committee	2012-2013
Member, Higher Academic Grade (HAG) Evaluation Committee	2011

Corporate Activities

General Secretary, Hall-4, IIT-K	1968-1969
General Secretary, Staff Hostel, IIT-B	1971-1974
Joint Secretary, First Executive Committee, Faculty Forum, IIT-B	1976-1978
Member, Executive Committee, Swansea & Overseas Society	1980-1982
Secretary, Faculty Forum, IIT-B	1985-1987
Vice President, Staff Club, IIT-B	1986-1987
Member, Save Powai Lake Action Group	1994
Member, High Rise Committee, Appointed by Govt of Maharashtra	1995-pres
Member, State Expert Appraisal Committee (SEAC), Ministry of Environmental, GOM July2011	2006-2010