

# Celebrating the generosity of

# Dr. Meher Prasad A



Impact of your giving in 2023

# **Prof. Kamakoti Veezhinathan**

# **Director, IITM**



#### Greetings!

IIT Madras continues to retain her top position for the eighth consecutive year, in the National Institute Ranking Framework, thanks to the world-class research of its faculty and students. The contribution and support of *Alumni and well-wishers like you* has crucially helped this standing and stature. Our achievements in research, education, innovation and entrepreneurship have also earned us the recognition of an 'Institute of Eminence' as well as the top position in the Atal Innovation Ranking from the Government of India.

The institute is making an indelible mark with her 'research with impact' in several areas including quantum computing, drinking water technology, industrially relevant mathematical models for governance, rendering cancer-cure more effective. Our centres of excellence, the Center for Innovation, Nirmaan – the pre-incubator, the Incubation Cell, technology centres such as 'IITM-Pravartak' and others, work in unison for not just our nation's building, but societies world-wide. We aspire to be locally impactful and globally relevant through all these efforts.

Towards exploring new research frontiers, a Department of Medical Sciences and Technology has been launched in May 2023 to conjoin medicine and engineering. Similarly, a School of Sustainability was also created in October 2023 to research sustainable practices in the Global South. The campus is moving towards a 'carbon-net-zero' goal through water conservation by 100% recycling, efficient garbage disposal, and electrification of vehicles. The traditional education system is undergoing a paradigm shift, with our online Bachelor of Science programme in Data Sciences and the National Program of Technology Enhanced Learning, that have won Gold in the 'Lifelong Learning' category and Silver in the 'Best Online Program' category of the Wharton-QS Reimagine Education Awards 2022 respectively. IIT Madras is leading this revolution from the front.

Such achievements are not possible without the deep-rooted faith and support of alumni and well-wishers such as yourself. We are indebted to you for your generous, bountiful, and impactful contributions. On behalf of IIT Madras, I offer you our deepest gratitude for continuing to strengthen the Institute. Together with your support, we are confident of building an IIT Madras that is more inclusive, diverse, and enabled by an ecosystem to be nationally relevant and globally recognised.



# **Prof. Mahesh Panchagnula**

Dean, Alumni & Corporate Relations, IITM

### Greetings!

I express my heartfelt gratitude to you for your generous support to IIT Madras. We appreciate your passion in supporting the causes you do and I assure you that your contributions will be optimally utilized. This report has been compiled to convey how your largesse has touched lives and made a difference at IIT Madras. In keeping with the rapid, contemporary strides in science, technology we have set ambitious goals for ourselves - your continued enthusiasm and support will help us greatly in these endeavors.

IIT Madras is far more diverse in its set of pursuits, more green and more research-focused. And yet, it remains unchanged over these years, it is still the best Institute in the country, and attracts the best students that India has to offer to come and make a mark. I also cordially invite you to visit your campus to see for yourself, the impact of your contribution, and the growth and transformation the Institute has undergone over the years.

We can never express our gratitude enough for all that you have done - Thank You!





# Dr. Meher Prasad A 1982/BT/CE Professor Indian Institute of Technology Madras

Dr. Meher Prasad, a distinguished professor at IITM, earned his Bachelor's degree in Civil Engineering from the elite Indian Institute of Technology, Madras in the graduating class of 1982. He proceeded to obtain his Doctorate in Civil Engineering from Rice University in 1989. Widely admired by his students, Dr. Prasad is held in high esteem for his exceptional teaching and mentorship.

Dr. Prasad stands as a paragon of excellence in academia, exemplifying a profound dedication in the field of Civil Engineering. His illustrious career, marked by the pursuit of knowledge and scholarly achievements, has inspired countless students at IITM.

Dr. Prasad's passion for teaching, coupled with his extensive research contributions, has not only enriched the academic landscape but has also left an indelible impact on the minds of those fortunate enough to learn under his guidance. His unwavering commitment to fostering a nurturing learning environment and his genuine care for the intellectual growth of his students are testaments to his exceptional character and leadership in the academic realm.

# **Summary of your contribution**

01 **General Fund** 02 P C Varghese Institute Chair 03 **PS Rao Institute Chair** 04 **PK Aravindan Institute Chair** 

This report will present a thorough assessment of the impact that your contributions have made towards the causes outlined below:

- P C Varghese Institute Chair
- P S Rao Institute Chair
- P K Aravindan Institute Chair

# P C Varghese Institute Chair

Shri Puthenveetil Chandapillai Varghese, a UNESCO Chief Technical Advisor, has over 60 years of teaching experience. He has published six books with PHI learning in the field of Civil Engineering. He also encouraged and groomed many faculty members and graduates into leadership roles. In 1961 he joined at IIT-Madras as Head of the Civil Engineering department and served till 1972. From 1972 to 1982 he served the Moratuwa University, Colombo (Sri Lanka). He also acted as UN advisor to the Ministry of Works, Sri Lanka during this period. There he worked with the UNCHS and the Ministry of Works and Housing on many building projects. In 1983 he returned from Sri Lanka and settled down in Chennai. Post this he joined at Anna University, Chennai as an Honorary Professor.

Department of Civil Engineering instituted this chair in remembrance of Prof. P. C. Varghese.

# **Chair Occupant:**

Prof. Devdas Menon is the current occupant of P C Varghese Institute Chair.

# **Academic Background:**

 B.Tech (1980) and Ph.D. (1995) from the Indian Institute of Technology Madras

### **Research Interests:**

- Reinforced Concrete Design
- Prestressed Concrete Design
- Structural Reliability
- Structural Analysis, Dynamics and Stability
- **Original** Bridge Engineering
- Wind & Earthquake Engineering
- Cost-effective Structural Systems
- Biomechanics



**Prof. P. C. Varghese**Department of Civil Engineering



Prof. Devdas Menon

Department of Civil Engineering
P C Varghese Institute Chair Professor

Prof. Devdas Menon has more than 35 years of academic and research experience and aspires to sustain excellence in teaching, research and consultancy in structural engineering, and also in developing a holistic approach to education, with emphasis on inner development and transformation. His technical publications include books titled "Reinforced Concrete Design", "Structural Analysis", "Advanced Structural Analysis" and "Handbook on Seismic Retrofit of Buildings". He is presently Chairman of the Bureau of Indian Standards CED 38 Committee on "Special Structures". His R&D areas include Reinforced and Prestressed Concrete, Wind and Earthquake Engineering, Cost-effective Structural Systems, and Biomechanics. He has a special interest in improving the prevailing engineering practice in India, with regard to various codes of practice, design and construction practices and quality of technical education.

Some of his Research and Development Activities are:

- Principal Investigator, "Development of precast concrete sections and joints for use in tower structures", Concrete Products & Construction Co. Ltd, 2002-04
- Principal Investigator, "Behaviour of slender reinforced concrete beams", Dept of Science & Technology, 2008-10
- Principal Investigator, "Structural design of reactor vault for prototype fast breeder reactor", Indira Gandhi Centre for Atomic Research, Kalpakkam, 2001-02
- Co-Investigator, "Development of wind hazard design module for Andhra Pradesh Cyclone Hazard Mitigation Project", Delft Hydraulics, 1999-2001
- Principal Investigator, "Seismic evaluation and retrofit of existing multi-storey buildings", Dept of Science & Technology, 2002-04
- ✓ Principal Coordinator, "Preparation of Handbook on Seismic Retrofit of Buildings", Central Public Works Dept and Indian Building Congress, 2002-04
- Co-Investigator, "Wind damage module for east coast of India: Pilot study for Nellore district of Andhra Pradesh", Dept of Science & Technology, 2007-08

# **Awards and Recognition:**

- The Architectural Engineering Division Gold Medal for 1988-89 by Institution of Engineers (India)
- Sir Arthur Cotton Memorial Prize for 1992-93 by Institution of Engineers (India)
- Best R&D Project of AICTE for 1997-98 by AICTE
- Patent for Dynamic External Wrist Fixator by Indian Patent
  Office
- Patent for External Fixator Assembly for Tibial Fracture by Indian Patent Office
- Oistinguished Service to the Institute by IIT Madras Alumni Association
- Srimathi Marti Annapurna Gurunath Award for Excellence in Teaching by IIT Madras
- Outstanding Concrete Engineer by Ultratech Cement
  Limited
- Guru Shreshta Award by Rotary Club (Madras North West)

#### **Chair Launch Photos:**













# **PS Rao Institute Chair**



**Prof. P. S. Rao**Department of Civil Engineering



**Prof. C. V. R. Murthy**Department of Civil Engineering
P S Rao Institute Chair Professor

Professor Pulugurta Srinivasa Rao, (fondly known to his colleagues and students as Professor P. S. Rao) joined the Civil Engineering Department of IIT Madras in 1965 and was instrumental in commissioning the Structural Engineering Laboratory. He was awarded the prestigious Alexander Von Humboldt Fellowship twice. With his penchant for deep fundamental understanding, he guided 19 Ph.D. theses and published over 100 technical papers. His research and consultancy works included applications to the design of PSC railway sleepers, RC television towers, RC chimneys, natural draft RC cooling towers, RC raft slabs, RC pile-rafts, RC shells and RC folded plates, stadia, and port & Company the professional plates.

The Department of Civil Engineering of IIT Madras created a Chair Professorship in the name of Professor P. S. Rao, as an expression of its gratitude to a great teacher, who actively contributed to the development of the Department of Civil Engineering and of IIT Madras in its formative years, and to honour his significant contributions to the Civil Engineering Profession.

# **Chair Occupant:**

Prof. C. V. R. Murthy is the current occupant of P S Rao Institute Chair.

## **Academic Background:**

- M.Tech in Civil Engineering (1986) from the Indian Institute of Technology Madras
- Ph.D. (1992) from California Institute of Technology, Pasadena, CA, USA.

# **Research Interests:**

- Nonlinear Behaviour of Structures
- Oisplacement-based Earthquake-Resistant Design of Buildings and Bridges
- Seismic Design Codes

Prof. C. V. R. Murthy has more than 15 years of academic experience and has published more than 100 papers in reputed journals. He was Visiting Professor at IIT Hyderabad during 2009-10. During 2013-18, he served as Director of IIT Jodhpur, where he helped create systems & Director of IIT Jodhpur, where h

He actively steered in Technical Collaborations in Earthquake Engineering Research with three organisations namely:

- Malaviya National Institute of Technology, Jaipur, India (2009-Present) to establish National Earthquake Test Facility for testing of 3-storey full-scale buildings.
- The Central Building Research Institute (CBRI), Roorkee, India (1997-2002) to establish experimental earthquake testing of full-scale tests on structures; and
- The Institute of Engineering (IOE), Tribhuvan University, Katmandu, Nepal (1997-2007) in establishing the M.Sc. Program in Structural Engineering (including laboratory experiments, theses discussions, and external examiner).

# **Awards and Recognition:**

- Honorary Advisor, Delhi State Disaster Management Authority, Government of NCT of Delhi, 2003-05
- Member, 2nd Advisory Committee, National Disaster Management Authority, Government of India, since 2016
- ✓ ICI Best Paper Awards, Best Paper Published in ICI Journal, Indian Concrete Institute, 2018 and 2016
- ✓ Institute Chair Professor, Indian Institute of Technology Madras, 2017-22
- 2016 ACCE Nagadi Award, Best Publication in Civil Engineering for the book Some Concepts in Earthquake
- Behavior of Buildings, Association of Consulting Civil Engineers, 2016
- Member, Tamil Nadu State Disaster Management Authority, Government of Tamil Nadu, 2013-16
- Member, Advisory Committee for Nuclear and Radiation Safety, Atomic Energy Regulation Board, Department of Atomic Energy, Government of India, 2016 – present
- Chairman, Earthquake Engineering Sectional Committee CED 39, Bureau of Indian Standards, Government of India, since 2020
- 2021 ICI Award for Best Concrete Structure of the Year, for the design and construction of a 10m tall Reaction Wall System, Indian Concrete Institute, 2021
- Member, National Committee on Dam Safety, Ministry of Jal Shakti, Government of India, since 2022
- 2022 IASE Excellence in Earthquake Structural Engineering Award for contributions to education, research, full-scale testing and policy development in earthquake safety in India, Indian Association of Structural Engineering, 2022

#### **Chair Launch Photos:**















# **PK Aravindan Institute Chair**

The Prof. P.K. Aravindan Institute Chair has been established to honor the late Prof. P.K. Aravindan, an outstanding teacher who was very popular among his colleagues. He has inspired generations of students and research scholars, teaching various courses at both undergraduate and postgraduate levels.

The Department of Civil Engineering created a Chair Professorship in the name of Prof. P.K. Aravindan, as an expression of gratitude to a great teacher who actively contributed to the development of the Department of Civil Engineering and IIT Madras in its formative years, and to honour his significant contributions to structural engineering practice in India. The Chair Professorship will enable the Department to identify and nominate academically high-performing faculty of Civil Engineering. Donations came across from various alumni of IITM.

# **Chair Occupant:**

Prof. Meher Prasad A is the current occupant of P K Aravindan Institute Chair.

# **Academic Background:**

- Bachelor of Technology in Civil Engineering (1982), The Indian Institute of Technology Madras
- Ph.D. Civil Engineering (1989), Rice University, Houston, Texas, US

#### **Research Interests:**

- Structural Dynamics
- Earthquake Engineering
- Structural Stability
- Structural Analysis
- Finite Element Analysis
- Dynamic Analysis
- 😽 Nonlinear Analysis
- Finite Element Modeling
- Stress Analysis



**Prof. P.K. Aravindan**Department of Civil Engineering



Prof. Meher Prasad A

Department of Civil Engineering
P K Aravindan Institute Chair Professor

Prof. Meher Prasad has over 32 years of research experience in structural dynamics and earthquake engineering. His Ph.D. work was in the area of dynamic soil-structure interaction. His recent work is related to the computational modelling of reinforced concrete buildings and bridges subjected to earthquakes. Specifically, the work concentrates on preparing seismic evaluation methodologies and obtaining the required computational tools to identify all the possible failure mechanisms of the available Indian building stock considering the prevailing construction practice.

His research group is currently working on developing fragility curves for the building typology available in India. His other research areas include Glass fiber-reinforced gypsum wall panel building systems, bridge health monitoring, structural reliability, and computational mechanics. He also worked on vulnerability models for buildings in cyclone-prone areas. His bridge-related research work includes the probabilistic modelling of highway bridges, congestion factors, instrumentation and monitoring of bridges; construction stage behaviour of cable-stayed bridges; time-dependent behaviour of bridges.

# **Awards and Recognition:**

- Author of over 120 papers, a significant number of them in structural dynamics and earthquake engineering.
- Recipient of the 1990 NORMAN Gold Medal from the American Society of Civil Engineers (ASCE)
- Member of Bureau of Indian Standards Committees on Seismic assessment and strengthening of buildings
- (CED39:9), Earthquake resistant design, and construction of prefabricated/precast structures. Tall buildings, Wind loads

  Member IRC B-2 committee
- Institute coordinator for the National Programme on Earthquake Engineering Education (NPEEE) and member of its Programme Implementation Committee.
- Institute coordinator for National Programme for Capacity Building of Engineers in Earthquake Risk Management (NPCBEERM), sponsored by the Ministry of Home Affairs, Government of India.
- Member of expert committee on the preparation of manual of retrofitting of buildings constituted by Indian Buildings Congress.
- Reviewed papers for journals such as Earthquake Engineering & Structural Dynamics, ISET Journal of Earthquake Technology, Engineering Analysis and Design, Journal of Institution of Engineers (India), Current Science, etc
- Principal Coordinator for Indo-Italian significant bilateral project with the University of Pavia, Italy on Seismic Vulnerability of Historic Centres in India
- Conducted many short workshops and courses for practicing engineers and engineering college teachers.

#### **Chair Launch Photos:**





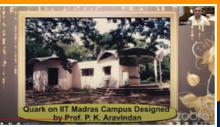


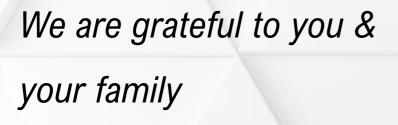












# **Dr. Meher Prasad A**



We express our heartfelt gratitude for your continued and generous support to IIT Madras throughout the years. We trust that you take great pride in your bond with IIT Madras and the unwavering dedication it has demonstrated towards academic and research excellence since the time of your association.

Your invaluable contributions, alongside the support of your family, have played a pivotal role in facilitating this remarkable growth. We are privileged to have you and your family walking with us along this journey. We extend our best wishes to you and your family. We thank you for your continued support to your alma mater.



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