IMPACT OF YOUR GIVING



IIT MADRAS

RAGS Family Foundation Chair in Management Studies 2016-2020 Office of Alumni and Corporate Relations







Directors Message

Indian Institute of Technology Madras is among the foremost institutes of national importance in higher technological education and basic and applied research. The Institute has sixteen academic departments and a few advanced research centres in various disciplines of engineering and pure sciences, with nearly 100 laboratories organized in a unique pattern of functioning. A faculty of international repute, a brilliant student community, excellent technical & supporting staff, and an effective administration has all contributed to the pre-eminent status of IIT Madras. IIT Madras has been ranked as the "Best Educational Institution" in India, in the latest edition of National Institutional Ranking Framework (NIRF) 2020 of MHRD, Govt. of India. The Institute continues to be the "Best Engineering Institute" in the country for the fifth consecutive year. IIT Madras has emerged as the No. 1 institution in the maiden edition of the Atal Ranking of Institutions on Innovation Achievements (ARIIA) 2020, MHRD, and Govt. of India. This success is largely due to the talent that passes through these prestigious gates, and the support that they receive from the faculty, the administration, Corporates and of course, the alumni.



Message from the Dean Alumni & Corporate Relations

A heartfelt thanks to Dr. Sridhar Tayur and his family from IIT Madras. As we aim to provide continued solutions to global societal problems, it is the support of alumni like you that make it possible. Solutions to these challenging problems are made possible through sustainable benevolent contributions from alumni like you. We thank you for your contributions and present to you a report on the impact of your giving. We seek your help and support in our future endeavours, as we attempt to take IIT Madras to the global stage.





Sridhar Tayur [1986/BT/ME]

Sridhar R. Tayur is an American business professor, entrepreneur, and management thinker. He is university professor of operations management and Ford Distinguished Research Chair at the Tepper School of Business, Carnegie Mellon University, and the founder of SmartOps Corporation and OrganJet Corporation

Chair Professorship

Chairs are occupied by Professors who have distinguished themselves and been recognized by their peers for their research and/or technology development, and who have excelled in teaching and service to the Institute/nation/profession. It is intended to host the eminent expert Professors as Chair with various options for visits and engagement, suitable salary and benefits or honoraria, accommodation and varied endowment amounts as applicable. The achievements must, therefore, go beyond those that earned them the Professorship and should demonstrate leadership in one or more of these aspects.



Chair Occupant: Prof. R. Rajendran Professor, Department of Management Studies, IIT Madras



Prof. C Rajendran

Activities during 2016-2020: An overview

Research

- Areas of research: Scheduling; Quality Management; Supply Chain Management, including logistics and inventory system; Analytics (with the focus on the application of OR models and heuristic techniques)
- Publications (during 2016-2020): one book and 33 publications in international journals, edited books and conference proceedings (indexed).

Teaching

Operations Research; Operations Management; Logistics and Distribution Management; Heuristics for Decision Making; Project Management; Simulation Modeling and Analysis.

Research based industry collaborative work

- > Target Corporation India Pvt. Ltd.: Development of optimization models for service level determination.
- McKinsey (Supply Chain Division): Development of forecasting models for items with lumpy demand; models for transport plan for loading on vending machines in a city network.
- Latentview Analytics: Development of forecasting models with a variety of seasonality factors in real life; development of forecasting models for the prediction of turnout in elections in India.
- Caterpillar (Supply Chain Division): Development of mathematical models for pick-up plan for inbound logistics.
- > Output: research publications based on such collaborative research work.



Collaborative research work with allied departments

- Civil Engineering Department: jointly guiding a PhD student on the problem of optimization of maintenance of roads; multi-criteria optimization of traffic flow in a city network.
- Biotechnology Department: guiding the MTech (Clinical Engineering) students on the work related to the classification of diseases

International research collaboration

Primarily collaborating with University of Passau, Germany:

1) Exchange of students and faculty members: obtained a grant for the period 2019-2023 – thanks to Prof. Hans Ziegler and Prof. Franz Lehner from the University of Passau (ranked within the top 30 universities among the young universities in the world as per THE Ranking Scheme – since 2018), and myself as the main coordinator & Prof Saji Mathew as another coordinator from IIT Madras – the grant is from DAAD Germany towards the faculty and student exchange.

2) Played a key role from IIT Madras in the Joint PhD and Joint MS program with University of Passau where one of my got the joint PhD degree.

3) Publications with the faculty member and students of University of Passau (e.g. in International Journal of Production Research, International Journal of Advanced Manufacturing Technology, European Journal of Operational Research, and Sadhana).

> Nanyang Technological University (NTU), Singapore:

Played a key role in the Internship Program for the students of DoMS, IIT Madras at NTU Singapore, thanks to Professors Chowdari and Vish Viswanathan.

University of Missouri, Columbia:

Collaborative research work on analytics applied to community detection – published in Expert Systems with Applications and the optimization of drone loading and routing of vehicle (on-going work).



Service to community

- > Delivering lectures in various engineering colleges.
- ➤ Guiding faculty members from engineering colleges for their doctoral work.
- Supporting the education of visually impaired girl students (primarily through Gnanadharshan Seva Foundation for the Disabled, located in Chennai).

Targets for 2020-2021

- Editing a book on Advances in Supply Chain Management (with Professors Ganesh Janakiraman (University of Texas at Dallas), and Vipin Balakrishnan and Deepu Philip (IIT Kanpur).
- Books on Quality Management in Indian Institutions for Higher Education; and Manufacturing Systems(with a focus on research – jointly with PhD students).
- > Getting deeper into research in the area of Analytics and contemporary research areas



Thank you for your support

We thank you & your family for your benevolent contributions towards the growth and development of IIT Madras.

