Indian Institute of Technology Kanpur
Institute Foundation Day

Thursday, 2nd November 2017
L-19, Lecture Hall Complex

Institute Fellows 2016
Flapping Wing UAVs (FUAV) are designed and built with a novel wing design in Unsteady Aerodynamics Laboratory, Department of Aerospace Engineering IIT Kanpur. The endurance of these models vary from 10 mins (30cm wing span) to 60mins (160cm wing span) depending on the size of the prototype. It can carry a camera or sensor as payload.

The Rotary Wing Unmanned Air Vehicle (RUAV) developed at IIT Kanpur which is capable of lifting 3 kg of payload and flying for over 2 hrs with a maximum speed of 120km/hr, has been developed for wide ranging missions including surveillance and delivery of emergency medical and humanitarian aids. The UAV designed and developed by IIT Kanpur students and has been selected for first humanitarian drone testing activity involving medicine delivery at Malawi as part of UNICEF drone corridor.
As individuals celebrate birthday, an institution or organization observes its Foundation Day each year to announce successful completion of yet another year of growth built on collective leadership and wisdom. Each Foundation Day offers an opportunity to review our journey as an Institute, celebrate successes, identify weaknesses and create a comprehensive strategy for the future.

Despite challenges faced in terms of inadequacy of infrastructure, financial constraints, faculty shortage and increased competition, the Institute has fared considerably well in the recent past in our core mandate of furthering knowledge in science and technology through dissemination and creation. I may add that residential accommodation capacity of the Institute for all categories (student, scholar, staff and faculty members) has undergone remarkable enhancement recently. Significant increase in space and infrastructure for academic and research activities are very much on the cards.

Despite odds, the Institute continues to add new research equipment and facilities, recruit promising new faculty members and pursue multiple academic and research initiatives that can place the Institute at a vantage point nationally and globally. Sincere and sustained efforts by our faculty colleagues and research scholars have brought laurels and accolades at regular intervals. The Institute is committed to imparting quality education, developing viable technology solutions and pursuing cutting edge research and innovation in all disciplines through individual and collective efforts.

In particular, the Institute would like to pursue certain thematic areas with greater emphasis where we have established credentials, core strength and emerging potential not only to create new avenues and knowledge but to translate them into practicable technology to ensure economic and societal growth of the entire country. National initiatives like IMPRINT, UAY, VAJRA, GIAN, Research Park and Institute of National Eminence should be explored and utilized to realize this goal of translation of knowledge into technology.

Given the global reputation and dynamic environment at IIT Kanpur, this Institute should emerge as an attractive center for the generation of ideas, concepts, and technologies both at national and international levels to collaborate with leading universities, R&D organizations and industry.

The country is poised for a big change with positive impact. Let us play a leading role and whole heartedly contribute towards that aspiration in the domain of science and technology.

Best wishes and Jai Hind!

Indranil Manna
Professor Ashwini Kumar obtained his Bachelor of Engineering degree from the University of Roorkee in 1969 and Masters & PhD degrees from the University of Waterloo, Canada in 1971 and 1974, respectively. After brief stints of post-doctoral research at the University of Waterloo and the University of Cambridge, England, Prof. Ashwini Kumar joined the Department of Civil Engineering, IIT Kanpur, in October 1975 as a Lecturer. He was elevated to the rank of Professor in August 1985. He took voluntary retirement in July 2012 and is presently associated with IIT Gandhinagar as Visiting Professor of Civil Engineering.

During his tenure at IIT Kanpur, Professor Kumar worked primarily in the area of stability and large deformation of structures, including theoretical stress analysis, buckling, post-buckling, and non-linear response of composite plates. He has published extensively in journals of international repute and guided many Ph.D. and M. Tech. theses. He also completed many sponsored research projects. He has authored two books on stability of structures which continue to be valuable references for the academic community.

Professor Ashwini Kumar is a passionate teacher and taught a variety of undergraduate and postgraduate courses. Professor Kumar contributed significantly towards academic administration as well. He served the Institute in various capacities such as the roles of Dean of Academic Affairs (including the Secretary, Senate), the Head, Centre for Development of Technical Education, Dean of Faculty Affairs, Deputy Director and the Director (In-charge). During the years 1983-85, he served as the Vice-Chairman and Chairman of the Joint Admission (JEE) Committee when IIT Kanpur was the organizing institute. Besides being a member and chairman of many Departmental and Senate committees, Professor Ashwini Kumar was appointed as the Chairman of an Inter IIT Committee set up to review the entire JEE system in 1994. The report submitted by the Committee played an important role in defining the scope and the administrative structure of this prestigious examination.

Professor Ashwini Kumar is known for his profound commitment to teaching and research, his meticulous and painstaking eye for detail, for being soft spoken, for his firm demeanor, and his ability to communicate with people holding a wide spectrum of views and yet present a view acceptable to all.

In recognition of his significant and valued contributions to the Institute and the society at large, IIT Kanpur on its Foundation Day takes pride and pleasure in conferring upon Professor Ashwini Kumar the award of INSTITUTE FELLOW for the year 2016.
A few selected productus under Innovative Ventures and Technologies for Development (INVENT) program, IIT Kanpur

Mobile Water ATM - Deventric Technologies

Grocery Items - Socents

Fashion Accessories - Deoria Designs

RO based water purifier - Aquvio

Deskit - Prosoc Innovations

Herbal Phenyl - NaturAims

Black Chicken - Taankbrothers Ventures

IIT Kanpur
Professor Raghubir Sharan obtained his Bachelor of Engineering degree from Bihar Institute of Technology, Sindri in 1961, and M.A.Sc. and Ph.D. degrees from University of Waterloo, Ontario, Canada in 1964 and 1968 respectively. He joined the Department of Electrical Engineering, IIT Kanpur in May 1969 as an Assistant Professor and became full Professor in July 1977. His distinguished career as a faculty member at IIT Kanpur spanned 27 years until he superannuated from IIT Kanpur in June 2002. After his superannuation, Professor Sharan continued at IIT Kanpur from July 2002 to June 2004. His research areas were Semiconductor Devices, Transducers and Instrumentation, Noise, and Engineering Education. Professor Sharan was the Head of the Electrical Engineering Department from 1981 to 1982 and served as the Dean, Academic Affairs from 1981 to 1984. Amongst his major contributions to IIT Kanpur, was his initiative to start and develop the Samtel Centre of Display Technologies (SCDT) at the institute. From its initial stages, SCDT has now grown into a major centre for research in organic light emitting diodes and various related applications.

Professor Sharan joined LNMIIT, Jaipur as a Distinguished Professor in 2004 and later moved to IIT Gandhinagar in 2006, where he continues to be actively engaged in teaching and research in several areas. An area he is particularly passionate about is the interface of Technological Progress and Human Values.

Professor Sharan is an outstanding educator who was known for his exemplary quality of teaching, both inside and outside the classroom. While at IIT Kanpur, he often taught the institute core course ‘Introduction to Electronics’ along with many other advanced courses in the area of microelectronics. He received the Distinguished Teacher Award of IIT Kanpur in 2013 for inspiring generations of students. He is well-known for his contributions to developing human capital by inspiring young minds to take up new lines of thought. His students, who are currently entrepreneurs and leaders in industry and academia, fondly recall his exemplary ability to motivate them which ultimately inspired them to enter their chosen professions. Professor Sharan is an able administrator who can steer a diverse team towards a broad common goal. Some of these skills were clearly in evidence during the formative years of SCDT where he played an advisory role.

In recognition of his significant and valued contributions to the Institute and the society at large, IIT Kanpur, on the occasion of its Foundation Day, takes pride and pleasure in conferring upon Professor Raghubir Sharan the award of INSTITUTE FELLOW for the year 2016.
IIT Kanpur-TCS team robot UR10 powered by 8 GPU server based visual perception deep network won 3rd Prize in Pick task and 4th prize in stow-cum-pick task with a total award money of USD 15000. The competition was held in Nagoya, Japan in July 2017.

Fluorescence image showing nuclear localization of human long non-coding satellite III (Sat3) transcripts as nuclear stress bodies (pink) in HeLa cells exposed to heat shock. This photograph has been selected as the cover page of *Journal of Cell Science*.

High-Performance Computing facility at the Computer Center, IIT Kanpur.
Awardees of Institute Fellow

Prof. E. C. Subbarao  
Awarded in 2005

Prof. G. D. Agarwal  
Awarded in 2007

Mr. F. C. Kohli  
Awarded in 2005

Prof. G. K. Lal  
Awarded in 2008

Prof. K. R. Sharma  
Awarded in 2006

Prof. P. T. Narasimhan  
Awarded in 2009

Prof. A. Vasudev  
Awarded in 2007

Prof. A. K. Mittal  
Awarded in 2009
Awardees of Institute Fellow

Prof. S. K. Gupta  
Awarded in 2010

Prof. N. Sathyamurthy  
Awarded in 2013

Prof. T. V. S. Ramamohan Rao  
Awarded in 2013

Prof. S. G. Dhande  
Awarded in 2013

Prof. M. Anandakrishnan  
Awarded in 2014

Prof. M. A. Pai  
Awarded in 2014

Prof. V. K. Stokes  
Awarded in 2014
Awardees of Institute Fellow

Prof. A. Ghosh
Awarded in 2014

Prof. D. Chakravorty
Awarded in 2014

Prof. R. N. Biswas
Awarded in 2015

Prof. A. K. Mallik
Awarded in 2015

Prof. R. Balasubramanian
Awarded in 2015

Prof. A. Kumar
Awarded in 2016

Prof. R. Sharan
Awarded in 2016