

Indian Institute of Technology Kanpur Materials Science Programme

EVENING GUEST LECTURE

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PROF. RAJ P CHHABRA

CHEVRON CORPORATION CHAIR,
DEPT. OF CHEMICAL ENGG., IIT KANPUR
ON

"ETHICS AND MISCONDUCT IN SCIENTIFIC RESEARCH"

DAY & DATE : SATURDAY, FEBRUARY 18, 2017

VENUE : CONFERENCE HALL, ACMS BUILDING

TIME : 17:00 HRS TEA : 16:30 HRS

Abstract:

Everyday life, both at personal and professional levels, abounds with dilemmas which are not easy to resolve. Notwithstanding that dishonesty and cheating are condemned universally, the incidents involving a whole range of activities ranging from simple lying to get something which rightfully does not belong to you all the way to falsifying research results which could have devastating effects on the well-being of millions of people by marketing adulterated/contaminated drugs and food stuffs are not rare. Consequently, much has been written in recent times about the crucial role of ethics and codes for professionals in all walks of life including politics, sports, business, science and engineering. The personal code of conduct may somewhat vary from one culture to another, one country to another, albeit there are many universally accepted tenets (honesty, respect for fellow citizens and law, etc.). On the other hand, the ethical standards expected of scientists and engineering professionals tend to be far more stringent & universal and these are certainly free from cultural factors (particularly in research). Any deviation from the scientific method constitutes an academic misconduct. Therefore, the question of the influence of ethics in science is extremely important for the growth and well-being of science (and hence technology).

This talk aims to provide an overview of the essential components of the scientific method and the ethical issues in the context of scientific research. Beginning with the definitions of various related terms, consideration will be given to the role of ethics in everyday life, gradually working our way towards the code of conduct for professionals and finally concluding by a short discussion of as to what constitutes the so-called academic misconduct (fair use, plagiarism, falsifying results, etc) in research.

About Speaker

R P Chhabra received his BE, ME & PhD (all in Chemical Engineering) from the erstwhile University of Roorkee (1974), the Indian Institute of Science, Bangalore (1976) and Monash University, Melbourne (1980) respectively. After a post-doctoral experience at the University of Wales at Swansea (UK), he joined the Indian Institute of Technology Kanpur in 1984. He has been a Professor of Chemical Engineering at IIT Kanpur since 1991.

His main research interests are in studying the influence of non-Newtonian characteristics (shear-dependent viscosity, visco-plasticity and visco-elasticity, for instance) as exhibited by most structured substances (of multiphase and/or high molecular weight nature) including foams, emulsions, slurries and polymeric systems on convective transport in such fluids in model configurations like the flow over a sphere (Stokes problem) or two-dimensional cylinders of different shapes. He has published widely in this field and has three books in this field to his credit.

He is a Fellow of the both Indian National Science Academy and Indian National Academy of Engineering.