

43rd ENGINEERS' DAY THEME :
IMPENDING PARADIGM SHIFT IN ENGINEERING SCIENCES
AND FUTURE CHALLENGES

September 15 is a memorable day in the annals of the engineering fraternity of the country in general and the Institution in particular as on this day 150 years ago, Sir Mokshagundam Visvesvaraya, the towering personality in the history of Indian engineering, was born. In recognition of his monumental services towards national development and for the cause of engineering, Sir Visvesvaraya was honoured by the country's highest civilian honour, the Bharat Ratna, in the year 1955. The Institution of Engineers (India) observes September 15 every year as the Engineers' Day. A Central theme of national importance is chosen every year by the National Council of the Institution and deliberated at its various State/Local Centres to educate the society and the engineering community as well. This is an occasion to rededicate the engineering profession of our country to the service of the national in the right trajectory. Therefore this year the Council of the Institution had selected the theme "*Impending Paradigm Shift in Engineering Sciences and Future Challenges*".

We are currently at the early but secure and irreversible stages of a remarkable and far reaching technological revolution. The engineering sectors have emerged as a science based knowledge intensive high technology area with serious repercussion for technical change, competitiveness, growth in employment, trade patterns, location of manufacturing activities and global division of labour. Moreover an essential part of the new development is to make attempts to resolve the pressing environmental problems and preserve the global eco-system.

Therefore an overhauling of our approach to meet the new challenges is much required. The agents of change are driving a new paradigm shift today. The signs are all around us. The introduction of the personal computer and the internet impacted both personal and business environments, and is a catalyst for a paradigm Shift. We are shifting from a mechanistic manufacturing industrial society to an organic, service based, information centered society, and increases in technology will continue to impact globally. New issues are emerging as a sequel of this shift in focus. Classical engineering is to take the back burner. Multidisciplinary Engineering Sciences integrating the sciences with engineering has created a new demand on the engineering and technological institutions and has consequently brought in New Challenges for them.

Change is inevitable. Let's open the dialogue and let IEI, the premier professional body of Engineers address the issue in its right perspective at the 43rd Engineers' Day.