

42nd Engineers' Day 2009

September 15, 2009

Theme : 'Engineering Solutions to Combat Climate Change'



Sir Mokshagundam Visvesvaraya

September 15 is a memorable day in the annals of the engineering fraternity in the country in general and of 'The Institution of Engineers (India) in particular as on this day 147 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 and deliberated at various State and Local Centres of the Institution to educate the society and the engineering community as well. This year the Council of the Institution had selected the theme 'Engineering Solutions to Combat Climate Change'.

A brief write-up on the theme is given alongside.

Climate change has become serious threat to society affecting environment, terrestrial ecosystems and biodiversity. Mankind's relentless and ever increasing consumption of fossil fuels is the major cause behind climate change. Our dependency on carbon based fuels has resulted in rapid increase of atmospheric concentration of greenhouse gases, and the outcome is global warming resulting in more frequent severe weather conditions and damage to many natural ecosystems.

'Carbon footprint' which is a measure of the impact of human activities on the amount of greenhouse gases needs to be radically reduced. Companies, products, services have to bear the social responsibility of kicking out carbon dioxide from the atmosphere.

Combating climate change requires the commercialization of low emission technologies in various sections of application. The engineering fraternity has a special role to play to neutralize the adverse effects on the climate. Efforts should continue for producing power using solar photovoltaic, second generation biofuels, fourth generation nuclear fuels and developing smarter grid capacity for transmission. Conservation of water, efficient management of solid wastes and generating wealth from them by recycling process, figuring out the hot spots of energy consumption and associated CO₂ emissions are some of the key areas where the engineers can apply their specialized knowledge for combating climate change.

Growth without GHG emission is the need of the day. Application of green technologies, phasing out GHG producing sources and combating the existing effects on climate are the areas of emphasis if the globe is to be saved from extinction.

Conservation of natural resources by adopting strategies for reducing, reusing, recycling and applying engineering solutions for combating emission of GHG is the need which requires addressing by engineers.