### NATIONAL TECHNOLOGICAL CONGRESS (NATCON 2012)

#### **REPORT**

National Technological Congress (NATCON) was initiated by Centre for Engineering Research and Development (CERD, Department of Technical Education, Govt. of Kerala to have a common platform for engineering researchers of the nation to exhibit their engineering and technological research outputs. This event is envisaged as an yearly programme like Kerala Science Congress for promoting research and development in the field of engineering education. Also, the congress provides an avenue for interaction and exchange of ideas between engineering fraternity from academic, research and industrial institutions. Further, it is intended to pave way for the transfer of technological and engineering information from diverse fields of engineering so as to evolve collaborative research programmes at state and national levels

The second "National Technological Congress, NATCON 2012, was organized by the Government Engineering College, Trichur on 9<sup>th</sup> and 10<sup>th</sup> February, 2012. It is high time to increase the awareness among researchers and common man, about the need for sustainable technologies and thereby enabling them to recognize the economic, environmental, and social impacts of their own technological choices. Keeping this in view, the main theme for the Congress was chosen as "Sustainable Systems and Processes - Innovations for a New World Order".

The various sub themes of the congress were

- (1) Sustainable Energy Technologies
- (2) Sustainable Environment
- (3) Green Computing
- (4) Waste Management
- (5) Sustainable Built Habitant

Inaugural Program was presided by Dr. J. Letha, Director of Technical Education and inaugurated by Adv. Therambil Ramakrishnan, Former Speaker and Present MLA of Thrissur. The keynote address was delivered by Prof. V.N. Rajasekharan Pillai, Executive Vice President, Kerala State Council for Science and technology & Environment. NATCON 2012 proceeding and CD were released by Prof. T.R. Sreekrishnan, IIT, Delhi and Prof. K.V. Jayakumar, NIT, Warangal respectively. Dr. B. Anil, Pricipal, GEC, Wayanad and former Director of CERD announced the Best Researcher award instituted for Govt. Engineering College teachers. This year, the award was won by Dr. S. Anil Lal, Department of Mechanical Engineering, College of Engineering Trivandrum. The total number of participants including faculty and M Tech students was around 600.

In connection with NATCON 2012, various programs were organized as described below

### (1) NATCON 2012 Competitions

Following competitive programs for school and college students from different parts of Kerala were conducted. The response received from the participants was very good.

- (1) Project Competition (Engineering College and Poly Technique)
- (2) Quiz, Essay and Painting Competition (College Level)
- (3) Quiz, Essay and Painting Competition (School Level)
- (4) Project Design Contest based on the theme 'Solid Waste Disposal in Cities'

#### (2) Paper Presentation

- (1) Oral Paper Presentation Over 50 papers were received in different sub themes from M Tech and research students. Of these, 47 papers were selected for oral presentation after review.
- (1) There was Poster Presentation of the projects funded by Centre for Engineering Research and Development (CERD)

# (3) Invited Talks

Six Invited talks of experts from IITs and other research and academic institutions were conducted related to the different sub themes. All the talks were highly informative and of current relevance.

The various invited talks were

- (1) An Overview of Fuel Cell Technologies, Prof. (Dr.) Prakash C. Ghosh, IIT Bombay
- (2) Sustainable Development through Biotechnology, Prof. (Dr.) T. R. Sreekrishnan, IIT Delhi
- (3) Integrated Water Resource Management, Prof. (Dr.) K. V. Jayakumar, NIT Warangal
- (4) Innovations & Technological Advancements in Understanding Ocean, Dr. R. Venkatesan, Programme Director, National Institute of Ocean Technology (NIOT), Chennai
- (5) A Sustainable Energy Scenario for Kerala, Dr. R. V. G. Menon
- (6) Sustainable Architecture and Urban Development, Ar. Regive Manuel, C-EARTH, Calicut

# (4) Project Exhibition

Project exhibitions by students both from schools and Engineering Colleges were organized. Projects funded by CERD from Engineering Colleges were also included in this exhibition.

Valedictory function was on 10th February, 2012. This function was presided by Dr. K. Vijayakumar, Principal, Govt. Engineering College, Trichur. Valedictory address of NATCON 2012 was delivered by, Dr. P. Kuncheria P Isaac, Member Secretary, AICTE, New Delhi. A special address on the relevance of these types of conferences was given by Dr. A. Unnikrishnan, Senior Scientist, NPOL, Kochi. The programme was concluded at 3.15 PM in the afternoon.