

### Call for Papers

Researchers are invited to submit papers for the Congress. Papers are to be submitted according to the IEEE Transactions format. Selection will be based on full paper submission. Please refer to 'Instruction to Authors' in the website: [www.natcon.gectcr.ac.in](http://www.natcon.gectcr.ac.in). The papers will be peer reviewed and accepted on incorporating the suggestions of the reviewers. The registration to the congress is compulsory for the authors. All accepted papers will be brought out as a proceeding in the digital format. A few number of accepted papers will be published in the print format also. Registration Fees are as follows

Delegates	: Rs. 1000.00
Student Delegates	: Rs. 500.00
Accompanying Person	: Rs. 300.00

Fifty percent concession on registration fee will be given to delegates / student delegates whose papers are accepted for presentation in the congress. TA/DA will be paid for a selected number of authors, based on the quality and contributions of their papers. Fee shall be paid by means of DD in favour of NATCON 2012 payable at Thrissur on or before 31<sup>st</sup> December 2011.

### Call for Project Exhibits

The students of engineering colleges / schools are also invited to submit a brief writeup about their projects for possible exhibition at the conference. The details are given in the conference website.

### Important dates

Receipt of full length paper	31 <sup>st</sup> October 2011
Intimation of Acceptance	15 <sup>th</sup> December 2011
Registration & Camera Ready paper	31 <sup>st</sup> December 2011
Conference dates	9-10 February 2012

All Correspondence to be addressed to

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CENTRE FOR ENGINEERING RESEARCH AND DEVELOPMENT

DEPARTMENT OF TECHNICAL EDUCATION

GOVERNMENT OF KERALA



NATCON 2012

SECOND NATIONAL TECHNOLOGICAL CONGRESS, KERALA  
THRISSUR, 9-10 FEBRUARY 2012

Sustainable Systems and Processes-  
Innovations for a New World Order



Organised by  
GOVERNMENT ENGINEERING COLLEGE TRICHUR

Visit <http://www.natcon.gectcr.ac.in>

**FIRST ANNOUNCEMENT**

## CERD

Centre for Engineering Research and Development (CERD) was established in 2010 by the Government of Kerala to promote research activities among the faculty and students of engineering colleges. It acts as a catalyst to create an environment conducive for research. Various schemes and programmes are implemented by the centre to motivate, mentor and support researchers. Major activities of CERD include providing financial support to young researchers and students, coordinating the resources of various institutions to form research clusters and to assist them to undertake R&D projects, collaborating with national and international research organisations to attract research funding, establishing Centres of Excellence in thrust areas, setting up of Technology Incubation Centres and conducting National Technological Congress, Kerala.

## NATCON 2012

The National Technological Congress, Kerala (NATCON) was initiated by the CERD to have a common platform for engineering researchers of the nation to showcase their engineering and technological research outputs. Also, the congress provides an avenue for interaction and exchange of ideas among engineering fraternity from academic, research and industrial institutions. The second National Technological Congress, Kerala 2012 (NATCON 2012) will be organised by Government Engineering College, Trichur during 9 - 10, February, 2012.

## Government Engineering College Trichur

Government Engineering College Trichur (GECT) was established in 1958 and is one of the premier engineering institutes in the country. The institution offers eight undergraduate programmes and ten post graduate programmes. GECT is an approved research centre for doctoral programme. GECT provides excellent education bridging the gaps in academics and industry and developing competency in frontier areas of engineering. More than a half century long services of the institution has created a large number of alumni who occupy coveted managerial and key technical positions in industries and government organisations within the country and abroad.

## Theme & Subthemes

Ever increasing demand for the resources to satisfy essential and rapacious requirements has adversely affected the self sustaining systems and processes in the environment. Hence, it is high time to increase the awareness among researchers and common man, especially younger ones, about the need for sustainable technologies and there by to enable them to recognise the economic, environmental, and social impacts of their own technological choices. Keeping this in view, the theme for the Congress is chosen as "Sustainable Systems and Processes - Innovations for a New World Order" with the following sub-themes.

# Sustainable Systems and Processes - Innovations for a New World Order

## Sustainable Energy Technologies

- Renewable Energy and Biofuels
- Energy Efficiency in Utilisation
- Energy Harvesting and Storage Systems
- Energy Market, Management & Economics
- Nanotechnology in Energy
- Power Electronics and Energy Conversion
- Off-grid Isolated Energy Systems
- New Materials for Energy Devices

## Green Computing

- Advanced IT Energy-aware Technologies
- Soft Computing
- IT Energy Management
- Power-aware Software
- Power-efficient Architectures & Chip Designs
- Component Level Power Management
- Smart Grid Applications
- Technology as Green Enablers

## Sustainable Built Habitat

- Building Design and System
- Water Supply System
- Intelligent Transport System
- Watershed Development

## Sustainable Environment

- Climate Change
- Environmental Impact Assessment
- Innovative use of Renewable Raw Materials
- Sustainable Development Policy and E-Society
- Eco-friendly Technologies
- Environmental Education and Training
- Air and Noise Pollution
- Dams and Earthquakes

## Waste Management

- Agricultural Wastes
- Industrial Wastes
- Medical Wastes
- Mining and Mineral Wastes
- Nuclear and Hazardous Wastes
- Waste from Electronic and Electrical Equipment
- Waste Water Treatment
- Municipal Solid Wastes

## Programmes Envisaged

- Invited Talks
- Panel Discussions
- Paper Presentation
- Project Poster Exhibition
- Project Display/Exhibition

- Project Competition
- Competition for Engineering College students  
Quiz, Poster, Essay, Painting, etc.
- Competition for School going students  
Quiz, Poster, Essay, Painting, etc.