

26th INDIAN ENGINEERING CONGRESS

15 - 18 December 2011

**Towards Prosperous India:
Challenges for Engineers**

VENUE

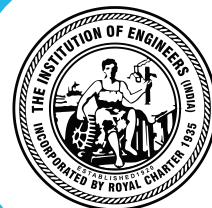
Palace Grounds, Bangalore

ORGANIZED BY

The Institution of Engineers (India)

HOSTED BY

Karnataka State Centre



message



Message from the President

"Economic equality is the master key to non-violent independence..."

– Mahatma Gandhi

Despite India's impressive economic growth in the past two decades, about 30% of our population lives on less than \$1 per day. With growth, the challenges too multiplied like crumbling and inadequate infrastructure, food and water shortages, unplanned urbanization, etc.

India must overcome these challenges to broaden the economic prosperity and we engineers have a big role to play.

The growth of "Bottom of Pyramid" demography in India is one opportunity, where the fundamentals of Engineering is being challenged; the traditional approach of designing, manufacturing and pricing has been reversed. Indian innovators have started to make an impact in this space, with various products like car, water filter, battery run refrigerators, rural banking etc. But greater effort needs to be put in this space to broaden economic prosperity.

With this economic environment in the country, The Institution of Engineers (India), thought that the role of Engineers in leading the country to prosperous future is relevant for the forth coming 26th Indian Engineering Congress and hence the theme, "Towards Prosperous India : Challenges for Engineers".

I look forward to see you all in Bangalore for the Congress and learn from each other on ways to make a difference for prosperous future.

G. Prabhakar
President

91 Years of Relentless Journey Towards Engineering Advancement for Nation-building

Established in 1920, **The Institution of Engineers (India)** was granted the Royal Charter in 1935, endowing its Corporate Members the status of Chartered Engineers. The Institution is the largest multi-disciplinary body of Engineers, encompassing 15 Engineering disciplines with a membership of more than 6.50 lakh, spread all over the country and abroad, with a national presence in 101 State/Local Centres including 5 Overseas Chapters. The Institution is issuing certificates of professional engineers as per International norms, enabling them to practice the profession in other countries like UK, Canada, Japan etc. without any additional certificates applicable to local Engineers in those Countries.

The Institution is now a full Member of the Engineers Mobility Forum (EMF) facilitating the international mobility of Professional Engineers certified by IEI.

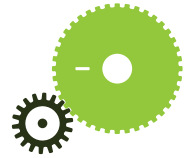
The Institution has bi-lateral relations with 27 Engineering Organizations worldwide in addition to full membership of some organizations like WFEO, FEISCA, FEIAP, CEC, fib, WMC and EMF.

In addition, Engineering Staff College of India (ESCI) - An Autonomous Organ and five Autonomous Fora namely, National Design and Research Forum (NDRF), Rural Development Forum (RDF), Water Management Forum (WMF), Safety and

Quality Forum (SQF) and Sustainable Development Forum (SDF) have been established to implement the objectives of the Institution.

The Institution is the pioneer body in introducing Non-formal Technical Education by conducting Sections A and B Examinations.

Indian Engineering Congress is the apex activity of the Institution which is organised annually to cater to the needs of the entire engineering profession.



Towards Prosperous India : Challenges for Engineers

The theme of this year's Indian Engineering Congress(IEC) is "Towards Prosperous India : Challenges for Engineers". The great progress made by our country in almost all fields, owes in no small measure to the contributions made by our engineering community. Successive generations of engineers of our country can be truly proud of their contributions to make India a developed Nation in the shortest possible time frame. Engineer Statesman Bharata Ratna Sir M. Visvesvaraya envisioned planned pathways towards restructuring India as early as 1934. Soon, India will emerge as an economic super power on its own right by harnessing its natural and human resources.

India is on its march to a promising future having the demographic advantage of more than half of its population in the younger age group. The ability to attain accelerated industrial growth in many sectors spurred by policies of liberalisation and globalisation and attracting investment and latest technologies. Soon, India will transform itself into a developed Nation. However, we have the challenging task of doubling our food production, tripling our energy generation and to enhance the infrastructure commensurate with the 1.2 billion plus population. At the same time, other fundamental issues such as wide spread poverty, increasing and deepening inequality, illiteracy and low school and college enrolment rates, ill health, very high malnutrition among small children are the impeding factors inhibiting the accelerated national development. In combating these impediments, the role of engineering community is of paramount importance.

A prosperous India for all its people and for future generations requires all professionals not only engineers execute their professional duties ethically and achieving high degrees of quality and excellence. More than any other profession, we Engineers have to become change agents and prime movers in transforming India to a truly prosperous nation in the coming years. India should become the most sought-after destination for investment, preferred source for services and manufactured goods for the whole world. "Made in India" should become the hallmark of quality and cost competitiveness. India should make a mark as world leader in new knowledge creation and innovation.

The Twenty-sixth Indian Engineering Congress being held in Bangalore is a fitting occasion for the engineering community across the country to rededicate itself to the task of building a prosperous India based on equity, ethics and excellence. The deliberations at the Congress will highlight the development pathways for making our country attaining self-reliance and self-sufficiency in vital sectors like housing, energy, transportation, communication, education, healthcare, food production and employment generation. The theme and the sub-themes will address related issues and focus on solutions from engineering perspective

RUNNING THEME

Education & Skill Development

Engineering & Technology Policy

Environment, Climate Change & Sustainability

Innovation, R&D, Patents & IPR

Professional Practices & Engineering Ethics

Promoting Appropriate Technologies

Quality Standards

IEC History

The Annual Convention, which the Institution had been holding, was enlarged into Indian Engineering Congress (IEC) to provide a wider spectrum. The Institution hosts the Indian Engineering Congress annually which is organised concurrently with its Annual General Meeting since 1987. The Engineering Congress is intended to broaden the scope of interaction and transfusion of knowledge by letting in from within the country and abroad engineer-brothers who are professional experts in their respective fields to participate and effectively diffuse their experiences and infuse their thinking. The Indian Engineering Congress has thrown open the threshold of knowledge to all, both members and non-members, and has provided them with a Forum.

The first Indian Engineering Congress was held at Kolkata in 1987 and was inaugurated by Bharat Ratna Late Rajiv Gandhi. Thereafter, the event got inaugurated by HE President of India, Late S D Sharma on two occasions. Hon'ble Prime Minister, Shri Atal Bihari Vajpayee and HE President of India Bharat Ratna Dr A P J Abdul Kalam have inaugurated and addressed the International Technical Congresses on the invitation of the Institution.

Call for Papers

Engineering professionals from industries, research and development organizations, academic institutions and Government Departments are invited to contribute papers on the Theme and running Sub-themes of the Congress and under each of the 15 engineering disciplines of IEI Colloquium. The papers should focus on sharing the experience, concepts, developmental ideas, research findings, etc. Those who intend to submit a paper may please note the scheduled dates given in the side box.

An abstract not exceeding 300 words shall be attached to paper in the beginning. The abstract should give details, such as, title of the paper, author(s) name(s), affiliation, full mailing address, phone and e-mail address. The paper should be limited to six (6) typed pages of A4 size paper, including text, figures, tables, charts, etc. Only Soft copy (in CD using MS Word) of the paper along with hard copy should be mailed to the Chairman, Organising Committee, more details at www.iec2011.in/call-for-papers

Poster Session

The IEC 2011 provides a unique opportunity for engineers and researchers to share their innovations and research in engineering and technologies to Industry, R & D Establishments, please visit www.iec2011.in/postersession

Congress creates fruitful interactions among engineers, students, industry, R & D laboratories, Professional associations and government.

IMPORTANT DATES

Last date for receipt of abstract

30 September 2011

Information of provisional acceptance

10 October 2011

Last date for receipt of full length paper

31 October 2011

Communication of acceptance

7 November 2011

Memorial Lectures

Following seven Memorial Lectures have been instituted by IEI in memory of the outstanding engineers. These lectures form an important part of the Congress.

The 54 th	Sir Mokshagundam Visvesvaraya Memorial Lecture
The 46 th	Nidhu Bhushan Memorial Lecture
The 37 th	Bhaikaka Memorial Lecture
The 33 rd	Sir Rajendra Nath Mookherjee Memorial Lecture
The 24 th	Dr. Ajudhia Nath Khosla Memorial Lecture
The 20 th	Dr. Amitabha Bhattacharyya Memorial Lecture
The 1 st	Prof. C.S. Jha Memorial Lecture

Glimpses of Engineering Personalities

Congress offers great opportunity to young engineers to benefit from the experience of experts / veterans from industry, research institutions and institutions of higher academic excellence. The Indian Engineering Congress is an eagerly awaited event in the year 2011.

Engineering Roundtable

Limited opportunity to participate in engineering/specially designed roundtables for interactive exchange of ideas and practices from other Engineering Professionals.

INTERNATIONAL MEET

Indian Engineers and Technologists have played a significant role in the advancement of the engineering disciplines overseas. IEI welcomes Engineers and Technologists from foreign countries to participate in the Indian Engineering Congress and share best practices.

IEI ALUMNI MEET

The Indian Engineering Congress provides an opportunity for IEI Alumni to reconnect with their counterparts and also play a mentoring role for the younger generation.

WOMEN ENGINEERS MEET

IEI recognizes the role and contribution of women engineers in the Indian engineering community. The Indian Engineering Congress provides an opportunity for women engineers to network and participate in thought leadership.

PRE-CONGRESS WORKSHOPS

Excellent opportunity to learn a new skill, enhance their knowledge of gathering information about a specific topic, IEC is organising pre-congress workshops for limited participants.

Aim of the Colloquium is to integrate the Engineers, Professionals, Technologist, Academicians and Students for exchange of knowledge in various spheres of engineering discipline. Engineers and technologists are inter networked with the economic growth and upliftment of social status of common man. Different disciplines in engineering have developed and new disciplines are emerging to a considerable extent. The congress will focus on colloquiums in each engineering discipline nurtured in IEI.

IEI has nurtured 15 divisions over 91 years. Each colloquium intends to bring together leading members of the division to share their experiences with corporate members of IEI of that particular division.

Outcome of the colloquium will contribute new dimensions in planning sustainable growth of nation. Salient thrust areas of 15 engineering divisions are mentioned in the brochure.

Visit www.iec2011.in/colloquium

Contact for Further details

Dr M. R. Pranesh | Chief - Converner
098459 60865

Aerospace Engineering

Application of Laser Techniques for Diagnostic and Repairs of Aerospace Structures, Nano-material Technology and its application in different fields, Aerodynamics

Agricultural Engineering

Potential of using Biomass as Energy Source, Virtual water concept, Transfer of Agricultural Mechanization through Entrepreneurial Development

Architectural Engineering

Energy Conservation Building Code 2007, Industrial Architectural engineering climate change Management Architecture interaction

Chemical Engineering

Bio-technology applied to Chemical Process, Use of Nano-technology, Food safety and security, Chemical and Bio-Sensors

Civil Engineering

Disaster Mitigation Engineering, Advanced Construction Technologies, Tunnel boring, Water crisis and its management, High rise buildings

Computer Engineering

Metal organic Chemical Vapour, Deposition Technology for production of Semiconductor devices, Nano-crystal Memory Technology, Hologram Security

Electrical Engineering

Provision of SCADA in Transmission and Distribution, Special Focus on APDRD, Generation of electricity from hydrogen, Alternative energy

Electronics & Telecom Engineering

Use of Nano-technology in Medical Applications, VLSI Design, Fourth Generation (4G) Wireless System, Blue tooth technology

Environmental Engineering

Cost Effective Industrial Effluent Treatment as well as Non-Conventional /Semi-Conventional Sewage Treatment Plants, Global Warming, Noise Pollution and Climate change

Marine Engineering

Recent Marine Technological, Development of Marine Diesel Engine, Control System and Platform Management System, Piracy and Security at sea, Under water vehicle

Mechanical Engineering

Micro Manufacturing, Nano Technology, Condition Monitoring, Alternative energy systems, Bio-Mechanical engineering

Metallurgical and Materials Engineering

New Generation Composite Material, Smart Materials, Steel technology, Material Informatics, Characterization

Mining Engineering

Exploration, Sustainable Mining, Revamping the present legislative framework

Production Engineering

Lean Manufacturing, Cellular Manufacturing, Tool Productive Management, Green Manufacturing, Micro-machining

Textile Engineering

Well Dressed Bird, Nano-fabric for Hazmat Suits, e-textiles and smart textiles, Ropes for pipe laying, Carbon foot print in Textile industry

participation

TAKE AWAYS

Get a feel for what's current in your field of engineering

Know the real challenges and solutions for building a futuristic technology

Identify the current trends in careers & technology for engineers

Develop opportunities for collaborations and partnerships

Build a vital knowledge network

Visit & see the engineering marvels at exhibition

Registration Fee

The fee payable by each category of registered delegates will be as follows.

All fees and charges should be remitted in the form of Demand Draft payable at Bangalore in favour of "IEI - Congress 2011". The Registration Fee may also be directly remitted to State Bank of India, Account no 31728955998, IFSC code : SBIN0003298, Shivajinagar Branch, Bangalore. The Bank Challans may be attached to the Registration Form. For availing concession on Group Registration, please contact the Organizing Secretary.

	Before 30 Oct 2011	After 1 Nov 2011
Corporate Members (IEI)	₹ 1500.00	₹ 2000.00
Non-corporate Members (IEI)	₹ 2000.00	₹ 2500.00
Academicians & other partnered Professional Institutions	₹ 2500.00	₹ 3000.00
Industry Sponsored Delegates	₹ 5000.00	₹ 5500.00
Spouses of Participants	₹ 1000.00	₹ 1500.00
ST/T* Members / Students **	₹ 500.00	₹ 600.00
International Delegates	\$ 350.00	\$ 450.00

How to register

- Register online <http://www.iec2011.in/register>
- Use the registration form attached to this information brochure.
- Download the registration form <http://www.iec2011.in/participation>

The Registration Form along with DD shall be sent to the following address.

The Convener

Organising Committee, 26th IEC 2011

Karnataka State Centre, No. 3, Dr. B.R. Ambedkar Veedhi, Bangalore 560 001

Ph : 080 – 22264698 / 22256191, e-mail : iec2011@gmail.com

Who will attend

- Engineers from all sectors - state and central government, public enterprises, industries and services.
- Academia - Student, Faculty and Management
- Research - Scientists and Engineers from all segments of R&D establishments - Defense, aerospace, industrial R&D
- Corporate members of IEI, Technician student members of IEI
- International participation
- Members from other Engineering Professional Bodies

Note : GRANT OF SPECIAL CASUAL LEAVE FOR GOVERNMENT OFFICERS ATTENDING MEETINGS OF SCIENTIFIC INSTITUTIONS. Details at www.iec2011.in/granted-leave.

Gain abundance of knowledge that will be shared by large number of eminent speakers from around the globe.

* Senior Technician / Technician. Attested copy of Identity Card to be produced

** Bonafide student / study certificate issued by Head of the Department / Principal of the College must be attached with the Registration Form.

DAY 1

Registration

Pre-conference workshops

DAY 2

Registration

Inauguration of the Congress

54th Sir M Visvesvaraya Memorial Lecture

33rd Sir R N Mookerjee Memorial Lecture

Visionary address/ Congress Session

Glimpses of Engineering Personalities

Prize Distribution Ceremony

Colloquium - Civil/Chemical/Electrical

Paper Presentation

Cultural Programme

Dinner

DAY 3

Visionary address/IEI Alumni meet

20th Dr A Bhattacharyya Memorial Lecture

37th Bhaikaka Memorial Lecture

24th Dr A N Khosla Memorial Lecture

Colloquiums - Mechanical/ ET/ Architecture

Colloquiums - Agriculture/ Mining/ Marine

Colloquiums - Textile/Computer/Environment

Paper Presentation

Women Engineers Meet

International Meet

Adjourned Council meeting

Cultural Programme

Dinner

DAY 4

Visionary address / Sessions/Colloquium

46th Nidhu Bhusan Memorial Lecture

1st Prof. C.S. Jha Memorial Lecture

Colloquium - Aerospace/Met & Mat

Paper Presentation

92nd Annual General Meeting

Valedictory Session of the Congress

Concluding Session of Congress Seminar

Meeting of the New - Council for the Session 2011-12

All the Divisional colloquiums/paper presentation will be run parallelly

opportunities

Imagine a place and time where all your current and future clients converge. IEC 2011 can make this a reality.

IEC meetings attracts over 3000 members and accompanying persons, from India and International centres to this event over a 4 day period. The participants comprises industry leaders, representatives, academicians, regulators and other stake holders.

Sponsorship opportunities at IEC 2011 offers excellent value and return on investments.

At IEC extensive facilities will be available to encourage interaction between conference participants and members of the industry. These include colloquium sponsor, exhibition, meeting room, press-interview room, and conference room. Sponsors are encouraged to make use of these facilities for interviews and for business and product announcements. Sponsors will be given priority over others in the scheduling of these facilities.

Featured Exhibitors

An unique opportunity to showcase a myriad of key and emerging technologies from backhaul of entire engineering community. Exhibit-Pavilions are covered for all 15 engineering divisions. Hence limited opportunity for wide spectrum of engineering community to showcase their technologies, products and prototypes. Exhibitors will have the options to select the right place for their featured product /service to display from :

SPONSORSHIP OPPORTUNITIES

Event Sponsor
Technology Partner
Colloquium Sponsor
Corporate Sponsor
Diamond Platinum
Gold Silver
Contributing Sponsor
Internet Provider
Food & Beverages
Name Badge & Lanyard
Satchel / Inserts

Kiosks
Exhibit Arena

Showcase
Premium Area

Spotlight
Privilege Area

For more details, please contact:

Congress Co-convenor
26th Indian Engineering Congress
Karnataka State Centre,
No. 3, Dr. B. R. Ambedkar Veedhi
Bangalore 560 001
080 – 22261144(t)/22261188(t) telefax : 080-22256191
opportunities@iec2011.in; www.iec2011.in/opportunities

Karnataka State Centre

The Karnataka State Centre of the Institution which was established at Bangalore in the year, 1934 is one of the most active Centres in the country in the context of technical activities and plays a very significant role in dissemination and proliferation of engineering knowledge amongst its members through organising Seminars, Symposia, Workshops, Conventions, etc both at national and international levels.

With a meager membership strength to start with, the Centre has brought into its fold a large section of fraternity with a membership strength of nearly 10000 Corporate Members and more than 26000 Non-corporate Members. Widening its horizon of technical activities, the Centre has established seven Local Centres at Mysore (1965), Dharwad (1966), Munirabad (1969), Gulbarga (1973), Mangalore (1973), Belgaum (1989)

and Davangere (1989) to serve more and more professional groups.

The Karnataka state centre acts as a qualifying body in conducting AMIE examinations under its non-formal educational programmes to cater to the needs and

aspirations of the profession.

The state centre is very fortunate to have the direct blessings of Sir. M. Visvesvaraya (www.visvesvaraya.co.in), the Engineer Statesmen in whose presence the foundation of the state centre was laid.

www.ieiksc.org

Accommodation

Accommodation for delegates is available at various hotels around the venue, to suit budgets of choice. All the hotels provide basic amenities with extended services on day to day base charges. A list of prominent hotels is available at the following web link. www.iec2011.com/accommodation_transport

Transportation from airport, railway stations and bus stations will be arranged on request against payment for all registered delegates.

Bangalore airport is located 35 Km from the venue place which can be covered in an hour depending on the traffic scenarios. Special buses are available to various destinations in Bangalore from airport. There are three main railway stations in Bangalore, Bangalore city railway station, Cantonment railways station and Yeshwanthpur railway station.

Places of Interest In and Around Bangalore

Bangalore is known as "Garden City", "Air-conditioned City" and the "Silicon Valley of India" and is the fastest developing city in the world. It boasts of well laid out parks, gardens, long avenues of brightly blossomed trees and salubrious climate throughout the year.

The rapid development of the city is marked with a cosmopolitan atmosphere with people concentrating from all parts of the country. Scientists, Doctors, Software Technologists, Space Researchers, Businessmen and traders fill the city.

The city is popular for shopping variety of items in the International level malls and in commercial areas like MG Road, Commercial Street, etc.

Mysore which is just 150 kms from Bangalore is a major historic and tourist city of Karnataka. The city was the erstwhile capital of the state and hence has played an important role in the history of the state and of South India. It is known as the 'City of Palaces' and there are number of other tourist attractions that one can visit in Mysore such as the famous Brindavan Gardens, Chamundi Hills, Mysore Zoo and others.

Sight-seeing at Bangalore

Visvesvaraya Industrial & Technological Museum, Lal Bagh, Cubbon Park, Vidhana Soudha, Government Museum, Chitrakala Parishath, Jawaharlal Nehru Planetarium, ISKON Temple, etc.

National Steering Committee

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Mr G Prabhakar
President

Co-Chairmen

Mr Madan Lal
Immediate Past President

Rear Admiral K O Thakare, NM
Past President

Padmashree Dr H C Visvesvaraya
Past President

Prof (Dr) M P Chowdiah
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Council Member

Dr Wooday P Krishna
Council Member

Dr L V Muralikrishna Reddy
Council Member

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Convener, 25TH IEC

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Mr. G. Sreekanth

Hon. Secretary-KSC

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Council Member

Mr A S Satish

Council Member,

Dr A V Shivapur

Council Member

Padmashree Prof. R.M. Vasagam

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Maj Gen R K Sanan, VSM (Retd)
Secretary & Director General

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General Information

Congress Secretariat

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Co-ordinator

For any information relating to 26th Indian Engineering Congress.

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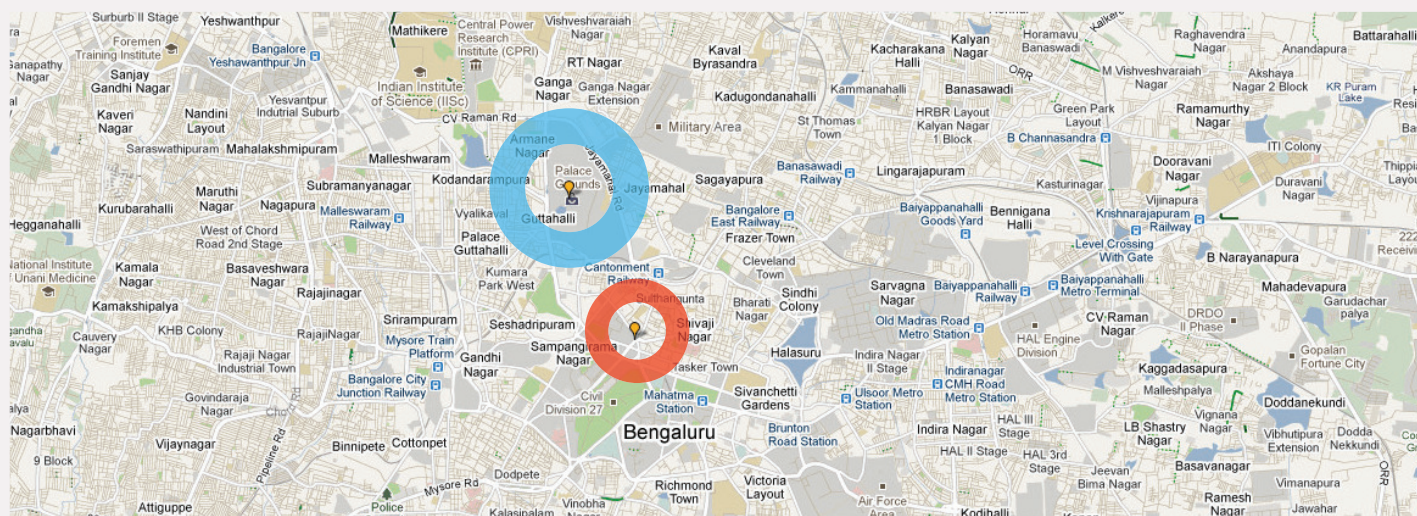
Venue on the Map



Palace Grounds, Bangalore



Karnataka State Centre - IEI



Palace grounds, the venue for the IEC 2011 is centrally located and connected by all the local transport services.
For further detailed maps and directions from your source, please visit the link www.iec2011.in/venue