GUIDEBOOK FOR

ENGINEERING DIVISIONS

AND

OTHER TECHNICAL ACTIVITIES

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The Institution of Engineers (India)

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Ashok Kumar Basa, FIE
PRESIDENT

"94 Years of Relentless Journey towards Engineering Advancement for Nation-building"

FORWARD

The technical activities of the Institution, organized mostly under the aegis of different Division Boards / Committees, are in a sense the public face of the Institution through which we reach out not only to the greater engineering fraternity but also to the general public. It is, therefore, essential that these activities follow basic norms so as to maintain the status / image of our premier engineering professional body in the country.

This revised edition of the "Guidebook for Engineering Divisions and Other Technical Activities", as recommended by CATE and approved by Council, will go a long way to help the Division Boards and the Centres spread all over the country, in organizing technical activities according to the approved norms and rules that address the changing needs of the Institutions.

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May 2014

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Guidebook for Engineering Divisions and other Technical Activities

(As amended✪)

1.0 HISTORICAL BACKGROUND

As India embanked on its industrial development, the status of the engineering profession became a matter of higher importance and it received public prominence in the Report of the Industrial Commission 1916-18. There were endeavours to advance an industrial society to safeguard and assure the status of the profession.

Sustained efforts by a group of Indian and British engineers brought "The Institution of Engineers (India)" into being and the Institution was registered on September 13, 1920 under the Indian Companies Act of 1913 with Madras as the "Province of Registration". The Registered Office was shifted to Calcutta on November 11, 1920.

In his Presidential Address at the formal inauguration of the Institution on February 23, 1921, Sir Rajendra Nath Mookerjee said, "The Institution of Engineers (India) which came into being on the September 13, 1920 is the result of general desire of those engineers in India who are members of the great parent Institution in England — the Institution of Civil Engineers, Mechanical Engineers and Electrical Engineers, to form a corporate body which should protect their interest, provide means of exchange of views on professional engineering matters and medium of expression of authoritative opinions on engineering problems of public interest ……".

Subsequently, The Institution of Engineers (India) was incorporated by Royal Charter in 1935 with the following objectives (as per Clause 2 of the Royal Charter).

"to promote and advance the science, practice and business of Engineering in all its branches (hereinafter referred to as "Engineering") in India".

"to establish, subsidies, promote, form and maintain Local Associations of members belonging to the Institution and others engaged or interested in Engineering so as to assure to each individual member as far as may be possible equal opportunity to enjoy the rights and privileges of the Institution".

"to diffuse among its members information on all matters affecting Engineering and to encourage, assist and extend knowledge and information connected therewith by establishment and promotion of lectures, discussions or correspondence; by the holding of conferences; by the publication of papers, periodicals or journals, books, circulars and maps or other literary undertaking; by encouraging research work; or by the formation of a library or libraries and collection of models, designs, drawings and other articles of interest in connection with Engineering or otherwise howsoever".

"to promote the study of Engineering with a view to disseminate the information obtained for facilitating the scientific development of Engineering in India".

"to establish, acquire, carry on, control or advise with regard to colleges, schools or other educational establishments where students and apprentices may obtain a sound education and training in Engineering on such terms as may be settled by the Institution".

✪ *Amended in 123rd Meeting of CATE and 676th Meeting of Council (Ranchi, June 2013); 124th Meeting of CATE and 677th Meeting of Council (Simla, September 2013) and 125th Meeting of CATE and 678h Meeting of Council (Coorg, March 2014)*

"to encourage, regulate and elevate the technical and general knowledge of persons engaged in or about to engage in Engineering or in any employment-manual or otherwise in connection therewith and with a view thereto to provide for the holding of classes and to test by examination or otherwise the competence of such persons and to institute and establish professorships, studentships, rewards and other benefactions and to grant certificates of competency whether under any Act of the Government of India or the Local Governments regulating the conduct and qualifications of Engineers or otherwise howsoever".

"to give the Government of India, the Local Governments and Municipalities and other public bodies and others, facilities for conferring with and ascertaining the views of Engineers as regards matters directly or indirectly affecting Engineering and to confer with the said Governments, Municipalities and other public bodies and others in regard to all matters affecting Engineering".

"to encourage inventions and investigate and make known their nature and merits".

"to arrange and promote the adoption of equitable forms of contracts and other documents used in Engineering and to encourage the settlement of disputes by arbitration and to act as or nominate arbitrators and umpires on such terms and in such cases as may seem expedient".

"to promote efficiency and just and honorable dealing and to suppress malpractice in Engineering".

"to do all such other acts and things as are incidental or conducive to the attainment of the above objects or any of them".

In order to fulfill its basic objectives, the Institution has always endeavored to synthesize an amalgam of academic and practical training with experiences. In order to perform better, the Institution grouped its members into Divisions according to their expertise in a particular discipline of engineering. The Institution now has fifteen Engineering Divisions, namely,

• Civil Engineering Division • Electrical Engineering Division • Mechanical Engineering Division	Established in 1954
• Chemical Engineering Division • Electronics and Telecommunication Engineering Division • Mining and Metallurgical Engineering Division (bifurcated to Mining Engineering Division and Metallurgical and Materials Engineering Division in 1984)	Established in 1961
• Public Health Engineering Division (now known as Environmental Engineering Division)	Established in 1962
• Aeronautical Engineering Division (now known as Aerospace Engineering Division) • Agricultural Engineering Division • Architectural Engineering Division • Marine Engineering Division • Textile Engineering Division	Established in 1978
• Computer Engineering Division • Production Engineering Division	Established in 1984

These Divisions have the mandate to devote their efforts, individually or jointly with one or more other Divisions, towards the search of common knowledge and product technologies within their respective or an interdisciplinary domain. These Divisions are directed to take active steps to establish close liaison between the Institution and its members and the policy makers. In order to broaden and strengthen the service of the Institution to the technical community and the public, these Divisions are also directed to actively encourage research and developmental programmes through various promotional aids like lectures, seminars, workshops and other educational programmes.

A Division Board may also recommend formation of Sub-Groups (**APPENDIX I**) to the Council through the Committee for Advancement of Technology and Engineering (CATE).

Technical publications of Engineering Divisions form one of the most important tools of communication designed to bridge the gap between the latest developments and the available existing knowledge in the respective fields of engineering and technology.

The Journal of the Institution, which was being published to contain articles on various disciplines, was subsequently segmented to deal on the disciplines of engineering having Divisions and one part for interdisciplinary matters. To augment the quality of the Journals, the Institution has signed the Co-publishing Agreement with Springer (India) Pvt. Ltd., New Delhi, on August 10, 2011. Both the Institution and Springer have agreed for the common cause of improvement in the quality of journals, impact factor, citation index and also to bring the Journals within the reach of one and all in all corners of the globe.

All the fifteen engineering divisional journals have been clubbed into five series as follows:-

Series A	:	Civil, Architectural, Environmental and Agricultural Engineering
Series B	:	Electrical, Electronics & Telecommunication and Computer Engineering
Series C	:	Mechanical, Aerospace, Production and Marine Engineering
Series D	:	Metallurgical & Materials and Mining Engineering
Series E	:	Chemical and Textile Engineering

The schedule of publication is given in **APPENDIX II**.

Besides this, with the objective to disseminate the technical knowledge and information pertaining to IEI, monthly tabloid in the form of IEI News is brought out. Also a theme based flagship magazine “Technorama” published for engineering profession and decision makers. A Division Board may also bring out special publications such as Monographs on topics of current interest, proceedings of seminars / symposia, etc. Besides, for the benefit of Technicians / Senior Technicians / Students, the Technicians’ Journal and Students’ Newsletter are also published.

2.0 THE COUNCIL

The Governance and control of the Institution and its affairs vest with the Council and the said Council is required to function with intent to give effect to the provisions of the Royal Charter and the Bye-Laws of the Institution. The Council is empowered to constitute Committees and Division Boards for smooth functioning in all spheres and to frame rules to be followed by these Committees and Division Boards in order to fulfill the objectives of the Institution in an organized and uniform fashion.

3.0 COMMITTEE FOR ADVANCEMENT OF TECHNOLOGY AND ENGINEERRING (CATE)

The Council is also required to constitute a Committee for Advancement of Technology and Engineering (CATE) to give particular attention to : promotion of research; development of appropriate technology; building up design talent; development and promotion of engineering information services; formulation and implementation of norms and standards for technical activities including publications of the Institution; continuous vigilance on science and technology policies of the nation; coordination of technical education with research and industrial development; and coordination of interdisciplinary activities.

4.0 DIVISION BOARD

The Council of the Institution comprises, inter alia, members representing the Divisions and the Centres. The Bye-Laws of the Institution require the Council to constitute Division Boards with the members of the Council as members according to their attachment to the Divisions. In the event of the strength of a Board being less than three, the Council may co-opt Corporate Members attached to that Division to make-up the strength. One of them shall be nominated as the Chairman of the Board for a term not exceeding two sessions.

5.0 OBJECTIVES OF A DIVISION BOARD

The objectives of a Division Board are :

(i) To develop a closer and more effective relationship among engineers — those who educate the profession as well as those who are being educate;

(ii) To maintain and expand the competence of the members and promote various inter-disciplines in engineering by organizing continuing education of engineers on subjects of identified priorities; and

(iii) To encourage the members and other engineers to participate in deliberations and actions devoted to community welfare through beneficial applications of engineering.

6.0 RESPONSIBILITIES OF A DIVISION BOARD

A Division Board has the following major responsibilities as in the discharge of its duties:

(i) Interact with National Bodies where Institution is represented.

(ii) Maintain liaison with the Government agencies and Groups relevant to the scope of the Divisions and thereby monitor the development of national plans and policies on technical matters of interest to the Divisions.

(iii) Keep a strict vigil on the national standards (pertaining to Divisions) and arrange to forward the views of the Divisions on these standards to the BIS through the appropriate Institution's representatives.

(iv) Locate and point out specific fields where Indian Standards pertaining to the Divisions either do not exist or are inadequate.

(v) Liaise with MHRD, AICTE, UGC, CSIR, DST, ICAR, NRDC, UNESCO, etc to identify foreign technical experts visiting India and involve them in technical activities of the Divisions as far as practicable.

(vi) Sponsor National Conventions, All India Seminars, One Day Seminars / Workshop, Symposia, Round Tables, Panel Discussions, etc; monitor the resolutions, conclusion and recommendations of those activities and ensure that necessary follow-up actions on such resolutions, conclusion and recommendations are taken at appropriate levels.

(vii) Organize at least one All India Seminar every year dealing with on-going national activities in addition to National Convention each year.

(viii) Monitor regular publication of IEI-Springer Journal with quality publications depicting original research in thrust areas, design, product and process development, future trends in R&D and development work along with review and state-of-art papers and "R&D Focus".

(ix) Each Division Board will form a Core Group consisting of eminent engineers from all over the country and abroad in that particular discipline, who may or may not be Member of IEI. Detailed guidelines for constituting Core Group have been attached as **APPENDIX III.**

7.0 ATTACHMENT OF CORPORATE MEMBERS

The Corporate Members shall be attached to one Division only based on their educational qualifications approved by the Council and the field of engineering in which they practice at the time of their admission to the Institution. But, if so qualified for attachment to more than one Division, a Corporate Member shall be allowed to select and change to the Division to which he / she would like to be attached. The Council may, however, at its discretion, allow the transfer from one Division to another provided the member establishes to its satisfaction that he / she deserves such transfer on account of change in the field of his/her practice of engineering subsequent to his / her election as a member. The responsibility of the Council is vested with the Board of the Division to which the member seeks transfer.

8.0 ADMINISTRATION

A Division Board, constituted as per provision of Bye-Laws, shall be responsible to manage, supervise and guide the activities under the Division in accordance with the rules laid down from time to time by the Council. The Council shall have the power to vary the rules, as they may deem fit, subject always to the provisions of the Charter and the Bye-Laws.

9.0 FINANCIAL MANAGEMENT

The Council allocates funds to the Division Boards for utilization through its activities as per the norms given in **APPENDIX IV**.

However, all activities organized by a Centre of the Institution under the auspices of one or more Division Boards should not only be self-financing but also generate surplus to add to the funds of the Centre. The grant, if any, from the funds allocated to the Division Board should, therefore, be supplemented with those raised by way of registration fees and contributions from governments, local industries, etc.

The grant from the funds of the Division Boards shall be utilized only for activities exclusively of technical nature [for example, publication of pre-prints of articles, proceedings, memorials lecture(s), etc] and no part of it shall be utilized, under any circumstances for defraying expenses incurred for travelling or general purposes.

N.B.: All payments should be made in the favour of "The Institution of Engineers (*India*) *…….* (*name of respective State / Local Centres*)*" where the Technical Activity will be organized. Funds will be managed in accordance with Bye-Laws 111 and Regulation 49 of the Institution. The quantum and mode of release of grant from Division Board will be in accordance with* **APPENDIX IV** *or as decided time to time by Council.*

10.0 TECHNICAL ACTIVITIES OF CENTRES

The Centres shall organize, on regular basis, lectures to be delivered by experts available locally.

In addition to Division sponsored activities, the Centres may also organize the following activities without any financial support from a Division Board and involve only the support and the participation as may be available from their respective geographical boundaries.

- Seminar
- Workshop
- Round Table
- Panel Discussion
- Continuing Education Course

Each Centre is required to submit a report on its technical activities every quarter (April-June, July-September, October-December, January-March) in prescribed format, given in **APPENDIX V** and based on the same , consolidated report for all quarters are prepared by the HQrs in prescribed format for submission to CATE.

11.0 INDIAN ENGINEERING CONGRESS

The Council of The Institution of Engineers (India) decided, at its 529th Meeting held at Bombay on June 9, 1985, to organize every year "The Indian Engineering Congress" at one of its Centres with the intention of having an enlarged participation of engineers from within the country and abroad and to provide a forum for effective and purposeful interaction amongst the member and non-member engineers and public and diffusion of knowledge as well as experience to infuse new thinking.

11.1 OBJECTIVE

The Council shall decide the theme of the Congress and the Congress will precede the Annual General Meeting of the Corporate Members of the Institution. A Seminar on the theme will be organized to provide a forum to bring together engineers belonging to different disciplines and also non-engineers who are interested in the topic for exchange of experiences, to evolve new concepts and to broaden general understanding. The Congress being the apex technical activity of the Institution, an all-out effort should be made to make the event a grand success and for this purpose, a close liaison between the Host Centre and the HQrs is necessary. The Congress is an occasion where delegates

representing foreign professional societies having bilateral relationship with the Institution also participate.

11.2 PROGRAMME STRUCTURE

Indian Engineering Congress comprises the following technical activities:-

- Inaugural Session of Congress
- Inaugural Session of Congress Seminar on a theme specified by the Council
- Memorial Lectures (for details, see **APPENDIX VI**)
- Glimpses of Engineering Personalities
- Technical Sessions of Congress Seminar
- Prize and Awards Ceremony
- IEI Alumni Meet
- Women Engineers Meet
- Engineering Colloquium
- Concluding Sessions of Congress Seminar
- Valedictory Sessions of the Congress
- Engineering Exhibition

On the social side, the Host Centre shall organize cultural programmes, Congress dinner, local sightseeing tours, out-station tours and ladies programmes.

11.3 ORGANIZATION SET-UP

The organizational set-up for the Congress shall comprise the following

- National Advisory Committee
- National Steering Committee
- Organizing Committee

The Council of the Institution shall constitute the National Advisory Committee and the National Steering Committee.

The National Steering Committee shall have the following responsibilities:-

(a) Finalization of Patrons;

(b) Approval of the draft programme of Congress;

(c) Finalization of
  - (i) The Chief Guest
  - (ii) The Speakers for Memorial Lectures
  - (iii) Glimpses of Engineering Personalities (to be felicitated at the Congress)

(d) Review of
  - (i) The venue
  - (ii) The accommodation
  - (iii) The registration fees
  - (iv) Hospitality norms
  - (v) Publicity arrangements

(e) Review of strategy for resource mobilization

The Committee of the Host Centre shall constitute the Organizing Committee to have one Chairman, one Co-Chairman, one Organizing Secretary and a few members. The Organizing Committee shall constitute several functional committees to look after various components of the entire programme.

Suggested Functional Committees are Registration, Resource Mobilization, Seminar, Souvenir, Accommodation and Transport, Tours, Ladies Programmes, Logistics, Hospitality, Cultural Programme, Volunteer and Medical Aid Committees.

11.4 NODAL DATES

The Council of The Institution of Engineers (India) decided to organize Congress during the period of December every year. With the Congress being held in December, the following nodal dates are suggested :

•	Finalization of Host Centre, dates of Congress and Congress theme	:	Last day of March
•	Constitution of National Advisory Committee, Organizing Committee and Functional Committees	:	Last day of March
•	Constitution of National Steering Committee	:	Middle of April
•	Submission of the draft Information Brochure to the HQrs by the Host Centre	:	Last day of April
•	Finalization of Speakers of Memorial Lectures and Personalities to be felicitated at the session of "Glimpses of Engineering Personalities"★	:	Last day of May
•	Preparation and printing of First Information Brochure	:	Last day of June
•	Dispatch of First Information Brochure for Congress Seminar	:	Last day of June
•	Obtaining clearance certification from the Nodal Ministry, Ministry of External Affairs and Home Ministry, Government of India★	:	Last day of June
•	Obtaining the full text of Memorial Lectures, life sketches of Engineering Personalities★	:	Last day of September
•	Finalization of the Chief Guest★	:	Last day of October
•	Printing of Memorial Lectures and Booklet on "Glimpses of Engineering Personalities" ★	:	Last day of October
•	Finalization of Prize and Awards	:	Last day of October
•	Finalization of IEI Industry Excellence Award		First week of November
•	Obtaining the full text of the Address of Chief Guest★	:	First week of November
•	Obtaining the full text of the Address of the President (Elect)★ and printing of the same	:	Middle of November
•	Printing of Seminar Articles	:	Last week of November
•	Printing of Address of the Chief Guest★	:	Last week of November

★ *responsibilities of the HQrs*

The Organizing Committee shall decide and notify through Information Brochure the nodal dates for the Congress Seminar as suggested below:-

•	Submission of synopsis	:	Last day of July
•	Intimation to author in respect of acceptance of synopsis	:	Last day of August
•	Submission of full text of the article by the author	:	Last day of October
•	Intimating the authors regarding session details	:	Middle of November
•	Printing of reprints of the Seminar articles	:	First week of December

The above items are the sole responsibilities of the Host Centre. For this purpose, the Information Brochure in respect of the Congress Seminar shall provide all details which are to be followed by authors.

11.5 FUND MOBILIZATION

The fund for organizing the Congress shall comprise the following

- Grant from the HQrs (**APPENDIX IV**)
- Registration and other fees
- Co-sponsorship / collaboratorship fees, donations and grants
- Charges of advertisements in Souvenir Volume
- Charges for Exhibition Stalls

11.6 REGISTRATION FEE

In order to encourage large participation, the Registration Fees shall be kept as low as possible and more stress should be given by the Host Centre on collecting funds by way of co-sponsorship, collaboratorship fees, donations, government grants, advertisements in the Souvenir volume and exhibitions.

The registration fees should preferably be in categories, namely, Corporate Members and Technician / Student Members of the Institution. Higher scale of registration fees may be fixed for members sponsored by any organization or government departments and for non-members. A separate scale of registration fees should be fixed for guests, spouses of the registered delegates and the authors of technical articles contributing in the Congress Seminar.

Host Centre may consider online registration through a dedicated website for the Congress which will have a link in the IEI's portal.

11.7 SUGGESTED DAY-TO-DAY PROGRAMME

Day 1	:		Registration
Day 2	:	1st Half	Registration, Inaugural Session of the Congress, Presentation of IEI Industry Excellence Award, SQF, NDRF Awards and Institution Prizes (four categories only), Sir M Visvesvaraya Memorial Lecture
	:	2nd Half	Inauguration of Congress Seminar, Engineering Colloquium, Glimpses of Engineering Personalities, Presentation of Prizes, Bhaikaka Memorial Lecture
	:	Evening	Congress Dinner
Day 3		1st Half	Technical Session I, Sir R N Mookerjee Memorial Lecture, Technical Session II, Nidhu Bhushan Memorial Lecture, Engineering Colloquium, Women's Engineers Meet
	:	2nd Half	Technical Session III, Dr A N Khosla Memorial Lecture Technical Session IV, Adjourned Council Meeting
	:	Evening	Cultural Programme
Day 4	:	1st Half	Technical Session V, Dr Amitabha Bhattacharyya Memorial Lecture, Technical Session VI, Prof C S Jha Memorial Lecture, Engineering Colloquium
	:	2nd Half	Annual General Meeting, Valedictory Session of the Congress
	:	Evening	Meeting of the New Council
Day 5	:		Post Congress Tour

11.8 SUGGESTED DETAILED PROGRAMME

The details of programmes related to various technical activities of Indian Engineering Congress are as follows:-

11.8 .1 Inauguration of the Congress

The structure of the programme of the Inaugural Session of the Congress shall be as follows.

- National Anthem (if President of India / Vice President of India / Prime Minister of India / Governor of the State is / are present)
- Invocation
- Welcome Address by the Chairman of the Host Centre / Organizing Committee
- Address by President, IEI
- Distribution of IEI Industry Excellence Award, SQF and NDRF Awards and Institution Prizes (4 categories only)
- Inaugural Address by the Chief Guest
- Vote of thanks by Secretary and Director General, IEI

The President, IEI shall chair the Inaugural Session of the Congress.

11.8 .2 **Inauguration of the Congress Seminar**

The structure of the programme of the Inaugural Session of Congress Seminar shall be follows.

- Welcome Address by the Chairman, Technical Committee
- About the Seminar by the Convenor, Technical Committee
- Address by President, IEI
- Special Lecture on the theme of Congress Seminar
- Inaugural Address by the Chief Guest of the Seminar
- Vote of thanks by the Honorary Secretary of the Host Centre / Organizing Secretary

The Chairman, Technical Committee, shall preside over this session.

11.8 .3 **Memorial Lecture**

The structure of the programme of Memorial Lecture Sessions shall be as follows

- Welcome Address by the Chairman of the Session
- Background of the Lecture and introduction of the speaker by Secretary and Director General, IEI
- Memorial Lecture Presentation
- Vote of thanks by Secretary and Director General, IEI

The President of IEI or a Corporate Member nominated by him shall chair this session

11.8 .4 **Glimpses of Engineering Personalities**

The structure of the programme of Glimpses of Engineering Personalities Sessions shall be as follows.

- Welcome Address by President, IEI
- Introduction of Personalities by Secretary and Director General, IEI
- Address by the Personalities
- Vote of thanks by the Secretary and Director General, IEI

The President, IEI shall chair this session.

11.8 .5 **Concluding Session of Congress Seminar**

The structure of the programme of Concluding Session of the Congress Seminar shall be as follows.

- Welcome Address by the Chairman, Technical Committee
- Reporting by Rapporteurs of all Technical Sessions
- Finalization of Recommendations
- Vote of thanks by the Convener, Technical Committee

The Chairman, Technical Committee, shall preside over this session.

11.8 .6 Valedictory Session of the Congress

The structure of the programme of Concluding Session of the Congress Seminar shall be as follows.

- Welcome Address by the Chairman, Organizing Committee
- Reporting by the Organizing Secretary
- Introduction of President by outgoing President
- Response by Delegates (from the floor)
- Address by the President, IEI
- Vote of thanks by the Honorary Secretary of the Host Centre

The Chairman of the Organizing Committee shall preside over this session.

For details of Seating Plans and Format of Invitation Cards, please see **APPENDIX VII** and **APPENDIX VIII**, respectively.

12.0 DIVISION-SPONSORED ACTIVITY

The activities sponsored by a Division, which may be hosted by a Centre, are National Convention, All India Seminar, One Day Seminar / Workshop, Round Table, Workshop, Panel Discussion and Continuing Education Course.

12.1 NATIONAL CONVENTION

The National Convention of an Engineering Division is the apex technical activity of the Division itself, which is organized annually to a place decided by the Division Board initially and subsequently approved by the CATE / Council.

12.1.1 Objective

The National Convention, sponsored by a Division, is the apex activity held once a year aiming at achievement of technical and professional growth through intensive technical content and mutual interaction. A National Convention shall seek to achieve maximum involvement and participation of members and non-members as well. This is the activity, which also aims at establishing liaison between the Institution, its members and the policy makers. The organization of a National Convention, therefore, requires full attention of the Host Centre and a long-term planning with adequate support from the HQrs and concerned Division Board.

12.1.2 Nomenclature

This activity shall be designated in the following style.

Sixteenth National Convention of Environmental Engineers

or

Sixteenth National Convention of Metallurgical and Materials Engineers

12.1.3 **Programme Outline**

A National Convention shall be a multi-activity capsule comprising the following elements:-

(a) National Seminar
(b) Memorial Lecture (for details, see **APPENDIX IX**)
(c) State-of-the-art Lecture
(d) Felicitation of Eminent Engineers (maximum four persons) #
(e) Presentation of IEI Young Engineers Award (maximum three persons)★
(f) Technical Visit and Technical Exhibition
(g) Workshop / Round Table / Panel Discussion
(h) Setting up of IEI Information Desk displaying various categories of Membership Forms, copies of IEI publications, IEI Publicity Brochure etc. These materials will be supplied by the HQrs.
(i) Division Board Meeting
(j) Maximum 3 to 4 Eminent Engineers should be felicitated in the National Convention ✠
(k) All the Eminent Engineers who will be selected for felicitation should make a technical presentation in the Convention ✠
(l) Besides Souvenir / Abstract Book, a Technical Volume may be in the form of hard copy or CD should be published in the Convention containing the full text of the technical papers presented during the Convention ✠
(m) The Young Engineers who will be getting the Award in the Convention also should be requested to present a technical paper in the Convention ✠
(n) The Technical Volume / CD should be forwarded to the respective Editor-in-Chief of IEI-Springer Series Journals through IEI Technical Department, so that Editor-in-Chief with its Editorial Board can find out good articles from the technical volume and request the concerned author(s) to upload this paper for journal publication through peer review process ✠
(o) Additionally, CATE has recommended that soft copy of the Proceedings should be sent by the Centres to Headquarters, who in turn will send those to the Members of that Division Board and will also display it in the website of IEI" ✠

The names of the Eminent Engineers and Speaker(s) of the Memorial Lecture are to be finalized by the Host Centre in consultation with the Chairman of the respective Division Board. The formal invitation to the Eminent Engineers and Speaker(s) of the Memorial Lecture should be made by the Host Centre with a copy to the Technical Department at IEI HQrs. No TA / DA will be provided from the HQrs to the Eminent Engineers and Speaker of the Memorial Lecture for attending the Convention.

As a customary, plaques are presented to the Eminent Engineers and Speaker(s) of the Memorial Lecture. These plaques are prepared by the HQrs as per the prescribed design and format. The Centre should forward details of the Speaker(s) of Memorial Lecture and Eminent Engineers for preparation of the plaque. The cost of the plaques will be borned from the grant of the National Convention.

★ *This Award was instituted in 2008 with a view to promote the pursuit excellence in the field of engineering. The Award consists of Rs.10,000/- and a Certificate for each awardee. The recipients of IEI Young Engineers Award are eligible for*

reimbursement AC-3 tier fare by train in the shortest route. (*if no AC-3 tier ticket is available then AC-2 tier fare will be reimbursed*). *Cost of Awards, Certificate and Train Fare will be borne by the HQrs* [*Modalities and guidelines of IEI Young Engineers Award given in* **APPENDIX X**]

- *(j) to (o) have been approved at the 680th Meeting of the Council, Coorg, Karnataka, held during March 22-23, 2014.*

12.1.4 **Planning**

Proposal for holding a National Convention will emanate from a Centre and shall be processed by the concerned Division Board and the final decision shall be taken by CATE / Council.

The Centre desiring to hold the National Convention shall submit the proposal to the concerned Division Board at least six months prior to the proposed dates of the Convention. The proposal shall contain the following for consideration of the Board.

- Venue (city / town)
- Date (the Council has decided the designated months for organizing the National Convention for each engineering division. Details given in **APPENDIX XI**)
- Theme, Sub-themes of the National Seminar, and a short write up on the theme
- Other activities (Workshop / Round Table / Panel Discussion) to be held concurrently with the Convention

A format for sending proposal is given in **APPENDIX XII.**

12.1.5 **Responsibility**

The primary responsibility for planning and organizing a National Convention shall rest with the Host Centre. Implicit support of the Chairman of the concerned Division Board and the HQrs will be available.

For smoothness in organization of this national event, the Host Centre shall constitute the following Committees.

- National Advisory Committee
- Organizing Committee
- Technical Committee

The Host Centre may organize the National Convention in association with reputed Engineering Colleges / Institutes.

National Advisory Committee

This Committee comprises President of IEI as its Chairman, the Chairman of the Division Board as its Co-chairman and a Corporate Member (attached to the Host Centre and also the concerned Division) as its Convenor.

The members of the Committee shall be nominated by the Host Centre from amongst persons of all India status and shall include all members of the concerned Division Board and the Honorary Secretary of the Host Centre (if he / she is not the Convenor).

This Committee shall provide guidance for structuring the technical programmes, selection of Session Chairmen, Keynote Speakers, State-of-the-art and Memorial Lectures' Speakers and the persons to be honoured at the Convention under the banner "Felicitation of Eminent Engineers".

This Committee may not meet frequently and the suggestions of the members may be made through correspondence only.

Organizing Committee

The Organizing Committee shall be constituted with the Chairman of the Host Centre as its Chairman and one Corporate Member (attached to the Host Centre and also the concerned Division) as the Organizing Secretary. The members of the Committee shall include local Corporate Members.

To make this Committee effective, representatives of the government departments, public bodies, industries, educational institutions, etc should be co-opted in it.

This Committee shall be responsible for all works related to the Convention.

The Chairman of the concerned Division Board and the HQrs shall be kept informed about major details of the programme as may be finalized by the Organizing Committee from time to time.

Technical Committee

A Technical Committee shall be constituted by the Organizing Committee to scrutinize the synopses of the articles as may be received from authors. The decision of the Technical Committee shall be communicated to those authors whose synopses are accepted and they shall submit the full text with all tables, diagrams, etc to the Host Centre well ahead of the dates of National Convention.

12.1.6 **Resource Mobilization**

- Grant from the Division Board **(Appendix IV)**
- Registration fees to be paid by delegates
- Contributions of other organizations as Patrons, Co-sponsors, Collaborators, Donors or Associates
- Charges collected from the advertisers in the Seminar Volume / Souvenir, published by the Host Centre
- Technical Exhibition

12.1.7 **Convention Document**

A publication containing the proceedings/e-proceedings should be brought out. The detailed report with photograph of the Convention should be sent to the HQrs within 15 days after completion of the Convention. The Host Centre may also publish a souvenir / Proceedings on the occasion.

12.1.8 **Prorgramme Structure**

The duration of National Convention may be two or three days and the programme shall include the following:-

(i) **Inaugural Session to have**

- Welcome Address by the Chairman of the Host Centre
- Address by the President, IEI (if present)
- Address on the theme of National Seminar by the Convenor
- Address by the Chairman of the Division Board
- Address by the Special Guests (if any)
- Inaugural Address by the Chief Guest
- Felicitation of Eminent Engineers
- Presentation of IEI Young Engineers Award
- Vote of thanks by the Organizing Secretary/Honorary Secretary of the Host Centre

This session shall be presided over by the Chairman, Division Board

(ii) **Memorial Lecture and State-of-the-art Lecture shall follow the Inaugural Session**

- Technical Sessions of the National Seminar
- Workshop or other technical events.

(iii) **Valedictory / Concluding Session to have**

- Welcome Address by the Chairman of the Host Centre or the Technical Committee
- Reporting on the Technical Sessions by Rapporteurs / Session Chairmen
- Finalization of Recommendations
- Vote of thanks by the Organizing Secretary / Honorary Secretary

This session shall be presided over by the Chairman of the Host Centre and the Chairmen of the Technical Sessions shall be present on the dais. For each Technical Session, there shall be one Chairman, one Co-chairman (Optional) and one Rapporteur.

12.1.9 **Publicity**

Publicity for a National Convention shall be made primarily through web and the IEI News. The Host Centre may, however, adopt other avenues for publicity of the Convention at the national and state levels by contacting various government departments, public bodies, industries, educational institutions, etc. Participation should also be initiated from foreign societies with which the Institution has bilateral agreements or any other formal relationship. After obtaining the approval of the proposal by Division Board / CATE / Council, the Centre will prepare the First Information Brochure as per the format given in **APPENDEX XIII** (Standard Brochure / First Information Brochure) and will forward 5 copies of the same to Technical Department for further action.

12.1.10 **Selection of Articles for National Seminar**

The persons desirous of presenting articles may be advised to submit synopses of their articles to the Host Centre, which will be scrutinized and finalized by the Technical Committee.

12.1.11 **General**

The Host Centre must send a complete report of the Convention on the prescribed format (**APPENDIX XIV**) and a few photographs within 15 days from the date of culmination of National Convention to the HQrs.

A detailed report of the Convention highlighting the technical content of the speeches delivered by the dignitaries, such as, Chief Guest, Guest-of-Honour, Keynote Speaker, Memorial Lecture Speaker, etc, along with photographs and copies of Souvenir / Proceedings should be sent to the HQrs for publication in the IEI News.

The recommendations emanated from the Convention be forwarded to the Core Group constituted by the concerned Division Board and approved by CATE / Council. The approved Guidelines for constitution of Core Group is given in **APPENDIX III.**

For details of Seating Plans and Format of Invitation Card, please see **APPENDIX VII** and **APPENDIX VIII,** respectively.

12.1.12 **Grants Available for National Convention**

The grant for the National Convention is Rs 1,50,000/- for each Division. Out of this grant, a sum of Rs 1,05,000/- shall be given as the grant to the Centre hosting the National Convention and the balance Rs 45,000/- shall be at the discretion of the Chairman of the Division Board for meeting such expenses, connected with the National Convention, as are found to be necessary.

The grant shall be released in two installments to the Host Centre as follows: Rs 55,000/- on receipt of printed information brochure and Rs 50,000/- at the time

of the Convention. The Chairman's Discretionary Fund amounting to Rs 45,000/- will be released to the Host Centre after completion of the Convention and after deduction of the expenses incurred by the HQrs for the Convention (e.g. preparation of plaques for Speaker of Memorial Lecture and Eminent Engineers etc) and conformation of necessary formalities.

No part of this grant shall be used for travelling.

The quantum of grant may be revised by Council time-to-time.

12.2 ALL INDIA SEMINARS

The All India Seminar is one of the sponsored technical activities of a particular Engineering Division, under the aegis of which the activity will be organized.

12.2.1 Planning

Proposal for holding All India Seminar will emanate from a Centre and shall be processed by the concerned Division Board and the final decision shall be taken by CATE / Council.

The proposal from a Centre should be submitted as per format given in **APPENDIX XII** to the concerned Division Board at least three months prior to the proposed dates of the Seminar. The proposal shall contain the suggested theme, dates and venue (city / town) of the Seminar.

After obtaining the approval of the proposal by Division Board / CATE / Council, the Centre will prepare the first information brochure as per the format given in **APPENDIX XIII** and will forward the same to Technical Department for further course of action.

The recommendations emanated from the All India Seminar be forwarded to the Core Group constituted by the concerned Division Board and approved by CATE / Council. The approved Guidelines for constitution of Core Group is given in **APPENDIX III.**

12.2.2 Responsibility

The primary responsibility for planning and organizing All India Seminar shall rest with the Host Centre. Implicit support of the HQrs will be available.

For smoothness in organization of the event, the Host Centre shall constitute the Organizing Committee. The Host Centre may organize the National Convention in association with reputed Engineering Colleges / Institutes other Professional Organizations.

12.2.3 **Organizing Committee**

The Organizing Committee shall be constituted with the Chairman of the Host Centre as its Chairman and the Honorary Secretary of the Host Centre or one Corporate Member (attached to the Host Centre) as its Organizing Secretary. The Members of the Committee shall include local Corporate Members.

12.2.4 **National Advisory Committee**

The Members of the Committee shall be nominated by the Host Centre from amongst persons of all India status and shall include all members of the concerned Division Board and the Honorary Secretary of the Host Centre (if he / she is not the Convenor). The Council Member elected from a State shall be included as a member in National Advisory Committee of the AIS conducted by the Centres in the respective State.

This Committee shall provide guidance for structuring the technical programmes, selection of Session Chairmen.

N.B.: For organizing All India Seminar, formation of National Advisory Committee is not mandatory.

12.2.5 **Resource Mobilization**

The Organizing Committee shall plan resource mobilization and the income may comprise the following:

- Grant from the Division Board (for Two-Day activity not to exceed Rs. 30,000/-)
- Registration fees to be paid by delegates
- Contributions of other organizations as Patrons, Co-sponsors, Collaborators, Donors or Associates
- Charges collected from the advertisers
- Technical Exhibition

12.2.6 **The Structure of the Programme of an All India Seminar shall be as follows**:-

12.2.6.1 **Inaugural Session to have**

- Welcome Address by the Chairman, Host Centre
- Address by the President, IEI (if present)
- Address by the Chairman, Division Board (if present)
- Address on the theme of technical sessions by the Honorary Secretary / Organizing Secretary / Convenor
- Address by the Special Guests (if any)
- Inaugural Address by the Chief Guest
- Vote of thanks by the Honorary Secretary of the Centre

12.2.6.2 **Technical Sessions**

Articles, received on the theme of the All India Seminar, are presented in Technical Sessions.

Each of the Technical Session to be presided over by a Session Chairman and assisted by one Rapporteur.

12.2.6.3 **Concluding / Valedictory Session to have**

- Welcome Address by the Chairman of the Host Centre
- Reporting by Rapporteur of each session
- Finalization of Recommendations
- Vote of thanks by the Organizing Secretary / Honorary Secretary

The Chairman of the Host Centre shall preside over both the Inaugural and the Concluding / Valedictory Sessions.

The report on an All India Seminar including the recommendations shall be sent to the HQrs within 15 days from the date of culmination of the Seminar together with two copies of the preprints of articles (as published) and a few photographs as per format given in **APPENDIX XV** for possible inclusion as a report in IEI News.

12.3 **ROUND TABLE / WORKSHOP / CONTINUING EDUCATION COURSE / PANEL DISCUSSION**

The general features of the Round Table, Workshop, Continuing Education Course and Panel Discussion may be organized by a Centre, the details of which are as follows :-

12.3.1 **Round Table**

A "Round Table" is a forum for discussion on problems of common interest to ensure business like discussion.

A Round Table presidium should consist of a Chairman, a Rapporteur and a panel of experts from the government and private sectors to cover technical, social-economic and administration aspects of the problem.

The Chairman of a Round Table will initiate the discussion by presenting a brief background and exact nature of the problem and invite the panel members to present their views for effective discussion.

The delegates may participate in the discussion. For this, they may write down their point in a "Discussion Slip" and submit the same to the Chairman of the session. The Chairman will reserve the discretion to allow the participants to speak.

At the end of the discussions, the Rapporteur will sum-up the proceedings and the Host Centre will submit a report on the event to the HQrs soon after the culmination of the event.

12.3.2 Workshop

Workshops are thought of as meetings for formal discussions on topics or theories, exchange of ideas, demonstration of methods and practical application of skills and principles employed in a field.

One of the most important aspects of the workshop is to examine not only the success of the investigation but also discussion of the failures in these investigations so that one could have a clear picture on the topics of Workshops. For this reason, there should be experts with different ideas both for and against the investigation, theory, etc.

A Group Leader, who will make an introduction to the theme, will lead the workshop. There will also be a moderator who will allow the intervention of the participants, keeping the form of an open discussion.

The Host Centre shall submit a detailed report on the same to the HQrs soon after the culmination of the event.

12.3.3 Continuing Education Course

Endeavours must be made to structure the course in such a way so as to integrate the latest theory and seasoned practice.

The Course Director may utilize one or more of the following techniques for the conduct of the course.

- Lecture
- Group Discussion
- Case Study
- Project Work
- Demonstration
- Film Show
- Factory / Site Visit

The Course Director will open the discussion with an address explaining the scope of continuing education programmes and outlining the procedure to be adopted in the conduct of the course.

A detailed report including opening/closing remarks of the Course Director shall be sent to the HQrs for future reference and record soon after the culmination of the course. A certificate may be issued to participants in this effect.

12.4 GUIDELINES FOR ONE DAY SEMINAR / WORKSHOP

[Approved by the Council at its 675th Meeting held at Hyderabad during March 23-24, 2013]

The One Day Seminar / Workshop is one of the sponsored technical activities of a particular Engineering Division, under the aegis of which the activity will be organized.

12.4.1 Planning

Proposal for holding Seminar / Workshop will emanate from a Centre and shall be processed by the concerned Division Board / Chairman of the Division Board. The proposal from a Centre should be submitted to the concerned Division Board at least one month prior to the proposed dates of the Workshop. The proposal shall contain the suggested theme, brief write up on the theme, date and venue (city / town) of the Seminar / Workshop.

12.4.2 Responsibility

The primary responsibility for planning and organizing the Seminar / Workshop shall rest with the Host Centre. Implicit support of the HQrs will be available. For smoothness in organization of the event, the Host Centre shall constitute the Organizing Committee.

Organizing Committee

The Organizing Committee shall be constituted with the Chairman of the Host Centre as its Chairman and the Honorary Secretary of the Host Centre or one Corporate Member (attached to the Host Centre) as its Organizing Secretary. The Members of the Committee shall include local Corporate Members.

12.4.3 Resource Mobilization

The Organizing Committee shall plan resource mobilization and the income may comprise the following :

- Grant from the Division Board @Rs 10000/-*;
- Registration fees to be paid by delegates;
- Contributions of other organizations as Patrons, Co-sponsors, Collaborators;
- Donors or Associates.

* Approved at the 680th Meeting of the Council, held at Coorg, Karnataka on March 2014.

12.4.4 The grant will be released from the HQrs after receipt of report and photographs as per the format provided in **APPENDIX XV.**

12.4.5 The structure of the programme of One Day Workshop shall be as follows:

(i) **Inaugural Session to have**

- Welcome Address by the Chairman, Host Centre
- Address by the Chairman, Division Board (if present)
- Address on the theme of technical sessions by the Honorary Secretary / Organizing Secretary / Convenor
- Address by the Special Guests (if any)
- Inaugural Address by the Chief Guest
- Vote of thanks by the Honorary Secretary of the Centre

(ii) **Technical Session**

The Organizing Committee shall invite the renowned professionals, having expertise in the relevant field to deliver Lectures during the Technical Sessions. Apart from that, Articles, received on the theme of the Workshop, will also be presented during the Technical Sessions.

(iii) **Concluding / Valedictory Session to have**

- Welcome Address by the Chairman of the Host Centre
- Reporting of Technical Sessions
- Vote of thanks by the Organizing Secretary / Honorary Secretary

The Chairman of the Host Centre shall preside over both the Inaugural and the Concluding / Valedictory sessions.

13.0 GUIDELINES FOR INSTITUTING AWARDS AND MEMORIAL LECTURES

13.1 GUIDELINES, MODALITIES FOR INSTITUTING MEMORIAL LECTURES

(Approved by the Council at its 633rd Meeting held at Dehradun during June 25-26, 2005)

Memorial Lectures to be organized by the HQrs at National Level with the approval of the CATE / Council	1. Person in whose name the Memorial Lecture is organized should be an engineer by education and profession and must have made distinguished contribution to engineering at the National and/or the International level.
	2. Minimum endowment fund required would be Rs.10.00 lakhs. Fund to be held at the HQrs.
	3. To be routed through CATE for approval of the Council.
Memorial Lectures to be organized by Division Boards during National Conventions / All	1. Person should be an engineer by education and profession and must have made significant contribution to engineering services at least at the National level in his/her relevant field of engineering expertise.
	2. Minimum endowment fund required would be Rs.6.00 lakh.

India Seminars	Fund to be held at the HQrs
	3. The number of Memorial Lectures for delivery at the National Conventions would be maximum two per division, with each to be delivered every alternate year
	4. The recommendation from the Division Boards for establishing Memorial Lectures whether delivered at the National Convention or at other locations during All India Seminars would be routed through CATE / Council for approval.
Memorial Lectures to be organized by State Centres	1. Person should be an engineer by education and profession and must have provided distinguished engineering services at least at the state level.
	2. Minimum endowment fund required would be Rs.4.00 lakhs.
	3. This fund would be held with the State Centre.
	4. The approval of the Memorial Lecture proposal will be done by the State Centre Committee with information to the HQrs. The timing and location of the lecture would be decided by the State Committee.
Memorial Lectures to be organized by Local Centres	1. Person should be an engineer by education and profession and must have provided distinguished engineering services at least at the Local Centre level.
	2. Minimum endowment fund required Rs.2.5 lakhs.
	3. This fund would be held with the Local Centre.
	4. The approval of the Memorial Lecture proposal, its timing and location will be done by the Local Centre Committee with information to State Centre and the HQrs.

13.2 **GUIDELINES, MODALITIES FOR INSTITUTING AWARDS BY STATE AND LOCAL CENTRES OF IEI**
(Approved by the Council at its 661st Meeting held at Ranchi during September 25-26, 2010)

Award to be instituted by State Centres	1. Person in whose name the award to be instituted should be an engineer by education and profession and must have provided distinguished engineering services at least at the State Centre level.
	2. Minimum endowment fund required would be Rs.2.00 lakhs.
	3. This fund would be held with the State Centre.
	4. The approval of the Award proposal will be done by the State Centre Committee with information to the HQrs. The award should contain a plaque and citation which should be approved at the State Committee level. The award may preferably be given during the Engineers Day Celebration. The awardee should be an Engineer and preferably IEI Corporate Member. The selection of awardee is to be decided and approved at the State Centre Committee level, with information to Secretary & Director General, IEI.
Award to be instituted by Local Centres	1. Person in whose name the award to be instituted should be an engineer by education and profession and must have provided distinguished engineering services at least at the Local Centre level
	2. Minimum endowment fund required Rs. 2.00 lakhs.

	3. This fund would be held with the Local Centre
	4. Person in whose name the award to be instituted should be an engineer by education and profession and must have provided distinguished engineering services at least at the Local Centre level.
Scholarships	1. Scholarships for IEI T/ST Members can be instituted at State and Local Centres from donations/endowment fund in the name of donor. Adequate fund should be deposited by the donor for the scholarship to be funded out of interest of such donation.
	2. The selection of beneficiary should be based on merit or merit-cum-need as decided while instituting the scholarship fund.
	3. The selection of beneficiary needs to be made at Centre's Committee level with information to the Secretary and Director General.

13.3 **GUIDELINES, MODALITIES FOR INSTITUTING AWARDS BY INDIVIDUALS**

(Approved by the Council at its 668th Meeting held at Bangalore at December 18, 2011)

Awards to be instituted by Individual	1. No award should be instituted in the name of a living person and awards to be instituted by any individual should be posthumous only.
	2. Person in whose name the award to be instituted should be an engineer by qualification and by profession and also should have made substantial contribution either at the national or international level and the Award be given for the sake of inspiring the students appearing in Section A and Section B Examinations during the Convocation.
	3. Minimum endowment fund required would be Rs.5.00 lakhs
	4. This fund would be held with the IEI HQrs
	5. The Awardee should be the topper of Section B Examination in the field of Chemical Engineering considering results of both Summer and Winter Examinations
	6. The award should contain a cash Award of amount Rs 10,000/-, a gold plated silver medal 2 inches diameter and 50 gm weight and a certificate. The award may be given during the IEI Convocation and Students and Technicians Convention every year. The award should also cover the conveyance allowance for the Awardee by AC-3 tier train fare by the shortest route.

14.0 IEI CONVOCATION AND TECHNICIANS' / STIUDENTS' CONVENTION

The IEI Convocation is held once a year aiming at achievement of technical and professional growth through technical content and mutual interaction amongst the Technician / Student Members. The Convocation shall seek to achieve maximum involvement and participation of Technician / Student Members. This is the activity, which also aims at establishing liaison between

the Institution, its Technician / Student Members and the policy makers. The organization of Convocation, therefore, requires full attention of the Host Centre and an adequately long-term planning.

14.1 NOMENCLATURE

Concurrently with the IEI Convocation, the Technicians' / Students' Convention shall also be held.

The activity shall be designated in the following style:

"Ninth IEI Convocation and Technicians' / Students' Convention"

14.2 PLANNING

Proposal for holding IEI Convocation and Technicians' / Students' Convocation will emanate from a Centre and shall be finalized by the Council. The Centre desiring to hold the IEI Convocation and Technicians' / Students' Convocation shall submit the proposal to President of IEI at least ten months prior to the dates of the activity, which shall be finalized by the Council. This prestigious activity shall preferably be held in the month of October / November each year.

14.3 NODAL DATES

With the IEI Convocation and Technicians' / Students' Convention being held at the end of October / November each year, the following nodal dates are suggested :

Decision to be taken by the Council in respect of Host Centre and also the theme of Seminar	:	End of April of the year in which the activity should be held
Announcement in Technicians' Journal and publication of theme, etc	:	End of May
Printing and dispatch of Information Brochure	:	End of June
Last date for submission of articles for Seminar and Technical Session	:	Middle of July
Intimation to Chapter Members (whose articles are accepted for presentation	:	Middle of August
Registration	:	End of September

14.4 ORGANIZATION

For smooth organization of this national event, the Host Centre shall constitute an Organizing Committee with the Chairman of the Host Centre as its Chairman and one Corporate Member attached to the Host Centre as the Organizing Secretary. The members of the Committee shall include local Corporate Members. This Committee shall be responsible for detailed work related to the event. The President shall be kept informed about various details of the programme as may be finalized by the Organizing Committee from time to time.

14.5 RESOURCE MOBILIZATION

The Organizing Committee shall plan resource mobilization and the income may comprise grant from the HQrs (**APPENDIX IV**), registration fees to be paid by delegates, contribution of other organizations, charges collected from advertisers in the Souvenir published by the Host Centre.

In order to attract larger participation from all sections of Students / Technicians of the Institution, the registration fee should be kept as low as possible and preferably the fee shall be in the categories, namely, Corporate Members and Technician / Student Members of the Institution.

14.6 PROGRAMME STRUCTURE

The duration of IEI Convocation and Technicians' / Students' Convocation may be for two days and the programme shall include the following:-

14.6.1 Inaugural Session of the IEI Convocation to have

- Welcome Address by the Chairman of the Organizing Committee
- Address by President, IEI
- Exhortation by President, IEI
- Convocation Address by an Eminent Personality
- Inaugural Address by the Chief Guest
- Reports of Seminar and Technical Session by the Chairmen of AISC and AITC
- Presentation of Prizes and Trophies
- Presentation of Prizes to Authors
- Vote of thanks by Secretary and Director General, IEI

This session shall be presided over by the President of IEI in which the certificates shall also be distributed to "Graduates" (who passed the examinations held in the Winter / Summer of the preceding year.

14.6.2 Seminar / Technical Session

The Seminar shall consist of presentation of selected articles on the approved theme and the Technical Sessions shall consist of presentation of approved articles by Technician / Senior Technician and Student Members of Engineering College Students' Chapter and Polytechnic Students' Chapter on the topic of their own choice.

The sessions shall normally be presided over by the Chairman of AITC (in case of Seminar Session) and Chairman of AISC (in case of Technical Session) and there shall be a jury comprising three members to select prizes.

14.6.3 General Session

The Session shall be conducted by Secretary and Director General of IEI. The Student/Technician Members may put their questions in this session, which will

be answered by Secretary and Director General of IEI. Therefore, this session will be in the form of a question-answer mode.

14.6.4 **Valedictory Session to have:**

(a) Welcome Address by the Chairman of the Host Centre
(b) Reporting of the Technical Sessions by the respective
(c) Chairman of AITC or AISC
(d) Presentation of Prizes to Authors
(e) Vote of thanks by the Organizing Secretary / Honorary Secretary of the Host Centre

14.7 PUBLICITY

The publicity for IEI Convocation and Technicians / Students' Convocation shall primarily be made through the publication of the Institution and through all other possible means by the Host Centre.

14.8 STUDENTS' / TECHNICIANS' SEMINAR AND TECHNICAL SESSION

The Technician/Student members desirous of presenting articles shall be advised to submit the same in triplicate to the HQrs with a CD containing text, figures, tables, etc. A Scrutiny Committee shall be constituted by the Secretary and Director General. The decision of the said Committee shall be communicated well ahead of the dates of the Convention to those authors whose articles are accepted. Adequate instruction shall be communicated to authors so as to have the articles with uniformity in respect of notation, symbols, etc.

Each of the Seminar and Technical Session shall be divided into three groups, namely, (i) Senior Technicians / Technicians Group; (ii) Students of Engineering College Chapter Group; and (iii) Students of Polytechnic Chapter Group. There shall be three prizes for each group, based on the marks obtained in the preliminary scrutiny and marks obtained for presenting the articles.

There shall also be awards for Best Engineering College Students' Chapter; Second Best Engineering College Students' Chapter and Third Best Engineering College Students' Chapter and also Best Polytechnic Students' Chapter; Second Best Polytechnic Students' Chapter and Third Best Polytechnic Students' Chapter in addition to Best Technicians' Chapter, Second Best Technicians' Chapter and Third Best Technicians' Chapter on the recommendation of the empowered Sub-Committee of All India Students' Committee and All India Technicians' Committee, respectively duly approved by the President of IEI. These prizes, including those for proficiency in examination, shall be given at the Inaugural Session of the IEI Convocation.

Grant for IEI Convocation and Technicians' / Students' Convention — Rs. 4,00,000/-.

15.0 INTERNATIONAL CONGRESS / CONFERENCE / SEMINAR / WORKSHOP

15.1 For technical event such as any Congress / Conference / Seminar / Workshop to qualify as an International event, the following criteria should be met :

(i) Offer adequate scope for wide international participation

(ii) Be supported / sponsored / co-sponsored by other professional societies of standing, universities / academic institutions and R&D organizations outside the country and / or supported / funded by international organizations like UNESCO, UNDP, ADB, WFEO, WMC, *fib*, FEIAP, FEISCA, IPEA etc.

15.2 International Conferences should be proposed after detailed interaction with the concerned functionaries in government, industry and academia as also with the concerned International Professional Bodies, if any.

15.3 The proposals for International Conferences should be routed through the concerned committees of the Institution like WMC etc. and approval obtained from CATE and the Council.

15.4 The programme should be conceived well in time, at least 12 to 18 months' prior to the event, depending on the size of the event, and time for preparation.

15.5 Immediately after approval, an Organizing Committee should be constituted for acting as nucleus for all planning and implementation. The Organizing Committee should be headed by a senior person from The Institution of Engineers (India) like Past President, Vice President, Chairman of the State Centre etc. It may include heads of government departments and industry, who as individuals, can take interest and can spare time.

15.6 The Organizing Committee shall interact with the appropriate Ministry of the Central Government and obtain its concurrence to become the nodal Ministry for the event.

15.7 To assure success for the event, the organizations / sectors connected with the subject area should be identified and individuals from Government, Public Sector, Private Sector, Academia selected to act as resource persons for finances, and provide organizational and technical inputs. A National Advisory Committee should be constituted with representatives from various interest groups at senior level like Secretaries to the Government of India, Chairmen of organizations etc. A senior government functionary should be requested to act as the Chairman of the National Advisory Committee.

15.8 An International Advisory Committee may be constituted, if necessary, with participation from foreign collaborating organizations and their consent obtained before publishing their names.

15.9 A meeting of the National Advisory Committee should be convened and interest generated amongst all functionaries through members to involve them in contributing their mite in finances, technical contributions, identification of key persons, logistic arrangements and the like.

15.10 A Technical Committee should be set up with an acknowledged and respected technical professional as its leader to set in motion the technical programme.

15.11 Likewise, a Finance Committee should be set up in the early stages to take stock of the financial position, generate funds, regulate and guide the expenses with best practice of financial management.

15.12 The Organizing Committee should work out a detailed budget and orchestrate the activities in consonance with revenue inflows.

15.13 A bank account for the conference should be opened at the earliest. The signatories for the bank account should be by Organizing Secretary of the Conference and a Member of the Finance Committee of IEI stationed at the event venue of the Conference. In case no Finance Committee Member is available at the event venue, another senior Council Member can be nominated.

15.14 All payments to be received should normally be in the form of Bank Draft / Pay Order / Cheque drawn in favour of "The Institution of Engineers (India) …….. A/C …….. International Conference" and payable at the place where the bank account is maintained. All payments received through Cheques / Drafts should be immediately entered in the Cash Book and accounted for properly.

15.15 Reconciliation with the bank should be done regularly on a monthly basis and statement of reconciliation prepared and presented to Organizing Secretary. All receipts including receipt of foreign exchange should be dealt with promptitude and credited in the nominated bank account. Due receipt / acknowledgement for the money received should be given after Cheques / Drafts are credited.

15.16 Power to incur expenditure shall be exercised by Chairman, Organizing Committee and his prior approval for all expenditures is essential. However, both Organizing Secretary and / or Member, Finance Committee may be authorized to incur normal day-to-day expenditure not exceeding Rs.10,000 in each case. All expenditures should be sanctioned by the Organizing Committee. It is necessary to ensure that purchases, services and printing jobs etc. are let out, as decided by the Organizing Committee and in a transparent manner and in the best interest of IEI, in accordance with the rules of IEI.

15.17 **BILLS**

Procedures required for processing and scrutinizing the bills will be as per the extant financial rules of IEI with the following additional guidelines:

(a) No payment in excess of Rs. 2,000 be released, other than by crossed Account Payee Cheque. This can be relaxed in exceptional cases by the Chairman, Organizing Committee.

(b) Income tax should be deducted at source as per Income Tax Act, that is, Contractors etc u/s 194-C, Professionals u/s 194-J of the Income Tax Act, wherever applicable.

15.18 **CAR HIRE AND TELEPHONE / FAX**

(a) Log Book for car hire and diary for ISD / STD telephone calls and fax should be

maintained and the person using the telephone must confirm by signing at appropriate place. In case of international call, prior approval of the Organizing Secretary / Chairman should be obtained.

(b) The person using the car should sign the duty slip of car hire agencies and note the kilometer reading at the time of reporting and releasing the car.

(c) The place and purpose of visit in case of car hire should be noted on the Log Book.

(d) Requisition slips for car hire shall normally be approved by the Organizing Secretary

15.19 Temporary staff should be engaged at reasonable remuneration as decided by the Organizing Committee and the remuneration should be paid out of the conference account. However, wherever possible, such services should be outsourced.

15.20 IEI HQrs may depute its Officer / Internal Auditor, if need be, to examine the accounts and report to the Finance Committee.

(a) Accounts will be maintained broadly as per classification of account heads as per budgetary allocation. If necessary, new classification may be introduced by the Organizing Secretary depending on the nature of the expenses.

(b) Cash balance not exceeding Rs 20,000 shall be maintained by the Organizing Secretary for meeting day-to-day expenses. The limit will, however, not apply during the conference.

(c) The following subsidiary accounts will be maintained under the administrative control of the Organizing Secretary. He may, however, delegate the powers to one or more officers bearers who has requisite experience in this field :

(i) Printing and Stationery
(ii) Technical Publications and Papers
(iii) Postage and Telegram
(iv) Souvenir Kits for Delegates
(v) Consumable Stores
(vi) Fixed Assets
(vii) Transport
(viii) Travel

15.21 TA and DA to the HQrs officers and staff should be borne from the conference accounts, if such officers and staff are requisitioned for assisting / overseeing organizational matters. TA and DA to the Committee Members for attending the Committee Meetings and Conference will be borne from the conference account and such TA and DA will be as per norms and rules for TA and DA to Council Members.

15.22 (a) The Organizing Secretary will be responsible for :

Proper maintenance of Subsidiary Accounts referred to in item 20(d) Sub-Clause (i) to (viii).

(i) Safe custody of stocks in hand.
(ii) Physical verification of stock in hand / fixed assets at the time of audit.
(iii) The evaluation of technical publications and stock of paper and other items which have financial implications and are to be incorporated in the final account.
(iv) Register of registration fees received from delegates.

(b) To write off bad debts / amounts received / exemption for delegates from payment of fee etc should rest with the Organizing Committee.

15.23 Expenditure on local hospitality i.e. board, transport and accommodation etc. to invited speakers and special invitees, President, President-Elect, Past Presidents, Vice Presidents, IEI who are invited by the Organizing Committee, shall be borne out of the conference accounts.

15.24 (a) Immediately after the conference is over, the account should be prepared incorporating all receipts and expenditure as also the amounts still to be received and liabilities to be paid off. This account should be got audited by a Chartered Accountant appointed for this purpose within three months of the event.

(b) Surplus from all International Conference will be transferred to the HQrs to be credited to appropriate heads of accounts of the National Committees such as WFEO / WMC / FIB etc which organized the function and utilized for payment of foreign subscription/delegation fee, statutory international meetings etc and thereafter, the fund will be released by the Finance Committee.

(c) Audited Accounts of the Conference / Seminar shall be submitted to IEI HQrs within six months from the date of completion of the events.

15.25 Efforts should be made to obtain the pending amounts and the liabilities discharged within three months. Separate Statements, showing receipts and remaining liabilities, should be incorporated in the account. These accounts, duly audited, should be furnished to the HQrs.

15.26 A meeting of the Organizing Committee should be held to review the accounts and the outcome of the Conference. Decision should be taken on the modalities of recovering the amounts yet to be received and utilization of the surplus available, if any in consultation with the President, IEI.

15.27 The Conference must produce an end result in compiling the final recommendations to be followed up with concerned Ministries and other authorities. The same be brought to the notice of the Council through CATE.

16.0 OTHER TECHNICAL EVENTS

Besides organizing various technical discourses in diverse fields of engineering in the form of seminar / conference / workshop / round table, the IEI observes a number of days earmarked for specific purposes throughout the country. No Division sponsored activities can be organized by

clubbing with the Statutory events observed by IEI (Approved by Council at its 661st Meeting held at Ranchi during September 25-26, 2010). Followings are the details of such activities.

16.1 WORLD WATER DAY

The theme and write-up for the World Water Day which is observed on March 22 every year, are given by United Nations. CATE approved the change in nomenclature from Water Resources Day to World Water Day effective from year 2012 and the same is circulated to all Centres of IEI for observance of the day.

16.2 WORLD TELECOMMUNICATION AND INFORMATION SOCIETY DAY

The theme for the World Telecommunication and Information Society Day is obtained from International Telecommunication Union, Geneva, Switzerland and is circulated to all Centres for the observance of the day on May 17 every year.

16.3 WORLD ENVIRONMENT DAY

The theme for the World Environment Day is obtained from the HQrs of UNEP and is circulated to all Centres for the observance of the day on June 5 every year.

16.4 ENGINEERS' DAY

The Engineers' Day is celebrated by all Centres of IEI on the September 15 of every year to commemorate the birthday of Bharat Ratna Sir Mokshagundam Visvesvaraya. The Central Theme of National importance for the day is chosen by the Council of the Institution for celebration by the Centres through Lecture/s, Round Table/s Workshop/s, Seminar/s. The theme and write up on the same is prepared by the HQrs and send to all Centres of IEI before the end of June each year.

16.5 WORLD HABITAT DAY

On First Monday of October every year, this day is observed by all Centres of IEI. The theme for the World Habitat Day is obtained from UN-Habitat and circulated to all Centres for the observance of the Day.

16.6 WORLD STANDARDS DAY

On October 14 of each year, this day is observed throughout the century by IEI Centres. The BIS, Delhi provides the theme to the HQrs, which is communicated to all Centres by the Secretariat.

16.7 ENERGY CONSERVATION DAY

On December 14 of every year, this day is observed by all Centres of IEI as part of national observance of Energy Conservation week observed at various States of India starting from December 14.

17.0 PROCEDURE FOR VETTING TECHNICAL PAPER

For IEI-Springer Journals, all papers are being submitted online by the Author/s and a peer review process has been introduced through the Editorial Manager System.

Detailed procedure for vetting technical papers is given in **APPENDIX XVI.**

17.1 EDITOR-IN-CHIEF'S

With effect from 2011 the Editor-in-Chief for each series of IEI-Springer Journal were appointed.

17.2 ASSOCIATE EDITORS

Editor-in-Chief may appoint Associate Editors as and when required.

17.3 EDITOR-IN-CHIEF'S REVIEW

The Reviewers are advised to forward their evaluation reports of submitted article directly to the Editor-in-Chief / Associate Editor.

(i) The Editor-in-Chief may agree with the Reviewer's Comments and approve the paper / article

(ii) The Editor-in-Chief may also suggest revision of the paper / article with specific recommended modifications, in which case the paper / article goes back to authors for modification.

(iii) The Editor-in-Chief may reject a paper / an article, if in his opinion, it is not up to the mark for publication in the Institution's Journal.

17.4 FINAL REVIEW AND APPROVAL

The Editor-in-Chief finally reviews a paper in light of the Reports submitted by the Reviewers and finally recommends the paper/s for publication or otherwise

8.0 MAJOR DUTIES AND RESPONSIBILITIES OF TECHNICAL DEPARTMENT AT HEADQUARTERS

(a) To arrange the meetings of the Division Boards including preparation of Agenda, Minutes and to take follow-up actions;

(b) To liaise with the Editor-in-Chief and the Chairmen of the Division Board;

(c) To announce the forthcoming technical events in IEI News in several consecutive issues;

(d) To keep in touch with the Centres organizing technical events;

(e) To arrange for receiving proceedings, souvenirs, recommendations / conclusions, a complete report with photographs, etc from the organizers within two weeks after completion of technical events and publish in comprehensive form in IEI News;

(f) To arrange for the reports on National Convention using the laid down format;

(g) To submit quarterly and Annual Report on the Technical Activity of the Divisions to the CATE / Council.

19.0 PRIZES AND AWARDS

The Institution awards every year a number of prizes and awards in various categories as given below:

19.1. PRIZES FOR BEST PAPERS PUBLISHED IN IEI-SPRINGER JOURNALS

Details are given in **Appendix XVII**.

19.2. IEI INDUSTRY EXCELLENCE AWARD

The IEI Industry Excellence Award has been instituted to recognize industry leaders for their innovation, excellence in engineering operations and thereby, to lead their industry in competitive manner. The benchmarks created by the industries in India have included productivity, quality, safety and performance assurance thereby giving India the rightful place in the global markets. Realizing that such industries can provide the leadership to a large number of other industries in the country, it has been considered appropriate by the IEI Council to launch the IEI Industry Excellence Awards in the year 2008.

19.3. IEI YOUNG ENGINEERS AWARD

With a view to promote the pursuit of excellence in the field of engineering, IEI has instituted "IEI Young Engineers Award". The Award consists of Rs 10,000/- and a Certificate. The purpose of the Award is to recognize outstanding achievements/contributions made by young engineers in engineering research, excellence in technology development, technology transfer, etc. Any engineer citizen of India not older than 35 years of age as on March 31 is eligible for the Award.

19.4. NATIONAL DESIGN AND RESEARCH FORUM (NDRF) AWARDS

These awards are given on the recommendation of the Expert Selection Committee appointed every year by the NDRF of the Institution.

19.5. SAFETY AND QUALITY AWARDS

The Safety and Quality Awards have been instituted by the Safety and Quality Forum of IEI with a view to encourage professionals from manufacturing and service sectors to strive for excellence.

The Safety and Quality Awards of the Institution would help :

a. Encouraging professionals to make significant improvements in safety and quality practices for maximizing workforce and consumer satisfaction and for successfully facing competition in the global markets;

b. Recognizing the achievements of those professionals who have improved in the field extensively and thereby set an example for others;

c. Establishing guidelines and criteria to evaluate competency of professionals.

19.6. SAIL AWARDS

To mark the special occasion of the Golden Jubilee of the Institution held in February 1970, the Hindustan Steel Limited (now Steel Authority of India Limited), Ranchi, donated two gold medals, known as the "Dr M Visvesvaraya Memorial Gold Medal" and the "Hindustan Steel Gold Medal", to The Institution of Engineers (India) on a permanent basis. After the merger of the Hindustan Steel Limited with the Steel Authority of India Limited, the above awards are now being called "SAIL Award and Dr M Visvesvaraya Award". Each of these awards is presented during the Indian Engineering Congress held annually for the best paper invited and received by the Institution on subjects each year by Steel Authority of India Limited through the Institution publications.

19.7. COAL INDIA (J G KUMARAMANGALAM MEMORIAL) AWARD

This prize was instituted in 1990 by Coal India Limited in the memory of J G Kumaramangalam and is given for the best paper invited and received by the Institution on the subject announced each year through the Institution publications. Though the subject broadly pertains to the mining industry, the exact scope of' the subject would be decided jointly by the representatives of the Coal India Limited and the Institution for year to year.

19.8. H NANDY MEMORIAL AWARD

This prize was instituted in the year 2010 by the Institution for being the topper in Section B Examination in Materials and Metallurgical Engineering discipline of the Institution considering both Summer and Winter examinations.

Institution also awards prizes to Technician and Student Members on the basis of their proficiency in the Institution Examination each year. These are distributed at the Annual Convocation and Students' / Technicians' Convocation (for details, see **APPENDIX XVIII**).

APPENDIX I

RECOMMENDED SUB-GROUPS IN ENGINEERING DIVISIONS

Engineering Divisions	**Sub-Groups**
Architectural	Nil
Agriculture	• Surface Irrigation • Integrated Watershed Development • Percolation Tank • Ground Water Recharge • Sprinkler and Micro Irrigation • Well Technology • Irrigation Pumps • Farm Power and Machineries • Processing of Food Products • Post-harvest Technology and Agriculture Process Engineering
Aerospace	• Avionics • Space Engineering • Aircraft Equipments • Aerodynamics • Propulsion
Chemical	Nil
Computer	• Algorithms, Programming Paradigms and Compilers, Operating Systems, Performance Evaluation • Knowledge Engineering, Computer Communication Network, Data Base System • Signal Processing, Image Processing
Civil	• Construction Planning and Management, Earthquake Engineering • Geo-technical Engineering • Hydrology and Hydraulic Engineering • Ocean Engineering • Structural Engineering, Traffic and Highway • Green Building • Energy Efficient Building • Town Planning • Infrastructure Development
Electrical	• Electrical Engineering Materials, Electrical Machinery and Power Apparatus, Energy Studies • High Voltage Engineering, Illumination Engineering, Instrumentation and Control • Legal, Commercial and Safety Aspects of Electrical Engineering Practice, Power Electronics and Drives, Power System Performance
Environmental	• Environment Impact of Agricultural Engineering Development Activities • Water Supply Engineering • Sewage Treatment, Disposal and Solid Waste Management • Industrial Waste Treatment, Rural Water Supply and Sanitation and Hygiene • Irrigation, Drainage, Water Management, Soil Conservation Practices

Electronics and Telecommunication	• Communication Engineering, Electromagnetics, Control Systems and Automation • Circuit and Systems, Electronic Devices and Solid State, Radar and Microwave Engineering • Testing, Evaluation, Quality Control and Measurement
Mechanical	• Engineering Design including Vibration and Noise, Thermal Engineering, Cryogenics, Heat Transfer • Non-conventional and Renewable Energy, Fluid Mechanics and Machinery • Optimisation, Simulation and Modelling, Dynamic Systems, Measurement and Control • Reliability, Availability and Maintainability, Tribology including Bearings • Internet Aided Design, Soft Computing, Fuzzy Logic, Neural Network, Virtual Manufacturing Environments and Systems • Artificial Intelligence, Knowledge Intensive CAD / CAM, Computer Aided Product Development, PDM / Enterprise Information Management, Computing Technologies • Bioengineering, Perception Based Engineering, Smart Technology, Mechatronics, Micro Electronics in Mechanical System • Energy Efficiency and Energy Conservation, Power Plant Engineering
Marine	Nil
Metallurgical and Materials	• Processing, Structure and Properties of Metal and Materials • Nanomaterials Synthesis, Characterization and Applications • Smart Materials • Composite Materials and Biomaterials • Materials Modeling and Simulation
Mining	• Wave Processes in Rock Mass and Flow of Hydrocarbons in Mining Blocks, Agronomics and Health Impacts on Miners • Ventilation Systems in Underground Working Places, Environmental Modeling in Open Cast Mines • Automation in underground Mining Systems and Mineral Dressing
Production	• Automation, Control and Robotics, Casting and Welding • Human Engineering and Ergonomics • Machine Tools and Tool Design, Machining Process and Metrology, Metal Forming Processes • Industrial Engineering, Production Management and Operations Research
Textile	• Fibre Science and Technology, Chemical Processing and Finishing • Yarn Manufacture including Core Yarns, Covered Yarns, Ply Yarns, Fabric Manufacture including Non-woven and Knitted Fabrics • Hosiery and Structural Mechanics of Fabrics, Textile Machine Design, Industrial Engineering, Aerodynamics, Propulsion

APPENDIX II

SCHEDULE OF PUBLICATION
(Approved by the at its 680th Meeting held at Coorg, Karnataka, during March 22-23, 2014)

Series of IEI-Springer Journals	Number of Issues per Year	Month of Publication			
		Issue 1	Issue 2	Issue 3	Issue 4
Series 'A' (Civil, Architectural, Environmental and Agricultural Engineering)	4	January-March	April-June	July-September	October-December
Series 'B' (Electrical, Electronics and Telecommunication and Computer Engineering)	4	January-March	April-June	July-September	October-December
Series 'C' (Mechanical, Aerospace, Production and Marine Engineering	4	January-March	April-June	July-September	October-December
Series 'D' (Metallurgical and Materials and Mining Engineering)	2	January-June	July-December	—	—
Series 'E' (Chemical and Textile Engineering)	2	January-June	July-December	—	—

APPENDIX III

GUIDELINES FOR THE CORE GROUP OF THE ALL INDIA SEMINARS AND NATIONAL CONVENTIONS
(Approved by the Council at its 676th Meeting held at Ranchi during June 29-30, 2013)

1.0 **Formation of the Core Group**

Each Divisional Board will form a Core Group (Expert Committee) consisting of eminent engineering personalities from all over the country and abroad in that particular discipline, who may or may not be Member of IEI.

2.0 **Planning**

The number of experts may be limited to five for larger Divisional Boards (CVDB, ELDB and MCDB) and three for smaller Divisional Boards. Chairmen of Divisional Boards will approach the experts to obtain their consent in this regard.

The Divisional Board will prepare a list of persons / organizations whom recommendations will be forwarded.

3.0 **Tenure of the Core Group**

The tenure of the Core Group will be for at least two years.

3.0 **Responsibility**

3.1 On completion of National Conventions / All India Seminars, Host Centre will forward the recommendations arising out of the all India activities along with five copies of proceedings, report and photographs to IEI HQrs. Those recommendations will be discussed in the Divisional Board Meetings and after necessary discussion / amendment, same will be sent to the Core Group for their views/comments. After receiving comments from Core Group the same will be finalized by the Chairman of Divisional Board and those will be sent to the persons / organizations (as recommended by Divisional Board) for their perusal and necessary action.

3.2 Recommendations as approved by the Division Boards will be published in IEI News and IEI website for wider visibility.

3.3 Divisional Boards will place those recommendations in CATE Meeting for noting.

APPENDIX IV

FINANCIAL NORMS FOR ALLOCATION OF FUNDS
(Ref Clause No. 22.0 of Financial Norms and Rules of IEI dated August 15, 2013)

GRANTS FOR TECHNICAL ACTIVITIES

The Division Boards are given a grant for

(a) Technical Activities (All India Seminar / Workshop) based on its Membership Strength as follows :

Corporate Membership Strength ★	Grant
Up to 1000	Rs 100,000/-
1001 to 2000	Rs 1,15,000/-
2001 to 5000	Rs 1,25,000/-
5001 to 10 000	Rs 1,40,000/-
10 001 and above	Rs 1,50,000/-

★ *as on March 31 of the preceding year*

N.B.: However, the grant for Division Board sponsored Two-Day activity will not exceed Rs.30,000/- and for One Day activity Rs 10000/-.

(b) National Convention

The grant for the National Convention is Rs 1,50,000/- for each Division. Out of this grant, a sum of Rs 1,05,000/- shall be given as the grant to the Centre hosting the National Convention and the balance Rs 45,000/- shall be at the discretion of the Chairman of the Division Board for meeting such expenses, connected with the National Convention, as are found to be necessary.

The grant shall be released in two installments to the Host Centre as follows: Rs 55,000/- on receipt of printed information brochure and Rs 50,000/- at the time of the Convention. The Chairman's Discretionary Fund amounting to Rs 45,000/- will be released to the Host Centre after completion of the Convention and after deduction of the expenses incurred by the HQrs for the Convention (e.g. preparation of plaques for Speaker of Memorial Lecture and Eminent Engineers etc) and conformation of necessary formalities.

No part of this grant shall be used for travelling.

GRANT FOR INDIAN ENGINEERING CONGRESS TO HOST CENTRE : Rs 16,00,000/-

GRANT FOR IEI CONVOCATION AND TECHNICIANS' / STUDENTS' CONVOCATION TO HOST CENTRE : Rs.4,00,000/-

The Council may revise the quantum of above grants time-to-time.

APPENDIX V

TECHNICAL ACTIVITY REPORT FORMAT

Table : A

NAME OF THE CENTRE		
REPORT FOR QUARTER NO.	1 (Apr-Jun) / 2 (Jul-Sep) / 3 (Oct-Dec) / 4 (Jar-Mar)	(Strike out / Delete which is not applicable)
YEAR :	20…….. - 20…….	

Table : B Quantitative Summary of Activities of Centre

		Approved by Divisional Board / CATE		
Events	Statutory Days	National Convention	All India Seminars	One Day Workshop / Seminar
Numbers				
Attendance				

Events	Local Seminar	Lecture / Paper Meeting under Divisions	Technical Visits	Films Show	International Seminar	Indian Engineering Congress / Council Meeting
Numbers						
Attendance						

TECHNICAL PROGRAMMES

Table : C Details of Observation of Statutory Days

Day	Date (dd.mm.yy)	Speakers	Number of Corporate Participants	Number of Non-Corporate Participants	Associate with any Forum
World Water Day (22nd March)					
World Telecommunication and Information Society Day (17th May)					
World Environment Day (5th June)					
Engineers' Day (15th September)					
World Standards Day (14th October)					
World Habitat Day (1st Monday of October)					
Energy Conservation Day (14th December)					

Table : D Details of Technical Activities Approved by Divisional Board / CATE

Type of Activity @		Date (dd.mm.yy)	Events	Division #	Speakers	Number of Corporate Participants	Number of Non-Corporate Participants	Associate with any Forum

@ : *(All India Seminar : AS; National Convention : NC; One Day Workshop / Seminar : OS)*

: *(Agricultural Engg.: AGDB; Architectural Engg.: ARDB; Aerospace Engg.: ASDB; Chemical Engg.: CHDB; Civil Engg.: CVDB; Computer Engg.: CPDB; Electrical Engg.: ELDB; Environmental Engg.: ENDB; Electronics and Telecommunication Engg.: ETDB; Interdisciplinary: ICC; Mechanical Engg.: MCDB; Marine Engg.: MRDB; Metallurgical and Materials Engg.: MMDB; Mining Engg.: MNDB; Production Engg.: PRDB; Textile Engg.: TXDB)*

Table : E Details of other Technical Activities (other than approved by Division Board / CATE)

Type of Activity $		Date (dd.mm.yy)	Events	Division #	Speakers	Number of Corporate Participants	Number of Non-Corporate Participants	Associate with any Forum

$ **:** *(Lecture, Paper Meeting / Local Seminar : LS; Films Show : FS; Technical Visits : TV)*

: *(Agricultural Engg.: AGDB; Architectural Engg.: ARDB; Aerospace Engg.: ASDB; Chemical Engg.: CHDB; Civil Engg.: CVDB; Computer Engg.: CPDB; Electrical Engg.: ELDB; Environmental Engg.: ENDB; Electronics and Telecommunication Engg.: ETDB; Interdisciplinary: ICC; Mechanical Engg.: MCDB; Marine Engg.: MRDB; Metallurgical and Materials Engg.: MMDB; Mining Engg.: MNDB; Production Engg.: PRDB; Textile Engg.: TXDB)*

Table : F Organization of Programmes in National Languages, if any

Type of Activity $		Date (dd.mm.yy)	Events	Division #	Speakers	Number of Corporate Participants	Number of Non-Corporate Participants	Associate with any Forum

$: *(Lecture, Paper Meeting / Local Seminar: LS; Films Show: FS; Technical Visits: TV)*

: *(Agricultural Engg: AGDB; Architectural Engg: ARDB; Aerospace Engg: ASDB; Chemical Engg.: CHDB; Civil Engg: CVDB; Computer Engg.: CPDB; Electrical Engg: ELDB; Environmental Engg.: ENDB; Electronics and Telecommunication Engg.: ETDB; Interdisciplinary: ICC; Mechanical Engg: MCDB; Marine Engg.: MRDB; Metallurgical and Materials Engg.: MMDB; Mining Engg: MNDB; Production Engg.: PRDB; Textile Engg.: TXDB)*

PUBLICATION AND LIBRARY

Table : G Details of Newsletters and other Publications Published during the Report Period

	Numbers	Subject, (If Applicable)	Dates
Newsletter			
Publications			

Table : H Library

Events	Total as on First Day of Quarter	Addition of the Quarter	Total as on Last Day of Quarter	Grant Received	Amount Spent
Books					
Periodicals					
Borrower Cards Issued					
Number of Visitors					

PUBLICITY AND PUBLIC RELATIONS

Table : I Details of Press Coverage and Release and PR Activities

Date (dd.mm.yy)	Newspaper	Item	Remarks

Table : J List of Dignitaries visited the Institution

Date (dd.mm.yy)	Event	Dignitary	Designation	Organization

Table : K IEI PR / Information Counter Opened

Date (dd.mm.yy)	Event	Location	Number of Visitors

TECHNICIAN CHAPTER

Table : L Technicians' Chapter

Number of Technicians' Chapters attached to the Centre :	

Summary of Activities of Technicians' Chapter for the Period

Events	Common Meeting	Lecture, Paper Meeting	Film	Visits	Seminar / Symposia	Reception	Short Term / Refresher Courses
Numbers							
Attendance							

Table : M Students' Chapter

Number of Students' Chapters attached to the Centre:	

Summary of Activities of Students' Chapter for the Period

Events	Common Meeting	Lecture, Paper Meeting	Film	Visits	Seminar / Symposia	Reception	Short Term / Refresher Courses
Numbers							
Attendance							

Table : N Details of Interaction with Engineering College Students' Chapter / Polytechnic Students' Chapter

MEMBERSHIP

Table : O Membership Growth

As on (dd.mm.yy)	Institutional Member	Donor Member	Corporate Members (AM / M / F)	Senior Technician	Technician Members	Total	Quarterly Growth (%)

Table : P Change of Address Reported

Name	Membership No.	Reporting Date (dd.mm.yy)

Table : Q List of Expired Members Reported

Name	Membership No.	Date of Expiry (dd.mm.yy)

APPENDIX VI

MEMORIAL LECTURES AT INDIAN ENGINEERING CONGRESS

The Institution has founded the following Memorial Lectures, which are annually organized during the Indian Engineering Congress

- Sir Mokshagundam Visvesvaraya Memorial Lecture
- Sir R N Mookerjee Memorial Lecture
- Dr A N Khosla Memorial Lecture
- Nidhu Bhushan Memorial Lecture
- Bhaikaka Memorial Lecture
- Dr Amitabha Bhattacharyya Memorial Lecture
- Prof C S Jha Memorial Lecture

SIR MOKSHAGUNDAM VISVESVARAYA MEMORIAL LECTURE

Sir Moskhagundam Visvesvaraya Memorial Lecture was founded by the Maharastra State Centre of the Institution in 1957-58 and the first few lectures were delivered in Bombay. Later, the lecture was transferred to the HQrs of The Institution of Engineering (India) in 1960, to be delivered during the Annual Convocation of the Institution, which was subsequently redesignated as the Indian Engineering Congress.

Born in 1861 at Chikkabalarpur in former Mysore State, Sir Moskhagundam took the B A degree from Madras University in 1880 and received engineering education at the then College of Science, Pune. Early in 1884, he was appointed as an Assistant Engineer in the Bombay PWD. In 1894, he was called upon to undertake the execution of the water supply and drainage of Sukkur in Sind (now in Pakistan). The construction of another waterworks scheme for Surat City followed. In 1899, he was placed in charge of Poona Irrigation District. The Indian Irrigation Commission of 1901-1903 appointed him to tour the country and advise the Government of India on measures to implement and extend schemes of cultivation by irrigation. He also designed, patented and installed a system of automatic gates in 1903 to raise the storage level of the lake at Khadakvasla permanently without raising the dam height and thus combat the insufficiency of the lake as a source of supply to meet the needs of the Mutha Canal and the water supply requirement of Poona City. In 1906, he was deputed to Aden to prepare a proposal for sanitation, water supply and roads. After 28 years of service, he took voluntary and premature retirement in 1990.

In 1909 at the pressing invitation of the *Maharaja* of Mysore, he accepted the services in Mysore State as Chief Engineer. His scheme for the Mysore Iron and Wood Distillation Works, Bhadravati using wood charcoal for reduction of iron ore received shape in May 1918. In the words of Gandhiji, "the Krishnarajasagara alone which is one of the largest of its kind in the world would perpetuate the name of Sir Visvevaraya". At the advance age, he prepared a flood control scheme for Orissa and was called upon to advise on the Tungabhadra Project. One of his last assignments was the selection of suitable site for the rail-cum-road bridge across the Gange in Bihar (the Mokameh Bridge) opened on May 01, 1959.

He received the title of CIE in 1911 of KCIE in 1915 and Bharat Ratna in 1955. He was honoured by a number of universities and he was a recipient of the Durga Prasad Khaitan Memorial Gold Medal awarded by the Royal Asiatic Society, Calcutta. He had the distinction of being the Honorary Life Member of the Institution, Honorary Member of the Indian Science Congress Association and other reputed learned associations. He died in 1962 at the age of 101 years.

To perpetuate his memory, The Institution of Engineers (India) is also observing September 15 each year, his birthday, as Engineers' Day to inspire the members of the engineering community to his ideals.

SIR R N MOOKERJEE MEMORIAL LECTURE

The Council of The Institution of Engineers (India) decided to institution an Annual Lecture in the name of Sir Rajendra Nath Mookerjee who was the first Indian President of the Institution to commemorate his contributions to the nation as an engineer and is delivered at the Annual Convention of the Institution, redesignated as Indian Engineering Congress. The first lecture was delivered at the Diamond Jubilee of the Institution in 1980.

Sir Rajendra Nath Mookerjee had the vision of an engineer and the comprehension of an intellectual. Born on June 23, 1854, he rose on the Indian scene in the 19th century and continued to serve the engineering profession and the country until the thirties of the 20th century. He died on May 15, 1936. The life story of Sir Rajendra Nath Mookerjee is the story of a great businessman, equally great of heart as of head, generous of instinct and charitable of soul, who brought glory to everything he touched.
Born in a typical middle-class family, Sir Rajendra Nath Mookerjee lost his father when he was six. Having matriculated from the London Missionary Society's Institution of Calcutta, he joined the engineering department of Presidency College, Calcutta. The satisfactory execution of the construction of Palta Water Works for the city of Calcutta gave him the confidence and experience that enable this self-made man in later life, to build an industrial colossus and a trading conglomerate. Sir Ranjendra Nath Mookerjee was the President of Science Congress in 1921 and in 1931. The Calcutta University conferred on him the honorary degree of Doctor of Science. He was the first President of The Institution of Engineers (India) during the session 1920-1921. He was knighted after his successful construction of the Victoria Memorial Building at Calcutta.

An abiding and deep interest of Sir Rajendra Nath Mookerjee in all kinds of social welfare work brought into being and sustained many a charitable institutions. Essentially a man of science, Sir Rajendra Nath practiced technology for the development of his country.

DR A N KHOSLA MEMORIAL LECTURE

To perpetuate the memory of Dr Ajudhia Nath Khosla, one of the most distinguished engineer-administrators of the country, this lecture was instituted and the first lecture was delivered at the Second Indian Engineering Congress held in 1988. He was President of The Institution of Engineers (India) for 1948-49 and 1949-50.

Born in 1892 at Jallunder, Dr Khosla graduated from Dayanand Anglo-Vedic College, Lahore in 1912. His first assignment was the survey and investigation connected with the Bhakra Dam Project. The Bhakra Dam has been built on the very axis line marked by him in 1917. During his brief stint with the Mesopotamia Expeditionary Force in Iraq as a Commissioned Officer (1918-20), he made his important contribution to engineering by the invention of Khosla Disc for precision levelling across rivers and wide valleys. During 1921-26, he evolved and introduced precast concrete units for construction of barrages and later was responsible for re-modelling of the Marala headworks and the Upper Chenab Canal works. During this period he also carried out intensive research on the flow of water through subsoil in relation to stability of hydraulic structures. These researches culminated in 1936 in the publication of his treatise on 'Design of Weirs on Permeable Foundations'.

In 1943, he was appointed Chief Engineer and Secretary to the Government of Punjab followed by appointment as Consulting Engineer to the Government of India and the first Chairman of Central Waterways, Irrigation and Navigation Commission and also the Additional Secretary to the Government of India in the Ministry of Works, Mines and Power. He developed the Poona Research Station at Khadakvasla into the Central Water and Power Research Station. He retired from this post in 1953.

Dr Khosla initiated investigation of the water and power potential of the river valleys as a whole and several individual projects, like the Bhakra, Chambal, Damodar Valley, Hirakud, Kosi, Narmada and Tapti. Special mention is necessary of the Hirakud Project on the Mahanadi river, which he conceived in 1945 soon after assuming charges as Chairman, Central Waterways, Irrigation and Navigation Commission. The Mahanadi Valley Project at Hirkud was completed in early 1957 — a record time of 12 years between conception and completion of a project of this magnitude. Dr Khosla thus may well be called 'the father of the river valley projects in India.

In 1953-54 as Special Secretary to the Government of India, he led the Indian delegation to the United Nations for the Indus Water dispute with Pakisthan. These negotiations led to the World Bank proposals, which later formed the basis of the Water Treaty between India and Pakistan. He was a member of the *Rajya Sabha* from April 1958 to October 1959 and a member of the Planning Commission in 1959. In 1962, he was appointed the Governor of Orissa. This appointment was a historic event for the engineers of this country.

NIDHU BHUSHAN MEMORIAL LECTURE

This lecture was instituted in 1966 by the illustrious metallurgist-philosopher Late Prof Guru Prasad Chatterjee in memory of his father Late Nidhu Bhushan Chatterjee. In Nidhu Bhushan, we find a man who, without being an engineer in the conventional sense, had the urge to serve mankind through his knowledge of science coupled with great inspiration derived from his knowledge of metaphysics. Although he got admission to Bengal Engineering College through a stiff competitive examination, he could not complete his studies on pecuniary ground. He wanted to be an engineer since he believed that one with love for scientific studies should alone become an engineer who has better opportunities to prepare himself for better service to his fellow beings.

With strong determination, Nidhu Bhushan, a science graduate, could raise himself to the position of an Inspecting Accountant in the Finance Division of Central PWD. He continued to serve the society never caring for name or fame. Nidhu Bhushan was a firm believer in the fact that only fundamental discipline in the life can help man to set around from within to face life without fear or frustration.

BHAIKAKA MEMORIAL LECTURE

Taking into consideration the unique contribution of Late Bhailal Bhai Patel, popularly known as Bhaikaka, towards engineering, particularly rural engineering in Gujarat, the Council of the Institution decided to institute an Annual Lecture in his memory. The first lecture was delivered at the 56th Annual Convention held in 1976.

Shri Bhailal Bhai Patel was born at Sersa, Gujarat, in 1880. He saw the famine of 1900 and his heart was filled with grief at the sight of abject poverty, widespread hunger and stark ignorance of people of the ways to mitigate the crisis. His intense desire to remove poverty and ignorance of people arose out of the sad memories of the famine and was the source of inspiration to him in the creation of Vallabh Vidyanagar.

Shri Bhailal Bhai Patel went to Poona in 1908 for engineering studies and took the LCE diploma in 1911. After working for a short period in the then Baroda State, he joined the Public Works Department of the Bombay Presidency. After working for about 12 years in Maharashtra, he was appointed Engineer in the Canal Section of the Sukkur Barrage Plan. An efficient and adventurous young man, he had several opportunities to show his originally of ideas and prowess. He became Executive Engineer of the project in 1936. The successful completion of the Sukkur Barrage Canal brought him an invitation from the Government of Afghanistan to work as Engineering Adviser. However, Sardar Vallabh Patel insisted his shouldering the responsibility as Chief Engineer of Ahmedabad Municipality and he accepted the post.

During 1942, he resigned from the job of the Ahmedabad Municipality and came to Anand to put into action his plans for education and village uplift and to dedicated the rest of his life to these goals. He became President of Charter Education Society, Anand — an ideal educational institution established by late Motibhai Amin. The Charter Vidyamandal and Charter Cramoddher Sehakeri Mandal Ltd were established in 1945. After many years of hard work, he could established Sardar Vallah Bhai Vidyapeeth in 1955. As the first Vice-Chancellor of the University, Bhaikaka managed its affairs with least possible expenditure and laid a strong foundation of the Vidyapeeth. Bhaikaka breathed his last in 1970. A man of vision and devoted service, Bhaikaka organized many educational institutions and administered them ably and honestly.

DR AMITABHA BHATTACHARYYA MEMORIAL LECTURE

Prof (Dr) Amitabha Bhattacharyya, President of The Institution of Engineers (India) during 1976-78, occupied the centre stage in the affairs of the Institution over two decades. A many-splendoured personality, Prof (Dr) Bhattacharyya's untimely death in June 1992 created a void which would take years to fill in. In grateful appreciation of the monumental work done towards furtherance of the cause of the Institution, the National Council, at their 563th meeting held at Hyderabad in July 1992, resolved to institute this Lecture to perpetuate his hallowed memory.

Prof (Dr) Amitabha Bhattacharyya, born on November 12, 1931, was a distinguished mechanical engineer and an eminent educationist and an acknowledged authority in the fields of production engineering, metal cutting and machine tools and had been honoured nationally and internationally for his outstanding contributions to the cause of engineering and humanitarian services.

He was a staunch advocate for the development of indigenous technology for the welfare of the common people. A persuasive teacher and eloquent speaker, he had travelled widely on many professional and academic assignments. An active and constructive social worker, he identified himself with the aims and aspirations of numerous social and cultural organizations and served them with great distinction.

As an ardent advocate for advancement of engineering, Prof (Dr) Bhattacharyya served its cause through various organs and activities of The Institution of Engineers (India) for three decades. During his Presidentship, the Institution's activities received an impetus and diversified its field of interest in many areas including rural development.

PROF C S JHA MEMORIAL LECTURE

Born on the July 1, 1934 and educated at Patna university (B.Sc. Honours in Physics), Indian Institute of Science, Bangalore (D.Sc in Electrical Technology), Heriot-Watt College, Edinburgh, UK (FH-WC) and Bristol University, UK (Ph.D. in Electrical Engineering), Dr Jha started his professional career as a Design and Development Engineer at the English Electric Company, Broadford (UK) and after a two year spell (1955-57) shifted to academic life as a Lecturer in Electrical Engineering at the University of Bristol (1958-61). He returned to India in 1961 to accept a Readership at the University of Roorkee and a year later joined the Indian Institute of Technology, Delhi where he rose from an Assistant Professorship in 1962 to an Associate Professorship in 1963, a Professorship in 1964 and a Senior Professorship in 1969. He remained on the professorial staff of IIT Delhi till his retirement in June 1994. During his long academic career, he occupied several senior academic and administrative positions becoming Head of Department (1964-67) and Dean of Engineering, IIT Delhi (1966-69), Director of IIT Kharagpur (1974-78), Education Adviser (Technical) to the Government of India (1979-84) and the Vice Chancellor of the Banaras Hindu University (1991-93). On retirement from IIT Delhi in 1994, Prof Jha was appointed Chairman of the Recruitment and Assessment Centre of the Defence Research and Development Organization on a three year contract (1994-97) and later became Honorary Chairman of the Governing Council of the DOEACC Society under Ministry of Information Technology (1997-2001).

Late Prof Jha had several short and long term international assignments, He held Visiting Professorship at the Imperial College, London (1968-69), at the Technische Hochschule, Aachen (Germany) (1969) and at the Pennsylvania State University, USA (1985-87). He gave short term consultancy to UNESO in 1986 and again in 1988 in the preparation of the Draft Convention on Vocational and Technical Education and for advising Lagos and Ondo State Universities in Nigeria on the organization of their Engineering Faculty (1986). He had also been consultant to AIT, Bangkok, EdCIL, Asian Development Bank, African Development bank, World Bank and Swiss Development Co-operation on different issues of Science and Technology Planning, institutional development and curricular reforms.

Late Prof Jha had been a member of several National and International Policy making committees and had contributed significantly to the planning and management of science and Technology Education. Some of the important membership assignments were National Committee on Science and Technology (NCST) (1975-76). Review Committee on TTTIs (1975-76), High Power Committee to review Post Graduate education in Engineering (1978), Science and Engineering Research Council of DST (1980-84), Chairman AICTE Board of Post graduate Education (1990-93), High Power Swaminadhan Committee to consider

resource mobilization in Technical Education (1993), High power Punnaiya Committee for financing Central Universities (1992-93), UNESCO Working Group on Continuing Education of Engineers (1973-88). Boarding Trustees AIT, Bangkok (1974-86) and International review Team for Colombo Planning Staff College for Technician Education (1983-84).

Late Prof had been a dedicated teacher and researcher and had introduced several innovations in his classroom and laboratory instruction. He has worked consistently to help his students develop creativity and problem solving skills, acquire communication ability and an awareness of quality, safety and reliability standards in their discipline, and retained an attitude for lifelong learning. He had more than 50 research publications in National and International Journals of repute on Electrical Machine Theory and Design and on Power Electronics applications and about 60 papers in National / International Conference on various aspects of Science and Engineering Education.

Late Prof. Jha had been very actively involved in the policy formulations of the Institution of Engineers, India. Since his election as a Fellow in the mid seventies, he had been a member of the Council and of CATE for most of the time except during his absences abroad. He was instrumental in initiating the Annual Engineering Congress and Annual Divisional Conventions concept, thorough revision of the AMIE syllabi in the eighties, initiating the establishment of ESCI, launching and running the mouthpiece journal Technorama for five years, formulation and presentation of Pay revision of engineers to the Fifth Pay Commission, preparation of a Perspective Plan for the Institution, conceptualizing the work of R&D Forum, preparation of the constitution of ESCI, drafting the Engineer's Bill and the documents for membership of EMF. He had been Chairman of the Delhi State Centre and of various Boards and committees of the Council from time to time including Electrical engineering Division Board and CATE. He had contributed numerous policy papers for the consideration of CATE / Council from time to time.

APPENDIX VII

SEATING PLANS

1. **INDIAN ENGINEERING CONGRESS**

A. **Inaugural Session of the Congress★**

1	2	3	4	5	6	7	8	9
Secretary & Director General, IEI	Chairman, Host Centre	Guestof Honour	President Elect, IEI	Chief Guest of the Session	President in Chair, IEI	Special Guest	Chairman, Organizing Committee	Honorary Secretary, Host Centre

★*The above arrangement is subject to change depending upon the protocol of dignitaries*

B. **Inauguration of Congress Seminar**

1	2	3	4	5	6	7
Convenor, Technical Committee	Chairman, Technical Committee	President, IEI	Chief Guest	Chairman, Organizing Committee	Secretary and Director General, IEI	Organizing Secretary

C. **Memorial Lecture**

1	2	3
Memorial Lecture Speaker	Chairman of the Session	Secretary and Director General, IEI

D. **Glimpses of Engineering Personality**

1	2	3	4	5	6
Personality	Personality	President	Personality	Personality	Secretary and Director General, IEI

E. **Concluding Session of the Congress Seminar**

1	2	3	4	5	6	7
Rapporteur	Rapporteur	Rapporteur	Chairman, Technical Committee	Rapporteur	Rapporteur	Convenor, Technical Committee

F. **Valedictory Session of the Congress**

1	2	3	4	5	6	7	8
Organizing Secretary	Past President, IEI	Immediate Past President, IEI	Chairman, Organizing Committee	President, IEI	Chairman, Host Centre	Past President, Host Centre	Honorary Secretary, Host Centre

2. **NATIONAL CONVENTION**

A. **Inaugural Session**

1	2	3	4	5	6	7
Organizing Secretary	Chairman, Host Centre	Chairman, Division Board	President, IEI	Chief Guest	Convenor, Technical Committee	Honorary Secretary, Host Centre

B. **Valedictory Session**

1	2	3	4	5	6
Organizing Secretary	Chairman, Host Centre	Chairman, Technical Committee	Chairman, Division Board	Convenor, Technical Committee	Honorary Secretary, Host Centre

3. **IEI CONVOCATION AND TECHNICIANS' / STUDENTS' CONVENTION**

Convocation and Inaugural of Convention

1	2	3	4	5	6	7	8	9	10
Organizing Secretary	Chairman, Organizing Committee	Chairman, AITC	Chief Guest	President, IEI	Speaker	Chairman, AISC	Chairman, Host Centre	Chairman, Organizing Committee	Secretary and Director General, IEI

4. **INTERNATIONAL SEMINAR / CONFERENCE**

Inaugural Session

1	2	3	4	5	6
Chairman, IAC	Chairman, Organizing Committee	Chief Guest	President, IEI	Chairman, National Committee	Organizing Secretary

APPENDIX VIII

FORMAT OF INVITATION CARDS FOR INDIAN ENGINEERING CONGRESS / NATIONAL CONVENTION OF ENGINEERING DIVISIONS / IEI CONVOCATION AND TECHNICIANS' / STUDENTS' CONVENTION

A. **INAUGURAL SESSION OF THE INDIAN ENGINEERING CONGRESS / IEI CONVOCATION AND TECHNICIANS' / STUDENTS' CONVENTION**

The President and the Members of the Council of The Institution of Engineers (India) request the pleasure of your company at the Inaugural Session of Indian Engineering Congress/IEI Convocation and Technicians' / Students' Convention at …… (venue) at …… am / pm on …….. (date). …… has kindly consented to be the Chief Guest and to deliver the Inaugural Address of the Congress Convocation Address.

RSVP
……

B. **INAUGURATION OF INDIAN ENGINEERING CONGRESS SEMINAR**

The President and the Members of the Council of The Institution of Engineers (India) request the pleasure of your company at the Inauguration of the Seminar on "……" being held during the Indian Engineering Congress at …… (venue) at …….. am / pm on …….. (date). …….. has kindly consented to be the Chief Guest and to Inaugurate the Congress Seminar.

RSVP
……

C. **NATIONAL CONVENTION**

Inaugural Session

The Chairman and the Members of …… Engineering Division Board and the Chairman and the Members of the Committee of the …….. Centre of The Institution of Engineers (India) request the pleasure of your company at the Inaugural Session of the …… National Convention of …….. Engineers at …… (venue) at …….. am / pm on …….. (date). …… has kindly consented to be the Chief Guest and to inaugurate the …….. National Convention of …….. Engineers.

RSVP
……

D. **INTERNATIONAL CONFERENCE / SEMINAR**

Inaugural Session

The Chairman and the Members of the Organizing Committee of the International Conference / Seminar on "……" request the pleasure of your company at the Inauguration of the International Conference / Seminar …… (venue) at …….. am / pm on …….. (date). …… has kindly consented to be the Chief Guest and to inaugurate the above-mentioned International Seminar.

RSVP
……

APPENDIX IX

MEMORIAL LECTURES AT NATIONAL CONVENTIONS

AG	Rathindranath Tagore Memorial Lecture	
AR	T S Narayana Rao Memorial Lecture	
AS	Dr Vikram Sarabhai Memorial Lecture	
CH	Acharya Prafulla Chandra Ray Memorial Lecture	
CP	M S Ramanujan Memorial Lecture	
CV	Dr K L Rao Memorial Lecture	
EL	M S Thacker Memorial Lecture	
EN	N V Modak Memorial Lecture	
ET	Prof S K Mitra Memorial Lecture	
MC	Dr S C Bhattacharyya Memorial Lecture Dr S P Luthra Memorial Lecture	★ Simultaneously
MM	V Subramony Memorial Lecture	
MN	Prof S K Bose Memorial Lecture	
MR	Rear Admiral T B Bose Memorial Lecture	
PR	F W Taylor Memorial Lecture G C Sen Memorial Lecture	Simultaneously
TX	S N Bhaduri Memorial Lecture Dr B K Chakrabarti Memorial Lecture	Alternate year

★ *against the J P Jain Endowment Fund*

RATHINDRANATH TAGORE MEMORIAL LECTURE

Rathindranath is the son of poet Rabindranath Tagore. He was born in Calcutta on the November 27, 1888. He was one of the first batches of five students at Santiniketan in 1901. Educated at Santiniketan and also privately under the guidance of his illustrious father, he was initiated to the rural development work at Sriniketan. He went to the USA for higher studies and training in agriculture as his father thought it would help him to work in rural India better. Rathindranath graduated in Agriculture from University of Illinois, USA in 1910 and specialized in rural craft besides agriculture. He travelled extensively in England and the USA in 1912 to gather experiences in agricultural extension work. He played a leading role in establishing agricultural and rural extension centre at Sriniketan. In 1921, Rathindranath became the General Secretary of Visva Bharati Society. He became the first Vice-Chancellor of Visva Bharati in 1951 when it was incorporated as a Central University. He retired in 1953 for reasons of health.

He is considered as the first and foremost Agricultural Engineer of the country. He was also a well known artist, craftsman, and author of several books. He breathed his last on the June 3, 1961.

In memory of his dedicated service, The Institution of Engineers (India) instituted an Annual Memorial Lecture in his name during the National Convention of Agricultural Engineers.

T S NARAYANA RAO MEMORIAL LECTURE

T S Narayana Rao was born on the February 7, 1907 in a pastoral family at Arkera, near Mysore City. He graduated in Civil Engineering in 1931 from the Government Engineering College of the erstwhile Mysore State. As an apprentice engineer, he worked in Madras with M/s Gannon Dunkerley and Company and subsequently shifted to Bangalore to work under the personal guidance of the late Lakshmi Narasappa, a reputed Government Architect. He participated in the construction of the Town Hall, Municipal Offices and other highly acclaimed structures in Bangalore.

Backed by a few years of intensive experience in architecture and having an educational commitment to engineering, he felt that it was appropriate to fuse the complementary disciplines of architecture and engineering through private practice. He started practicing as a Consulting Architect and Engineer in 1933 and took the risk inherent in starting a new venture totally foreign at that time to the private sector.

Narayana Rao had the rare privilege of constructing buildings of which Shri Krishna Weaving Mills, Mysore Vegetable Oil Products, Rashtriya Vidyalaya and St Joseph's College Observatory deserve special mention. His work reflected a genetic blend of the architect and engineer in him. His success as a builder and architect was in no small measure due to his capacity to execute masonry, carpentry and plumbing works himself.

He was associated with several Engineering Institutions, ISI (now BIS), etc. As a man, he was highly principled and self disciplined. His honesty and integrity sought expression in his exemplary conduct and behaviour. His services as a man and as a professional are even remembered today with respect.

In memory of his dedicated service, The Institution of Engineers (India) instituted an Annual Memorial Lecture in his name during the National Convention of Architectural Engineers.

DR VIKRAM SARABHAI MEMORIAL LECTURE

Dr Vikram Sarabhai was not only an imaginative and creative scientist but also a pioneering industrialist and astute planner. He made significant contributions in the field of cosmic ray physics and in the development of nuclear power and space programmes. He took up the nuclear programmes with a challenge and added fresh dimensions to the space research programmes in 1966 when he became the Chairman of the Atomic Energy Commission.

Dr Sarabhai was born on August 12, 1919 at Ahmedabad in a rich industrialist family. His early education was in a private school and Gujarat College at Ahmedabad. He then went to Cambridge, England and from St John's College obtained his Tripos in 1939. He came back to India and started research work in the field of cosmic rays with Sir C V Raman at the Indian Institute of Science, Bangalore. In 1945, he went back to Cambridge to carry out further research on cosmic rays and there in 1947 obtained Ph D Degree. It was as early as 1942, Dr Sarabhai conceived the idea of starting the Physical Research Laboratory in Ahmedabad. Soon after his return from Cambridge in 1947, Sarabhai started looking for a place for this project. He got a few rooms at the M G Science Institute to start the laboratory and the laboratory was formally opened in April 1954. Dr Sarabhai made the Physical Research Laboratory virtually the cradle of the Indian Space Programme.

Dr Sarabhai not only encouraged science but also devoted a good deal of time to industry. For over 15 years, he nurtured a pharmaceutical industry.

Dr Sarabhai helped to build the Ahmedabad Textile Industry's Research Association (ATIRA) in 1947. During 1949-56, he remained an Honorary Director of ATIRA. In 1962, he helped to found the Indian Institute of Management at Ahmedabad and during 1962-65, he remained an Honorary Director of this Institute.

Today the success of space programmes in our country is largely owing to the groundwork prepared by him in this regard. Due to his efforts only, India could launch its first satellite, Aryabhatta just three and half years after his death.

Dr Sarabhai was a world-renowned figure in the field of space research. He was awarded Bhatnagar Memorial Award for Physics in 1962; Padma Bhushan in 1966 and posthumously Padma Vibhushan. He was elected the Vice-President and Chairman of the U N Conference on peaceful uses of outer space in 1968. He also presided over the Fourteenth General Conference of the International Atomic Energy Agency. Dr Sarabhai died on December 30, 1971 at the age of 52 when he was at the peak of his achievements.

In memory of his dedicated service, The Institution of Engineers (India) instituted an Annual Memorial Lecture in his name during the National Convention of Aerospace Engineers.

ACHARYA PRAFULLA CHANDRA RAY MEMORIAL LECTURE

Acharya Prafulla Chandra Ray was born on August 2, 1861 in a village in the District of Jessore (now in Bangladesh). After studying for two years at Metropolitan College, Calcutta, he received a scholarship from the University of Edinburgh where he obtained a B Sc degree in 1885 and two years later, a D Sc degree for his research in inorganic chemistry. In 1889, he got a special appointment as a Lecturer at Presidency College, Calcutta and became Professor of Chemistry soon.

Sir Andrew Pedlar, the then Principal of Presidency College and himself a Chemist encouraged Ray to pursue research and with Pedlar's help, Ray raised funds to equip a reasonably good chemistry research laboratory and began a search for some of the missing elements in the periodic table. He managed to

precipitate mercurous nitrite, a compound that had been regarded as unstable in crystalline form. For several years thereafter, he and his students carried out a systematic exploration of the properties of mercury salts and a range of nitrite compounds. His findings of an enquiry into the adulteration of oil and ghee were published in 1894 in the Journal of Asiatic Society and the publication was highly acclaimed.

He remained with Presidency College until 1916 when Sir Asutosh Mukherjee summoned him to the University College of Science, Calcutta. There, he continued his teaching and research for next two decades long after he became eligible to retire. His students included Dr Meghanad Saha, Dr P C Mahalanobis and Prof S N Bose.

Ray's first volume of History of Hindu Chemistry was published in 1902 and the second, in 1908. He was known as the Father of Indian Chemistry. He was knighted in 1919.

Ray was instrumental in laying foundation of chemical and allied industries in India. He motivated to start the Bengal Chemical and Pharmaceutical Works Ltd in 1901. The Bengal Pottery Works, the Calcutta Soap Works, the Bengal Enamel Works and the Bengal Canning and Condiment Works are his creations. These industries, during the next few decades, provided hundreds of technical managers to the industrial establishments all over India. The Jadavpur Technical Institute established in 1921 (developed now into Jadavpur University) had Acharya Ray as its founder President. He formed the Indian Chemical Manufacturers' Association (ICMA) in 1938.

Intellectual regeneration, industrial development, economic freedom, social reforms and political advancement of the country — all made equally strong appeal to him, as did his teaching and research. Having abandoned western dress and manners on his return to India in 1889, he actively promoted the ideals of traditional Indian culture. He played a significant role in independence movement and motivated his colleagues and students for greater participation in it. He donated all his earnings to students, workers, laboratories and scientific organizations. He expired in Calcutta on June 16, 1944 at the age of 83.

In memory of his dedicated service, The Institution of Engineers (India) instituted an Annual Memorial Lecture in his name during the National Convention of Chemical Engineers.

M S RAMANUJAM MEMORIAL LECTURE

Born in 1887, Srinivasa Ramanujam was brought up in an orthodox traditional south Indian environment. He was an enigma to his teachers even at school because of his prodigious memory and unusual mathematical talent, which began to show, even before he was ten. That was the age when he topped the whole district at the primary examination and this procured him a half-fee concession at Town High School, Kumbakonam. He passed the Matriculation examination of the University of Madras in December 1903, secured a first class, and earned for himself the Subramaniam Scholarship in the FA (First Examination in Arts) class at Government College, Kumbakonam.

His research marched on undeterred by environmental factors-physical, personal, economic or social; magic squares, continued fractions, hypergeometric series, properties of numbers-prime as well as composite, partition of numbers, elliptic integrals and several other such regions of mathematics engaged his thought. He recorded his results in his notebooks. Exact facsimiles of these notebooks have now, since 1957, been published in two volumes by the cooperative efforts of the University of Madras, the Tata Institute of Fundamental Research and Sir Dorabji Tata Trust.

Though Ramanujam accepted a clerk's appointment in the office of the Madras Port Trust, his mathematical work did not slacken. His first contribution to the Journal of the Indian Mathematical Society appeared in 1911. Ramanujam was brought to the University of Madras as a Research Scholar on May 1, 1913 at the age of 26.

Ramanujam thus became a professional mathematician and remained as such for the rest of his short life. He began a correspondence with Prof G H Hardy, the then Fellow of Trinity College, Cambridge and his first historic letter to Prof Hardy in January 1913 contained an attachment of 120 theism all originally discovered by him. Thereafter, he was invited to England in March 1914.

Ramanujam spent four very fruitful years at Cambridge, fruitful certainly to him, but more so to the world of mathematics, published twenty-seven papers, seven of them jointly with Prof Hardy. In 1918, he was elected Fellow of the Royal Society and in the same year was elected Fellow of Trinity College, both honours coming as the first to any Indian. The University of Madras rose to the occasion and made a

permanent provision for Ramanujam by granting him an unconditional allowance of £ 250 a year for five years from April 01, 1919.

Unfortunately, Ramanujam had to spend the fifth year of his stay in England in nursing homes and sanatoria. He returned to India in April 1919 and continued to suffer from his incurable illness. All the time his mind was totally absorbed in mathematics. Thus, arose the so called Lost Notebook of Ramanujam, which contains 100 pages of writing and has in it a treasure house of about 600 fascinating results. Ramanujam's discoveries and flights of intuition were contained in the four notebooks and also his thirty-two published papers as well as in the three Quarterly Reports, which he had submitted to the University of Madras in 1913-14. These had thrilled mathematicians the world over. More than two hundred research papers had been published as a result of his discoveries. Later Ramanujam died at the unexpected age of 32.

In memory of his dedicated service, The Institution of Engineers (India) instituted an Annual Memorial Lecture in his name during the National Convention of Computer Engineers.

DR K L RAO MEMORIAL LECTURE

Dr Kanuru Lakshmana Rao was born on July 15, 1902. After passing his Intermediate Examination in Science from the University of Madras, he took the B E Degree in Civil Engineering with Honours from the College of Engineering, Guindy in 1925.

His first appointment was as Assistant Engineer in the Visakhapatnam District Board in 1926. He subsequently worked in the College of Engineering, Rangoon and Guindy, and later in the Cauvery – Mettur project. During this period he also qualified for the M Sc (Eng) Degree of the University of Madras by research, being the first recipient of a research degree in engineering from that University. In 1939, he proceeded to England to specialize in reinforced concrete and obtained his Ph D Degree from the University of Birmingham.

Between 1943 and 1945, he was employed as a Senior Lecturer in Loughborough Engineering College, England. On his return to India in 1946, he was appointed by the Madras Government as Design Engineer in the Ramapadasagar Project and in 1951 joined the Central Water and Power Commission at New Delhi as Director (Dams). In 1954, he became Chief Engineer (Planning and Designs), and then became a Member (Designs and Research) in the same Commission.

During these later years, Dr Rao was closely associated with major dam projects in this country, notably Lower Bhavani, Tungabhadra, Hirakud, Malampuzha, Kosi and Umtru and with flood control on the Brahmaputra River at Dibrugarh. His personal contributions to these projects are acknowledged as outstanding.

Dr Rao is the author of a well known standard work 'Calculation, Designs and Testing of Reinforced Concrete' published by Sir Isaac Pitman and Sons. His contributions to technical journals are numerous. Dr Rao joined the Institution as a member in 1947 and became its President for two sessions (1958-1960). He was also a Minister of Government of India.

In memory of his dedicated service, The Institution of Engineers (India) instituted an Annual Memorial Lecture in his name during the National Convention of Civil Engineers.

M S THACKER MEMORIAL LECTURE

Prof M S Thacker who was Director of the Indian Institute of Science, Bangalore, was appointed Director General of the Council of Scientific and Industrial Research, Government of India, in succession to the late Sir S S Bhatnagar.

Prof Thacker was the Chairman of the Electrical Section of the Institution, and the Section had vastly expanded under his vivid leadership.

Prof Thacker was the Chairman of the Mysore Centre and later the President of the Institution for 1955-56. He represented the Institution, at the Third Conference of Engineering Institutions of the Commonwealth in London in June 1954, and the Indian National Committee at the Sectional Meeting of the World Power Conference in Rio de Janeiro, Brazil, in July-August 1954. He was also the Chairman of the Papers Committee for the selection of articles from India for the Fifth World Power Conference held in Vienna, Austria in July 1956. He expired on July 6, 1979.

In memory of his dedicated service, The Institution of Engineers (India) instituted an Annual Memorial Lecture in his name during the National Convention of Electrical Engineers.

N V MODAK MEMORIAL LECTURE

N V Modak received his early education in the Government High School and Ferguson College, and then joined the College of Engineering, Poona and received his BE (Civil) from the University of Bombay in 1911. He then served the Bombay Government until 1918, and then proceeded to England on a State Technical Scholarship for special work in municipal and sanitary engineering.

On his return to India, he was appointed as an Executive Engineer in the Indian Service of Railway Engineers and posted to G I P Railway as Sanitary Engineer. Subsequently his services were requisitioned by the BB and CI Railway as a Consulting Engineer to prepare a Sewerage scheme for Dohad Station. From 1930, he was with the Bombay Municipality, first as Deputy City Engineer and then Hydraulic Engineer and in 1934, he was promoted to the responsible position of City Engineer to the Bombay Municipal Corporation.

His activities in the promotion of engineering profession have been very wide and extensive. He had been the Chairman of the Bombay Centre of the Institution of Engineers (India), and the President of the Bombay Engineering Congress. He was a Fellow of the University of Bombay, a member of its Syndicate and Dean of the Faculty of Engineering. He was also a member of the Advisory Committee of the Poona Engineering College and of the Governing Board of the Victoria Jubilee Technical Institute, Bombay, a member of the Institution of Civil Engineers and the Institution of Municipal and Country Engineers, London and a Fellow of the Royal Sanitary Institute of London.

He was elected as President of The Institution of Engineers (India) by the Council for the year 1940-41 and was re-elected for a second term for the year 1941-42. He was the first member to receive such an honour.

In memory of his dedicated service, The Institution of Engineers (India) instituted an Annual Memorial Lecture in his name during the National Convention of Environmental Engineers.

PROF S K MITRA MEMORIAL LECTURE

A renowned scientist, an excellent lecturer and a reputed author, Prof Sisir Kumar Mitra is a pioneer in the field of radio-physics and ionosphere research in the country.

Born in Calcutta on October 24, 1890, Sisir Kumar Mitra had his initial insights into the field of scientific research and development during his stint in Presidency College, Calcutta where he came in close contact with Sir J C Bose and Acharya P C Roy. Sir J C Bose's equipment for the generation and detection of Herizian waves had left in him an indelible interest in radio physics — a faculty he cultivated later in life.

In 1916, the University College of Science was founded and Mitra joined the Department of Physics. He began researches on the diffraction and interference of light and in 1919 obtained the D.Sc. Degree from the University of Calcutta.

In 1920, he joined the University of Sorbonne where he worked for the determination of wavelength standards of the copper spectrum and received the Doctorate Degree in 1923. Later, he joined the Institute of Radium to work under Madame Curie and subsequently joined the University of Nancy. On his return to India, he was appointed Khaira Professor of Physics in the University College of Science, Calcutta.

While developing teaching and research facilities in the University, he also took active interest in the development of broadcasting in India. His proposal for the establishment of a Radio Research Board was accepted by the newly formed Council of Scientific and Industrial Research, and he was appointed as its first Chairman and continued in this position until 1948.

Prof Mitra's greatest contribution to scientific knowledge was in the field of ionosphere. His ideas and guidance was at the root of most of the contributions made by the Ionosphere Laboratory of Calcutta. His findings on upper atmosphere ionization and night sky luminescence was presented in a treatise 'Active Nitrogen – a New Theory' in 1945.

After his retirement from University service in November 1955, he was appointed Professor Emeritus of the University of Calcutta. Subsequently he assumed the Administratorship of the Board of Secondary Education of the State of West Bengal and was instrumental in the introduction of Higher Secondary Syllabus in the State.

In 1958, he was elected as a Fellow of the Royal Society, London for his contribution to the study of upper atmospheric phenomena. He was the recipient of the King George V Silver Jubilee Medal in 1935, Joy

Kissen Mukherjee Gold Medal of the Indian Association for the Cultivation of Science in 1943, Science Congress (Calcutta) Medal of the Asiatic Society in 1956 and Sir Devaprasad Sarabadhikary Gold Medal of Calcutta University in 1961.

He held many responsible positions including : President, Asiatic Society of Bengal (1951-52); General President, Indian Science Congress (1955) and President, National Institute of Sciences of India (1956-58). He was a member of the Indian National Committee for the International Geophysical Year and was in the Editorial Board of a number of Indian and foreign scientific journals.

Prof Mitra received *Padmabhushan* in 1962 and in the same year was appointed National Research Professor in Physics by the Government of India.

In memory of his dedicated service, The Institution of Engineers (India) instituted an Annual Memorial Lecture in his name during the National Convention of Electronics and Telecommunication Engineers.

DR S C BHATTACHARYYA MEMORIAL LECTURE

Dr S C Bhattacharyya, born on August 20, 1894, passed M Sc in Mathematics from University of Calcutta in 1919 and obtained the degree in both mechanical and electrical engineering in 1921 from the Bengal Technical Institute. Almost simultaneously, he passed the final examination in mechanical engineering from the City and Guilds, London. Subsequently, he went to Germany and obtained the degree in mechanical engineering from Berlin Technical University in 1926, and Dr Ing from the same University in 1928. He stood first in his degree examination in mechanical engineering at National Council of Education, Bengal, as well as at the Berlin Technical University.

India was then reverberating with the spirit of nationalism and Dr Bhattacharya, after his return from Germany, had no hesitation in responding to the call of the nation and joining the National Council of Education, Bengal as a teacher in mechanical engineering ignoring tempting offers from other reputed engineering colleges. His entire career was thereafter devoted and dedicated to the service of NCE, Bengal and Jadavpur University and in planning and implementing his ideas in the development of human resources in mechanical engineering till his retirement as Professor and Head of the Department of Mechanical Engineering in 1959. He acted as Vice-Chancellor of Jadavpur University for a short period. After his retirement, he was made Professor Emeritus of Jadavpur University.

Dr Bhattacharyya excelled in whatever subject he touched, be it thermodynamics or applied mechanics, theory of mechanics or strength of materials, machine design or machine tools.

He was not only a pioneer in introducing and advancing mechanical engineering education in the country but also a pioneer Indian author of such engineering textbooks as 'Engineering Thermodynamics', 'Machine Design', 'Machine Tools', etc. Besides being a teacher par excellence during his entire service career, he was associated with various indigenous industries as technical consultant. He left behind an academic legacy virtually beyond comprehension.

In memory of his dedicated service, The Institution of Engineers (India) instituted an Annual Memorial Lecture in his name during the National Convention of Mechanical Engineers.

DR S P LUTHRA MEMORIAL LECTURE

Dr S P Luthra, born on April 01, 1912, after a brilliant academic career in India was awarded a Government of India Overseas Scholarship for higher studies and research at the Imperial College of Science and Technology, London and obtained the Ph.D. Degree in Mechanical Engineering in 1949. Earlier, he had received the B.Sc. (Engineering) Degree of Punjab University in 1937 and worked at the North-West Railway Mechanical Workshop at Lahore; Punjab PWD, Hydro Electric Branch; Shaw Wallace and Co Ltd; Siemens India Ltd and VDJH Technical Institute, Lahore.

In 1949, Dr Luthra joined Delhi Polytechnic (now known as Delhi College of Engineering) as Head of the Mechanical Engineering Department. He was also Visiting Professor at the University of Wisconsin, USA, under the Technical Co-operation Mission. Later, he joined the Indian Institute of Technology, Delhi, as Professor and Head of the Department of Applied Mechanics and held the positions of Dean of Students, Dean of Examination, Dean of Faculty of Engineering, and Dean of Administration and finally became its Director. During his professional career, Dr Luthra was connected with various professional, educational and scientific organizations. He was member of the Board of Governors, IIT, Delhi; Chairman, Board of Governors, Gorge College for Women, New Delhi; Chairman, World Conference in Industrial Tribology, New Delhi; and President of the Indian Society for Industrial Tribology.

Dr Luthra was also a recipient of the President of India Award for Best Teacher in Technical Education in 1979 and the prestigious award by the Prime Minister of India for meritorious service rendered to the IIT, Delhi, on the occasion of its Silver Jubilee in 1986, and a silver medal by the President of India for meritorious services rendered to the Indian Institute of Science, Bangalore, on the occasion of its Diamond Jubilee in 1986.

Dr Luthra had long association with The Institution of Engineers (India) having joined it as Corporate Member in 1944. He had served on the Council for twelve years and was Chairman of the Delhi State Centre of the Institution. He expired on July 24, 1993.

In memory of his dedicated service, The Institution of Engineers (India) instituted an Annual Memorial Lecture in his name during the National Convention of Mechanical Engineers.

Endowment Fund for National Convention of Mechanical Engineers :

- *Honorarium to the Speakers of Memorial Lecture : Rs.3,000/- each.*
- *Printing of the text of Memorial Lecture : Rs.2,500/- each.*
- *Memento to the Speaker of Memorial Lecture : Rs.1,500/- each.*

V SUBRAMONY MEMORIAL LECTURE

Hailing from a well-known family in Quilon, V Subramony had his early education in Quilon before joining Banaras Hindu University for the Graduate Course in Metallurgical Engineering. After graduation, he had his initial training in the USSR and had visited Steel Plants in Japan, West Germany and the USA.

He had a rich and varied career in steel. Joining the Bhilai Steel Plant in 1956, he rose steadily, occupying the posts of Superintendent (Blast Furnaces), Chief Superintendent (Iron Zone), Assistant General Superintendent (Technical Development) and Deputy General Superintendent (DGS). As DGS, he looked after the plant operations and was instrumental in bringing about a number of technological improvements that resulted in higher productivity. He was associated with the expansion of Bhilai Steel Plant to four million tons.

Shri Subramony joined SAIL Headquater as General Manager (Operations) in June 1978, and subsequently he took over as Director (Technical) in January 1981. On April 30, 1982, he assumed charge as Managing Director, Rourkela Steel Plant. He was also Director, MECON; Nagarjuna Steel Ltd, Hyderabad and Director, Fertilizer Association of India, New Delhi. He was conferred the 'Distinguished Alumni Award' by Banaras Hindu University on the November 15, 1983.

Shri Subramony introduced several new management techniques, which ultimately resulted in the Rourkela Steel Plant turning the corner. He won the hearts of everyone by his sense of values, enthusiasm and fairness. A high performer, he was the pride of many. A rising star was cut short cruelly by a quirk of fate on January 23, 1986.

In memory of his dedicated service, The Institution of Engineers (India) instituted an Annual Memorial Lecture in his name during the National Convention of Metallurgical and Materials Engineers.

Endowment Fund for National Convention of Metallurgical Engineers

- *Honorarium to the Speakers of Memorial Lecture : Rs.5,000/-*

PROF S K BOSE MEMORIAL LECTURE

Prof S K Bose was born on October 07, 1900 in Burdwan district of West Bengal. After passing his matriculation examination in 1917, he was admitted to Presidency College, Calcutta and secured first position in his B Sc (Geology Honours) Examination in 1921. He continued his study in M Sc (Geology) for one year only. Later, he switched over to mining, joined the Sanctoria Colliery, and took apprentice training.

In 1923, Prof Bose joined the Royal School of Mines, London, under Government of India Scholarship. He passed the ARSM (Mining) examination in 1927 and was placed first in first class. During his period of study abroad, he travelled Europe and visited some large mines in Belgium, Netherlands, Germany and France. He joined as first Professor of Mining at Indian School of Mines (ISM), Dhanbad in 1927. Later, he became Head of the bifurcated Department of Metal Mining and Surveying. He devoted his entire career at ISM, Dhanbad and retired from there in 1956.

After retirement from ISM, he served NCDC in the capacity of Officer on Special Duty (Training) for one year. During his service at ISM, he visited many minefields in India as well as abroad. It is remarkable that most of his visits were undertaken at his own expenses. He visited Ceylon in 1932, South Africa in 1934, and Japan, North Korea, Mongolia and China in 1936 to observe important mines in those countries. He often used to contribute some state-of-the-art short notes to the local weekly 'The New Sketch'.

Through his publication in this weekly, he stressed the need for establishing a Government College of Mining Engineering, similar in status and model to the Royal School of Mines in England and Japan. This eventually led to a resolution being passed by Indian National Congress.

In another publication in one of the special issues of the same weekly on 'Mining and Civilization', he emphasized the importance of the part played by mining and geological education in the industrial development of the world and improvement of the social conditions of mankind. He expired on January 15, 1968.

In memory of his dedicated service, The Institution of Engineers (India) instituted an Annual Memorial Lecture in his name during the National Convention of Mining Engineers.

T B BOSE MEMORIAL LECTURE

Rear Admiral T B Bose in 1938 started his career as Lieutenant in the Royal Indian Navy and was appointed an Officer on the dockyard staff. He took special interest in the apprentices assigned to the Dockyard of Engineer Cadets to pass out the IMMTS 'Dufferin'.

Admiral Bose was Principal Officer, Mercantile Marine Department at Calcutta in 1952. Right from the time the new DMET Course was inaugurated in 1949, he identified himself with the new system of training, gave it his full support and, until his retirement from service and even afterwards, became a guiding spirit.

In 1957, when he was Chief Surveyor to Government of India, he was appointed Chairman of a Committee to advise Government on the indigenization of ship-ancillaries. The assignment involved considerable touring, data collection and discussions with shipyards and industrial enterprises. The Report of the Committee led to the formation of a Marine Engineering Division of the then ISI (now BIS) and to the setting up of an indigenous development cell at the Hindustan Shipyard, Vishakapatnam.

Admiral Bose was largely responsible for the development of Naval College of Engineering at Lonavala. Even though he had retired from the Navy, Naval Headquarters had a very high regard for his sagacity and expertise and valued his advice greatly. Even after his retirement from service, he took keen interest in the development of marine engineering and was a constant source of inspiration to all at the Ministry in New Delhi and at the new shipyard at Cochin.

As Vice-President of the Institute of Marine Engineers, London, he was a beacon light to the marine engineers of India. In spite of the high offices he held, he was easily accessible to young marine engineers who found his guidance invaluable. Admiral Bose, during his professional career, was closely involved in shipping, ports, shipbuilding, and ship repair and state policy pertaining to these sectors.

In memory of his dedicated service, The Institution of Engineers (India) instituted an Annual Memorial Lecture in his name during the National Convention of Marine Engineers.

F W TAYLOR MEMORIAL LECTURE

Inventor and engineer, Frederick Winslow Taylor was born on March 20, 1856 at Philadelphia, the USA.

Educated at preparatory schools at Pennsylvania and New Hampshire, Taylor entered apprenticeship in the trades of pattern maker and machinist in Philadelphia in 1875. In 1878, he was employed by the Midvale Steel Company in their machine shop. In 1881, he introduced his method of increasing the efficiency of production by close observation of individual workers, identifying and eliminating wasted time and redundant motion. He earned a degree in 1883 from the Stevens Institute of Technology, and in 1884, he was elevated to the position of Chief Engineer at Midvale. In 1890, he became the General Manager of the Manufacturing Investment Company. He subsequently became consultant in management in a number of organizations. Having dedicated about forty years in the improvement of production techniques and productivity, Taylor earned the distinction of being the father of modern scientific management. He expired on March 21, 1915.

In memory of his dedicated service, The Institution of Engineers (India) instituted an Annual Memorial Lecture in his name during the National Convention of Production Engineers.

G C SEN MEMORIAL LECTURE

Gopal Chandra Sen, graduated in mechanical engineering from College of Engineering and Technology, Jadavpur in 1933 and gathered first-hand experience for two years, first in a private firm and then in a distinguished workshop in Howrah. He joined the National Council of Education, Bengal as Instructor in 1935 and became Lecturer in 1940. In 1946, he went on a Government scholarship to the USA for higher studies in engineering. He got the degree of Master's of Science in Engineering from the University of Michigan. On return, he resumed teaching at Jadavpur University and became Professor of Mechanical Engineering in 1952. In June 1969, he was appointed Dean of the Faculty of Engineering and from August 1970 until his demise on the December 30, 1970, he was the Vice-Chancellor of Jadavpur University.

Prof Sen was the pioneer in India of the teaching of production engineering and was the author of a number of very useful books including textbook on the Principles of Machine Tools and Metal Cutting, which are adored in many universities abroad. Prof Sen belonged to that vanishing 'tribe' of teachers who would take up teaching as dedication rather than profession. He was a disciplinarian with a difference.

Apart from his academic brilliance, he was a poet and an artist – one who was an expert in drawing and an adept in drawing pen pictures.

In memory of his dedicated service, The Institution of Engineers (India) instituted an Annual Memorial Lecture in his name during the National Convention of Production Engineers.

S N BHADURI MEMORIAL LECTURE

After gaining considerable experience in the above-mentioned field, he joined ATIRA, Ahmedabad and developed a well-organized team of SQC personnel. He undertook the dual responsibility of training textile mill personnel of western part of the country in SQC and process control techniques and their applications in the mills.

S N Bhaduri obtained his M Sc Degree in Statistics from University of Calcutta and thereafter started working in the field of Statistical Quality Control (SQC) and its application in textile mills.

Adaptation and implementation of the aforesaid techniques not only improved the quality of textile products but also immensely increased the popularity and value of the same in overseas market. Though he was a pioneer in the field of application of SQC and allied techniques in textile mills, he also took keen interest in mechanical processing of textile fibres and development of the same, including textile machines.

In memory of his dedicated service, The Institution of Engineers (India) instituted an Annual Memorial Lecture in his name during the National Convention of Textile Engineers (to be delivered in alternate year).

DR B K CHAKRABARTI MEMORIAL LECTURE

Dr B K Chakrabarti, an outstanding scholar and researcher, obtained his M.Sc. Degree in Pure Physics from Calcutta University and made commendable research contributions in the fields of optics and spectrometry. He then took up teaching assignment for a short period, and later joined Indian Central Jute Committee (ICJC) (later named as JTRL and currently known as NIRJAFT) at Tollygunge, Calcutta as a scientist and devoted himself in research and made outstanding contributions in the fields of textile physics and statistical quality control. Thereafter, he obtained his Ph.D. Degree from the University of Calcutta. He also evaluated jute yarn diameter subsequently at ICJC and later joined Institute of Jute Technology (IJT) as Professor and Head, Department of Textile Science and developed a unique silver irregularity tester and introduced 2 :1 doubling in the gills in jute finisher drawing machines. He went to the UK on Ghosh Fellowship and was honoured with Fellowship of the Textile Institute, Manchester. Before leaving IJT, he became Principal for a short stint. After retiring from IJT, Dr Chakrabarti became Technical Advisor to a number of jute factories in and around West Bengal.

In memory of his dedicated service, The Institution of Engineers (India) instituted an Annual Memorial Lecture in his name during the National Convention of Textile Engineers (to be delivered in alternate year).

APPENDIX X

MODALITIES FOR IEI YOUNG ENGINEERS AWARD

1. The applicant should be an Engineer and citizen of India.
2. The applicant should not be older than 35 years of age as on March 31 of the year of notification.
3. The application must be forwarded by the Head of the Organization / Institution.
4. The work considered for the award should have been carried out during the preceding five years and must have been done within India.
5. The work should be related to the design and development of engineering products relevant to national perception.
6. The achievement should have technological / engineering content with or without measurable financial benefits.
7. The number of awards is to be limited to three.
8. The awards should be given away during the National Convention of the respective engineering division.
9. The awardees should be selected by the respective Division Board.
10. The award will consist of Rs.10,000/- and a Certificate.

APPENDIX XI

TIME SLOT FOR THE NATIONAL CONVENTIONS

Engineering Divisions		**Scheduled Month**
AGDB	:	January
ARDB	:	September / October
ASDB	:	November
CHDB	:	September
CPDB	:	February
CVDB	:	October
ELDB	:	November
ENDB	:	August
ETDB	:	October
MCDB	:	September
MMDB	:	January
MNDB	:	December
MRDB	:	August
PRDB	:	May
TXDB	:	February
Indian Engineering Congress / Council	:	December
CATE / Council	:	March, June, September
IEI Convocation	:	October

N. B. :
- *Spill over months for National Convention — March, April and July*
- *ENDB* (*effective from 122nd CATE Meeting at Hyderabad, March 23, 2013*)
- *ARDB* (*effective from 124th CATE Meeting at Shimla, September 28, 2013*)

APPENDIX XII

PROPOSAL FROM CENTRES FOR HOLDING TECHNICAL ACTIVITIES

For use by the HQrs (Programme Code) :

Centre Code	Prog.Type #	Div.Board	Fin.Yr★	Prog.No.

(*NC / AS / OD*) ★ *Last two digits of financial year*

Name of the Centre:			
Proposed Programme: *(strike out which are not applicable)*	National Convention / All India Seminar / One Day Workshop / Seminar		
Title of the Programme:			
Under the aegis of which Divisional Board / Committee:			
Date :		Venue :	
Associate organization (if any):			
Grant requested from the HQrs:	Rs.		
Brief Write-up about the programme *(preferably within 300 words)*:			
For use by Chairman, Division Board, Chairman, CATE and the HQrs:			
Put-up to Chairman, Division Board on:		Comments of Chairman, Division Board received on:	
Comments of Chairman Division Board / Committee:	Approved / Not Approved / To be Revised		
Suggested Revision (if any) :			
Put-up to Chairman, CATE on:		Comments of Chairman, CATE received on:	
Comments of Chairman CATE:	Approved / Not Approved / To be Revised		
Suggested Revision (if any) :			

Information to Centre about decision or to incorporate suggested revision (if any) on:	

Proposals to be sent *(a) Six months prior to the proposed dates of National Convention, (b) Three months prior to the proposed dates of All India Seminar and (c) One months prior to the proposed dates of One Day Workshop / Seminar.*

Grant available for *(a) National Convention: Rs 1,50,000/-, (b) All India Seminar: Maximum Rs. 20,000/-, (c) One Day Workshop / Seminar: Rs. 10,000/-*

APPENDIX XIII

STANDARD BROCHURE

The Institution of Engineers (India)

"94 Years of Relentless Journey towards
Engineering Advancement for Nation-building"

(Name of the Programme)

(Date, Place)

Organised by

The Institution of Engineers (India)

…… State Centre / Local Centre

Under the aegis of

…… *(Name of Divisional Board),* IEI

In association / collaboration with (*if any*)

(Name and logo of the organization — logo should be smaller than IEI logo)

Venue

About The Institution of Engineers (India)

The Institution of Engineers (India) or IEI is the largest multidisciplinary professional body that encompasses 15 engineering disciplines and gives engineers a global platform from which to share professional interest. IEI has membership strength of above 0.7 million. Established in 1920, with its HQrs at 8 Gokhale Road, Kolkata 700020, IEI has served the engineering fraternity for over nine decades. In this period of time it has been inextricably linked with the history of modern-day engineering.

In 1935, IEI was incorporated by Royal Charter and remains the only professional body in India to be accorded this honour. Today, its quest for professional excellence has given it a place of pride in almost every prestigious and relevant organization across the globe. IEI functions among professional engineers, academicians and research workers. It provides a vast array of technical, professional and supporting services to the Government, Industries, Academia and the Engineering fraternity, operating from over 104 Centres located across the country. The Institution has established R&D centres at various locations in the country and also provides grant-in-aid to its members to conduct research and development on engineering subjects.

IEI conducts Section A & B Examinations in different Engineering disciplines, the successful completion of which is recognized as equivalent to Degree in appropriate field of Engineering of recognized Universities of India by the Ministry of Human Resources Development, Government of India. Every year as many as 90000 candidates appear for these exams. For details, please see: **www.ieindia.org**.

About the associate organization (*if any*)

About the programme with objective, theme, sub-themes, call for papers, important dates, registration details, advertisement tariff, accommodation, venue etc.

Payment:

All payments are to be made through crossed Demand Draft / Cheque, drawn in favour of **"The Institution of Engineers (India), ……State/Local Centre"**

NATIONAL ADVISORY COMMITTEE

Chairman	:	President, IEI
Co-Chairman	:	Chairman of the Divisional Board
Convenor	:	A Corporate Member (attached to the Host Centre and also the concerned Division)
Members	:	Name of all members of the concerned Division Board
	:	Persons of all India status
	:	Name of Honorary Secretary of the Host Centre (if he / she is not the Convenor)

ORGANIZING COMMITTEE

Chairman	:	Chairman of the Host Centre
Organizing Secretary	:	Honorary Secretary of the Host Centre or one Corporate Member (attached to the Host Centre)
Members	:	Local Corporate Members

TECHNICAL COMMITTEE

Chairman	:
Members	:

CONTACT

Name of the contact person	:
Address of IEI State / Local Centre	:
Phone	:
Email	:

REGISTRATION FORM / ADVERTISEMENT BOOKING FORM

APPENDIX XIV

REPORT OF THE CONVENTION

Part I: Report by the Host Centre

(Within two weeks of completion of the Convention, the Host Centre shall send the Report to the Technical Department at the HQrs along with some photographs.)

(a) Introductory point(s)
  (i) Title of the Convention:
  (ii) Dates :
  (iii) Host Centre :
  (iv) Venue of the Convention

(b) Nodal date(s)
  (i) Date of receipt of communications from the HQrs confirming to host the Convention _____
  (ii) Date of receipt of Guidelines from the HQrs _____
  (iii) Date of dispatch of materials to the HQrs for announcements in IEI News / Journal / Students' Newsletter / Technicians' Journal _____
  (iv) Date of dispatch of First Circular to prospective delegates _____
  (v) Date of dispatch of Last Circular to prospective delegates _____
  (vi) Date of receipt of seed money from the HQrs _____
  (vii) Details of IEI publications as in (iii) carrying announcements _____

(c) Delegate Fee(s)
  (i) Corporate Member _____
  (ii) Non-member _____
  (iii) Sponsored Member _____
  (iv) Spouse _____
  (v) Student / Technician / Research Scholar _____

(d) National Seminar _____
  (i) Theme of the National Seminar and date:
  (ii) Expert Lectures _____

	Name of Speaker	Title of Lecture / Address
(a) Memorial Lectures	_____	_____
(b) State-of-the-art Lecture	_____	_____
(c) Keynote Address	_____	_____

  (iii) Number of articles received by the organizers from other authors [excluding (ii)] _____
  (iv) Total number of articles selected by the organizers _____
  (v) Number of articles presented at the National Seminar _____
  (vi) Number of technical sessions _____

(e) Inaugural Session of the Convention
  (i) Names of VIPs on Dais (Mention their functions) _____
  (ii) Number of media personnel _____
    (a) Newspapers _____
    (b) AIR _____
    (c) TV _____

(iii) Total number of persons present _____

(f) Number of expert lectures with details _____

(g) Number of technical sessions _____

(h) Participation

(i) Number of persons registered _____

(ii) Total number of registered delegates outside the Centre who attended ____

(iii) Number of persons present in first technical session after inauguration ____

(iv) Number of persons present in last technical session _____

(v) Number of persons present at other events

(a) Workshop _____

(b) Technical Exhibition _____

(c) Round Table _____

(d) Technical Visit _____

(e) Valedictory Session _____

(i) Felicitation of Eminent Engineer(s) (also, highlight the achievements of personalities)

(i) Number selected with names _____

_____

(ii) Number attended with names _____

_____

(j) Publication(s) (Mention whether printed or cyclostyled)

(i) Souvenir _____

(ii) Abstract of articles (included in Souvenir or printed separately) _____

(iii) Proceedings of full articles _____

(iv) Any other publications _____

(k) Name of Representative from the HQrs and work done by him _____

_____

(l) Strong/Weak Points

(i) Strong points about the HQrs _____

_____

(ii) Weak points about the HQrs _____

_____

(m) Press Coverage

(i) Newspapers (Please attach cuttings)_____

(ii) AIR _____

(iii) TV_____

(n) Name of the Members of Core Group_____

(o) Recommendations _____

(p) Name of the Organizations / Institutions to whom the recommendations have been sent _____

(q) Please provide the suggestions (within 200 words) for making the National Convention more successful in future days

_____

(r) Any other remarks _____

_____

_____

Signature with date

Part II: Report by Headquarter Representative

Name of the invitees who attended the DB Meeting		
Names of DB members who could not attend the Convention		
Where were the strong involvements of the HQrs?		
Where was the weak involvement of the HQrs?		
Which were the success points of Convention?		
Which were the failure points of Convention?		
Write within 150 words your plan to make a National Convention more successful in future		
Whether IEI Information Desk was installed?		
(a)	Whether IEI publications were displayed at IEI Information Desk?	
(b)	Whether Institution Ties were available at IEI Information Desk?	
(c)	Whether Lapel Pins were available at IEI Information Desk?	
(d)	Whether Membership Forms of different categories were available at IEI Information Desk?	
(e)	Whether information regarding reinstatement was available at IEI Information Desk?	
Any other remarks		

Part III: Report by the Chairman

(i) Where was the strong involvement of the HQrs?

(ii) Where was the weak involvement of the HQrs?

(iii) Where was the strong involvement of the host Centre?

(iv) Where was the weak involvement of the host Centre?

(v) Which were the success-points of the Convention?

(vi) Which were the failure-points of the Convention?

(vii) Where were the strong involvement of the Chairman and the DB?

(viii) Where were the weak involvement of the Chairman and the DB?

(ix) Please write within 100 words how you plan to make a National Convention more successful in future

APPENDIX XV

TECHNICAL ACTIVITY CARRIED OUT BY CENTRES / OVERSEAS CHAPTERS

Name of Centre / Overseas Chapter:	

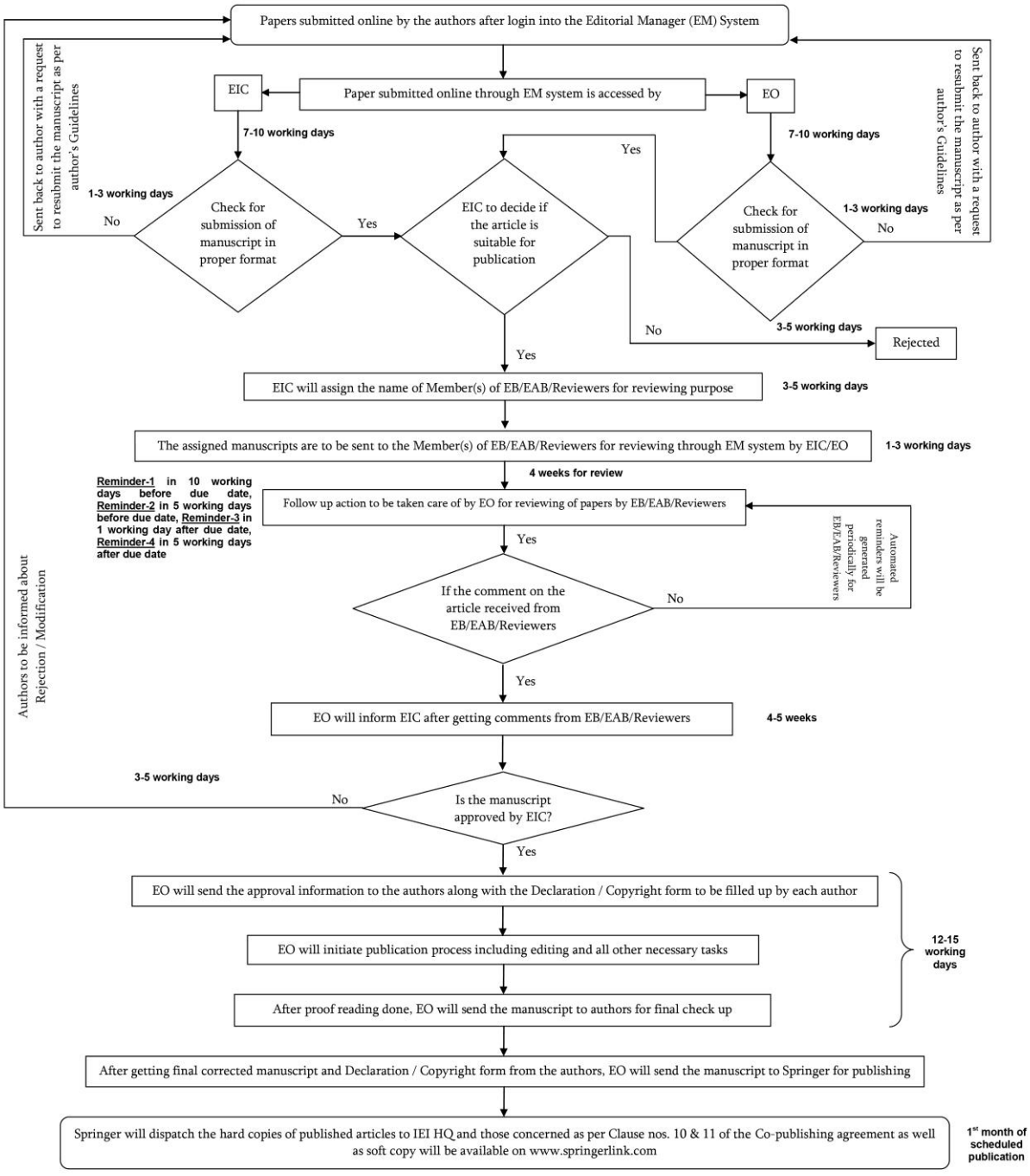
Title of Activity:			
Activity under Divisional Board			
Date:		Venue:	

(Insert photo)	(Insert photo)
Title of photo:	Title of photo:

Brief Report (not exceeding 4000 characters – **please use Arial 11 point font**)

APPENDIX XVI

Flow Process Chart and Charter of Responsibilities for Processing Technical Papers



Note: EO – Editorial Office at IEI
EIC – Editor-in-Chief
EB – Editorial Board
EAB - Editorial Advisory Board
EMS – Editorial Manager System

Reminders will be generated by EMS periodically, requesting,
i) EB/EAB/Reviewers for sending assessment report on the assigned papers
ii) authors for submission of modified manuscript

EIC, EB/EAB/Reviewers to be provided login and password by Springer

All publication related assignments would be done by Editorial Office at IEI including the follow up action on Editor-in-Chiefs, Editorial Board & Editorial Advisory Board Members and Reviewers. Editing, Proof readings and layout design will also be done by IEI Editorial Office. Each Technical Officer is being given the overall responsibilities to oversee all the above mentioned activities of each Series of Journals.

APPENDIX XVII

PRIZES FOR BEST PAPERS PUBLISHED IN IEI-SPRINGER JOURNALS

The Institution gives away a large number of prizes, awards and certificates to the authors of the papers of high technical standard published in the IEI-Springer Journals of all Divisions and thereby extending recognition to individual achievements and activities in advancing the science and the art of engineering.

All articles written by the members and non-members and published in the IEI-Springer Journals are eligible for awards / prizes except in case where the conditions of the award / prize restrict it to a particular branch of engineering or otherwise.

Preliminary selection of articles for the award of various prizes is done by the Consulting Editors. The Chairman of the respective Division Boards finally vets such selections.

To help the President in arriving at a final decision regarding selection of the best papers / articles for the award of various categories of prizes and awards, an "Award Committee" is formed comprising President, one Division Board Chairman and another Council Member co-opted by the President.

1. **The President of India's Prize**

   This prize was instituted in 1921 as the Viceroy's Prize and is of historical significance. In declaring the Institution inaugurated on the 23rd February of that year, the Governor General and Viceroy Lord Chelmsford announced an annual prize to be called "The Viceroy's Prize", for the best paper presented by a member. The name was changed to "The Governor General's Prize" in 1947, and again to "The President of India's Prize" in 1952, reflecting the changes in the political status of the country. It is awarded by the Government of India, on the recommendation of the Institution's Council, for the best paper published in the Institution's Journal.

2. **The Institution Prizes (Two Numbers)**

   These prizes were instituted in 1953. They are awarded by the Institution's Council for the best papers published in the Institution's Journal.

3. **The K F Antia Memorial Prize**

   This prize was instituted in 1969 in the memory of Late Shri K F Antia, the then President of the Institution. The prize is given for the best paper published in the Institution's Journal on any subject related to engineering.

4. **The Corps of Engineers Prize**

   This prize was instituted in 1961 and is awarded by the Council of the Institution of Military Engineers for the best paper published in the Institution's Journal on a subject of common interest to all branches of engineering.

5. **The Institution Prize (Donated by Col G N Bajpai)**

   This prize is awarded for the best paper published in the Civil Engineering, Electrical Engineering and Mechanical Engineering parts of the Institution's Journal in the fields of Marine Structures, Ship-building and such other topics related to Marine Engineering.

6. **The Railway Board's (First and Second) Prize**

These prizes were instituted in 1931. The prizes are awarded by the Railway Board, Ministry of Railways, and Government of lndia, for the best two papers published in the Institution's Journal on Railway Engineering or subjects allied to it.

7. **The E P Nicolaides Prize**

This prize was instituted in 1963 by Gammon (India) Ltd to commemorate E P Nicolaides for his pioneering work in the field of Pre-stressed Concrete in India. It is awarded for the best paper on Reinforced and Pre-stressed Concrete published in the Institution's Journal.

8. **The John C Gammon Prize**

This prize was instituted in 1963 by Gammon (India) Ltd to honour the Late John C Gammon for his pioneering work in the field of shell structures in India. It is awarded for the best paper published in the Journal on concrete shell structures.

9. **The Corps of Electrical and Mechanical Engineers' Prize**

This prize was instituted by the Directorate of Electrical and Mechanical Engineering, Army Headquarter, New Delhi. This prize is to be awarded for the best paper contributed to the Institution's Journal and of relevance to the Army in the field of mechanical, automotive, production, electronics or industrial engineering.

10. **The Surendranath Mukherjee Memorial Prize**

This prize was instituted in 1984 by R G Mukherjee to commemorate his father the Late Surendranath Mukherjee, who served the Irrigation Department of Bengal for thirty-two years and retired in 1935. The prize is awarded to the best research paper pertaining to practical execution of work for : (i) improvement of existing water supply and distribution for human consumption, (ii) improving the irrigation work for cultivation in West Bengal or (iii) improvement of food control in West Bengal.

11. **The Union Ministry of Water Resources : Department of Irrigation Prize**

This prize was instituted in 1958 by the Union Ministry of Irrigation and Power and now awarded by the Department of Energy, Government of India, respectively. The prize is for the best paper on Civil Engineering on aspects of River Valley Development.

12. **The Union Ministry of Energy : Department of Power Prize**

This prize was instituted in 1958 by the Union Ministry of Power (now Ministry of Energy, Department of Power), Government of India, for the best paper published on Power Development and Utilization in the Institution's Journal.

13. **The Sir Arthur Cotton Memorial Prize**

This prize was instituted in 1965 for the best paper published in the Civil Engineering Division Part of the Institution's Journal.

14. **The Geroge Oomen Memorial Prize**

The prize was instituted in 1970 by the friends and admirers of (late) Shri George Oomen who contributed to a memorial fund to establish a prize in his name to be awarded for the best paper published in the Civil Engineering Division Part of the Institution's Journal on topics : (i) Composition, properties and quality plant capacities and layout to suit different site conditions and various types of concrete dams.

15. **The Dr Jai Krishna Prize**

Dr Jai Krishna, a Past President of the Institution (1974-75) and an eminent earthquake engineer donated a sum of Rs 3000 towards instituting a prize to be given by the Institution every year for the best paper on the subject of earthquake engineering (or allied fields in structural dynamics) published in the Journal of the Institution.

16. **The Sir Rajendar Nath Mookerjee Prize**

The prize was instituted in 1965 for the best paper published in the Mechanical Engineering Division Part of the Institution's Journal.

17. **The Pandit Madan Mohan Malaviya Memorial Prize**

This prize was instituted in 1965 for the best paper published in the Electrical Engineering Division Part of the Institution's Journal.

18. **The Sir Thomas Ward Memorial Prize**

This prize was instituted in 1965 and is awarded for the best paper published in the Electronics and Telecommunication Engineering Division Part of the Institution's Journal.

19. **The Shrimati Saroma Sanyal Memorial Prize**

The donor was H Sanyal, a Corporate Member of the Institution, who in memory of his mother, the Late Shrimati Saroma Sanyal, donated an endowment fund to be used for an award for the best paper on water supply and sanitary engineering published in the Journal.

20. **The Nawab Zain Yar Jung Bahadur Memorial Prize**

The prize was instituted in 1965 for the best paper published in the Environmental Engineering Division. Part of the Institution's Journal**.**

21. **The Dr Rajendra Prasad Memorial Prize**

The prize was instituted in 1965 for the best paper published in the Mining Engineering Division Part of the Institution's Journal.

22. **The Sir Ganga Ram Memorial Prize**

This prize was instituted in 1965 to be awarded for the best paper published in the Chemical Engineering Division Part of the Institution's Journal.

23. **The Hem Prabha-S N Gupta Prize**

Constituted in 1980 and donated by the Late S N Gupta — a Fellow Member of the Institution, this prize is awarded to encourage studies pertaining to collection and analysis of river data as related to channel geometry, sediment transport and meanders, regime of rivers before and after adoption of river improvement measures, bank erosion control, river bed stabilization and sediment control at estuaries. The prize is awarded for the best paper submitted by a civil engineer on these topics and published in the Civil Engineering Division Part of the Journal.

24. **The Hindustan Zinc Limited Prize**

This prize was instituted in 1981 to be awarded for the best practice-oriented paper in the area of Underground Metalliferrous Mining or Rock Mechanics published in the institution's Journal.

25. **The N K Iyengar Memorial Prize**

This prize was instituted in 1982 on an endowment by the Mysore Technical Education Society to be awarded for the best practice-oriented paper on the machine design published in the Mechanical Engineering Division Part of the Institution's Journal.

26. **The Dr Triguna Charan Sen Prize**

This prize was instituted in 1982 by the Late Dr Triguna Charan Sen, a Past President of the Institution (1962-64) and is awarded for the best paper published in the Textile Engineering Division Part of the Journal.

27. **The Brij Mohan Lal Memorial Prize**

This prize was instituted in 1981 and is awarded for the best paper published in the Civil Engineering Division Part of the Institution's Journal.

28. **The Prof R C Singh Prize**

This prize instituted in 1986 by Prof R C Singh (F), is awarded to a paper of the greatest practical importance and published in the Environmental Engineering Division Part of the Institution's Journal.

29. **The Tata Rao Prize**

This prize was instituted in 1987 by the admirers of Dr Tata Rao (F) and is awarded for the best paper published in the Electrical Engineering Division Part of the Institution's Journal.

30. **The Rekha Nandi and Bhupesh Nandi Prize**

This prize was instituted in 1991 by Shri Bhupesh Nandi for the Author(s) of the best piper published in the Environmental Engineering Division Part of the Institution's Journal each year.

31. **The Suchit Kumar Ghosh Memorial Prize**

This prize was instituted by the family members of Late Shri Suchit Kumar Ghosh, an eminent Civil Engineer and also Chief Engineer, Public Works Department, Government of West Bengal, and is awarded for the best paper on Bridge Engineering — Design and / Construction published in the Institution's Journal. In absence of any such paper, any practice-oriented paper on Civil Engineering Project Execution could be considered.

32. **The Aerospace Engineering Division Prize**

This prize was instituted in 1982 by the Institution for the best paper published in the Aerospace Engineering Division Part of the Institution's Journal**.**

33. **The Agricultural Engineering Division Prize**

This prize was instituted in 1982 by the Institution for the best paper published in the Agricultural Engineering Division Part of the Institution's Journal.

34. **The Architectural Engineering Division Prize**

This prize was instituted in 1982 by the Institution of the best paper published in the Architectural Engineering Division Part of the Institution's Journal each year.

35. **The Computer Engineering Division Prize**

This prize was instituted in 1987 by the Institution for the best piper published in the Computer Engineering Division Part of the Institution's Journal each year.

36. **The Marine Engineering Division Prize**

This prize was instituted in 1982 by the Institution for the best paper published in the Marine Engineering Division Part of the Institution's Journal.

37. **The Metallurgical and Materials Engineering Division Prize**

The prize was instituted in 1987 by the Institution for the best paper published in the Metallurgical and Materials Engineering Division Part of the Institution's Journal each year.

38. **The Production Engineering Division Prize**

This prize was instituted in 1987 by the Institution for the best paper published in the Production Engineering Division Part of the Institution's Journal each year**.**

APPENDIX XVIII

LIST OF PRIZES FOR IEI CONVOCATION

SECTION A (DIPLOMA) AND (NON-DIPLOMA)

(i) For passing the Examination in full securing the Highest Marks amongst the successful candidates of Examination (irrespective of number of attempts the candidate made for passing)

Rs 1000/- × 2 × 2 Rs 4000/-

(ii) For passing the Examination in full securing the Second Highest Marks amongst the successful candidates of Examination (irrespective of number of attempts the candidate made for passing)

Rs 500/- × 2 × 2 Rs 2000/-

SECTION B

For passing the Examination in full securing the Highest Marks amongst the successful candidates of an Examination (branch-wise)

Rs 1500/- × 10 Rs 15000/-

S N GHOSH MEMORIAL PRIZE

To be awarded additionally to candidate passing under category A(ii) above

Rs 150/- × 2 Rs 300/-

BHUPESH NANDI AND REKHA NANDI AWARD

For passing Section B in Civil Engineering Branch securing the Highest Marks amongst the successful candidates [This will be additional prize to the same candidates who will be selected for prize under category (b) above]

Rs 1000/- × 2	Rs 2000/-

SUMAN SHARMA PRIZE

For women candidates appearing in Section A (Diploma) and Section A (Non-Diploma) Examination qualified with first three best results in each category per Examination

First Prize	Rs 350/-	
Second Prize	Rs 250/-	
Third Prize	Rs 150/-	
	Rs 750/- × 2 × 2	Rs 3000/-

AWARD / PRIZES FOR ALL INDIA TECHNICIANS' / STUDENTS' SEMINAR AND TECHNICAL SESSION

1. **Seminar (B P Kapadia Memorial Prizes and Institution Prizes)**

Group I (Technician / Senior Technician)

First	Rs 2000/-
Second	Rs 1500/-
Third	Rs 1000/

Group II (Students from Engineering College Students Chapter)

First	Rs 2000/-
Second	Rs 1500/-
Third	Rs 1000/-

Group III (Students from Polytechnic Students Chapter)

First	Rs 2000/-
Second	Rs 1500/-
Third	Rs 1000/-

2. **Technical Session**

Group I (Technician / Senior Technician)

First	Rs 2000/-
Second	Rs 1500/-
Third	Rs 1000/-

Group II (Students from Engineering College Students Chapter)

First	Rs 2000/-
Second	Rs 1500/-
Third	Rs 1000/-

Group III (Students from Polytechnic Students Chapter)

First	Rs 2000/-
Second	Rs 1500/-