EXCERPTS FROM THE GUIDELINES ON THE ACTIVITIES OF VARIOUS ENGINEERING DIVISIONS

10.0 TECHNICAL ACTIVITIES AT CENTRES

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

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 and January - March) and a consolidated report every year (April-March) within a month after conclusion of the quarter or the year, as the case may be, in prescribed format for submission to CATE.

11.0 INDIAN ENGINEERING CONGRESS

The Council of The Institution of Engineers (India) decided, at its 529111 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 thinkings.

11.1 Objective

The Council shall decide the theme of the Congress and the Congress will follow 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 Headquarters 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.

i. Inaugural Session of Congress
ii. Inaugural Session of Congress Seminar on a theme specified by the Council
iii. Memorial Lectures (for details, see Appendix ill)
iv. Glimpses of Engineering Personalities
v. Technical Sessions of Congress Seminar
vi. Concluding Session of Congress Seminar
vii. Valedictory Session of the Congress
viii. Engineering Exhibition

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

ll.3 Organizational Set-up

The organizational set-up for the Congress shall comprise the follo\\ing. .

- National Advisory Committee
- National Steering Committee
- Organising 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 :

1. finalization of Patrons,
2. approval of the draft programme of Congress,
3. 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

With the Congress being held at the end of 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 Headquarters 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
Despatch of First Information Brochure for Congress Seminar	Last day of June
Obtaining clearance certificate 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 Septennber
Finalization of the Chief Guest*	Last day of October
Printing of Memorial Lectures and Booklet on 'Glimpses of Engineering Personalities'*	Last day of October
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	Last week of November
Printing of Seminar articles	First week of December
Printing of Address of the Chief Guest.	Second week of December

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 preprints of the Seminar articles	First week of December

Note **The items marked * are the responsibilities of the Headquarters.**

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.

1. Grant from the Headquarters (see Appendix ll)
2. Registration and other fees
3. Co-sponsorship / Collaboratorship fees, donations and grants Charges of advertisements in Souvenir Volume
4. 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, Associates and Technician *I* 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.

11.7 Suggested Day-to-day Programme

Day 1	2nd Half	Adjourned Meeting of the Council and the Annual General Meeting of Corporate Members
Day 2	1st Half	Inaugural Session of the Congress, Presentation of NDRF Awards and Institution Prizes (four categories only), Sir M Visvesvaraya Memorial Lecture
	2nd Half	Inauguration of Congress Seminar, Glimpses of Engineering Personalities, Presentation of Prizes, Bhaikaka Memorial Lecture.
	Evening	Congress Dinner

Day 3	1st Half	Technical Session L Sir R N Mooketjee Memorial Lecture Technical Session II, Nidhu Bhusan Memorial Lecture
	2nd Half	Technical Session III, Dr A N Khosla Memorial Lecture, Technical Session IV
	Evening	Cultural Programme
Day 4	1st Half	Technical Session V, Dr Amitabha Bhattacharyya Memorial Lecture
	2nd Half	Concluding Session of the Seminar, Valedictory Session of the Congress
	Evening	Meeting of the New Council
Day 5		Post Congress Tours.

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.

1. Invocation
2. Welcome Address by the Chairman of the Host Centre I Organizing
3. Committee
4. Introduction of President (by the Outgoing President) and his installation.
5. Address by President
6. Distribution of NDRF Awards and Institution Prizes (four categories only)
7. Inaugural Address by the Chief Guest
8. Vote of thanks by Secretary and Director General, lEI
9. National Anthem

The President, lEI shall chair the Inaugural Session of the Congress

11.8.2 Inauguration of Congress Seminar

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

1. Welcome Address by the Chairman. Technical Committee
2. About the Seminar by the Convenor, Technical Committee
3. Address by President, lEI
4. Special Lecture on the theme of Congress Seminar Inaugural Address by the Chief Guest of the Seminar
5. Vote of thanks by the Honorary Secretary of the Host Centre *I* 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.

1. Welcome Address by the Chairman of the Session
2. Background of the Lecture and introduction of the speaker by Secretary & Director General. lEI
3. Memorial Lecture Presentation
4. Vote of thanks by Secretary & Director General. lEI

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

11.8.4 Glimpses of Engineering Personality

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

1. Welcome Address by President, lEI
2. Introduction of Personalities by Secretary & Director General, lEI' .
3. Replies by Personalities
4. Vote of thanks by the Secretary & Director General, lEI

The President, lEI shall chair this session

11.8.5 Concluding Session of Congress Seminar

1. The structure of the programme of Concluding Session of the Congress Seminar shall be as follows.
2. Welcome Address by the Chairman, Technical Committee
3. Reporting by Rapporteurs of all Technical Sessions

4. Finalization of Recommendations
5. Vote of thanks by the Convenor, 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 Valedictory Session of the Congress shall be as follows.

1. Welcome Address' by the Chairman, Organizing Committee
2. Reporting by the Organizing Secretary
3. Response by delegates (from the floor)
4. Address by President, IEI
5. 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 IV & V, 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, 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 and subsequently approved by the 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 Headquarters 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.

- National Seminar
- Memorial Lecture (for specified Memorial Lecture see page no 6 to 17)
- State-of-the-art Lecture
- Felicitation of Eminent Engineers
- Technical Visit and Technical Exhibition
- Workshop/Round Table/Panel Discussion
- Division Board Meeting

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 twelve months prior** to the proposed dates of the Convention. The proposal shall contain the following for consideration of the Board.

- Venue (city/town)
- Dates
- Theme of the National Seminar
- Other activities (Workshop/Round Table/Panel Discussion) to be held concurrently with the Convention.

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 Headquarters will be available.

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

- National Advisory Committee
- Organizing Committee

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 Centre and the 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 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 Headquarters shall be kept informed about major details of the programme as may be finalized by the Organizing Committee from time to time.

12.1.6 Resource Mobilization

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

- Grant from the Division Board
- 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

Essential documentation in the form of preprints of article should be brought out in advance. A publication containing the proceedings and recommendations is desirable. The Host Centre may also publish a souvenir on the occasion.

12.1.8 Programme Structure

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

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
- Vote of thanks by the Organizing Secretary/Honorary Secretary of the Host Centre

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

Memorial Lecture and **State-of-the-art** Lecture shall follow the Inaugural Session.

Technical Sessions of the National Seminar

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 preside 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 the IEI News and the Division Part of the Journal of Institution. 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. The Host Centre should send 25 copies of the "First Information Brochure" to the Headquarters for necessary 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.

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.

12.1.11 Annual Paper Meeting

Adequate instructions shall be communicated to the authors by the Headquarters so as to have the articles with uniformity in respect of notation, symbols, etc.

Articles received and screened by the Headquarters should be presented at the Annual Paper Meeting. The list of authors with their addresses and titles of the articles shall be sent by the Headquarters to the Organizing Committee. The authors shall be contacted by the Headquarters and also by the Organizing Committee.

The Officer of the Technical Department attending the National Convention shall also assist the Host Centre for the successful conduct of the Convention and prepare a report for the perusal of the Chairman of the Division Board.

12.1.12 General

The Host Centre must send a complete report on the suggested pattern (see page no 18 to 20) and a few photographs within 15 days from the date of culmination of National Convention to the Headquarters for the purpose of publishing the same in IEI News.

In addition to the guidelines mentioned earlier, the host center is also required to arrange the following :-

1) During the Convention a separate IEI Information Desk has to be set up, displaying the various publications (journals, IEI News, etc) of the Institution, the Membership forms and other priced items like the Institution tie, lapel pin etc. It is expected that a competent person would be available who will be in a position to clarify the queries and give information regarding the IE(I) membership, various courses of IEI etc. to the visitors. The stall is to be put up in a prominently visible location at least half an hour before the start of the inaugural function and needs to remain operational till end of the Convention.

2) A core group is to be formed out of the members of the organizing committee of the Convention for monitoring follow up actions on the recommendations of the National Convention.

3) Local Committee members attached to the Engineering Division are to be requested to attend the Division Board Meeting. Formal invitation letter shall be sent from the HQ. Please forward their mailing address.

4) The Information Brochure, apart from other details should include the names of the members of National Advisory Committee as provided in the Guidebook and the list of Division Board Members.

12.2 All-India Seminar

The procedures in regard to proposal from a Centre and its approval by the concerned Division Board shall be same as those for a National Convention. However, the proposal from a Centre should be submitted to the concerned Division Board at least six months prior to the proposed dates of the Seminar. The proposal shall contain the suggested theme, dates and venue (city/town) of the Seminar.

12.2.1 The structure of the programme of an All-India Seminar shall be as follows.

12.2.1.1 Inaugural Session to have:

a. Welcome Address by the. Chairman. Host Centre
b. Address by President. lEI (if present)
c. Address by the Chairman, Division Board (if present)
d. Address on the theme of technical sessions by the Honorary
e. Secretary / Organizing Secretary / Convenor - .
f. Address by the Special *Guests* (if any)
g. Inaugural Address by the Chief Guest
h. Vote of thanks by the Honorary Secretary of the Centre

12.2.1.2 Technical Session
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.

12.2.1.3 Semi-Annual Paper Meeting
This activity is organized along with an All India Seminar on a theme chosen by the Division Board and

approved by the CATE / Council.

12.2.1.4 Concluding/Valedictory Session to have:
a. Welcome Address by the Chairman of the Host Centre
b. Reporting by Rapporteur of each session
c. Finalization of Recommendations
d. 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.

Organizational structure, resource mobilization, publicity, technical sessions, etc shall be similar to those prescribed for a National Convention. However, the National Advisory Committee may not be constituted for an All-India Seminar. The report on an All-India Se 'oar shall be sent to the Headquarters within 15 days fro the date of culmination of the Seminar together with two copies of the preprints of articles (as published) and a few photo-graphs for possible inclusion as a report in lEI News.

12.2.1.5 Round Table/Workshop/Continuing Education Course/Panel Discussion

The general features of the round table, workshop, continuing education course and panel discussion may be orga nized by a Centre, the details of which are as follows.

12.3.1 Round Table
A 'Round Table' is a forum for discussions on problems of common interest. A Round Table is a business like discussion instead of long endless speeches. It is a forum that will make strategy for decision-making for future courses of action. Here, a nucleus of planning is born, and methodologies outlined.
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, socio-economic and administrative 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 Headquarters soon after the culmination of the event. 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 Headquarters soon after the culmination of the event.

12.3.2 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.
1. Lecture
2. Group Discussion
3. Case Study

4. Project Work
5. Demonstration
6. Film Show
7. 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 Headquarters for future reference and record soon after the culmination of the course. A certificate may be issued to participants in this effect.

13.0 lEI CONVOCATION AND TECHNICIANS'/STUDENTS' CONVENTION

The lEI Convocation is held once a year aiming at achievement of technical and professional growth through technical content and mutual interaction amongst the Students / Technicians. The Convocation shall seek to achieve maximum involvement and participation of Students/Technicians. This is the activity, which also aims at establishing liaison between the Institution, its Students/Technicians and the policy makers. The Organization of Convocation, therefore, requires full attention of the Host Centre and an adequately long-term planning.

13.1 Nomenclature

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

The activity shall be designated in the following style: *({Ninth lEI Convocation and Technicians'/ Students' Convention"*

13.2 Planning

Proposal for holding lEI Convocation and Technicians' / Students' Convention will emanate from a Centre and shall be finalized by the Council.

The Centre desiring to hold the lEI Convocation and Technicians' / Students' Convention shall submit the proposal to President of lEI 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.

13.3 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

Announcement in Technicians' Journal and publication of theme, etc	End of May
Printing and despatch of Information Brochure	End of June
Last date for submission of articles for Seminar and Paper Meeting	Middle of July
Intimation to Chapter Members (whose articles are accepted)	Middle of August
Registration	End of September

13.4 Organization

For smooth organization of this national event, the Host Centre shall constitute an Organizing Committee with the C~ 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.

13.5 Resource Mobilization

The Organizing Committee shall plan resource mobilization and the income may comprise grant from Headquarters (Appendix ll), registration fees to be paid by delegates, contribution of other organizations, charges collected from advertisers in the Souvenir published by the Host Centre, if any, etc.

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

13.6 Programme Structure

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

3.6.1 IEI Convocation and Inaugural Session' of the Convention to have

1. Welcome Address by the Chairman of the Organizing Committee Address by President.. IEI
2. Exhortation by President, IEI
3. Convocation Address by an eminent personality
4. Inaugural address by the Chief Guest
5. Presentation of Prizes and Trophies
6. Vote of thanks by Secretary & Director General, IEI

This session shall be presided over by *the President of /E/* in which the certificates shal1 also be distributed to 'Graduates' (who passed the examinations held in the Winter/Summer of the preceding year).

13.6.2 Seminar / Technical Session

The Seminar shal1 consist of presentation of selected articles on the approved theme and the Technical Sessions shall consist of presentation of approved articles by Technician and Student Members on topic of their own choice.

The sessions shall normally be presided over by the Chairman of AITC or of AISC and there shall be a jury comprising three members to select prizes.

13.6.3 General Session

This 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.

13.6.4 Valedictory Session

The Valedictory Session to have:

Welcome Address by the Chairman of the Host Centre Reporting of the Technical Sessions by the respective Chairman of AITC or AISC

Presentation of Prizes to Authors'

Vote of thanks by the Organizing Secretary / Honorary Secretary of Host Centre

13.7 Publicity

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

13.8 Students'/Technicians' Seminar and Technical Session

The students I technicians desirous of presenting articles shall be advised to submit the same in duplicate to the Headquarters. A Scrutiny Committee shall be constituted by the Secretary & Director General. The decision of the said Committee shall be communicated well ahead of the dates of the Convocation 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 I 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 Students' Chapter and best Technicians' Chapter, on the recommendation of the All-India Students Committee and All India Technicians Committee, respectively. These prizes including those for proficiency in examination shall be given at the Inaugural Session of the IEI Convention.

14.0 INTERNATIONAL CONGRESS I CONFERENCE I SEMINAR I WORKSHOP

A technical event such as congress I conference I seminar I workshop to qualify as an international event should meet the following requirements.

1. Offer adequate scope of wide international participation.
2. The activity be. supported I sponsored I co-sponsored by other professional societies of standing, universities or academic institutions and R & D organizations outside the country and I or supported I funded by international organizations like UNESCO, UNDP, ADB, WFEO, WMC, FIB, FEISCA.

14.1 Procedures for Approval of Council

The proposal for hosting an international event from a Centre shall contain the following information and shall be placed before CATE for its consideration at least 24 months prior to the proposed dates.

1. Nomenclature of the event
2. Theme and sub-themes with a short write-up

Venue (city I town)

Expected participation of international bodies.

The CATE, at its discretion, shall recommend the proposal to the Council for provisional approval and on receipt of the said provisional approval. the Centre shall approach to various international bodies for participation as sponsors/co-sponsors. Within six months after the receipt of the provisional approval of the Council, the Host Centre shall report to the Council about the status of the international participation. If the response is favourable, the approval shall be made final.

14.2 Programme Structure

The programme structure of the international congress I conference I seminar I workshop comprises the followings.

1. Inaugural Session
2. Technical Session
3. Concluding Session
4. Valedictory Session
5. Technical Exhibition

On the social side, the Host Centre shall organize cultural programmes, local sight seeing tours, outstation tours, ladies programmes, etc.

14.3 Organisational Set-up

The Organizational set-up shall comprise the following.

1. International Advisory Committee with participation from foreign collaborating organizations.
2. National Advisory Committee with eminent Indian personalities to generate interest among all functionaries through members to involve them in technical contribution, logistics arrangement, infrastructural support, etc.
3. Organizing Committee with a senior member of the Institution like a Past President, the President, a Vice-President and the Chairman of the Host Centre as its Chairman. This committee should have heads of government departments and industries who as individual can take interest and can spare time.

The Organizing Committee shall act as the nucleus for all planning and implementation and may have several functional committees to look after various areas of activities.

1. The most important functional committees are : Finance Committee and Technical Committee.
2. The Finance Committee shall take the stock of the financial position. generate funds, regulate and guide the expenses with best practices of financial management.

The Technical Committee set-up with acknowledged and respected professional as the Chairman shall set in motion the technical programme and shall be responsible for assessment of article received, printing the articles and conducting the technical sessions in the most befitting manners.

For details of Seating Plans and format of Invitation Cards, please see Appendix V & VI, respectively.

14.4 Financial Management

The financial management in regard to organization of an international event comprises the following.

14.4.1 A bank account for the conference should be opened at the earliest. The signatories for the bank account may be the Chairman, Organizing Committee; Organising Secretary; a member .of the Finance Committee and, if possible, Director (Finance) / Deputy Director (Finance) from IEI Headquarters. In case no Finance Committee Member is available, a Senior Council Member at the event venue can be a substitute.

14.4.2 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 immediately be entered in the Cash Book and accounted for properly.

14.4.3 Reconciliation with the bank should be done regularly on a monthly basis and statement of such 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 sent to the senders after Cheques / Drafts are credited.

14.4.4 Power to incur expenditure shall be exercised by Chairman, Organizing Committee. However, both Organizing Secretary and the member, Finance Committee may be authorized to incur normal day-to-day expenditure not exceeding Rs. 10,000/- in each case. All expenditure should be sanctioned by the Organizing Committee. It is necessary to ensure that purchases, services and printing jobs, etc are let out in transparent manner and in the best interest of IEI.

14.4.5 Procedures required for processing and scrutinizing the bills would be as per the existing financial rules of IEI and also as per the following guidelines.

(a) No payment in excess of Rs. 1000/- be released. Qther 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, (i.e. Contractors, etc. *uIs.* 194-C, Professionals *uIs.* 194-J under the Income Tax Act. wherever applicable).

14.4.6 In regard to car hire and telephone / fax to be made in connection with the international activity, following guidelines should strictly be enforced.

(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 *I* Chairman should be obtained.

(b) The person using the car should sign the duty slip of car hire agencies and note the kilometre 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) Requizition slips for car hire shall normally be approved by the Organizing Secretary.

14.4.7 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.

14.4.8 (a) Accounts will be maintained broadly as per classification of account heads and as per the 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,OOOI-* shall be maintained by the Organizing Secretary for meeting day-today 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 of his officers who has sufficient experience in one of the following fields.

(i) Printing and stationery
(ii) Technical publication
(iii) Postage and telegram
(iv) Souvenir for delegates
(v) Fixed assets

(d) IEI Headquarters may depute its Officer/Internal Auditor, if need be, to examine the accounts and report to the- Finance Committee.

14.4.9 TA and DA to Headquarters 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 out of the Conference Account and such TA and DA will be as per the norms and rules for TA and DA to Council Members.

14.4.10 The Organizing Secretary will be responsible for:

(i) proper maintenance of Subsidiary Accounts refereed to in item 14.4.8(c) as mentioned above,
(ii) safe custody of stocks in hand,
(iii) physical verification of stock in hand/fixed assets at the time of audit,
(iv) the evaluation of the technical publications and stock of paper and other items which have financial implications and are to be incorporated in the final account,
and
(v) register of registration fees received from delegates. The following powers will rest with the Chairman. Organizing Committee.

To write off the bad debts / amount short received.

Exempt the delegate(s) from payment of fees.

14.4.11 Expenditure on local hospitality [i.e. boarding, transport and accommodation. etc to invite 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.

14.4.12 Immediately after the conference is over, the accounts should be prepared incorporating all receipts and expenditure and 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 from the culmination of the event.

Surplus from all International Conferences will be transferred to Headquarters and to be credited to appropriate heads of accounts of the National Committees such as *WFEO/WMCI* fib, etc which organized the function and utilized for payment of foreign subscription *I* delegation fee, etc for international meetings *I* conferences.

Audited Accounts of the Conference *I* Congress shall be submitted to IEI Headquarters preferably within six months from the culmination of events.

14.4.13 All-out 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 Headquarters.

14.5 Co-sponsorship of International Conference

The IEI may consider proposal for co-sponsoring an international technical event being organized by a sister professional body of standing, institutions of repute, government departments, and public and private sector undertakings with *I* without any financial commitment and allow them to use IEI's name provided that IEI is represented in their Organizing Committees and IEI's involvement in this respect is projected properly in the Conference Proceedings, etc.

Such proposals should invariably be processed through the CATE and the Council.

Where financial support is extended by IEI for such events, the Utilization Certificate must be obtained from the sponsored organizers for the purpose of IEI's audit.

15.0 OTHER TECHNICAL EVENTS

Besides organizing various technical discourses in diverse fields of engineering in the form of seminar *I* conference *I* ,workshop *I* round table, the IEI observes a number of days earmarked for specific purposes throughout the county. Followings are the details. of such activities.

15.1./ Water Resources Day

The theme for the Water Resources Day is obtained form the Central Water Commission, New Delhi and the same is circulated to all Centres of IEI for observance of the day on any day from }'I April to 3111 May each year (date to be selected by Host Centre).

15.2 World Telecommunication Day

The theme for the World Telecommunication Day is obtained from International Telecommunication Union, Geneva, Switzerland and is circulated to all Centres for the observance of the day on the 1?th of May each year.

15.3 World Environment Day

The theme for the World Environment Day is obtained from the Headquarters of UNEP and is circulated to all Centres for the observance of the day on the 5111 of June each year.

15.4 Engineers' Day

The National Engineers' Day is observed by all Centres of IEI on the 15th of September each year to commemorate the birthday of Bharat Ratna Sir Mokshagundam Visvesvaraya. The Theme for the day is prescribed by the Council for celebration through lecture/s, round table/s, workshop/s, seminar/s as decided by the Centres. The theme and write up on the same is prepared by Headquarters and send to all Centres of IEI before the end of June each year.

15.5 World Standards Day

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

APPENDIX III : MEMORIAL LECTURES AT INDIAN ENGINEERING CONGRESS

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

a. Sir Mokshagundam Visvesvaraya Memorial Lecture
b. Sir R N MookeJjee Memorial Lecture
c. Dr A N Khosla Memorial Lecture
d. Nidhu Bhushan Memorial Lecture
e. Bhaikaka Memorial Lecture
f. Dr Amitabha Bhattacharyya Memorial Lecture

Sir Mokshagundam Visvesvaraya Memorial Lecture

Sir Mokshagundam Vasvesnraya Memorial Lecture was founded by the Maharashtra State Centre of the Institution in 1957-58 and the first few lectures were delivered in Bombay. Later, the lecture was transferred to the Headquarters of The Institution of Engineers (India) in 1960, to be delivered during the Annual Convention of the Institution, which was subsequently redesignated as the Indian Engineering Congress.

Born in 1861 at Cbikkaballarpur in former Mysore State, Sir Mokshagundam took the B A degree from Madras University in 1880 and received engineering education at the then College of Science, Pune. Early in 1884, be- was appointed as an Assistant Engineer in the Bombay PWD: In 1894. be 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 to advise the Government of India on measures to implement and extend schemes of cultivation by irrigation. fie 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 1909.

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 Oandhiji, 'the Krishnarajasagara alone which is one of the largest of its kind in the world would perpetuate the name of Sir Visvesvaraya'. At the advanced 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 Ganga in Bihar (the Mokameh Bridge) opened on May I, 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 Iristitution. 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 institute an Annual Lecture in the name of Sir Rajendra Nath MookeIjee 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 MookeIjee had the vision *of* an engineer and the comprehension *of* an intellectual. Born on 23rd June 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 15th May 1936. The life story *of* Sir Rajendra Nath MookeIjee 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 MookeIjee 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 enabled this self-made man in later life, to build an industrial colossus and a trading conglomerate. Sir Rajendra Nath MookeIjee 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 1920-21. He was knighted after his successful construction *of* the Victoria Memorial Building at Calcutta.

An abiding and deep interest *of* Sir Rajendra Nath MookeIjee in all kinds *of* social welfare work brought into being and sustained many a charitable institutions. Essentially a man *of* science, Sir Rajendra Nath practised 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 remodelling *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, Nannada 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 Hirakud 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 Pakistan. 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 Bhusban 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 56111 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 tilled 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 Haroda 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 originality 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 dedicate 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 Gramoddher Sehakeri Mandai Ltd were established in 1945. After many years of hard work, he could establish Sardar Vallabh 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 qf 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 5631'1 meeting held at Hyderabad in July 1992, resolved to institute this Lecture to perpetuate his hallowed memory.

Prof (Dr) Amitabba Bbattacharyya, 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

1	2	3	4	5	6
Personality	Personality	President	Personality	Personality	Secretary)' & Director General

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.

APPENDIX IV : SEATING PLANS

1. INDIAN ENGINEERING CONGRESS

A. Inaugural Session of the Congress

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15

(l) Honorary Secretary of the Host Centre	(9) Outgoing President, IEI
(2) Chairman, Organizing Committee	(l0)Past President, IEI
(3) Past President, IEI	(11) Past President, IEI
(4) Past President, IEI	(12) Past President, IEI
(5) Past President, IEI	(13) Past President, IEI
(6) Past President, IEI	(14) Chairman of the Host Centre
(7) Incoming President, IEI	(15) Secretary & Director General, IEI
(8) Chief Guest of the Session	

B. Inauguration of Congress Seminar

1	2	3	4	5	6	7

(1) Convenor, Technical Committee	(4) Chief Guest
(2) Chairman, Technical Committee	(5) Chairman, Organizing Committee
(3) President, lEI	(6) Secretary & Director General

(7) Organizing Secretary

C. Memorial Lecture

1	2	3
Memorial Lecture Speaker	Chairman of the Session	Secretary & Director General, lEI

D. Glimpses *of* Engineering Personality

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
Organizing Secretary	Past President, lEI	Cahirman, Organizing Committee	President, lEI	Chairman, Host Centre	Past President *of* the Centre	Honorary Secretary, Host Centrl

SEATING PLAN FOR NATIONAL CONVENTIONS

A. **Inaugural Session**

1	2	3	4	5	6	7	8
Organizing Secretary	Chairman, Organizing Committee	Chairman, Division Board	President, IEI	Chief Guest	Chairman, Host Centre	Convenor, Technical Committee	Honorary Secretary, Host Centre

B. Valedictory / Concluding Session

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

3. lEI CONVOCATION AND TECHNICIANS' / STUDENTS' CONVENTION

Convocation and Inauguration *of* Convention

1	2	3	4	5	6	7	8	9	10

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

4. International Seminar/Conferences

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

APPENDIX V: FORMAT OF INVITATION CARDS FOR INDIAN ENGINEERING CONGRESS *I* NATIONAL CONVENTION OF ENGINEERING DIVISIONS IEI CONVOCATION AND TECHNICIANS' *I* STUDENTS' CONVENTION

A. INAUGURAL SESSION OF THE INDIAN ENGINEERING CONGRESS IEI CONVOCATION AND TECHNICIANS' *I* 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.

R.S.V.P

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.

R.S.V.P.

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.
R.S.V.P.

International Conference/Seminar

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

APPENDIX VI : MEMORIAL LECTURES AT NATIONAL CONVENTIONS

Engineering Division	Name of Lecture
AG	**Rathindra Nath 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 Ramanujam 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***	**Simultaneously**
	Dr S P Luthra Memorial Lecture	
MM	**V Subramony Memorial Lecture**	
MN	**Prof S K Bose Memorial Lecture**	
MR	**T B Bose Memorial Lecture**	
PR	**F W Taylor Memorial Lecture**	**Simultaneously**
	G C Sen Memorial Lecture	
TX	**S N Bhaduri Memorial Lecture**	**Alternate year**
	Dr B K Chakrabarti Memorial Lecture	

*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 27th November 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, U S A in 1910 and specialized in rural craft besides agriculture. He travelled extensively in England and the U S A 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 3rd June 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 7th February 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 & 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 practising 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 12th August, 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 2nd August , 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 16th June, 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 1st May , 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 27 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 1st April , 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 32 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 15th July, 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 & 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 & 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 Fergusson 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 & 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 ionisation and night sky Iuminescence 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 Bhattacharya, born on 20th August, 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 text books 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 1st April , 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 (Engg) Degree

of Punjab University in 1937 and worked at the North West Railway Mechanical Workshop at Lahore; Punjab PWD, Hydro Electric Branch; Shaw Wallace & Co Ltd; Siemens India Ltd. andVDJH Technical Institute, Lahore.

In 1949, Dr Luthra joined Delhi Polytechnic (now 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, Garge 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 12 years and was Chairman of the Delhi State Centre of the Institution. He expired on 24th July , 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.

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 U.S.A.

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 Headquarters as General Manager (Operations) in June 1978, and subsequently he took over as Director (Technical) in January 1981. On 30th April, 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 15th November, 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 23rd January, 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.

PROF S K BOSE MEMORIAL LECTURE

Prof. S K Bose was born on 7th October , 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 Hons) 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 15th January, 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 I M M T S "Dufferin".

Admiral Bose was Principal Officer, Mercantile Marine Department at Calcutta in 1952. Right from the time the new D M E T 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 I S I (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 expertize 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 20th March, 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 21st March, 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 30th December 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 text book 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

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.

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.

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 Technial 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 VII : FORMAT FOR REPORT ON NATIONAL 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 Headquarters 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 Headquarters confirming to host the Convention _____

(ii) Date of receipt of Guidelines from the Headquarters _____

(iii) Date of despatch of materials to Headquarters for announcements in IEI News/Journal/Students' Newsletter/Technicians' Journal _____

(iv) Date of despatch of First Circular to prospective delegates _____

(v) Date of despatch of Last Circular to prospective delegates _____

(vi) Date of receipt of seed money from the Headquarters _____

(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 _____

(d) Annual Paper Meeting

(i) Date(s) _____

(ii) Number of articles received by the HQ _____

(iii) Number of articles presented _____

(e) Number of expert lectures with details _____

(f) Number of technical sessions _____

(g) 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

(h) Felicitation of Eminent Engineer(s)

(Also, highlight the achievements of personalities)

(i) Number selected with names _____

(ii) Number attended with names _____

(i) 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 _____

(j) Name of Representative from the Headquarters and work done by him/her _____

(k) Strong/Weak Points

(i) Strong points about the Headquarters _____

(ii) Weak points about the Headquarters _____

(l) Press Coverage

(i) Newspapers (Please attach cuttings) _____

(ii) AIR _____

(iii) TV _____

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

Any other remarks _____

CONTD. ……..

NEW TIME SLOTS FOR HOLDING NATIONAL CONVENTIONS OF ENGINEERING DIVISIONS, COUNCIL MEETINGS, IEI CONVOCATION AND INDIAN ENGINEERING CONGRESS AS ACCEPTED BY THE CATE

	Division Board		*Month*
1.	**AGDB, ENDB, MMDB**	**:**	**January**
2.	**TXDB, CPDB**	**:**	**February**
3.	**Council Meeting, spill over month for National Convention**	**:**	**March**
4.	**--------**	**:**	**April**
5.	**PRDB**	**:**	**May**
6.	**Council Meeting**	**:**	**June**
7.	**Spill over month**	**:**	**July**
8.	**MRDB**	**:**	**August**
9.	**CHDB, MCDB, Council Meeting**	**:**	**September**
10.	**ETDB, CVDB, IEI Convocation**	**:**	**October**
11.	**ARDB, ASDB, ELDB**	**:**	**November**
12.	**MNDB, Indian Engineering Congress**	**:**	**December**