

# Reports of the Proceedings of the 10th All India Conference on Engineering Materials & Equipment

**Organised by :** The Association of Engineers, India

**Co-Sponsors :**

M/s. Ghosh, Bose & Associates, Calcutta-16.

The Regional Computer Centre, Calcutta-32.

**Venue :** Bharatiya Bhasa Parisad Auditorium, Calcutta-17.

**Date :** 16—18 January, 1981.

The 10th AICEME was inaugurated by Sri Chittabrata Majumder, Minister-in charge, Cottage & Small Scale Industries, Government of West Bengal on 16th January at the auditorium of the Bharatiya Bhasa Parisad. Dr. R. K. Chakrabarti, President of The Association presided over the function. Dr. M. Bhattacharyya, our Vice-President welcomed the delegates and guests.

In his Inaugural Address Sri Majumder stressed upon the need on Economic Growth and Productivity. The Minister reminded the engineers of their role to the society and emphasised that the prime aim of the technology is to bring the benefits to the masses. The policies towards large scale and small scale manufacturing industries should be framed in such a way that, they do not interfere with each others interests. Mechanisation is necessary but it should be labour-intensive, also stressed upon by Shri Majumder.

Er. N. R. Banerjea, Secretary of The Association, mentioned about the various activities of the Association. The Association will be conducting the Associate Membership Examination for the Diploma Holder Engi-

neers and Technologists in Mechanical, Electrical and Civil Engineering in June, 1981. The Secretary mentioned that The Association had been allotted a plot of land in the Salt Lake City by the Government of West Bengal. The Association is very thankful to the State Government for this. The Association will soon be taking a programme to build its own house in the Salt Lake City.

Dr R. K. Chakrabarti in his Presidential Address emphasised upon the need of a National Wage Policy and also called upon the Government to entrust the Engineers, Scientists & Technologists with the policy making Body for National Development. Dr. Chakraborty further mentioned that even after 33 years of Independence the country has not considered the matter seriously. It is high time that we should consider a Technical & Scientific Service on All India basis in the same line as I.A.S. and other Higher Services. Dr. Chakrabarti also stressed upon the need of action oriented plans and programmes for National Development.

During the 10th AICEME, The Association of Engineers, India conferred Hony. Fellowship of the Association to two eminent personalities

in the profession of engineering and public life. They are

Er. Kartik Oraon,  
Hon'ble Minister of State,  
Tourism & Civil Aviation,  
Government of India, New Delhi.

and

Er. Subimal Ghosh,  
• Sheriff, The City of Calcutta and  
Director, M/s. Ghosh, Bose &  
Associates, Calcutta-16

Both Ers. Oraon and Ghosh have made outstanding contributions in the profession and for that matter to the cause of National Development. The citations for the Award of the Fellowship are given elsewhere in this issue.

The Inaugural Session of the 10th AICEME ended with a Vote of Thanks moved forward by Dr. B. Bose. Our sincere and hearty thanks are due to

Sri Chittabrata Majumder  
Minister-in-Charge, Cottage &  
Small Sale Industries, W. B.  
Government for accepting our  
invitation to grace this occasion  
and inaugurating the conference ;

The Regional Computer Centre, Cal-32  
and M/s Ghosh, Bose & Associates, Cal-16  
for Co-sponsoring the 10th AICEME.

The West Bengal Science & Technology  
Committee, Government of West Bengal, for  
providing financial assistance to bring out  
this issue of the proceedings of the 10th  
AICEME ;

The Bharatiya Bhasa Parisad, Calcutta-17  
for permitting us to hold the 10th AICEME in  
its Auditorium and Seminar Hall ;

and

The Patrons and Advertisers to the Pre-  
Conference Issue of the Journal of the Journal  
of the Association of Engineers, India.

The Technical Sessions were held on 17 &  
18 January, 1981 at the Seminar Hall of the  
Bharatiya Bhasa Parisad. The papers pre-  
sented at the Technical Sessions are printed  
in this issue. The brief proceedings of the  
Technical Sessions are given below.

### SYNOPSIS OF THE TECHNICAL SESSIONS

TS 1 : Chairman : Er. A. C. Chaturvedi,  
F.A.E., India,  
Chief Engineer, Irrigation  
U. P. Government,  
Lucknow.

Topic : **Water Supply in Rural Areas  
for Agro-Irrigation.**

The theme of the topics are very important  
and intimately connected with the develop-  
ment of Water Resources: Planning &  
Management and for that matter the National  
Development at large. The papers are  
published in this issue of the Journal.

The consensus of the august Congregation,  
which had been attended by Experts and  
Specialists from different parts of the country  
was :

That a White Paper on the Recommen-  
dations of the Congression regarding different  
aspects found to be important for the Planning,  
Development & Management of Water Re-  
sources of our Country be published and be

brought to the notice of all concerned agencies and personalities at home and abroad.

This is a novel idea. Because the Congregation felt that it is only through "Action Oriented Plan and Programme for its Completion" the country's vast water wealth could be developed. In the wake of Government of India's Rs 50,000 crores Plan on Water Resources Development of the country it may be mentioned, that the Recommendations of the Congregation would be not only timely but also very important.

TS 2 : Chairman : Dr. B. Sen,  
Director,  
Technical Education,  
W. B. Government,  
Calcutta-1.

Key-note-Speaker : Dr. H. K. Sen,  
Managing Director,  
H. K Sen & Associates,  
Calcutta-17.

Topic : **Application of Computational Technique in Design.**

There are a number of papers presented at this Sessions. The general feelings of the seminar are being summed up nicely by Dr. B. Sen, who presided over the Session. Mr. H. K. Sen in his Key-Note address talked about the interesting aspects of the usage of computer in the early days as well as the different factors concerning use of computer at present.

The computer has got to be accepted in our society otherwise we would be unable to keep pace with the rest of the world. There had been many revolutions in the past, for instance, Industrial Revolution, Electrical Revolution, etc. This is the age of Computer

Revolution. And should we like to go parallel with the rest of the world we would not afford to 'miss the bus'. The scientific achievement in the present age would be difficult to attain without the aid of computer. Regarding the use of computer there are problems for example, to develop programme. It may not be always profitable to go for one's own programme when standard programme-packages are available at nominal costs.

The papers presented in this session are printed in the volume.

**TS 3 : Production & Productivity**

Chairman : Dr. R. K. Chakrabarti, F.A.E.  
President, A.E.I.

Key-note-Speaker : Er. K. K. Chanda,  
Alkali Chemicals Ltd.  
Rishra.

Er. K. K. Chanda in his Key-Note address focussed on the important problems associated with production and productivity. Er. Chanda pointed that "when the productivity is low the cost of some sophisticated product, eg. transistorised radio-set has not gone up whereas cost of most of other daily necessities have increased". Er. Chanda believes that it is possible to increase the productivity reorganising man and machine within the constraints of management and capital investment and market. Since demand for product as well as competition for sale are high the production must have to be increased.

Papers presented and discussed in the session are published in this issue.

Dr. Chakrabarti, President of the Association, summed up the Technical Sessions with thanks to the authors of papers and the Key-

Note Speakers at different Technical Sessions. It is important to note, mentioned Dr. Chakrabarti, that the Technical Sessions were very interesting and lively all through. The audience were very critical and knowledgeable and had been taking active parts during the deliberations. This feature according to our President, who had attended many Conferences and Seminars at home and abroad, is very heartening and rarely seen in learned Seminars & Conferences where in general the link between the speaker and the audience is very thin. Dr. Chakrabarti further emphasised

on the need of 'action-oriented-programme' and called upon the profession at large to go through the "Recommendations of the Technical Sessions on Water Resources, Application of Computers in Design and Production & Productivity" which would be published as a "White Paper" for all concerned as per consensus of the Congregation during the 10th AICEME. It would be a matter of time to see whether such a novel work by the Association could make any impact on National Development and to the cause of the profession, but the 10th AICEME had been a Success !

## **The Association of Engineers, India Conferred Hony. Fellowship on**

**Er. KARTIK ORAON**

**Er. SUBIMAL GHOSH**

**during the Inaugural Session of the 10th AICEME held on 16.1.81 at  
the Auditorium of the Bharatiya Bhasa Parisad, Calcutta-17.**

### **Citation**

Engineer **Kartik Oraon** was born in 1924. He graduated from the Science College and Bihar College of Engineering, Patna. He did his Post-Graduate work in Engineering from the Royal College of Science and Technology, Glasgow and Battersea College of Technology, London University. He studied for Bar-at-Law at the Lincoln's Inn, London. He is a Chartered Civil & Structural Engineer. He is a member of the following Associations :

1. Member of the Civil Institutions of Civil Engineers, London.

2. Member of the Institute of Structural Engineering, London.
3. Member of the American Society for Civil Engineers, (USA).

He has worked for more than 20 years with different Industries and Concerns like Twisteel Reinforcement Ltd. & E. B. Badegan & Sons, London, British Railways, British Transport Commission, London, Atomic Power Department Taylor Woodrow Construction Ltd., Middlesex, U. K., Hinkley

Point Nuclear Power Station in U. K., Heavy Engineering Corporation Ltd., Ranchi, etc.

Er. Oraon has actively participated in the political field of the country. He is a member of Parliament during 1967-1970, then 1971 to 1977 and 1980 to-date. At present, he is a Minister in the Central Government in Delhi.

In recognition to his contribution in the field of Engineering and Technology and also as one of the representatives of Professional people in the Parliament of the country, the Association of Engineers, India confers on him the "Honorary Fellowship" of the Association.

## Citation

Engineer **Subimal Ghosh** was born in 1927. He graduated in Civil Engineering from the Bengal Engineering College, Shibpore, Howrah, under the Calcutta University in 1950.

Er. Ghosh did Post-Graduate Diploma in Structural Engineering from the Imperial College of Science & Technology, London, in 1956. He also did his Post-Graduate course in Town Planning from the London School of Economics in 1956.

Er. Ghosh is one of the successful Consultants and Architects in this country. He is a member of the following institutions :

1. Life Member of the Institution of Engineers, India.
2. Member of the Institution of Structural Engineers, U.K.

3. Member of the Bengal National Chamber of Commerce & Industries.
4. Member and Secretary of the Rotary International.
5. Member of the Executive Committees of Social and Charitable Organisations like Calcutta Club, Bengal Club, etc.

He is a Registered Valuer with the High Court, Calcutta, the Finance Ministry, Government of India, L.I.C. and other Financial Institutions. He has acted as Official Arbitrator, Valuer on behalf of Official Liquidators in various cases of disputes. At present he is a Sheriff of the city Calcutta.

In recognition to his valuable contribution towards the development of the country the Association of Engineers, India confers on him the "Honorary Fellowship" of the Association.

## BOOK REVIEW

Books, Journals etc for review

should be sent to the Editor

of the Journal in **duplicate.**