Motilal Nehru National Institute of Technology
Allahabad

Report of IUCEE Regional Meeting with the Directors of Engineering Institutions in the Region
held on Wednesday, October 15, 2008 at 12:00 Noon in the Institute Conference Hall

Following participants attended the meeting

1. Prof. A.B. Samaddar Director, MNNIT, Allahabad in Chair
2. Mr. Vivek Singhal Board Member, IUCEE
3. Prof. D.S. Pundhir Director, KN Institute of Technology, Sultanpur
4. Dr. A.K. Singh Dean (Student Welfare), KN Institute of Technology, Sultanpur
5. Prof. S.G. Prakash Dean, JK Institute of Applied Physics & Technology, Allahabad University, Allahabad
6. Dr. T.D. Bhist Director, Shambhunath Institute of Engineering & Technology, Allahabad
7. Prof. K.P. Singh Director, Dr. Rizvi College of Engineering, Allahabad
8. Prof. A.N. Vishnoi Director, Allahabad Institute of Engineering and Technology, Allahabad
9. Prof. D.N. Parsad CEO, Allahabad Institute of Engineering and Technology, Allahabad
10. Prof. A.K. Sachan Professor, MNNIT, Allahabad
11. Prof. Anuj Jain Professor, MNNIT, Allahabad, Convener

Prof. Jain welcomed the participants and introduced Mr. Vivek Singhal to the participants.

Prof Samaddar informed the participants about the purpose of the meeting and the role of MNNIT.

Mr. Vivek Singhal introduced the participants about the IUCEE and its objectives.

Participants were requested to suggest the ways to improve the quality of Engineering Education in India and in particular in their own institutions/region. The participants expressed their concerns on various aspects of engineering education and proposed remedies. The points which came out after the deliberations are outlined below

1. **Students:**

   The participants expressed concern over poor quality of students and lack of motivation to learn. Following reasons are identified for the same

   i) With mushrooming of engineering institutes and corresponding increase in number of intake, the students of lower quality are getting admission to technical institutes.

   ii) Career choice is driven by family rather than by students themselves. Even the students’ choice is governed by family background, society notion and misplaced glamour rather than on their own abilities.

   iii) The technical institute are viewed by the students as employment exchange.
iv) Most of the students from rural background who have done their schooling in Hindi medium find it difficult to cope with the studies as English is the medium of instruction at engineering institutions.

**Recommendation:**

i) School education needs to be strengthened to enable students to make right choice of their career and equip them with necessary background for the same so that better students are available to engineering.

ii) Remedial courses to enable students to cope with expectations of technical education.

iii) Flexible under graduate programme where students can learn at their own pace.

iv) Improvement in quality of teaching in technical institutes so that students are motivated to learn.

v) Schemes for meritorious students to increase competitions, like one semester study at national level premier institutions with credit transfer facility.

vi) National level premier institutes, NITs should organise finishing schools for the fresh technical graduates.

2. **Faculty:**

The participants expressed concern over shortage of quality faculty in all level of institutions. Following reasons are identified for the same

i) In general, teaching is not considered a lucrative job option in the society.

ii) Teaching demands high qualification (Ph.D.) with no additional tangible benefits.

iii) Salaries are less as compared to that offered by the industry.

iv) People take up teaching job as time gap arrangement especially in less established institutes till they get better job. Therefore, they lack sincerity to their teaching job.

vi) Administrations of self financed institutes are not willing to spend on the training of such unstable faculty.

vii) Highly qualified faculty need not necessarily be always a good teacher.

viii) There is no training and certification programme to ensure the quality of the faculty.

ix) Lack of opportunities for teachers serving in self financed institutions to improve their qualification (Ph.D.)/skills.

**Recommendations:**

i) Salary and job conditions should be improved to attract the best talent to teaching.

ii) Avenues should be created for the faculties to improve their qualifications, subject knowledge and teaching skills.

iii) National level premier institutions like NITs should take lead in association with the government and other voluntary organisations like IUCEE for training and certification of existing faculty on larger scale.
iv) Faculty exchange programme should be strengthened. Opportunities may be looked for more interaction between Indian faculties from different level of institutions and also with their counterparts outside India. Faculty from established foreign universities may be invited to visit Indian universities and promising faculty from India be sent to good universities abroad for international exposure.

3. Curriculum:

i) The students are more theoretician resulting lack in appreciation of technology. Laboratory component and industrial exposure is less.

ii) Graduates are not able to meet the expectations of industry and the industry does not found them employable.

Recommendations:

i) Model curricula should be prepared/revised in association with industry as per their long term needs as guideline.

ii) More academic autonomy should be given to the institutions to frame their own curricula.

iii) Industry academia interaction should be increased. Industry exposure of students and faculty should be improved.

iv) Create a forum where the representatives of Industry and technical institutes meet on regular basis and discus the issues of mutual interest.

4. Administration:

i) The owners of many private institutions are politicians or businessmen who lack orientation and experience in managing engineering institutes.

ii) Shortage of qualified persons to become head of the institutes, i.e., Director/Principal.

iii) Lack of autonomy and accountability at all level was considered to prime deterrent for the excellence of institute.

Recommendations:

i) Sensitization and training programme for the owners/managers of the engineering institutes to enable them to make good profits out of engineering institutes through case studies of successful institutes.

ii) Leadership training for senior faculty to enable them to take up role of the head of the technical institute and its development.

iii) MNNIT should organise regular meetings of the head of the technical institutes in the region to create a platform to share the problems and solutions of the common interests.

Action Plan

i) Prof. D.S. Pundhir, Director, Kaml Nehru Institute of Technology, Sultanpur has offered himself to submit a draft proposal for conducting following training programmes to Prof. A.B. Samaddar for further action.
a. Business model for establishing an excellent institute for Chairperson/Secretary of technical institutes.
b. Leadership programme for the Principal/Directors
c. Effective teaching – learning programme for the faculty
d. Finishing school for the fresh graduates

ii) Visit to local and nearby technical institutes by the faculty of MNNIT to interact with the faculty of these institutes, sensitize them about the concerned issues and motivate them for effective teaching.

iii) Organise the above proposed programmes at a convenient date, time and locations as mutually agreed between trainer and trainees.

iv) MNNIT will organise meetings with the representatives of technical institutes and the industries once in every six month to keep pace and the direction of this initiative.