

INFORMATICS

1. NEWS :

A) I.I.I. NEWS

TMMA Tie up with IIT

The Textile Machinery Manufacturers Association (TMMA) India recently signed an MoU with IIT Mumbai to establish the D. K. Devarajuly Chair Professorship and five student fellowships in Textile Engineering at IIT Mumbai. TMMA handed over a cheque for Rs. 5 lacks on this occasion as endowment for this purpose.

This is the first time that IIT. Mumbai has tied up with an industrial association in a venture of this nature.

Philips Grant for IIT Delhi

The IIT Delhi has received a grant of over 1.6 crores from Philips Semi conductors Corporation of Holland for a newly initiated programme in very Large Scale Integrated Circuits (VLSI) under which a state of art VLSI Design Lab is set up which is equipped with a high performance computer and file server alongwith five X-terminals from Hewlet Packard of U.S.A.

This will provide a major impetus to research and development and teaching in area of VLSI design.

Advanced Photonics Technological Centre

The Electronics Corporation of India Limited (ECIL) and the Jawaharlal Nehru Technological University (JNTU) are reported to have signed a MoU for establishing an Advanced Photonics Technological Centre at Hyderabad, for developing practically implementable devices in the area of Photonics.

Also R & D work in the area of Fibre Optics Technology, Opto-Electronics, Fibre Optic Sensors, Electro Optics and Non invasive bio-photonic diagnosis would be taken up.

Indian Institute of Innovation and Inventions (IIII)

The Confederation of Indian Industry (CII) and the Council for Scientific and Industrial Research (CSIR) together propose to establish an Indian Institute of Innovation and Invention (IIII) as another step towards promoting technology development and innovations. The CII has made an offer to Andhra Pradesh Govt. to setup "Technology Development Centre" at Hyderabad. This Centre's work would cover the four areas namely innovation, design information technology and management and

training.

IIT Mumbai Tie up with U.S. Firm

The aerospace engineering department of the IIT Mumbai and United Technologies, a U.S. aerospace organisation and makers of Pratt and Whitney Engines used to power U.S. fighters F-15, F-16, F-22 - have entered into an agreement for developing new computer models for the study of Jet engine efficiency. It will provide the much needed incentive to aerospace students of IIT Mumbai to broaden their research work.

B) AICTE NEWS

Grading the Management Schools

AICTE has constituted an independent body to grade the 422 recognised Management Institutes by which students will know before hand how good or bad an institute is. The courses will be graded into four categories A, B, C and not accredited. The grading will be done by taking into consideration the facilities, the faculty, placement and other such things.

Initially accreditation will be optional for the Institutes. Only the accredited institutes will be considered for AICTE grants for research and development.

National Testing for Admission to Management Courses

AICTE is planning to develop National Testing Service on lines of the Graduate Management Aptitude Test in the U.S.. At present institutes hold their own test or admit students through a test conducted by the All India Management Association.

This will save students from appearing in a number of tests and also save expenses. AICTE approved institutes can admit students on the basis of this test. The test will help in setting standards in management programmes and stop institutes from admitting students through sub-standard tests.

M.B.A. Course at Padmavathi Mahila Vishwa Vidyalaya

The AICTE has accorded approval for the conduct of M.B.A. programme at Shri. Padmavathi Mahila Vishwa Vidyalaya with an intake of 30 seats in 1996-97 as a self financing programme.

Networking Engineering Colleges

The AICTE and the National Informatics Centre (NIC) have launched a joint project for linking all the 450 Engineering Colleges in the country to NICNET, the computer communication network of NIC to gain access to Internet and World Wild Web. The project will enable the various colleges to share the library resources through a Bibliographic Information System of thousand of journals and other information sources in digital form. This will reduce overall library subscription budget while increasing the access to number of journals each college can have in the various engineering discipline.

The linkage will also facilitate E-Mail transaction between colleges having similar interests.

Video conferencing facility developed by NIC would make it possible for a pannel of teachers to reach out to a very large number of students in various colleges through one way video and audio transmission in the reverse direc-

tion. It would also help the teachers demonstrate a laboratory experiment to a large number of student.

C) GENERAL NEWS

Anna-Varsity-Nagoya Institute of Technology (NIT) Exchange programme

The Anna University and NIT - one of the leading technological institutions in Japan have signed a MoU for promoting academic and research activities by exchanging academic materials, information, students, research scholars and faculty members.

Five students of Anna University including two research scholars from the departments of Chemical Engineering, Ceramic Technology, Structural Engineering, Instrumentation and Crystal Growth have been selected for a 10 months long stay at NIT.

The MoU would also help in upgrading the infrastructure facilities of the University.

Tamil Medium Engineering Colleges

The TamilNadu Minister for Tamil Development Dr. M. Tamizh Kudimagan announced that an Engineering College with Tamil as medium of instruction would be started from the next academic year. The books required for the first two years had been prepared and would be put to use when the courses were launched. Initially 90 students in three batches would be admitted. The college would either be affiliated to Anna University or Tamil University.

NCST Technology Laboratory
The country's first "Windows NT"

technology laboratory at the National Centre for Software Technology (NCST) at Juhu Mumbai is commissioned in which 300 post graduate students would be trained annually using the latest computer operating system "Windows NT".

With hardware from Digital India Ltd. and software from Microsoft, NCST laboratory will provide expert consultancy and will provide worldwide web service to the colleges and schools in the city.

No Minimum Age - bar for IIT - JEE

The minimum age limit for students appearing for the IIT Joint Entrance Examination to be held on May 3-4-1997 and there after every year is removed. Also the diploma holders and those appearing for three year diploma programme from any AICTE approved polytechnic can also take examination.

Committee to Review Vocationalisation

The Tamil Nadu State Council for Higher Education (TANSCH) has appointed a Committee to review the vocationalisation of higher education. The committee will explore the possibility of transforming at least one arts and science college in each district into a community college that will offer arts and science degree programmes alongwith career-oriented course.

The panel will examine the feasibility of linking such colleges with polytechnics and professional education institutions in the area, identify specific courses that could be encouraged in each college.

M. S. by Research

The TamilNadu Council for Higher Education (TANSCHÉ) approved proposal to start M. S. by research for Engineering college teachers in different disciplines. The programme will have course work for one regular semester or two summer semesters with one year of research project which can be undertaken by the engineering college teachers in the respective colleges under the guidance of a professor from the college or university offering the courses.

The M.S. by research degree will be equivalent to an M. E. or M. Tech. degree.

IIT Delhi Plans MBA Courses

The IIT Delhi will introduce two year full-time MBA programme in management systems and a three year part-time MBA course in technology management from July 1997.

The programme are open to engineering graduates as well as post-graduates in physical sciences, computer applications, operations research commerce and economics with more than 60% marks.

Roorkee University's 150th Anniversary

Roorkee University the first engineering institute of independent India that has made an outstanding contribution in the field of development of technology in the country is celebrating its 150th Anniversary.

Established in 1857 as Thomson Engineering College was elevated to engineering university in 1949 in recognition of its performance and potential.

Since its establishment, the university of Roorkee has played a vital role in

providing technical manpower and know how to the country and pursuit of research, education of foreign students from foreign countries including U.S., Japan, China and education of special groups of students from abroad.

The University offers degree courses in 10 disciplines in engineering and architecture and 55 postgraduate degree courses in engineering, applied science, architecture and planning. It offers Doctoral programmes in all departments and research centres. 27 Research centres are functioning including industrial automation and robotics, off shore engineering structures, water resources management, hybrid-micro electronics, appropriate technology for rural development and hilly region.

The most conspicuous feature of the university is that the academic directions, framework and content are all the time conceived to be relevant to Indian needs and Indian Society.

According to latest data available from U.P.S.C., the highest number of selected candidates in engineering services examination is from Roorkee University.

II. VIEWS :

Hon'ble Mr. Justice A. M. Ahmadi, Chief Justice of India, at the 12th convocation of Kakatia University, Warangal (A. P.)

Fundamental Duties

"One is also a witness to a sort of apathy amongst the educated intelligentsia in exercising their right to vote because they are very often confronted with a situation where they do not find any candidate in whose favour they would like to cast their votes. An eminent scholar has correctly described it as

a vicious circle - persons of integrity and talent will not enter public life because of the filth and stench, and yet public life cannot be cleaned unless persons of talent and integrity enter it. I can only hope that some of those amongst you will show the strength of character required to make the decision of entering public life with an intent to upholding the noble values that have been instilled in you in this serene academic environment. It is regrettable that the educated masses of our country have earned the dubious description of being least inclined towards a democratic way of life for their consistent reluctance to participate in polls. George Bernard Shaw had said that of all the negative traits that humans possess, indifference is the most inhumane of them all. Those best suited to improve our national character can ill-afford to be complacent or indifferent or what is worse, negligent of their duties as citizens."

"You will do well to remember that our constitution carries a chapter on Fundamental Duties and I would commend you to carefully read the same. The educated have a greater duty to participate in the election process so that people of the right stamp contest elections and get elected. In these pressing times, adult suffrage amongst the educated is more a priority than a privilege."

Dr. J. S. Rajput, Chairman, National Council of Teacher Education, at the convocation address at the Khalsa College of Education, Amritsar :

Whither Teacher Education ?

"Teacher education has not yet distinctly established the need for its essentiality as is the case for professions like

law, medicine, and engineering. People need to be convinced of the inevitability of teacher training for good education."

"The neglect of the teacher is perhaps, inadvertantly, enhanced by the manner in which education systems work. The teacher is invariably considered as one of the inputs like equipment, library or other infrastructural support. That he is the focal point is only highlighted in policy proclamation, but ignored in implementation. He is not prepared for the change.... "The present model of teacher education, no matter whatever variations exist among nations has remained static for decades. The changes made, have been limited to small subtraction and additions in curricula or activities."

Dr. R. A. Mashelkar, Director General, CSIR & Secretary Dept. of Scientific & Industrial Research Govt. of India at the 33rd convocation of I.I.T. Madras.

The Emerging Indian Challenge

"Many say that India is a rich country, where poor people stay. The richness is due to our intellectual prowess and bio-diversity. The powerful synergy of our intellectual powers and India's rich bio-diversity will give India the competitive edge. Conserving preserving and protecting our bio-diversity and value adding is the need of the hour".

The inevitability of Indian Technology Movement

Let us deal with one myth quickly.... There is a mistaken notion that opening up of the economy will result in having unlimited inflow of technology and therefore we do not have now to worry about developing

technological strength by sweating it out"....

...."Nothing can be further from truth. I would like to give concrete examples to illustrate as to why such thinking is wrong".

"Technology will be available to Indian companies only if they fit in with the global scheme of a supplier. If Mark - III technology is available then we might negotiate for Mark - II and in most cases we may get Mark - I. This is because India will be looked at, not as a bottomless pit of demand but as a competitor in the global market".

"The days of straight forward technology licensing are over. Technology cum-product-swap, technology-cum-stake holding, etc. are the new equations..... Even technology is being broken into pieces and each part is being made-available separately...."

"New non tariff barriers are beginning to come in.... The same health and safety standards for our labour will be demanded so that the obvious advantage of the cheaper labour will be lost." The only way we can fight these battles is through the means of continuous innovation and technology development.

"Let me also correct another impression and that is about joint ventures. Why not form joint ventures and then of course technology will be available to us from our foreign partners. This is not quite right again...." Equality in equity based joint ventures will have to be earned and not demanded. This equality can be earned only when we have a strong technological muscle ourselves."

What I am really trying to emphasise is that there is substitute for creating

a technology movement in the country. Unfortunately this movement has not taken place so far. There is no substitute for our industry itself, investing heavily in inhouse R & D and synergising with our national institution like IITs."

Science - Business Links : Need for Change

The fundamental problem that we have today is that the institutions and the business units in industry have different cultures. The fact that Science has to make an economic sense has not dawned on our institutions. On the other hand, the fact that competitive advantage in business can only be reached by using cutting edge science and engineering alone has not been realised by our industry. There are basic incompatibilities between our institutions and industry....." "There is even a difference in the basic orientation between the institutions and the industry. There is a need for both the R & D institutions as well as industry to change their mind sets".

Eminent architect Padmashri Charles Correa at the 14th convocation of the School of Planning and Architecture, New Delhi.

"Make sure its your Train"

"Whenever you get to the station there's always a train leaving. Don't jump on just because its leaving. Make sure its your train." These words of Corbusier make them a wonderful advice, for young architects and planners. You know its not so much the talent you possess but the nourishment it gets that makes you grow. And this nourishment can only come from the work you are

doing. So if your first job is on a train going the wrong way, it really does not matter how much you are paid or how easy your life is. If your talent is denied the nourishment it needs, it will gradually dry up and atrophy. This is why, ten or twenty years down the line, you will find that those of you who are doing the most interesting and significant work are not necessarily those who graduate at the top of your class but those of you who had the good fortune to address the right issues."

Now how do we recognise the right train when it comes along ? This is a crucial question - and it doesn't help to pontificate about the answer because by definition for each one of us the right train is a little bit different."

"DISCUSSION DOCUMENT" on Curriculum Framework for Teacher Education issued by the National Council of Teacher Education (NCTE), New Delhi.

Facing the Challenges of Science and Technology

"The teaching community has to face the challenges thrown by science and technology. There has been an explosion not only of scientific and technological knowledge but also in the means and techniques of acquiring knowledge. The theories of heredity, learning, mental health, attention and motivation should be given a fresh look in the light of the Scientific Researches.

Eminent Journalist Mr. V. N. Narayanan, Editor, The Hindustan Times at the 15th & 16th convocation of the Nagarjun University.

What a tragedy it is for us, the world's oldest civilised people. Science today is arriving at basic conclusions which our ancient "thought scientists" - the rishis, - clearly perceived thousands of years ago. Our Vedas and Upnishads had taught us that the spirit supreme and unchanging pervades the entire universe. The material world cannot explain the nature of the spirit. For them, all matter is energy and inorganic substance is never without life. There is a unity that underlies all creation and life. Recent advances in science bear this out albeit in scientific and mathematical terms. Sir James Jeans declared that the stream of modern knowledge is heading towards a non mechanical reality. What else is that except "Brahman" that sage Bhrigu went in search of it. As science marches from gadgetry to truth it comes closer to vedanta.

Such is our heritage and yet we seldom turn to it. We should all be asking (with T. S. Eliot) :

- "Where is the life, we have lost in living ?"

- "Where is the wisdom we have lost in knowledge ?"

- Where is the knowledge we have lost in information ?"

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