

DEPARTMENT OF HIGHER EDUCATION MHRD **GOVERNMENT OF INDIA**

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THIS ISSUE

- Technical Education The Harbinger of Economic Prosperity
- Technical Education Quality Improvement Programme (TEQIP) – Phase-II
- HRM Visits MNNIT Allahabad, Speaks on Curricular Reform
- IIT Gandhinagar PV Systems Contributes to Solar India
- IIT Bhubaneswar Propagates Interdisciplinary Education
- Academic Staff Development a Catalyst for Technical Education: NITTTR, Bhopal Way

SECTIONS

- Events
- Campus Notes
- Exchange of Ideas
- Vichaar Vimarsh
- Appointments / Retirements



"Literary education is of no value, if it is not able to build up a sound character."

- Mahatma Gandhi.



Shri Kapil Sibal, Minister of HRD, delivering the inaugural address at the State Education Minister's Meet, in New Delhi on February 22, 2012.

States Endorse Proposal for Common Entrance Test for Engineering Colleges 'In Principle'

Taking a big step forward in educational reforms, all the States, except five, have endorsed "in principle" the Union Government's proposal for a Common Entrance Test for Engineering Colleges with effect from 2013 with weightage to State Board results, normalized on the basis of percentiles formula.

This decision was arrived at after day-long deliberations held as part of the State Education Ministers' Conference, held on February 22, 2012 in New Delhi.

The five States, which have sought more time to study the proposal in detail, are Tamil Nadu, Odisha, Puducherry, Himachal Pradesh, and West Bengal. The States are free to decide on adopting the same pattern for admission to State-level engineering institutions with appropriate weightage as States may deem fit. The Conference also decided that within the next two months, the details for the common examination process would be finalized in consultation with States.

The Conference of the State & UT Education

Ministers' was chaired by Shri Kapil Sibal, Minister of HRD while Dr. D. Purandeswari, Minister of State of HRD, 23 Ministers of Education of State and UT Governments, Smt. Vibha Puri Das, Secretary (HE), Smt. Anshu Vaish, Secretary (SE&L), Dr. T. Ramasami, Secretary, Department of Science and Technology, Prof. Sanjay G. Dhande, Director, IIT-Kanpur, and senior officials of the Central, State, and UT Governments were also present at the event.

At the start of the Conference, a presentation was made on the reforms under the common entrance proposed examination to engineering institutions. The presentation was made by Dr. Ramasami and Prof. Dhande.

During the course of discussions, the Education Ministers expressed their viewpoint regarding the need to limit the multiplicity of entrance examinations to reduce stress on students. The presentation on the examination reforms sought to clarify that the common entrance examination proposal would not affect reservations followed by States and the Centre, nor would it have any impact on the special pool made available by the Ministry to

Editorial

Technical Education is one of the important pillars of Higher Education sector as it imparts practical knowledge to its students to build infrastructure for tomorrow. Besides generating skilled manpower, increasing industrial productivity, and improving the overall quality of life for the people, Technical Education also creates professionals in architecture, management, applied arts & crafts, hotel management and catering technology.

In the present issue of The Newsletter on Higher Education, we have focused on the IITs, NITs, IIITs, and NITTTRs to start with. While the IITs have already established themselves as institutions of great repute, not only in India but the world, NITs and IIITs are not far behind in dreaming of a brilliant future for the country and contributing to it. Read about the activities undergoing in different institutes, right from practical experiments to setting up new facilities for nano-technology. The information assures you that things are moving in the right direction.

NITTTRs are also doing a yeoman's service by offering long term training programmes to degree and diploma-level teachers of Polytechnic besides offering consultancy services to the industry. In this regard, a write up from NITTTR Bhopal throws sufficient light on what transpires at these institutes, located, besides Bhopal, also in Chandigarh, Chennai, and Kolkata.

TEQIP or the "Technical Education Quality Improvement Programme" of Government of India is in its second phase. The programme, conceived as a long term project to support excellence and transformation in Technical Education in the country, is doing very well for the students.

Apart from the focus area of Technical Education, The Newsletter also has information on the various activities, projects, meetings that are going on in the Ministry - right from the 1st World Summit on Accreditation to launch of Virtual Labs in nine different disciplines. So much and more is happening and it all is happening for you, the common man.

In case you want to air your views on this issue or theme, do share them with us.

Patron

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Discussion Forum

The next issue will focus on "New Initiatives in Higher Education" Readers are requested to send in feedback, in the form of comments, suggestions and ideas on editor.edu@nic.in



North-Eastern States. Shri Sibal assured the Ministers that the States could adopt their own weightage for State Board marks and the National examinations for admission to State-level institutions.

The academic component of the Main and Advanced examinations, the two categories of the proposed common entrance test, would be handled by IITs whereas the management and conduct of the examination would be done by CBSE in collaboration with the State and UT Boards. It was also informed that the IITs and other Central Educational Institutions were proposing to adopt a weightage of 40% for State Board marks. Regarding the States' concern for conducting the examination in regional languages as well, they were assured that while the common entrance test would be conducted in English and Hindi languages, it could be conducted in regional languages too, where States intend to use the same examination for admission to State engineering institutions.

However, the Common Entrance Test was not the only thing discussed at the Conference. Presentations were also made by the MHRD and AICTE on the National Vocational Education Qualifications Framework (NVEQF) and concept of Community Colleges.

The Ministers welcomed the NVEQF and felt that it would be an important landmark in improving the skills and employability of the youth of this country. In this regard, the report of State Education Ministers headed by the Education Minister of Bihar, was unanimously accepted. After due deliberations, both NVEQF and the need of Community Colleges were unanimously endorsed by States. A decision was also taken in the Conference to start 100 Community Colleges on pilot basis in 2012-13 and scale it up gradually. It was, therefore, decided to constitute a Committee of State Education Ministers, headed by Smt. Archana Chitnis, Minister of School Education of Madhya Pradesh, to finalise the concept and frame work of scheme of Community Colleges.

In his address, Shri Sibal said, "We are in the terminal year of the XI Plan and together we have made substantial progress in the different sub-sectors of education. In Higher Education, focus on access, equity and excellence has been translated into strategies for achieving expansion, inclusion and improved quality. Tremendous achievements have been made by setting up of several new institutions - Central Universities, IITs, IIMs, NITs, SPAs, IISERs, Polytechnics and Model Degree Colleges... Today, we are meeting at a crucial stage when we are at the threshold of the XII Five Year Plan. The spread of education in society is at the foundation of success in today's globalized world, where the real wealth of a country is not in its tangible natural resources but in knowledge; as it is the driver of the economic development..."

Technical Education - The Harbinger of Economic Prosperity

If a country wants its human resources to be highly-developed, it needs to invest in quality Technical Education for its youth. If a country wants economic prosperity, it has to strengthen its Technical Education system. This system creates skilled manpower, enhances industrial productivity, and, ultimately improves the quality of life. However, Technical Education doesn't mean just Engineering or Information Technology. It encompasses a lot more, e.g., courses and programmes like management, architecture, town planning, pharmacy, applied arts & crafts, hotel management, and catering technology.

The Indian Technical Education system is divided into three broad categories:-

- Central Government funded institutions;
- State Government/State-funded Institutions; and
- Self-financed Institutions

Out of a total of 79 Centrally-funded Institutions, some of the most prestigious are the Indian Institutes of Technology (15 in no.), Indian Institutes of Management (11), Indian Institute of Science (1), Indian Institutes of Science Education & Research (5), National Institutes of Technology (30), and Indian Institutes of Information Technology (4), etc.

XI Five Year Plan

The Eleventh Plan, had envisaged major expansion in the Technical Education sector. This was done through increasing the number of the Centrally funded Institutions. During this Plan, 8 new IITs, 10 new

THE NEWSLETTER, MARCH 2012 ISSUE

NITs, 3 new IISERs, and 7 new IIMs were established. The enhancement of the numbers of these Institutions is expected to provide a solution to the major challenges of the system, which are:- accessibility, quality maintenance, inclusiveness, etc.

Some of the major initiatives that were launched to augment quality Technical Education in the country are as follows:-

• Technical Education Quality Improvement Programme (TEQIP), which is assisted by the World Bank

• Indian National Digital Library for Science & Technology (INDEST)

Both the initiatives are discussed in detail in the following pages.

All India Council for Technical Education (AICTE) Established in 1945, the AICTE works as a national level Apex Advisory Body of the Government of India on Technical Education. AICTE conducts survey on the facilities on Technical Education and also promotes development of the sector in a "coordinated and integrated" manner. To ensure that the body plays its role well, the National Policy of Education (1986) stipulated that AICTE be vested with statutory authority for planning, formulation and maintenance of norms and standards, quality assurance through accreditation, funding in priority areas, monitoring and evaluation, maintaining parity of certification and awards and ensuring coordinated and integrated development and management of Technical Education in the country.

AICTE covers the following programmes of Technical Education:- Engineering & Technology, Architecture & Town Planning, Management, Pharmacy, Applied Arts & Crafts, Hotel Management and Catering Technology, etc. The AICTE approves under graduate, Post graduate, Diploma, Post Diploma and Post Graduate Diploma level Technical Institutions in the country. The details for the same for the financial year 2011-12 are as follows:-

Programs	Undergraduate		Post Graduate		Diploma		Post Diploma		Post Graduate Diploma	
	No. of Institutes	Intake	No. of Institutes	Intake	No. of Institutes	Intake	No. of Institutes	Intake	No. of Institutes	Intake
Engg. & Tech.	3288	1386732	1380	86236	2563	843529	51	202	18	1715
Applied Arts Crafts	12	796	1	52	44	3182	2	15	0	0
Arch & Town Planning	84	5918	12	339	62	3308	0		0	0
HMCT	84	6575	2	156	46	3065	0		0	0
Management	13	1200	3536	346665	194	20933	43	920	294	412.89
MCA	6	360	1856	132657	2	105	0	0	1	0
Pharmacy	1058	84646	725	1851	482	29174	0		0	0

Schemes/Initiatives for Technical Education:

Apart from TEQIP and INDEST, the Technical Education sector also has the following schemes and initiatives to help in improving the enrolment and awareness of education in this sector:

1) Central Scheme to provide full interest subsidy on Education Loan:-The scheme provides full interest subsidy on Education Loan during the period of moratorium on educational loans for students belonging to economically weaker section (with family income from all sources less than

Rs. 4.5 lakh annually) from the Scheduled Banks under the Education Loan Scheme of the LBA to pursue studies in professional/Technical streams from recognized institutions in India.

2) Setting up 20 new IIITs on Public Private Partnership (PPP) basis:- The Government is taking steps to set up Technical Institutes at various levels on PPP mode. Initially, 20 new IIITs would be set up in phases.

3) National Mission on Education through Information and Communication Technology (NMEICT):- This scheme is

THE NEWSLETTER, MARCH 2012 ISSUE

learning process for the benefit of all the learners in Higher Education Institutions.

4) Programme for Quality Improvement in Technical Education:- Under this scheme, support is granted to new and emerging technology areas, such as earthquake engineering.

5) Grants-in-aid to Institutions in Technical Education:-Funds are provided for faculty development in technical education, increasing fellowship amounts, and support to the engineering colleges for diploma courses.

For a long time now, the Government of India has been initiating restructuring of academic programmes to ensure their relevance to modern market demands. Now with that in sight, the Technical Education may just prove to be the stepping block to a better educational future for the youth of India.

Technical Education Quality Improvement Programme (TEQIP) - Phase-II

Technical Education Quality Improvement Programme (TEQIP) was conceived and designed as a long term project to be implemented over a period of 10-12 years in 3 phases. The main aim of this programme is to support excellence and transformation in Technical Education in the country.

TEQIP-I

The first phase of TEQIP was implemented with the assistance of World Bank as a centrally coordinated Central and State Sector Project with a total cost of Rs. 1339 crore. Out of this, Rs. 306 crore was Central Component and the remaining Rs. 1033 crore was State Component. The programme became effective in March, 2003 and the closing date of the programme was March 31st, 2009.

TEQIP-II

Based on the achievements made during TEQIP Phase- 1, TEQIP Phase-2 is being implemented as a Centrally Sponsored Scheme (CSS) with the assistance of the World Bank at a total cost of Rs 2430 crore. The Central contribution will be Rs 1895.50 crore, out of which Rs. 1395.50 crore will be reimbursed by the World Bank. The State share will be Rs 518.50 crore and the Share of Private Unaided institutions will be Rs. 16 crore. The funding pattern will be 75:25 between the Centre and the participating States. However, for the North Eastern States, the funding pattern will be on a ratio of 90:10.

TEQIP Coverage

The programme basically covers the following two components:

1) Component 1: Improving Quality of Technical Education in selected Institutions. This component further has two more parts:-

1.1 Strengthening Institutions to improve learning outcomes and employability of graduates.

1.2 Scaling-up Post Graduate Education and Demand-Driven R&D&I.

2) Component 2: Improving System Management.

The TEQIP-II project is for the duration of 4 years, during which it seeks to cover 200 institutions based on competitive funding to be selected as shown in the table given on the next page.

Under subcomponent 1.1, the Government has selected 63 Government/Government-aided Institutions and 25 Private Institutions. Under subcomponent, 59 Government/Government-aided and 14 Private Institutions have been selected.

The TEQIP is expected to provide the much-needed impetus to the dissemination of quality Technical Education to the students and for now, it seems to be doing its job.

Subcomponent	Government and Government aided institutions	Private Unaided institutions	Total number of Institutions	
Strengthening institutions to improve learning outcomes and employability of Graduates	100	25	125	
Scaling-up PG Education & Demand-Driven R&D&I	60	15	75	
	160	40	200	

INDEST-AICTE

The Indian National Digital Library in Engineering Sciences and Technology (INDEST) Consortium was first set up in 2003 by the Ministry of Human Resource Development after an Expert Group recommended the same. The Expert Group was appointed by MHRD during the National Seminar on Knowledge Networking in Engineering Sciences and Technology held at IIT Delhi in November 2002. IIT Delhi has been designated as the Consortium Headquarters and it coordinates all the activities on behalf of INDEST. The core members of the Consortium are IITs, IISc Bangalore, NITs, IIITs, IISERs, IIMs, and a few

other Institutions, which received funds from the Ministry to subscribe to electronic resources. However, it is not as if only the core members can benefit from the subscription to electronic resources. This facility is extended to all educational institutions under its open-ended proposition. The total number of members in the Consortium has gone up to be more than 750. In December 2005, the Consortium was renamed INDEST-AICTE Consortium with the AICTE playing a pivotal role in enrolling its approved engineering colleges and institutions as members of the Consortium for selected e-resources at much lower rates of subscription.

HRM Visits MNNIT Allahabad, Speaks on Curricula Reform

Shri Kapil Sibal, Minister of HRD, was invited to visit the Motilal Nehru National Institute of Technology, Allahabad (MNNIT) on January 13, 2012. On this occasion, he was also the Chief Guest at a session to discuss the topic, "Development of Curriculum for NIT System." The Minister's visit coincided with the Institute's endeavour to update its curricula in different courses taught at the Institute. Regarding this, the Institute is already in the process of organizing meetings and workshops at Departmental and Institutional levels.

While addressing the Institute's Senate members and

faculty, Shri Sibal stressed upon the need of the curriculum reform and said that this is not a one-time agenda, as it is, rather, a continuous process, and should reflect what happens outside the classroom and textbooks. He also said that this is a challenge, especially since the Institute has also to keep pace with the changes in technology, happening at an exponential speed.

Prof. S. K. Duggal, Dean (Academic) introduced the subject and its relevance before the Minister's address while Prof.R. K. Srivastava, Dean (Planning & Development)

THE NEWSLETTER, MARCH 2012 ISSUE

Technical Education

introduced the Chief Guest. Prof. P. Chakrabarti, Director MNNIIT delivered the welcome address.



Shri Kapil Sibal, Minister of HRD, addressing the MNNIT Senate members and faculty at MNNIT Allahabad on January 13th, 2012.

During his address, Shri Sibal spoke about a skill-job mismatch that exists in the talent pool of the world; developed nations have skilled personnel, but insufficient jobs. On the other hand, the developing nations like India have jobs that require skilled force, but is short of personnel with the right set of skills. He advised that it is in this context that the Institute needs to address its curriculum development efforts. He further suggested that the Institute should adopt a proactive approach, whereby curricula should be designed looking at the needs of the economy twenty years hence. Notable areas are those which would provide important facilities like medicine, pharmaceutical products, power, suitable weather resistance housing and similar needs of the masses packaged via a technology that is both accessible and affordable.

Shri Sibal also said that the MNNIT is expected to be the torchbearer of the future. Besides his address, the Minister also interacted with the MNNIT students, and joined the faculty and staff for dinner.

IIT Gandhinagar PV Systems Contribute to Solar India

The Indian Institute of Technology (IIT), Gandhinagar has recently installed 10 kW roof-top solar photovoltaic (PV) system. This has contributed its bit to the development of solar energy system in India. This is in addition to one more PV system sponsored by the Gujarat Energy Research Agency. Each PV system is equipped to generate about 15,000 kWh per year.

Such installations are capable of reducing the electricity consumption at the Institute but the real worth of the PV system lies in the fact that it can eliminate about 28 tonnes of CO2 emissions annually throughout its lifetime of 25 years.

Apart from the GEDA-sponsored PV system, the second PV system has been established in collaboration with Underwriters Laboratories (UL), USA and sponsored by NTT Facilities Inc., Japan. Based on the thin film CIS technology, the installation is the first of its kind in the Asia-Pacific region, as far as the NTT Facilities is concerned.



A view of one of the PV systems installed at NIT Gandhinagar.

The Institute informed that the two pilot PV systems are useful in providing practical knowledge to its students and are primarily used for educational and research purposes. The Institute hopes to contribute substantially to the National Solar Mission - Solar India - with its initiatives.

IIT Bhubaneswar Propagates Interdisciplinary Education

The Indian Institute of Technology, Bhubaneswar, functioning since July 2008, is currently promoting a borderless, interdisciplinary academic environment while encouraging its academic staff and students to work together through the concept of Schools rather than departments. At present, seven Schools have been set up viz.:

1) School of Basic Sciences (Physics, Chemistry, BioScience, Mathematics);

2) School of Humanities, Social Sciences and Management;

3) School of Mechanical Sciences (Mechanical, Manufacturing & Industrial Engineering, Aerospace Engineering, Naval Architecture);

4) School of Infrastructure (Civil Engineering, Architecture, Urban Design, Town Planning, Traffic & Transportation Engineering);

5) School of Electrical Sciences (Electrical Engineering, Electronics Communication Engineering, Computer Science and Engineering, Energy, Learning Sciences, Instrumentation);

6) School of Mineral, Metallurgical and Materials Engineering - Materials, Metallurgy, Mining); and

7) School of Earth, Ocean and Climate Sciences.



A view of the IIT Bhubaneswar campus.

The Institute is in the process of setting up an Innovation Centre for Climate Change on the Puri-Konark coastline. It is also providing joint M. Tech - Ph. D. programmes in Mechanical, Civil and Electrical Engineering disciplines; Applied Geosciences, Climate Science and Technology, Materials Science and Engineering from 2012-13 academic session.

Academic Staff Development a Catalyst for Technical Education: NITTTR, Bhopal Way

As the Indian economy is growing stronger and faster, Technical Education is seen to play more important role in Human Resource Development, the movement of people, students, and the workforce in the region. Technical Education systems across India have made extraordinary gains by expanding access, diversifying curricula, and experimenting with new instructional delivery systems. At the same time, this success has created new challenges brought about by exponential enrollment growth; shortages of qualified instructional staff; a need to improve instructional quality; and, in many cases, severe financial constraints. These issues are interwoven, and their solutions are likewise interdependent.

Quality Technical Education is vital for creating a sustainable human resource based upon which to build India's economic growth and development. There is a growing demand for technical professionals, managers and skilled workforce in a variety of fields. Therefore, investing in Technical Education with the innovation, knowledge, and technology is needed to thrive in an interconnected, competitive world and in developing a sustainable growth. Meeting the emerging challenges of Technical Education, more particularly building competent technical educators, are the National Institute of Technical Teachers' Training and Research (NITTTRs), formerly known as TTTIs. The four unique premier autonomous institutions located in Bhopal, Chandigarh, Kolkata and Chennai were established in 1966 by Government of India, (then Ministry of Education), now Ministry of Human Resources Development for teacher training and improving quality of Technical Education system in the country.

Various Programmes

The institution offers a wide variety of short-term programmes for its clientele, in addition to unique, long-term Programmes such as Master's and Ph.D. Programmes in allied areas of Technical Education e.g. Computer Technology and Application, Construction Technology and Management, Power System, Master in Technical Education and Master of Business Administration(M.B.A.).

Pioneering Undertakings

The institution started publishing a quarterly research Journal of Engineering, Science & Management Education on a self-supporting mode. There is an increasing demand for membership of the journal. Eight issues of the journal have already been published and are accessible on the institution website. This unique initiative provides a platform to Technical Education professionals as well as promising future leaders, research scholars of Technical Education system for sharing innovative ideas, new researches etc.

Technical Education Quality Improvement Program (TEQIP)

The institution is also actively pursuing Technical Education Quality Improvement Programme of Government of India, which aims to upscale and improve quality of Technical Education and enhance existing capabilities of the technical institutions to become dynamic, demand driven, quality conscious, efficient and forward looking, responsive to rapid economic and technological developments occurring both at National and International levels.

Technical Co-operation Scheme (TCS)

The institution is offering its Programmes and services to the developing partners in the field of TVET in Asia-pacific countries. The Technical Cooperation Scheme was started with a view to providing technical assistance to neighboring Colombo Plan countries. Through this scheme, of Government of India, institution is providing a comprehensive and integrated training to participants from member countries of Colombo Plan with the drive of assisting them to enhance their administrative and technical capabilities through human resource development. In this scheme, around 30 scholars from



Prof. Vijay K. Agrawal (extreme right), Director, NITTTR, Bhopal, representing India in the Plenary Session of International Conference on Preparing Next Generation Educators, organized jointly by CPSC, Manila, UNESCO-UNEVOC, GIZ, Germany, Ministry of Higher Education (MOHE), Malaysia, on December 12-13, 2011. Afghanistan, Bangladesh, Bhutan, Indonesia Laos, Myanmar, Nepal, and Sri Lanka received training in different areas in last four years. The trainees were provided with airfare, tuition fee, accommodation and living allowance to cover daily expenses. Some of the program themes include Computer Networking Using Windows and Linux Platforms, Entrepreneurship Development Program for Trainer Motivators, Design and development of Dynamic Website, Quality Management System for TVET Institutions, Developing Teaching Learning Resources Using Digital Media, Renewable Energy Systems, Planning, Organizing, Implementing and Evaluating Projects etc. There is growing response to the Programmes under the scheme.

> -- By Prof. Vijay Kumar Agrawal, D. Phil. (Director, NITTTR, Bhopal)

IIT Mandi Research Focus On Bio, Nano-Tech

The Indian Institute of Mandi is well on its way to become a world class facility in terms of biotechnology and nano-technology. The Institute informs that by mid-2012, with the basic synthesis and characterization equipment already in place, the institute will have a 500 MHr and a high resolution TEM. A team of 10 members of faculty and more than 20 research scholars will be using the facility under the guidance of Prof. Kenneth Gonsalves (the Celanese Acetate Distinguished Professor Emeritus at the University of North Carolina at Charlotte).

The focus of research at this new facility would be on development of low-cost organic photovoltaic material, organic LEDs, nano-pharmaceuticals, micro-fabrication for electronics and bio/nano-technology.

MHRD Launches Virtual Labs Project in Nine Disciplines



Shri Kapil Sibal, Minister of HRD, addressing media at the launch of the Virtual Labs in New Delhi on February 23, 2012. Dr. D. Purandeswari, Minister of State of HRD, and Smt. Neelam Kapur, Principal director General (M&C), Press Information Bureau, are also seen.

Taking a leap forward in dissemination of better education to the students in the Higher Education sector, the Ministry of Human Resource Development (MHRD), Government of India, launched the Virtual Labs project on February 23, 2012. Shri Kapil Sibal, Minister of HRD, unveiled to the nation the project, which is a collection of 91 virtual laboratories that would facilitate hundreds of experiments in nine disciplines belonging to the science and engineering streams. The Minister informed that the Virtual Labs is part of a comprehensive undertaking to provide easily accessible and high quality education throughout India. The project is a part of the MHRD's National Mission on Education through Information and Communication Technology (NMEICT).

Challenges

In a vast country such as India, physical distances and the lack of resources make it difficult to perform experiments, especially when they involve sophisticated instruments. Conducting join experiments by two participating institutions and also sharing costly resource has always been a challenge. With the present day internet and computer technology, these limitations can no longer hamper students and researchers in enhancing their skills and knowledge. Web-enabled experiments have, therefore, been designed for remote operation and viewing so as to enthuse the curiosity of the students. This would help in learning basic and advanced concepts through remote experimentation. Internet-based experimentation further permits use of resources - knowledge, software, and data - available on the web, apart from encouraging skillful experiments being simultaneously performed at points separated in space.

Background

The Pilot Phase of the Virtual Labs project started in April 2009. During this phase, approximately twenty labs were developed as proof of concept. The Main Phase began in April 2010. So far, over 80 Virtual Labs have been developed, and are undergoing field trials in various parts of the country.

Types of Virtual Labs

Two types of Virtual Labs have been developed under this project:

a. In the Simulation-based Virtual Labs (SVL), the experiments are modeled using mathematical equations. The simulations are carried out remotely at a high-end server, and the results are communicated to the student over the internet. SVLs are scalable and can cater to a large number of simultaneous users.

b. Using the Remote-triggered Virtual Labs (RVL), the actual experiments are triggered remotely. The output of the experiment (being conducted remotely) is communicated back to the student over the internet. This class of Virtual Labs gives the students the output of real-time experiments. Typically, time-slots are booked before conducting such experiments.

Accessibility

At present, the Virtual Labs are available in the following disciplines - Electronics & Communication, Computer Science £ Engineering, Electrical Engineering, Mechanical Engineering, Chemical Engineering, **Biomedical** Engineering, Biotechnology æ Civil Engineering, Physical Sciences, and Chemical Sciences. The students and researchers can access the Virtual Labs through a common website: www.vlab.co.in. You only need to have a PC and broadband connectivity to enable yourself to use these Virtual Labs.

Advantage

These Virtual Labs will be very useful for Engineering students who do not have access to good lab-facilities, High School students whose inquisitiveness will be



Shri Sibal displaying the Virtual Labs to the media at the same event.

studies, researchers in different institutions who can collaborate/share experimental equipment, and engineering colleges, who can benefit from the content and related teaching resources. The advantage is clearly visible in the student interest generated in the past 6 months. The Virtual Labs website has had 233,570 site visits and 1,034,443 page visits during this time. The Labs have also generated user registration from 133 other countries, including the US, UK, Australia, Canada, Germany, Malaysia, etc.

Minister Inaugurates International Conference on Indian Social Sciences

At the International Conference on Indian Social Sciences, Shri Kapil Sibal, Minister of HRD, revealed a five-point agenda, which would rejuvenate the social science research in India. Shri Sibal was speaking at the inauguration ceremony of the "International Conference on Indian Social Sciences in the Changing World: Roles, Responsibilities, and Reforms."

Revealing the five-point agenda, the Minister enlisted the following:

1. Firstly, we need to attract bright minds to social science research in the country. To that end, ICSSR shall proceed to develop a Fellowship scheme for embedding young scholars in the universities interested in pursuit of social science research. Simultaneously, we also need to enhance both the quantum and number of fellowships awarded every year.

2. Secondly, ICSSR can create a network of eminent academics to collaborate on creation of academic content including publications of texts, digests and manuscripts in specific areas in social sciences. These manuscripts would provide an inexpensive aid to teachers and students in social sciences and would be available in different languages. The manuscripts could be delivered electronically leveraging on the gains of the National Knowledge Network which aims to interlink all institutions of higher learning with an information super-highway.

3. Thirdly, ICSSR could take the lead to develop a Social Sciences Knowledge and Research Network (SSKRN) as an open source, virtual assembly of research papers of quality. This Network could host peer reviewed research papers and Ph.D theses in social sciences, both priced and free, depending on the choice of the author. The SSKRN could also provide authorised translations of hosted research papers in various languages for the community of researchers in the country.

4. Fourth, in order to develop capacity in new and frontier areas of trans-disciplinary research, ICSSR could establish a National Social Science Research Innovation Centre. The Centre could identify innovative research methodologies in frontier areas of knowledge and assist in building a network for carrying forward the research interests of institutions, scholars and teachers.

5. Fifth, while the field of sciences recognises advances through research through the Bhatnagar Awards, there is no comparative recognition to high quality research in social sciences. We propose to institute ten annual awards to recognise advancement of knowledge in social sciences. I hope that due recognition to social scientists and their contributions would spur thousands of aspiring scholars in the future." These awards will be known as the Amartya Sen Awards.



Shri Kapil Sibal, Minister of HRD, delivering the inaugural address at the "International Conference on Indian Social Sciences in the Changing World, Roles, Responsibilities and Reforms", in New Delhi on February 6, 2012.

Speaking on the occasion, Shri Abhijit Sen, Member Planning Commission underlined the need for ICSSR Institutes to focus on research that helps achieve an inclusive society for the country. He pointed out that the advantage of the network of Institutes that ICSSR has could help towards this end. He also stated that the institutes must have a link to universities and on the need for mid-level research.

The keynote address for the Conference was given by Professor Pranab K. Bardhan, University of California, Berkeley who underlined the need for greater social science research in India, especially mid level research. He also pointed out areas where research in social sciences needs to be undertaken.

'Better Centre-State Coordination Needed for Improved Educational Infrastructure'

Dr. D. Purandeswari, the Minister of State of Human Resource Development said that with better coordination between States and Centre, the country will be able to achieve an improvement in its educational infrastructure. In this regard, the MoS appealed the State Governments to extend full cooperation for the betterment of education infrastructure in the Country.She was addressing the All India Editors Conference on Social Sector Issues in Puducherry on February 11, 2012, when she mentioned that education is a collective and cooperative responsibility of Union as well as all State governments.



Dr. D. Purandeswari, Minister of State of HRD, addressing the All India Editors Conference on Social Sector Issues at Puducherry on February 11, 2012. Smt. Neelam Kapur, the Principal Director General (M&C), Press Information Bureau, is also seen.

Speaking about the development of educational infrastructure over the past half a century, she said that at the time of Independence, the country had only 20 universities and 500 colleges, which increased to 611 universities as well as university-level institutions and 31,324 colleges. Shedding light on the Government initiatives during the XI Plan period, Dr. Purandeswari said that the Government has taken a number of initiatives focusing on improvement of access along with equity and excellence, adoption of state-specific strategies, enhancing the relevance of Higher Education through curriculum reforms, Vocationalisation, networking and use of Information Technology and Distance Education along with reforms in governance.

Talking about planned interventions and sustained efforts of the Government, the MoS said that theliteracy rate of the country had improved from 64.83% in 2001 to 74.04% in 2011.

She mentioned about the National Vocational Education Qualifications Network (NVEQF), which is being developed to provide a common reference framework to link various qualifications and setting up a nationally recognized qualifications system. The NVEQF is basically aimed at addressing the issue of skill shortage in various sectors, said the MoS.

Minister Launches NVEQF for Colleges, Polytechnics

The National Vocational Education Qualification Framework (NVEQF) was launched by Shri Kapil Sibal, Minister of HRD. Launched by MHRD and AICTE, the Framework would be implemented at all the polytechnics, Engineering colleges, and other colleges under the University systems from the year 2012-13.

The Framework will have sector-specific programmes that will focus on areas like Telecommunications, Information Technology, Media, Entertainment, Automobile, Construction, Mobile Communications, Retail, Food Processing, Tourism, Hotels, Jewellery Design, and Fashion Design. More areas are being identified for further implementation under the NVEQF.

Under this scheme, there will be Seven certificate levels. Each certificate level will have certificates, with each certificate being attributed about 1000 hours. Each 1000 hours shall be made of certain number of hours kept for vocational competency-based skill modules while the rest of the hours will be for general learning. A Diploma for vocational education shall be provided after the certificate level five or a Degree for vocational education shall be provided after certificate level seven. A student is free to choose to avail of competency-based skill learning along with generation education under this scheme. Doing so will not take away from him the opportunity to change course or move into a formal system of education at any certificate level, and vice versa. As a result, the NVEQF provides a full multi-entry exist system between the vocational education, general education, and the job market.

From the Academic Year 2012, Institutions can seek statutory approvals from the AICTE if they wish to conduct these programmes. The institutions can choose a maximum of 500 students per institute in any five sectors, 100 students per sector. As a result, the scheme is expected to cater to at least 5 million students for vocational degree and diploma every year.

MHRD's Special Issue Newsletter on Pravasi Bharatiya Diwas 2012

In keeping with the tradition started in the year 2011, the MHRD released the second issue of the Special Edition of its Newsletter on Higher Education on the occasion of Pravasi Bharatiya Diwas 2012. The Newsletter is a quarterly publication and the Special Edition 2012 covered important bilateral events such as the Indo-US Summit and the India-UK Education Forum. It has also highlighted new developments within the Ministry, UGC, AICTE etc. as regards schemes/programmes specific to NRIs.

Shri Kapil Sibal, Minister of HRD, said in his message to the Newsletter, "Our vision is to build a truly innovative educational system for our youth to acquire skills in critical thinking, analytical reasoning, problem solving, and communications and to develop people who have ambition and self confidence. To make this a reality, our educational system offers tremendous opportunities for collaboration and cooperation to our Diaspora. Skills development, networking of institutions, devising and financing of advanced research, twinning arrangements and PPP initiatives for new educational institutions are just a few of them. We do hope that our Diaspora would come forward to partner us in this 'Great Adventure.'"

Highlights of Pravasi Bharatiya Diwas 2012

• The 10th Pravasi Bharatiya Diwas (PBD) was held from 7-9 January, 2012 at Birla Auditorium, Jaipur.

• The Prime Minister, Dr. Manmohan Singh inaugurated the event and the President Smt. Pratibha Devisingh Patil delivered the valedictory address and conferred the Pravasi Bharatiya Samman Awards to 15 eminent NRIs.

• The Prime Minister of Trinidad and Tobago, Ms. Kamla Persad Bissessar was the Chief Guest of the event.

• Over 1900 delegates from about 60 countries participated in this year's PBD.

• "The Global Indian: Inclusive Growth" was the theme of the event and the focus was on India's Social Development and the Overseas Indian community.

दिल्ली में पन्द्रहवॉ विश्व संस्कृत सम्मेलन

स्वागत करते हुए संस्कृत विधा की महिमा का प्रतिपादन किया कि शिक्षा और ज्ञान की सभी परम्पराओं को संस्कृत भाषा समृद्ध करती है। उन्होंने संस्कृत ज्ञान से गृढ़ और उपयोगी रत्नों को शोधपूर्वक उजागर करने के लिए विद्वानों का आवाहन किया। उद्घाटन सन्न में 'इन्टरनेशनल एसोसिएशन फॉर संस्कृत स्टडीज' के अध्यक्ष प्रो. वी.कुटुम्ब शास्त्री ने मुख्यातिथि माननीय प्रधानमन्त्री, अध्यक्ष माननीय मानव संसाधन विकास मन्त्री, उच्च शिक्षा सचिव माननीय सुश्री विभा पुरी दास एवं उपस्थित अतिथियों और प्रतिनिधियों के प्रति स्वागत वक्तव्य प्रस्तुत किया। राष्ट्रीय संस्कृत संस्थान के कुलपति प्रो. राघावल्लभ त्रिपाठी ने उपस्थित गणमान्य अतिथियों और प्रतिनिधियों के प्रति कृतज्ञता ज्ञापित की। उद्घाटन सन्त्र में संस्थान के कुछ नवीन प्रकाशनों का लोकार्पण भी प्रधानमन्त्री के करकमलों द्वारा किया गया।

उद्घाटन सन्न के तुरंत बाद आयोजित विशिष्ट सन्न में कनाडा से पधारे संस्कृत विद्वान डॉ. अशोक अकलूजकर ने 'पूर्व' और पश्चिम के संस्कृतज्ञ के विचार' पर अपना भाषण दिया। भारत-विद्वा के प्रसिद्ध विद्वान डॉ. लोकेशचन्द्र ने विभिन्न भाषाओं, साहित्यों और विचारधाराओं में संस्कृत के बहुआयामी स्वरूप पर विस्तार से प्रकाश डाला। इस विशेष सन्न की अध्यक्षता भारतीय संस्कृति और कला क्षेत्र की सुप्रसिद्ध लेखिका डॉ. कपिला वात्स्यायन द्वारा की मयी।

इन्दिरा गोंधी कला केन्द्र के परिसर में एक बृहत संस्कृत पुरतक मेले का आयोजन किया गया। इन प्रदर्शनियों में 105 पुरतकों के स्टॉल लगाये गये थे, जो सम्मेलन के दौरान सुबह से शाम आठ बजे तक खुले होते थे जिन्हें देखने के लिए छान्न-छान्नाएँ व प्रतिनिधिगण बड़ी संख्या में आते रहे । पुरतक मेले की लोकप्रियता को देखते हुए संस्कृत पुरतक मेले को विश्व संस्कृत सम्मेलन की समाप्ति के अगले दिन 11.01.2012 को भी जारी रखा गया ।

'संस्कृत भारत की आत्मा है।'

इन्टरनेशनल संस्कृत एसोसिएशन और राष्ट्रीय संस्कृत संस्थान के संयुक्त तत्त्वावधान में आयोजित पन्द्रहर्वे विश्व संस्कृत सम्मेलन को 5 जनवरी, 2012 को प्रातःकाल दस बजे विज्ञान भवन में भारत के माननीय प्रधानमन्त्री डॉ. मनमोहन सिंह के द्वारा उदघाटित किया गया। देश के विभिन्न प्रदेशों और विश्व के अन्य बत्तीस देशों से पधारे संस्कृत की विभिन्न विधाओं के सहस्राधिक विद्वानों से सुशोभित सभागार में प्रधानमन्त्री ने अपने भाषण के प्रारम्भ में उदघोषित किया-'संस्कृत भारत की आत्मा है।' उन्होंने कहा कि संस्कृत समान रूप से सभी के लिए महत्त्वपूर्ण है और विश्व के सभी विषयों के ज्ञान के लिए उसकी उपयोगिता देखी जाती है। सम्मेलन जैनविद्या. को वेद साहित्य व्याकरण. इतिहास-पुराण, भाषाशास्त्र, अलंड.कारशास्त्र, दर्शन आदि लगभग बीस विभागों में बांटा गया है और यही संस्कृत की व्यापकता का प्रमाण है।



माननीय प्रधानमन्त्री डॉ. मनमोहन सिंह, श्री कपिल सिब्बल, माननीय केन्द्रीय मंत्री, मानव संसाधन विकास मन्त्रालय एवं उपस्थित मुख्य अतिथि सम्मेलन का उदघाटन करते हुए ।

उद्धाटन सत्र के अध्यक्ष पद से बोलते हुए श्री कपिल सिब्बल, माननीय केन्द्रीय मंत्री, मानव संसाधन विकास मन्त्रालय ने सम्मेलन में भाग लेने वाले सभी विद्वानों का



श्री कपिल सिब्बल, माननीय केन्द्रीय मंत्री, मानव संसाधन विकास मन्त्रालय उद्घाटन सन्न के अध्यक्ष पद से बोलते हुए

इस संगोष्ठी का समापन समारोह विज्ञान भवन में 10 जनवरी, 2012 संध्या 6:00 बजे हुआ जिसके मुख्य अतिथि संसद सदस्य (राज्यसभा) तथा भारतीय सांस्कृतिक संबद्ध परिषद के अध्यक्ष माननीय डॉ. कर्ण सिंह जी थे ।

श्रीमती शीला दीक्षित माननीया मुख्यमंत्री दिल्ली सरकार ने इस सत्र की अध्यक्षता की। दिल्ली विधानसभा के स्पीकर माननीय श्री योगानन्द शास्त्री एवं दिल्ली सरकार की स्वास्थ्य मंत्री श्रीमती डॉ. किरण वालिया तथा उद्योग—श्रम तथा निर्वाचन मंत्री दिल्ली सरकार श्री रमाकान्त गोस्वामी भी इस समापन समारोह में उपस्थित थे ।

विश्व सम्मेलन में पारित प्रस्ताव -

दिनांक 10 जनवरी, 2012 को सम्मेलन में उपस्थित समस्त विद्वानों की समान्य सभा में अन्तर्राष्ट्रीय संस्कृताध्ययन समवाय की कार्यकारिणी व परामर्शदात्री समिति के द्वारा पारित प्रस्ताव पर विचार किया व उनका

यह प्रदर्शिनी पुस्तकों के अद्यतन प्रकाशनों से परिचित कराने का अनूठा अवसर थी । 'विश्ववारा' में इन प्रभागों को समायोजित किया गया । पाण्डुलिपि संसाधन के द्वारा, जो भारत की वैज्ञानिक परम्परा पर प्रकाश डालती है, उसके माध्यम से ज्ञान का पुनः उर्जाकरण, दक्षिणपूर्वी एशिया में संस्कृत–शिलालेख, पाण्डुलिपि विज्ञान के द्वारा भारत की ऐतिहासिक परम्परा, सूचना प्रोद्योगिकी तथा संस्कृत सम्बन्धी संगणक संसाधनों (टूल्स) की प्रदर्शनी । विश्ववारा प्रदर्शनी शृंखला में दर्शनार्थियों की रूची को देखते हुए विश्व संस्कृत सम्मेलन की समाप्ति के बाद इसे आठ दिन (विनांक 08.01.2012) तक जारी रखा गया ।

4 जनवरी, 2012 को पूर्वरंग कार्यक्रम से 15वें विश्व संस्कृत सम्मेलन का शुभारम्भ किया गया और पुस्तक मेले का उदघाटन उद्योग अम व निर्वाचन मंत्री, दिल्ली सरकार के माननीय श्री रमाकान्त गोखामी ने किया और श्री चिन्मय आर गरेखान (अध्यक्ष, इंदिरा गॉधी कला-केन्द्र) ने प्रदर्शनी शृंखलाओं का उदघाटन किया । इसके अतिरिक्त इस 15वें विश्व संस्कृत सम्मेलन के दौरान राष्ट्रीय संस्कृत संस्थान ने पंचविवसीय संस्कृतनाट्य महोत्सव का भी आयोजन किया गया । संस्कृत के इन पारम्परिक मंचन में कुडियाट्टम, कथक्कली, नाडगीयारकुटटु, यक्षगान, अंकिया नाट तथा मणिपुरी रास का मंचन किया गया ।

विविध विषयों को लेकर तकनीकी सत्रों की शुरूआत 05 जनवरी, 2012 अपराहन के बाद से 10 जनवरी, 2012 तक विज्ञान भवन, दिल्ली में आयोजित हुई । सम्मेलन में 20 सत्रों में 6 दिन विमर्श चलता रहा । यह विमर्श इन वर्गों में हुआ – वेद, भाषा विज्ञान, महाकाव्य, पुराण, तन्त्र, आगम, व्याकरण, काव्य, नाटक एवं सौन्दर्यशास्त्र, संस्कृत और एशिया की भाषा और साहित्य, संस्कृत और विज्ञान, बौद्ध अध्ययन, जैन अध्ययन, दर्शन, धर्मशास्त्र अध्ययन, कर्मकाण्डशास्त्र अध्ययन, शिलालेखशास्त्र, तकनीकी जगत् में संस्कृत आधुनिक संस्कृत साहित्य, पण्डितपरिषद, कवि–समवाय, विधि एवं समाज तथा पाण्डलिपि विज्ञान । सर्वसम्मति से अनुमोदन किया । यह प्रस्ताव इस प्रकार हैं-

'अन्तर्राष्ट्रीय-संस्कृत अध्ययन समवाय' की साधारण सभा के समक्ष रखे गये निर्णय

 राष्ट्रीय संस्कृत संस्थान द्वारा पिछले 42 वर्षों से राष्ट्रीय एवं अन्तर्राष्ट्रीय स्तरों पर अनवरत संस्कृताध्यययन के क्षेत्र में किये गये विशिष्ट योगदान के आलोक में 'अन्तर्राष्ट्रीय-संस्कृत-अध्ययन-समवाय' की साधारण समा (जिसकी बैठक 15वें विश्व-संस्कृत-सम्मेलन के दौरान हुई) भारत सरकार से राष्ट्रीय संस्कृत संस्थान को संसद के अधिनियम द्वारा पूर्णप्रकल्प्यन्त अन्तर्राष्ट्रीय केन्द्रीय संस्कृत विष्वविद्यालय घोषित करने की प्रार्थना करता है ।

 15वें विश्व-संस्कृत-सम्मेलन तथा अन्तर्राष्ट्रीय संस्कृताध्ययन समवाय की साधारण समा सरकार से एक संस्कृत- आयोग की स्थापना के लिए दृढतापूर्वक संस्तुति करती है, जो 1956 के प्रथम संस्कृत आयोग के कार्यों में अद्यतनत्व सम्पादन, पूरकता-सम्पादन एवं सातत्य-सम्पादन करेगा।



 15वें विश्व—संस्कृत—सम्मेलन अध्ययन की साधारण सभा (जिसकी बैठक 15वें विश्व संस्कृत सम्मेलन के दौरान हुई) भारत सरकार को 'राष्ट्रीय पाण्डुलिपि मिशन' की स्थापना के लिए धन्यवाद देती है । साथ ही साथ, यह भारत सरकार से 'राष्ट्रीय पाण्डुलिपि मिशन' पर इसके अस्तित्व के लिए नियत पंचवर्षीय समय सीमा को उठाने की प्रार्थना करती है ।



• विदेशी विनिमय न्यूनता के दिनों में भारत में स्थित पुस्तकालयों ने गम्भीर परेशानियों का सामना किया है । क्योंकि संस्कृत भारत भिन्न देशों में सबसे अधिक विस्तृत रूप से पढ़ी जाने वाली भारतीय भाषा है और चूँकि संस्कृत बहुत सी ज्ञान विधाओं के लिए उपयोगी है । अधिकतर संस्कृत–सम्बद्ध विदेशी प्रकाशनों को खरीदने की असमर्थता का प्रभाव चिन्तनीय है । 15वें विश्व संस्कृत–सम्बद्ध विदेशी प्रकाशनों को खरीदने की असमर्थता का प्रभाव चिन्तनीय है । 15वें विश्व संस्कृत–सम्मेलन तथा अन्तर्राष्ट्रीय–संस्कृत अध्ययन संस्कृत–सम्मेलन तथा अन्तर्राष्ट्रीय–संस्कृत अध्ययन समवाय अध्ययन की साधारण सभा (जिसकी बैठक 15वें विश्व संस्कृत सम्मेलन के दौरान हुई) शीघ इस शोच्यदशा को सुधारने के लिए भारत सरकार से संस्तुति करती है । स्थिति के आकलन के लिए भारत के विभिन्न भागों से एक विशेषज्ञ समिति की स्थापना की जाये ।

 15वें विश्व संस्कृत—सम्मेलन तथा अन्तर्राष्ट्रीय—संस्कृत अध्ययन समवाय की साधारण सभा मारत सरकार को सबलतम सम्भव शब्दों में उत्प्रेरित करती है कि वह भारत के राज्यों एवं केन्द्रशासित प्रदेशों में (स्थित) संस्कृत—शिक्षण—संस्थाओं (प्राच्यविद्यालय / महााविद्यालय/पाठशाला आदि) के संरक्षण में सहायक कदम यथाशीघ्र उठाये ।

 15वें विश्व संस्कृत—सम्मेलन तथा अन्तर्राष्ट्रीय—संस्कृत अध्ययन समवाय की साधारण सभा 15वें विश्व संस्कृत सम्मेलन के कार्यवृत्त को प्रकाशित करने की राष्ट्रीय संस्कृत संस्थान की प्रार्थना को कृतज्ञतापूर्वक स्वीकार करती है ।

UGC Proposed FDCs for Quality Teaching

The University Grants Commission (UGC) has proposed, as part of the XII Five Year Plan, setting up of 20 Faculty Development Centres (FDCs), to improve the quality of teaching in all the Higher Education institutions. These FDCs would be set up at select Universities all over the country.

It is proposed that the Centres would provide refresher programmes specific to various disciplines already being taught at these Universities. Besides, the Centres will also impart training programmes linked to Information and Communication technology as well as teachinglearing-research. The Universities, where these Centres would be located, shall be selected on the basis of parameters such as infrastructure, past performance, and academic strength.

While proposing the FDCs, UGC outlined about the selection of Universities, "For example, refresher courses in life sciences should be conducted in only those universities which have a strong base in life sciences. A similar pattern can be adopted for other disciplines."

In addition to these proposed Centres, the UGC has also sought reforms in the Academic Staff College (ASC) system.

Govt. Plans Grievance Redressal Mechanism in Higher Education Institutions

The Government is planning to have a Grievance Redressal mechanism in Higher Education Institutions, which would provide timely succor to aggrieved students and other applicants. Shri Kapil Sibal, Minister of HRD, said recently that the University Grants Commission (UGC), All India Council for Technical Education (AICTE), and National Council for Teacher Education (NCTE) will require all Central Education Institutions, deemed-to-be Universities, Technical and Management Institutions, and Teacher Education Institutions to establish a Grievance Redressal Mechanism (GRM) for students before the commencement of admissions for this academic year.

In addition to the GRM, each institution would also be required to constitute an Ombudsman; person with judicial or legal experience to be appointed from a panel suggested by the affiliating university for technical and management institutions, by the Central Government for deemed universities and by the regulator for non-degree granting institutions. Detailed instructions would also be issued to the institutions in this regard shortly.

The Government is of the view that the grievances raised by students and other applicants require immediate solution. In fact, the Parliamentary Standing Committee has also recommended that pro-active steps be taken to constitute GRMs in Higher Education institutions.

Microsoft Team comes to IIT Mandi

Microsoft India sent a team of five members to Indian Institute of Technology, Mandi. The purpose of the visit was to select students for the Institute for its Summer Internship programme. Shri Mahender Dubba, Senior Director, Service Management Division of Microsoft, was all praise for IIT Mandi and its students. He said that despite the Institute being only three years old, it was a pleasure to note that the students were being given all the required exposure and rigorous training.

Professor T. A. Gonsalves, Director, IIT Mandi, expressed willingness to work with Microsoft on long term innovative projects. He also said that the Institute's students would benefit widely if Microsoft would expand its talent search beyond Computer Science, to other fields like Electrical, and Mechanical Engineering.

Research Activity is Backbone of IISER Mohali

The research atmosphere at Indian Institute of Scientific Education & Research (IISER) Mohali is electrifying, thanks to the campus activities, which form the backbone of the overall research activity at the Institute. With about 320 students in the 5 year BS-MS dual degree programme, the interdisciplinary course structure and research-orientation makes it possible for undergraduate students to have ample opportunities to learn about the ongoing research work through faculty seminars as also through close interaction with faculty through projects.

Campus Notes

The IISER Mohali is currently working out of a fully residential campus, coming up in Sector 81, Knowledge City, Mohali. All the students and almost all the faculty members live on the campus. Apart from student sin the dual degree programme, there about 90 students in the doctoral programme while the number of faculty members is close to 50.

Tripura University's 9th Convocation

Bangladesh PM Receives Honorary D. Lit. Degree



Bangladesh PM Sheikh Hasina receiving the Honorary Degree from Vice President Hamid Ansari at Tripura University Convocation on February 12, 2012.

After receiving an honorary Doctor of Literature degree from Tripura University, at the hands of Vice President Hamid Ansari, on January 12, 2012, Bangladesh Prime Minister Sheikh Hasina expressed her desire to set up joint ventures, including power plants, in India and to boost trade and business with India. She was leading a delegation of over 100 members to the country and during the Convocation, she also addressed the gathering during which she talked about the means to improve Indo-Bangladesh ties. When she said, "Not only in trade and business, India and Bangladesh should undertake more mutual programmes in education, sports, and culture," her words were applauded by the whole gathering.

Shri Kapil Sibal, Minister of HRD, Tripura Chief Minister Manik Sarkar, Tripura Governor D. Y. Patil, University Chancellor Amiya Kumar Bagchi, Vice Chancellor Arunoday Saha, and other dignitaries, along with PM Hasina and Vice President Ansari, also took part in the ceremonial academic procession before the beginning of the Convocation ceremony. While addressing the Convocation Shri Sibal said, "There is much that unites our two countries - India and Bangladesh - a shared history, common heritage, language and cultural ties, an equal passion for music, literature and arts. Bangladesh and India share a common history of struggle for freedom and liberation but there is also enduring fraternal as well as familial ties across the borders. The exchange of people as well as the large number of students from Bangladesh who come to study in India provides the foundation for a lasting friendship. These individual exchanges and interactions have served as an important adjunct to official-level interactions."

Girls Outshine Boys Yet Again at BHU's 94th Convocation



Dignitaries on the dais during the 94th Convocation ceremony at BHU on March 17, 2012.

The Banaras Hindu University (BHU) held its 94th Annual Convocation on March 17, 2012 at the open Amphitheatre ground. In keeping with the past tradition, the girl students, once again, outshone boys and bagged more number of BHU medals. Smt. Meira Kumar, Lok Sabha Speaker, who was the Chief Guest at the function, asked for focus on the glorious history of BHU and the need for all the Universities to provide "moral, spiritual, and national values along with traditional and modern knowledge of science."

She also said, "If the education system churns out students who look for handsome salaries and attractive jobs, then I think it is grossly failing in its objective of providing holistic education."

Wadhwani Foundation, Virginia Foundation Sign MoU

The Wadhwani Foundation (WF) and the Virginia Foundation for Community College Education (VFCCE), USA, have signed a Memorandum of Understanding to encourage exchange of industry-relevant professional education through technical and organizational know-how, curriculum, and teacher training. The MoU was signed in the presence of Shri Kapil Sibal, Minister of HRD and US Senator Mark Warner, Co-Chair of the Senate India Caucus, who was visiting India as part of a delegation. The MoU was signed between Dr. Ajay Kela, President and CEO of WF and Dr. Glenn DuBois, Chancellor of Virginia's Community Colleges.

Speaking on the occasion, Shri Sibal emphasised the importance of enhanced skill development to boost the economic growth rate of India. He congratulated both the parties on the signing of the MoU.

As part of the memorandum, the VFCCE and the WF will together identify high-impact skill development programs in India that need such support. These partnerships could be forged with government or private initiatives and would involve vibrant exchange of ideas and technology transfer, adapting U.S. expertise to position Indian institutions to meet local needs. Virginia Community College experts will serve as consultants, sharing best practices. The Wadhwani Foundation will provide local support and co-funding for this capacity building.

IIT Gandhinagar's Student Exchange Prog With CalTech, USA

To facilitate inter-institutional and inter-cultural dialogue between its students and those of the CalTech, USA, the IIT Gandhinagar hosted a group of 10 undergraduate students and one staff member of CalTech, USA during December 12-21, 2011. The students of both the Institutes held a number of interactions among themselves, which were based on a vast range of themes including:

- 1) Caste and community structures in India;
- 2) Ancient Indian civilizations;
- 3) Challenges of globalization and liberalisation;

- 4) Science & Technology;
- 5) Media and advertising;
- 6) Economic reforms and their impact on the cultures of self and market;
- 7) Democratic institutions; and
- 8) Non-Governmental organizations



Students of IIT Gandhinagar and CalTech, USA, during the Student Exchange Programme.

Through a combination of academic lectures and field-visits, the module took the students through India of the past, present and future, making them relate to India's ancient traditions of philosophy, science and technology to a present-day India and help identify continuities as well as shifts that India has made through centuries.

Cancer Research Centre at IIT Bombay

The Indian Institute of Technology (IIT) Bombay opened a Cancer research centre, "The Wadhwani Research Centre in Biosciences and Bioengineering" in January 2012. The Centre was formed as a result of the Memorandum of Understanding signed between the Institute and Wadhwani Foundation. The Centre will mainly focus on understanding cell mobility and migration.

While explaining the purpose of the Centre, the Institute said in a release, "The centre will study how cancerous cells move from one localized area to other parts of the body and what gives them the ability to move when they become cancerous. This is a phenomenon called 'metastasis', and there is not much understanding how it happens. The new centre is a major step forward and will aim at producing world-class research."

ICAI Report on Accounting Standards in HE Institutions

In its report on Implementation of Accounting Standards in Educational Institutions of Department of Higher Education, the Institute of Chartered Accountants of India (ICAI) has recommended that accounting standards issued by ICAI be made mandatory to institutions in the Higher Education. The report was presented to Shri Kapil Sibal, Minister of HRD by Shri G. Ramaswamy, President, ICAI and Jaydeep N Shah, Vice-President, ICAI.

The MHRD had nominated members to a working group, which also consisted of members from ICAI, and this group brought out the report. Apart from Shri Ramaswamy and Shri Shah, the working group members included Shri Amarjit Chopra, Chairman, Professional Development Committee and representatives from the school and university sector, besides, accounting experts.

The major recommendations of the report are:-

• All the education institutions should be mandated to apply accrual basis of accounting; Accounting Standards issued by the ICAI;

- Accounting Standards issued by the ICAI should be made mandatory to educational institutions;
- Fund based accounting may be introduced for Earmarked / Designated Funds; and

• All educational institutions should follow a common format for presentation of its general purpose financial statements to ensure proper accountability, financial discipline, end-use of funds and to meet the needs of stakeholders.

In order to implement the recommendations of the report, the MHRD would be organizing consultations with HE institutions as well as schools. Besides, the Ministry, in coordination with ICAI, shall organize capacity-building programme to train the staff of educational institutions.

Ministry Reviews Citizen's Charter

In keeping with the Central Government's policy, the Ministry of Human Resource Development has put out its Citizen Charter. The mission of the Charter includes the following aims:

1) Provide greater opportunities of access to higher education with equity to all the eligible persons and in particular to the vulnerable sections.

2) Expand access by supporting existing institutions, establishing new institutions, supporting State Governments and Non-Government Organizations / Civil Society to supplement public efforts aimed at removing regional or other imbalances that exist at present.

3) Initiate policies and programmes for strengthening research and innovations and encourage institutions public or private - to engage in stretching the frontiers of knowledge.

4) Promote the quality of higher education by investing in infrastructure and faculty, promoting academic reforms, improving governance and institutional restructuring towards the inclusion of the hitherto deprived communities.

The Ministry has also endeavored to provide the following services in interest of the public:

Policy Formulation relating to Higher Education (including Minority Education & focus groups):-Consultation, Conference (like Vice Chancellors Level etc.), discussion, interaction session etc.

The details of release of funds under various schemes of this Department are available on website :www.mhrd.gov.in. Funds are released to Grantee Institutions within 25 working days after approval of the competent authority.

Information dissemination about Higher Education:-Updation of information on website and through various publication on Higher Education.

Monitoring of the Implementation of the Policies/Programmes/Projects:- Monthly Progress

Consultation at various forums such as Central Advisory Board of Education (CABE) to have ideas to improve the higher education sector, Parliamentary Committees:-Through Conference, Discussions, Interaction session and Meetings etc.

Grant of Scholarships to University & College students pursuing higher education:- As per Guidelines of the specific scheme available on www.education.nic.in

Collaboration with United Nations Educational, Scientific and Cultural Organization (UNESCO), Foreign Governments, International Partners to keep the higher education at par with the international standards.

Registration of Copyright:- Extract of Register to be sent to applicant within 15 working days of registration of the work by the Registrar of Copyright.

ISBN Registration:- To assign ISBNs to the applicant and send the same to him/her within 7 working days of registration of the book by the ISBN Registry.

Minority Education

Five Sub-Committees Constituted at the NMCME Meeting

Shri Kapil Sibal, Minister of HRD, chaired a meeting of the National Monitoring Committee for Minorities' Education (NMCME) on March 5, 2012. One of the major decisions, taken after due deliberations within the Committee members, was to set up five sub-Committees, which would look after various aspects of Minority Education. These five sub-Committees would look after:

(1) Vocational and Skill Development in Minority Concentration Districts (MCDs);

(2) Implementation of Schemes in MCDs and addressing grievances relating to education of minorities;

(3) Promotion of Urdu and enhanced English learning for employability of Minorities;

(4) Promotion of girls education at all levels; and

(5) Mapping of educational requirements of minorities - region-wise and district-wise and creating of a database to track access and coverage of education.

The Sub-Committees will meet in April-May, 2012 and present their respective reports in the next meeting of the NMCME, proposed to be held in the month of June, 2012.

While addressing the Committee members, Shri Sibal said that during the last three years, a number of reforms have been initiated in the school education as also in the higher education sector such as the enactment and enforcement of the RTE Act, launch of Saakshar Bharat, academic and governance reforms in Higher Education including setting up of more than 100 new Central Educational Institutions, National Vocational Education Qualification Framework, etc. However, he found that the educational development of the minorities is lagging far behind and there is a need to have targeted approach along with participation and coordination with the State Governments and civil society, so that the benefits of various schemes reach the minority communities. He also desired that the Committee should monitor the ongoing schemes as also advise and recommend to the Government on issues relating to education of minorities.

Shri Sibal talked of the need to target the schemes towards habitations dominated by the minorities. Secondly, since most of the schemes are implemented through the State Governments, there is a need for the State Governments to take proactive steps to ensure proper implementation of the schemes. Thirdly, a system is required for regular monitoring and field visits to various states and even to districts, through the Standing Committee and by Sub-Committees on different areas whose reports should be placed before the National Monitoring Committee for Minorities' Education.

Others who attended the meeting include Dr. D. Purandeswari, Minister of State for HRD, Shri E. Ahamed, Minister of State of HRD and External Affairs, Smt. Vibha Puri Das, Secretary (HE), Smt. Anshu Vaish, Secretary (SE&L), Shri H.B. Sarma, Education Minister of Assam, Shri Bratya Basu, Education Minister, West Bengal, Shri Moinul Hassan,

Vichar-Vimarsh

Member of Parliament (Rajya Sabha), Ms. Mabel Rebello, Member of Parliament, (Rajya Sabha) and 51 other Members of the NMCME representing the Minority Communities from all over the country.



the first meeting of the NMCME in New Delhi on March 5, 2012. Shri E. Ahamed and Dr. D. Purandeswari, Ministers of State for HRD, Smt. Vibha Puri Das (extreme right), Secretary (HE), and Smt. Anshu Vaish (extreme left), Secretary (SE&L) were also present on the occasion.

IISERs Meeting

Minister Wants Faster Student Intake

On March 9, 2012, at a meeting with the Chairmen and Directors of the five Indian Institutes of Scientific Education and Research (IISERs), Shri Kapil Sibal, Minister of HRD, emphasised up on the need to speed up student intake in these institutes. At the same time, he also expressed satisfaction on the progress made in development of infrastructure, education, and research in the newly-established IISERs.

The Minister told the meeting that the Government was doing everything possible to facilitate awarding degrees to the IISER students. He appreciated the willingness of the IISERs to support the proposed Science Magnet Schools to attract students at their early age to the realm of science. Shri Sibal also took note of the initiatives of these Institutes in having Mobile Science Labs in all the States to perform as a role model to set up such labs at the District Level to mentor the teachers and to create enthusiasm amongst the students in the remote areas of the country. The IISERs' Directors informed the Minister that international Baccalaureate at Higher Secondary level is an approved basis for admission to IISERs. During the meeting, the Minister also stressed upon the need to develop a good eco-system in and around the IISERs, the progress of which would be reviewed in the next meeting of the IISERs to be held in June, 2012.

Accreditation Plays Decisive Role in Higher Education



Shri Kapil Sibal, Minister of HRD, addressing the 1st World Summit on Accreditation, in New Delhi on March 26, 2012.

"Quality assurance, that accreditation offers, can play a decisive role in modernizing, improving and achieving better value for money of our Higher Education system." These were the words of Shri Kapil Sibal, Minister of HRD, who said this while inaugurating the 1st World Summit on Accreditation on March 26, 2012. At the same time, Shri Sibal also stressed upon the fact that whatever the benefits of accreditation, the same can never replace internal monitoring and assessment done by the education providers themselves.

The Summit is being organized by the National Board of Accreditation (NBA) and the theme of the Summit is "Achieving Excellence through Accreditation." The Summit is expected to bring together Indian and Global leaders in Technical and Professional Education, academicians, administrators, policy makers, regulatory bodies and representatives of industry.

While drawing the focus on Government's efforts to seek enlargement of the initiative towards achieving quality assurance, Shri Sibal said that the same could be possible through a legal foundation to cover all higher education programmes and institutions. He said, "Accordingly we have introduced in our Parliament a National Accreditation Regulatory Authority for Higher Educational Institutions Bill, 2010. The Bill seeks to make it mandatory for every higher educational institution and programme to be accredited by independent accreditation agencies working under the oversight of an Accreditation Regulator to manage issues of conflict of interest and ensure objectivity and transparency in the accreditation process. The accreditation mechanism is expected to provide a credible method of informing all stake-holders including potential students, employers etc. of the academic quality benchmark of the institution and the programme of study. This will mirror the world-wide trend to ensure quality assurance and certification of institutions and programmes of study. Moreover, such regulation of the accreditation agencies will give the required confidence to both the employers and the students."

Technological Advancements at IIT Bombay

Among a host of technologies developed at IIT Bombay, the most important ones are:-

Hindi Wordnet - Hindi Wordnet is a rich, complex, large and widely used electronic resource along with associated tools developed for the first time for an Indian language. It is invented by Prof. P Bhattacharyya and his team in the Department of Computer Science and Engineering.

Extraction Process for Herbal Oil - The extraction process for the production of herbal oil from leaf extracts of Nirgundi (Vitex negundo) was invented by Prof. N. G. Shah and his team in the Centre for Technology Alternatives for Rural Areas and the Department of Chemical Engineering.

Point-of-Care System for Cardiac Diagnostics - A low-cost, diagnostic aid for assessing cardiac dysfunctions was invented by Prof. V. R. Rao, Prof. S. Mukherji and their team in the Departments of Electrical Engineering, Biosciences and Bioengineering, Chemistry, and Mechanical Engineering. The Technology provides an integrated system for point-of-care diagnostic support for cardiovascular diseases.

Appointments/Retirements/Transfers/Snapshots

Appointments

Sh. Pramod Kr. Saha, Deputy Secretary (DS) Sh. R. Srinivasan, Director (Dir) Sh. Hari Ram Jothy, Under Secretary (US)

Transfers

Sh. G. S. Bothyal, Joint Secretary (JS) Smt. Sarita Mittal, JS Sh. Pravin L. Agrawal, Dir Smt. Rashmi Chowdhary, Dir Sh. M. K. Meena, US

Retirements

Sh. John Mathew, DS Sh. V. K. Walia, DS Smt. Kusum Bhalla, Section Officer (SO) Sh. A. K. Gupta, SO Sh. Satish Kumar, SO, Sh. Dev Sharma, AD



Shri Kapil Sibal, Minister of HRD, addressing at the conferment of the Degree of Doctor of Philosophy (Honoris Causa) on the President of the Russian Federation, Mr. Dmitry A. Medvedev, at a Special Convocation of the Jawaharlal Nehru University, in New Delhi on March 28, 2012.



Shri Sibal and Shri Ramadorai, Advisor to the Prime Minister of India in National Council of Skill Development, witnessing the signing of an MoU between AICTE and Tata Institute of Social Sciences (TISS), in New Delhi on March 27, 2012.



Shri Sibal in a meeting with Mr. G. L. Peiris, Minister of External Affairs of Sri Lanka, in New Delhi on January 24, 2012.