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महानिदेशक की डेस्क से

Shri Rajiv Kumar, Director General, NIELIT presenting the agenda points during the 35th NIELIT GC under the chairpersonship of Shri Ravi Shankar Prasad, Hon'ble Minister of Electronics and IT, in the August presence of Shri Alphons Kannanthanam, Hon'ble MoS (E&IT) and Dy. Chairperson, NIELIT GC and Shri Ajay Prakash Sawhney, Secretary, MeitY and Executive Vice Chairperson, NIELIT GC and other members from Government, Industry and Academia.

प्रिय पाठकों,

जैसा कि आप जानते हैं, अगस्त 2017 में नाइलिट के तत्कालीन महानिदेशक, डॉ0 अश्विनी कुमार शर्मा के कार्यकाल पूर्ण होने पर नाइलिट में नेतृत्व परिवर्तन हुआ है और यह पदभार मुझे सौंपा गया है।

मुझे इस बात की बहुत प्रसन्नता है कि मैं पहली बार आप सभी पाठकों को महानिदेशक, नाइलिट के रूप में संबोधित कर रहा हूँ। मैं आशा करता हूँ कि जिस गति से यह संस्थान पूरे भारत में प्रौद्योगिकी पाठ्यक्रमों में प्रशिक्षण प्रदान करने हेतु तथा भारत सरकार के दृष्टिकोण को पूरा करने में कार्यरत है, उसी क्रम व गति से आगे बढ़ते हुए ज्ञान आधारित एकीकृत समाज स्थापित करने में सफल होगा। डिजिटल टेक्नोलॉजी में विकास के साथ भारत परिवर्तित हो रहा है और जिससे देश के नागरिकों को सुशासन की ओर ले जाने का अवसर प्रदान किया है और मैं आशा करता हूँ कि कुछ वर्षों में नाइलिट, इलेक्ट्रॉनिकी एवं सूचना प्रौद्योगिकी मंत्रालय, भारत सरकार, की ई–नीतियों को साकार करने में और अपने उन्नत स्तर के पाठ्यक्रमों के माध्यम से सशक्त एवं समावेशी समाज बनाने में महत्वपूर्ण भूमिका निभाएगा। ऐसा करने हेतु यह आवश्यक है कि हम निरंतर प्रयास करते रहें और यह सुनिश्चित करें कि आने वाले समय में न केवल वर्तमान गुणवत्ता बनाए रखेंगे अपितु इससे भी बेहतर सेवाएं समाज को प्रदान करेंगे जिससे सुगमता से देश भर में सूचना प्रौद्योगिकी का विकास हो सके। एक संगठन के रूप में नाइलिट ने लगातार चुनौतियों को स्वीकारा है और देश के डिजिटल विकास में महत्वपूर्ण योगदान देता आ रहा है।

तेजी से फैलते इंटरनेट तंत्र के साथ साइबर खतरा तथा भारी मात्रा में डाटा बढ़ रहा है। डाटा विश्लेषिकी एवं उचित साइबर सुरक्षा तकनीकों के द्वारा इस डाटा को बहुमूल्य संपत्ति में परिवर्तित करने का स्वर्णिम अवसर है। नाइलिट ने डाटा विश्लेषिकी एवं साइबर सुरक्षा में क्षमता निर्माण की चुनौती को अपने विभिन्न पाठ्यक्रमों जैसे कि, BCA, MCA, PG Diploma and Advanced Diploma level in areas like Big Data, Data Analytics, Cyber Security, Cyber Forensic, IoT, इत्यादि के माध्यम से स्वीकार किया है।

नाइलिट की 35वीं गवर्निंग काउंसिल की बैठक, 26 सितंबर 2017 को **माननीय मंत्री, इलेक्ट्रॉनिकी एवं सूचना प्रौद्योगिकी, श्री रवि शंकर प्रसाद जी** की अध्यक्षता में सम्पन्न हुई, जिसमें परिषद को नाइलिट द्वारा विभिन्न स्तरों पर की जा रही महत्वपूर्ण गतिविधियों से अवगत कराया गया। मैं, माननीय मंत्री महोदय का प्रोत्साहन तथा मार्गदर्शन प्रदान करने हेतु आभार व्यक्त करता हूँ।

मैं, **माननीय राज्य मंत्री इलेक्ट्रॉनिकी एवं सूचना प्रौद्योगिकी, श्री अल्फोंस कन्नंथानम** जो नाइलिट गवर्निंग काउंसिल के उपाध्यक्ष भी हैं तथा **श्री अजय प्रकाश साहनी, सचिव, इलेक्ट्रॉनिकी एवं सूचना प्रौद्योगिकी मंत्रालय**, जो नाइलिट गवर्निंग काउंसिल के कार्यकारी उपाध्यक्ष भी हैं, का भी प्रोत्साहन और मार्गदर्शन करने हेतु आभार व्यक्त करता हूँ। मैं, परिषद के अन्य सदस्यों, जो उद्योग एवं शिक्षा जगत के सम्मानित एवं वरिष्ठ अधिकारीगण हैं, का भी कौशल विकास एवं क्षमता निर्माण के क्षेत्र में नाइलिट द्वारा चलाई जा रही परियोजनाओं में मार्गदर्शन करने के लिए आभारी हूँ।

मैं, माननीय राज्य मंत्री, इलेक्ट्रॉनिकी एवं सूचना प्रौद्योगिकी, श्री अल्फोंस कन्नंथानम का नाइलिट परिवार की तरफ से हार्दिक स्वागत करता हूँ। आपके नेतृत्व में नाइलिट इसी प्रकार कड़ी मेहनत से अपनी गतिविधियों को पूरा करता रहेगा।

मैं यह भी बताना चाहता हूँ की 1 सितंबर 2017 से नाइलिट मुख्यालय का स्थानांतरण 'इलेक्ट्रॉनिक्स निकेतन' से 'नाइलिट भवन', द्वारका, नई दिल्ली में कर दिया गया है।

नाइलिट के संवादपत्र को और अधिक जानकारीपूर्ण और संसाधनपूर्ण बनाने के लिए, इस संस्करण से दो नए वर्गों की शुरुआत की जा रही है *(i) Tech वार्ता* – जिसमें छात्रों के बीच जागरूकता फैलाने के लिए वैज्ञानिक सिद्धांत और नवीनतम तकनीक के व्यवहारिक प्रयोग का संक्षिप्त विवरण होगा तथा *(ii) New Courses @ NIELIT Centres* – जिसके अंतर्गत नाइलिट के विभिन्न केन्द्रों में चलाए जा रहे नए आगामी पाठ्यक्रमों के बारे में जानकारी प्रदान की जाएगी।

इस तिमाही में नाइलिट ने सोशल मिडिया अभियान (i) *#GuruSeGarima* अभियान के द्वारा शिक्षक दिवस के उपलक्ष पर गुरुओं का आभार व्यक्त किया गया जिन्होंने जीवन के विभिन्न चरणों में हमारा मार्गदर्शन किया तथा (ii) *#SwachhataHiSeva* अभियान के अंतर्गत नाइलिट केन्द्रों द्वारा 'स्वच्छ भारत अभियान' के तहत की गयी गतिविधियों को प्रदर्शित किया गया।

– राजीव कुमार

35ᵀᴴ MEETING OF NIELIT GOVERNING COUNCIL

Shri Rajiv Kumar, DG, NIELIT and JS, MeitY welcoming Shri Ravi Shankar Prasad, Hon'ble MoE & IT and L & J in presence of Shri Alphons Kannanthanam, Hon'ble MoS, MoE & IT and Shri Ajay Prakash Sawhney, Secretary, MeitY at 35ᵗʰ GC Meeting

The 35ᵗʰ Meeting of the Governing council of NIELIT was held under the Chairmanship of Shri Ravi Shankar Prasad, Hon'ble Minister of Electronics & Information Technology and Law & Justice and Chairman, GC, NIELIT in presence of Shri Alphons Kannanthanam, Hon'ble MoS, Electronics & IT and Deputy Chairperson, GC, NIELIT and Shri Ajay Prakash Sawhney, Secretary, MeitY and Executive Vice Chairperson, GC, NIELIT on September 26, 2017 at New Delhi. Shri Rajiv Kumar, Director-General, NIELIT and Joint Secretary, MeitY welcomed the Members of the Council. The Council deliberated on many key issues including capacity building and skill development initiatives in state-of-the-art technologies that NIELIT propose to undertake. Dr. N.H. Siddalinga Swamy, Director, e-Gov, MeitY; Ms. Anuradha Mitra, Additional Secretary & Financial Adviser, MeitY; Shri R.P. Pradhan, Director (Personnel), MeitY; Dr. B.K. Murthy, Scientist 'G' & Group Coordinator, MeitY; Shri R. Chandrashekhar, President, NASSCOM; Prof. (Dr.) K T V Reddy, President, IETE and other Senior Officials of NIELIT and MeitY also attended the meeting. A presentation on capacity building initiatives was presented by Director General, NIELIT.

WORKSHOP FOR VISIONING, SUSTENANCE OF GROWTH AND FURTHERING BRAND EQUITY

A one day workshop for visioning, sustenance of growth and furthering Brand Equity of NIELIT was held under the chairmanship of Dr. Ashwini Kumar Sharma, the then Director General, NIELIT on August 03, 2017 at the newly constructed NIELIT Bhawan, Dwarka, New Delhi. The workshop was attended by Executive Director / Directors/ Director-in-Charge from NIELIT Centres across India. The objective of the workshop was to introspect and deliberate upon the future course of action for sustenance of growth and also to synergise common efforts with focus on branding, promotion and marketing initiatives of NIELIT. In his keynote address, Dr. Ashwini Kumar Sharma enlightened the participants with his vision about NIELIT and talked about various key areas that NIELIT should focus on in the coming years for a sustainable growth. The day long workshop witnessed intense discussion and deliberation among all Centre Heads regarding articulation of tweets/messages in line with the vision and objectives of Government of India / MeitY / NIELIT, management of official twitter handles, creation of tweets in local language etc.

Dr. Ashwini Kumar Sharma, the then DG, NIELIT delivering keynote address during the workshop

SWACHHATA PAKHWADA – eWASTE MANAGEMENT

NIELIT HQ and all its Centres observed 'Swachhata Pakhwada' during August 01 -15, 2017. During the period, various activities ensuring 'Swachhata' such as cleanliness drive, tree plantation etc. were carried out at all the Centres of NIELIT across country. Competitions on Poster making, slogan writing on the theme of 'Swachh Bharat' were conducted by NIELIT Centres which witnessed enthusiastic participation by students. On August 11, 2017, a workshop on e-Waste Management under the Chairmanship of Shri Rajiv Kumar, Joint Secretary, MeitY was organized by NIELIT HQ at New Delhi. Senior officials of Ministry of Electronics and Information Technology (MeitY), NIELIT Delhi Centre and all Officials of NIELIT HQ attended the workshop. Shri Sandeep Chatterjee, Scientist 'F' and OSD to Secretary, MeitY and Shri Asish Chaturvedi, Director, Climate Change, GIZ India graced the workshop and enlightened the audience with their insightful speech on disposal and management of electronic waste.

DIRECTOR GENERAL INAUGURATES BOYS HOSTEL AT NIELIT AURANGABAD

Signing of MoU between NIELIT Aurangabad and Chamber of Marathwada Industries & Agriculture in presence of Director General, NIELIT.

Inauguration of 'Swami Vivekanand Boys Hostel' at NIELIT Aurangabad Campus by Shri Rajiv Kumar, Director General, NIELIT and Joint Secretary, MeitY

In a noteworthy event held on September 18, 2017, Shri Rajiv Kumar, Director General, NIELIT and Joint Secretary, MeitY inaugurated a 32 rooms Boys Hostel equipped with networking and many other facilities at NIELIT Aurangabad campus in presence of Professor Balu Ananda Chopade, Vice-Chancellor, Dr. Babasaheb Ambedkar Marathwada University; Shri. Prasad Laxmikant Kokil, President of oldest regional industrial association CMIA (Chamber of Marathwada Industries & Agriculture); Dr. Sanjeev Kumar Gupta, Executive Director, NIELIT Aurangabad besides others.

On this occasion, Shri Rajiv Kumar, DG, NIELIT inaugurated a cricket ground in NIELIT Aurangabad campus and thereafter, tree saplings were planted by the dignitaries. Inauguration of a ladies gymnasium in the campus by Mrs. Charu Kumar, distinguished Guest, also added colours to the day long event.

A MoU was also signed between NIELIT Aurangabad and CMIA for adoption of eligible Business Startup ideas emerging from the Undergraduate, Post-Graduate and Ph.D Projects of the students of NIELIT Aurangabad as per the criteria mutually set out by both CMIA and NIELIT for incubation and acceleration at MAGIC facilities.

Director General, NIELIT reviewing the projects developed by the students

Director General, NIELIT giving away prizes to meritorious students

During the visit, Shri Rajiv Kumar, DG, NIELIT addressed the students of NIELIT Aurangabad and motivated them to pursue their career in innovation of technologies. He also reviewed various state of the art projects developed by the students in the areas of IoT, PCB, Embedded Systems design, CAD/CAM, Consumer Electronics, Agri-Electronics, etc. A prize distribution ceremony was also organized for victorious NIELIT students of various sporting activities.

The day long event ended with media briefing on NIELIT's activities by Shri Rajiv Kumar, DG, NIELIT.

CYBER SECURITY TRAINING FOR CRIME BUREAU, BHOPAL

NIELIT Aurangabad conducted a training program on cyber security and digital forensics for State Crime Record Bureau Bhopal, Madhya Pradesh. The

training was inaugurated by Shri Rishi Kumar Shukla, IPS, Director General of Police (DGP), Madhya Pradesh and Shri Adarsh Katiyar, ADGP, Madhya Pradesh. 100 Police Personnel attended the training programme.

NIELIT AURANGABAD CELEBRATES FOUNDATION DAY

On 19th September, 2017 NIELIT Aurangabad celebrated its foundation day. The Centre was established on this day in 1986 jointly by MeitY (erstwhile DoE), Government of Maharashtra (through Marathwada Development Corporation(MDC) and Dr. B.A. Marathwada University, Aurangabad. At present, alumni of NIELIT Aurangabad are working in ISRO, Army, Videocon, Sterlite, Bajaj Auto and many of them have established their own enterprises and Industries.

The grand event celebrated on the foundation day turned out to be a full package of entertainment and learning platform with various cultural shows and skits on 'Skill India', 'Digital India', 'Make in India' 'Swachh Bharat ', performed by students. Dr. Sanjeev Kumar Gupta, Executive Director, NIELIT Aurangabad gave away prizes to meritorious students.

ACCOLADES TO NIELIT STUDENT!

NIELIT Centre Patna is a training centre of "Kushal Yuva Program" under Bihar Skill Development Mission (BSDM), Government of Bihar which is aimed at empowering the youth with requisite skills to fuel the growth of the State of Bihar. It is a subject of enormous pride and joy that

Mr. Azad Kumar, student of NIELIT Patna Centre has been awarded with first prize (Laptop) in Kushal Yuva Program (KYP) programme by Shri Nitish Kumar, Hon'ble Chief Minister, Bihar for securing highest marks in the state.

CUSTOMIZED TRAINING PROGRAMME FOR DEPT. OF SOCIAL WELFARE, BIHAR

NIELIT Patna Centre has started a corporate training programme of Certificate Course in Computer Application and Concepts for Group 'B' employees of Department of Social Welfare, Government of Bihar. The first batch of training started from 22nd August, 2017. The programme will provide direct benefit to the government employees of Department of Social Welfare as they will be able to take part in transformation of ecosystem of public services through the use of information technology and MS office tools.

ENTREPRENEURSHIP DEVELOPMENT

NIELIT Imphal Centre organized Entrepreneurship Development Training for its Students at NIELIT Imphal on 18th August 2017. Shri N. Shyamsunder Singh, former Chairman, JERC(M&M); Shri Raghumani Singh, former GM, DIC; Shri P. Loken Singh, Chairman, MIDC and Shri Th. Prameshwor Singh, Executive Director, NIELIT Imphal were the dignitaries present on the occasion.

Enthusiastic students taking part in the Entrepreneurship Development Programme

महा रोजगार मेला

NIELIT Ropar participated in Mega Job fair organized by District Administration on August 31, 2017. The fair was inaugurated by Mrs. Gurneet Tej, Deputy Commissioner, Ropar, Punjab. Shri Deepak Wasan, Director-in-Charge, NIELIT Ropar addressed the candidates who attended the fair. NIELIT Ropar Centre counselled students about various career opportunities that they can explore and also highlighted different courses that are being conducted at NIELIT Ropar.

PANEL DISCUSSION ON 'DIGITAL INDIA'

A live panel discussion on 'Digital India' was telecasted on DD Chandigarh on August 22, 2017. Shri Deepak Wasan, Director-in-charge, NIELIT Ropar Centre and Dr. Manish Arora, Additional Director, NIELIT Chandigarh participated in the discussion and shared their views on 'Digital India'.

NEWS FROM SIKKIM

ONLINE SOFTWARE TRAINING FOR PANCHAYAT AWARD

Ministry of Panchayati Raj, Government of India has been incentivizing the best performing Panchayats recommended by the State Governments/UT Administrations. In this regard, the State Institute of Rural Development (SIRD), Govt. of Sikkim has utilized NIELIT Gangtok's state-of-the-art infrastructure for organizing the Online Software Training for 'Panchayat Awards 2018'. Panchayat Raj Functionaries across the state have attended the training programme that was conducted during August 9-11, 2017 at NIELIT Gangtok Centre.

CYBER SECURITY AWARENESS FOR SIKKIM GOVERNMENT

As part of the project 'Creating Mass Cyber Security Awareness' among schools, colleges and government employees through appropriate training and campaign mechanism in Sikkim & Manipur sponsored by Ministry of Electronics & Information Technology (MeitY), Govt. of India, NIELIT Gangtok Centre conducted a one day workshop for Sikkim Government employees. The workshop was attended by more than 30 Government employees of Rural Management and Development Department (RMDD), Government of Sikkim who were made aware of the threats in cyber world and the safety measures to be adopted. NIELIT Gangtok had conducted similar workshops in the past as well, in association with Government of Sikkim. So far, 162 Government employees of the State have been trained under this project.

Government Officials participating in the Cyber Security Workshop

DIGITAL EMPOWERMENT IN REMOTE REGIONS

Training of students of Sikkim Government College, Rhenock by NIELIT Gangtok is in progress

With an attempt to take IT literacy to the remote parts of Sikkim; NIELIT Gangtok Centre entered into an agreement with the Sikkim Government College, Rhenock under Directorate of Higher Education, Human Resource and Development Department (HRDD), Government of Sikkim. As a result, NIELIT Gangtok Centre has started the first batch of training in NIELIT CCC Course, a digital literacy course at Sikkim Government College, Rhenock. The training was attended by 31 students of the college. The initiative is beneficial for the students at large as NIELIT enriched the learning experience of the local youth in the remote area of Rhenock. Based on the positive feedback received from the students, further batches of training are being scheduled.

MODERN TECHNOLOGIES FOR OFFICE PRODUCTIVITY

In a joint efforts made by NIELIT Gangtok Centre, Department of Information Technology, Govt. of Sikkim and Department of Personnel, Administrative Reforms, Training and Public Grievances, Govt. of Sikkim, a training programme on "Modern Technologies for Office Productivity" was organized for the employees of Sikkim Government. The training was conducted in 4 batches starting from July 20, 2017 and was attended by 109 employees belonging to various departments of Sikkim Government.

NEWS AT A GLANCE FROM CHANDIGARH

CAPACITY BUILDING OF EX-SERVICE PERSONNEL

Seen in the picture are Ms. Meenakshi Gaur, Additional Director(Tech); Dr. Manish Arora, Additional Director(Sys) and Dr. Sarwan Singh, Deputy Director(Sys) of NIELIT Chandigarh Centre distributing certificates to the participants

The Directorate General Resettlement (DGR) is an Inter Service Organization functioning directly under Department of Ex-Serviceman Welfare (Ministry of Defence). DGR assists Ex-Serviceman to train and acquire additional skills and facilitate their resettlement through a second career. NIELIT Chandigarh Centre has successfully conducted a special batch of training in 'O' Level Hardware course (CHM-O) for the Ex-Serviceman under DGR sponsorship. On conclusion of 6 month training, participation certificates were distributed to the Ex-Servicemen.

Ms. Meenakshi Gaur, Additional Director, NIELIT Chandigarh Centre in an interaction on All India Radio in the programme titled 'Lakshay' wherein she apprised about various courses being conducted at NIELIT Chandigarh. She also spoke about various Government Schemes of capacity building that are being implemented by NIELIT Chandigarh.

'DIGITAL INDIA' के बढ़ते कदम

Ms. Anita Budhiraja, Joint Director, NIELIT Chandigarh participated as an expert speaker in the Doordarshan programme titled "Digital India ke Badhte Kadam'. Ms. Anita Budhiraja enlightened the audience about NIELIT's role and initiatives in spreading digital literacy in the country and the advantages of digital payments.

ASSOCIATION WITH NABI

Dr. M. M. Sharma, Executive Director, NIELIT Chandigarh Centre had a meeting with Dr. T. R. Sharma, Executive Director, National Agri-Food Biotechnology Institute (NABI) while the later visited NIELIT Chandigarh Centre to explore possibilities for association in the areas of Information, Electronics and Communication Technology (IECT). Welcoming him, Dr. M.M. Sharma highlighted that NIELIT can undertake multifarious activities such as collaborative training, Examination, Recruitment and Web site Development etc.

CAPACITY BUILDING OF HARYANA GOVERNMENT OFFICIALS

NIELIT Chandigarh Centre is going to be the Knowledge Partner of Haryana Information Security Management Office (ISMO) in its journey of organizing Operational Level Workshops on Information Security and Digital Payment Awareness for the officials of Haryana Government. Around 21 such workshops would be conducted across the state of Haryana.

MOBILE HANDSET DESIGNING AND MAINTENANCE

A 5 days workshop on Mobile Handset Designing and Maintenance was conducted in NIELIT Chandigarh Centre during August 2017. A total of 17 Officials of NIELIT from Agartala, Aurangabad, Gorakhpur, Shillong, Imphal, Jammu, Kurukshetra, Ropar, Shimla and Guwahati attended the workshop to get hands-on practical knowledge about servicing and repairing cellular devices.

COUNSELLING OF STUDENTS FOR CHANDIGARH ADMINISTRATION

NIELIT Chandigarh Centre has designed and developed the website of the Chandigarh Administration UT for counselling the students who are taking admission to 11th Class. Three rounds of counselling has been concluded successfully on August 23, 2017 wherein approximately 17000 students were given admission in 40 government schools of Chandigarh in 11th class.

SOME NOTEABLE EVENTS

सक्षहम – POWER OF 'SHE'

In its bid to support and encourage entrepreneurship among women, NIELIT has launched a unique initiative "Saksham–Power of She" aimed at encouraging entrepreneurship among women under 'Digital India'.

On July 19, 2017, female students from NIELIT Centre Chandigarh, Guwahati, Patna, Ajmer and Srinagar participated in a live discussion with women entrepreneurs and experts through smart virtual classrooms. The panel of expert included Ms. Vineeta Dixit, Public Policy & Government Relations, Google; Ms. Ruby Sinha, Founder, Women Entrepreneurs at Work; Shri Sanjeeva Shivesh, Founder & CEO, The Entrepreneurship School and Ms. Prabha Shukla, Founding Director, EasyGov. Unveiling the campaign, Dr. Ashwini Kumar Sharma, the then Director General, NIELIT said that women have an inborn trait towards entrepreneurship as they have to effectively manage a household. This needs to be honed so that they can step out and make a meaningful contribution to India's economic growth.

The event witnessed enthusiastic participation by more than 200 female students as they learnt about entrepreneurship development.

हिन्दी पखवाड़ा

दिनांक 01–14 सितंबर 2017 तक नाइलिट दिल्ली केंद्र में हिन्दी पखवाड़ा का आयोजन किया गया। इस अवसर पर दिनांक 01 सितंबर को हिन्दी ज्ञान प्रतियोगिता, 4 सितंबर को हिन्दी निबंध प्रतियोगिता, 6 सितंबर को कविता पाठ प्रतियोगिता, तथा 7 सितंबर को हिन्दी नोटिंग ड्राफिटंग प्रतियोगिता का आयोजन किया गया। 06 सितंबर को कविता पाठ प्रतियोगिता के अवसर पर पंजाब एंड सिंध बैंक प्रधान कार्यालय नई दिल्ली से प्रबन्धक राजभाषा, डॉ. नीरू पाठक विषेश अतिथि के रूप में उपस्थित रही।

दिनांक 15 सितंबर 2017 को पुरस्कार वितरण समारोह आयोजित किया गया । इस समारोह में पंजाब एंड सिंध बैंक प्रधान कार्यालय से श्री राजेन्द्र सिंह बेवली सहायक महाप्रबन्धक (राजभाषा) मुख्य अतिथि के रूप में शामिल हुए । पुरस्कार वितरण समारोह में हिन्दी पखवाड़ा की प्रतियोगिताओं में प्रथम, द्वितीय एवं तृतीय स्थान पर रहने वाले प्रतिभागियों को मुख्य अतिथि के कर–कमलों द्वारा नकद पुरस्कार एवं प्रशंसा पत्र प्रदान किए गए। मुख्य अतिथि ने अपने उद्बोधन में नाइलिट दिल्ली केंद्र में राजभाषा हिन्दी के लिए किए जा रहे प्रयासों की सराहना की तथा पुरस्कार विजेताओं को बधाई दी । प्रभारी निदेशक महोदय ने भी सभी अधिकारियों एवं कर्मचारियों का उत्साहवर्धन किया तथा सभी को अपना काम हिन्दी में ही करने का परामर्श दिया।

''हिंदी वाणी'' के पहले संस्करण का अनावरण

डॉ. अश्विनी कुमार शर्मा, पूर्व महानिदेशक, नाइलिट ने दिनांक 02–08–2017 को दिल्ली केंद्र द्वारा प्रकाशित त्रैमासिक पत्रिका 'हिंदी वाणी' के पहले संस्करण का अनावरण किया। 'हिंदी वाणी' त्रैमासिक पत्रिका के माध्यम से नाइलिट दिल्ली केंद्र की गतिविधियों और कर्मचारियों के योगदान को उजागर किया जाएगा।

NEWS FROM KERALA

JOINING HANDS WITH VELLORE INSTITUTE OF TECHNOLOGY, TAMILNADU

With an aim to impart quality education to more students in the field of Embedded Design and VLSI, an MoU to this effect was signed by NIELIT Calicut and Vellore Institute of Technology (VIT) University. The MoU would enable students to enroll into Post Graduate Diploma programs in VLSI, Embedded Hardware Design, Embedded Real time systems, and ASIC Design and Verification courses at VIT Vellore Campus from August 2017. Also, the students can take up these courses at VIT Chennai Campus from 2018.

The MoU was signed by Dr. Anand A Samuel, Vice Chancellor, VIT University, Vellore and Dr. M P Pillai, Executive Director, NIELIT Calicut, in the presence of Dr Z. C. Alex, Director, Sponsored Research & Industrial Consultancy, VIT University Vellore; Mr. Pratap Kumar S, Sc- E, NIELIT Calicut and Shri A. Baradarajan, JD, NIELIT Calicut.

Exchange of MoU between Dr. M P Pillai, Executive Director, NIELIT Calicut and Dr. Anand A Samuel, Vice Chancellor, VIT University.

In future, aspiring engineering students will also have the opportunity to take up the M. Tech program in ESDM/Product Design and can also participate in modular M. Tech programs.

PLACEMENT INITIATIVES

The Placement cell at NIELIT, Calicut has conducted a Campus placement drive at NIELIT Calicut by Dynomerk Controls Pune on September 10, 2017.

WORKSHOP ON PYTHON

NIELIT Calicut organized a Workshop - Python Quick Start in association with IEEE Malabar Subsection during September 16-17, 2017. The Workshop covered the Fundamentals of Python, Object Oriented Programming using Python, Hands-on Design Examples & Case studies along with a Mini Project. Around 60 participants benefited from the Workshop.

WORKSHOP FOR SKILL GAP ASSESSMENT

A consultation workshop to review the IT Skills required for various job roles in the Government of Kerala was organised by Kerala State e-goverance Mission in Trivandrum. Smt. Saritha S, Sc-'E' and Shri K S Lalmohan, Sc-'E', represented NIELIT Calicut in the discussions. Various Central/ State Government institutes conducting similar IT courses also participated in the workshop. The workshop was appreciative of the NIELIT courses and the certification scheme adopted by NIELIT. It was also noted that only NIELIT courses were NSQF aligned.

The workshop was Coordinated by Shri. Muraleedharan Manningal, Head State e-Governance Mission Kerala.

CAPACITY BUILDING OF PUBLIC SERVICE COMMISSION OFFICIALS

NIELIT Kolkata Centre has organized a 36 hours duration training programme on Office Automation for the officials of Public Service Commission, Govt. of West Bengal during August 2017 where 15 State Govt. officials participated.

Participants of PSC Training programme

INDUSTRIAL INTERNET OF THINGS (IIoT) BASED PROJECTS

A Number of projects were taken up by NIELIT Calicut students creating Socially Relevant IoT Projects like e-parking (A Smart City Project), MosKill, Spot-on, Server based Fault Recognition in Street Lights (A Smart City Project), Wireless Weighing and CarIoT.

e-parking : e-parking involves an automated intelligent parking system using embedded devices with sensors like ultrasonic sensors used for the detection of vehicles. The system has the provision of a vacant slot information display at the parking entry gate. The vehicles entering parking area can view the LED display and can decide which lane to enter and also to park the car.

MosKill : MosKill is an echo friendly mosquito prevention system called MosKill (mosquito repellent system), which will prevent and kill amount of mosquitoes in the surroundings. This set up is a combination of 3 different methods such as Artificial breeding spot with egg destroying facility, Auto smoking mechanism and Electric fencing.

Spot-on : This project is used for person identification in a confined area where GPS is weak or not available. The person locating system process involves use of Radio frequency technology. The person with the RF transceiver is integrated as a user module. Spot module is fitted in each location to locate user movements. Whenever a person with ID enters into the location that person can be detected by the Receiver module and sends the details of the person like Name, ID and Room number to the web server by using Wi-Fi. The System includes Microcontroller, RF transceiver and web server.

Server based Fault Recognition in Street Lights (A Smart City Project)

This project involves intelligent illumination control of street lights to optimize the problem of power consumption and illumination of the streets late in the night. Street lights today are being replaced by LED street lighting system, which reduces the power consumption.

This embedded system detects fault in the street lights and upload its status on a web page which can be accessed by the concerned authorities. Along with the ability to detect faults this system can also automatically turn on the lights based on the light intensity in the surrounding environment which helps in saving power. This project can be implemented in cities also, this will be helpful for keeping track of the condition of the street lights in remote locations where the fault in the street light cannot be found out unless through a physical inspection.

Wireless Weighing : Wireless weighing -Industrial IoT application is a system which is proposed to minimize the losses as well as monitoring the entire systems and connecting it with internet for the proper analysis of the data obtained.

CarIoT : CarIoT is an IoT dash board for vehicle's activity monitoring in real time, self - diagnostic and location based mode. The IoT dash board is portable and available across different devices like Desktop, Android devices and palm held Raspberry Pi Mini Computers. Based on the cold stored data available, it is convenient to read the Health of the Vehicles Engine, Path Tracking, and real time data may help us to locate the vehicle instantly, check any danger levels of Temperatures in the Coolant, Engine Oil, malfunctioning of the Engine, RPM, Speed etc.

INTERACTIONS WITH INDUSTRY

Malabar Cancer Centre, Thalassery: A team of senior officials led by Dr. Satheesan, Director, Malabar Cancer Centre visited NIELIT Calicut and held discussions on possible areas of collaboration such as Big data analytics for bioinformatics, modular orthopedic implants development, mobile apps for patient care management, (AI based) image processing for medical diagnostics, Electronics and IT solutions in medical field, joint training programs in biomedical engineering etc.

C-MET Thrissur: Dr. M. P. Pillai, Executive Director, NIELIT Calicut, Mr. Jayaraj U.K, Scientist 'D' and Mr. Ishant Bajpai, Scientist 'B' OF

NIELIT Calicut visited C-MET Thrissur to explore possible areas of collaboration such as joint R &D programs for development of ultrasound probes and other related applications.

'Maker Village' Kochi: A visit to 'Maker Village' Kochi, established with funding from MeitY was undertaken to explore avenues for collaboration. Dr M P Pillai, Executive Director, Mr. Pratap Kumar S, Scientist 'E' and Mr. Ishant Bajpai, Scientist 'B' of NIELIT Calicut visited Maker Village and identified the following areas of collaboration such as sharing of resource like 'Maker Villages' Assembly line, NIELITs Laboratory facilities in VLSI, Embedded System, internship for NIELIT PG Diploma students with startups of Maker Village, Incubation facility at NIELIT Calicut, development of Joint training programs in Electronic Product Design and Manufacturing etc.

SIGNIFICANT DEVELOPMENTS IN ASSAM

ACTIVITIES OF NIELIT GUWAHATI REVIEWED BY HON'BLE MINISTERS

In order to take review of MeitY organization in the State of Assam, Shri Ravi Shankar Prasad, Hon'ble Union Minister for Electronics & IT and Law & Justice, Government of India, visited Guwahati on July 30, 2017 and held a meeting with Shri Sarbananda Sonowal, Hon'ble Chief Minister of Assam. Following the meeting, Shri Ajay Prakash Sawhney, IAS, Secretary, MeitY and Shri Sanjay Kumar Rakesh, IAS, Joint Secretary, MeitY took review of NIELIT Guwahati Centre and other organizations at Hotel Radisson Blu, Guwahati. They appreciated the capacity building and skill development activities done by NIELIT Guwahati and advised to take up more projects that would contribute for Digital India Mission of Government of India.

Seen in the picture are Shri Ajay Prakash Sawhney, IAS, Secretary MeitY; Shri Sanjay Kumar Rakesh, IAS, Joint Secretary, MeitY; Shri M.K. Yadava, IFS, MD Amtron, Govt. of Assam; Shri K Baruah, Director, NIELIT Guwahati Centre and other senior officers

DIGITAL LITERACY COURSE FOR THE ORPHANAGE

NIELIT Tezpur Centre, an Extension Centre of NIELIT Guwahati sponsored Basic Computer Course (BCC) for the children in care of NABA PRABHAT ORPHANAGE, Tezpur, Assam. After completion of the course, certificates were distributed by Deputy Commissioner, Sonitpur, Assam.

CONSTRUCTION OF PERMANENT CAMPUSES - NIELIT GUWAHATI

➢ Construction of permanent campus of NIELIT Kokrajhar, EC of NIELIT Guwahati is almost complete.
➢ Construction of NIELIT Tezpur, EC of NIELIT Guwahati is also in full swing.

Kokrajhar   *Tezpur*

BASIC TRAINING IN BIOINFORMATICS

Shri K. Baruah, Director, NIELIT Guwahati with the participants

NIELIT Guwahati Centre has successfully organised a short term training programme on Bioinformatics during July 4-7, 2017. A total of 19 women students from the Zoology Department of Handique Girl's College, Guwahati have attended the special training programme organised to empower YOUNG WOMEN students in the field of Computational Biology & Bioinformatics.

Shri K. Baruah, Director, NIELIT Guwahati congratulated the students on completion of the course and also distributed certificates to the participants. The sessions were conducted by Shri Saurov Mahanta, (Technical Officer & Co-ordinator Bioinformatics Courses), NIELIT Guwahati .

CREATING CAPACITIES IN ASSAM FOR IT COURSES

NIELIT Guwahati recently signed MoUs with 25 Facilitation Centres and Training Partners of NIELIT Guwahati for conduction of a few IT certificate courses for non SC/ST candidates in different parts of Assam. These training locations will be controlled by NIELIT Guwahati by providing required technical help and guidance from time to time.

MoU with Training Partners

NEWS HIGHLIGHTS FROM NORTH EAST

NICT 2017

NIELIT Guwahati's initiatives and activities pertaining to "Transforming India" was highlighted at the IT Conference 'NICT 2017' held in Radisson Blu, Guwahati during September 7-8, 2017 organized by ABP Group, Kolkata in association with Government of Assam. Shri K.Baruah, Director, NIELIT Guwahati was invited as the Guest of Honor at the event. In his address, Shri Baruah highlighted different activities of NIELIT undertaken to bring a wave of digital transformation across the nation, especially in North East region.

INTERNET SECURITY AWARENESS

A Workshop on Internet Security Awareness was conducted by NIELIT Tezpur on September 07, 2017 at L.G.B. Girls College, Govt. High School and MP School, Tezpur. A total of 100 participants attended the training. Similarly, another workshop was conducted on September 11, 2017 at Tezpur Science Academy in which 110 participants attended.

रोजगार मेला

A job fair on the theme of 'Skill Development and Self-Employment' was organized by Himachal Pradesh Kaushal Vikas Nigam (HPKVN), Himachal Pradesh Government at Banuti, Shimla. The event was graced by Hon'ble Chief Minister of Himachal Pradesh, Shri Virbhadra Singh along with business leaders, delegates from industries and

Shri Pratiyush Guleria, Deputy Director, NIELIT Centre Shimla briefing the skill development initiatives of NIELIT to Hon'ble Chief Minister Shri Virbhadra Singh, Himachal Pradesh and Shri Vikramaditya Singh, Director, HPKVN

SET UP OF HARDWARE LAB

A Hardware Lab was set up at NIELIT Guwahati Centre for providing hands on learning experience to the students of long term CHM 'O', 'A' Level & other NSQF aligned Short Term Courses. The newly set up hardware lab boasts of some high end equipments such as Analog Oscilloscope (CRO), Digital Multimeter (Hand Held), Function Generator, Pulse Generator, D.C regulated multiple power supply etc.

STRENGHTENING SKILLS IN IECT

NIELIT Shillong Centre has organised a two days training program on IECT Skills(Advanced) for Officials of Agriculture & Allied Departments, Government of Meghalaya during July 27-28, 2017 at NIELIT Shillong. The training program was sponsored by the Meghalaya Agriculture & Management Extension Training Institute (MAMETI), Shillong. Topics that were covered during the program included 'Advanced topics in Operating systems and administrative tools', 'Advanced MS Word', 'Advanced MS Excel', 'Digital payment options' and 'e-Governance Services'. A total of 32 officials of Agriculture & Allied Departments, Meghalaya Govt. attended the training programme and the programme was well received.

Participants from Agriculture and Allied Departments of Government of Meghalaya

different government departments of Himachal Pradesh. NIELIT Centre Shimla participated in the job fair by putting up an exhibit which was visited by the Hon'ble Chief Minister of Himachal Pradesh, Director of HPKVN and a large number of visitors comprising of business leaders, students and general public. NIELIT Centre Shimla participated in the Job Fair showcasing technological potential for creation of synergy through Information Electronics and Communication Technology (IECT).

CAPACITY BUILDING IN WEST BENGAL

CORPORATE TRAINING FOR KOLKATA POLICE

Shri Hari Kishore Kusumakar, IPS, Addl Commissioner of Police (IV), Kolkata Police addressing the participants at the valedictory session in presence of Dr. Yumnam Jayanta Singh, Director, NIELIT Kolkata

NIELIT Kolkata conducted a two week Training Programme on "Computer Hardware & Maintenance and Network Administration" during September 4-16, 2017 for the officials of Kolkata Police, Govt. of West Bengal. The course was of 80 hours duration. The training was inaugurated on September 04, 2017 at Police Training Institute, Kolkata in presence of Shri Arup Chattopadhyay, Additional Director, NIELIT Kolkata and other senior officers from Kolkata Police and NIELIT Kolkata. Valedictory and certificate distribution session was conducted in presence of Shri Hari Kishore Kusumakar, IPS, Addl. Commissioner of Police (IV), Kolkata Police and Dr. Yumnam Jayanta Singh, Director, NIELIT Kolkata and other senior officers from Kolkata Police and NIELIT Kolkata.

JOB FAIR AT KOLKATA

A job Fair was organized by Model Career Centre, NIELIT Kolkata on August 12, 2017 at its premises within Jadavpur University Campus, Kolkata. 8 different Companies from different IT/ITeS sectors attended the job fair for offering various types of job like Sales, Tele sales, Web Developer, HTML Coder, Hardware Maintenance etc. to the NCS registered candidates. 161 candidates appeared for Interview and out of them 65 were shortlisted.

Candidates at the job fair

Another job fair for SC/ST candidates was conducted by Model Career Centre, NIELIT Kolkata in association with NCSC for SC/ST at NIELIT Kolkata Centre, Jadavpur University Campus on September 15, 2017. 61 candidates appeared for interviews conducted by 6 companies through which 15 candidates got selected for the next round.

MEETING WITH COUNCILLORS & SR. EXEC.

Senior Officers of NIELIT Kolkata held a meeting with the councillors, Sr. Executives of Municipal Corporation at NIELIT Kolkata, Saltlake Campus on September 19, 2017 to explore the possible business opportunities in different areas such as e-Waste, Corporate Training etc.

TRAINING ON GOODS AND SERVICE TAX

NIELIT Kolkata has organized a 60 hours duration Course namely "Training on Goods & Services Tax (GST)" where 74 nos. candidates from various sectors participated. So far, 3 batches of training have been completed and the 4th batch training is ongoing. The participants are basically Low and Medium Level Traders / Businessman. On completion of the training participants would be able to handle GST tax compliances like invoice making, etc. under the new tax regime.

Seated on the dais are Dr. Y. Jayanta Singh, Director, NIELIT Kolkata and Shri Arup Chattopadhyay, Scientist 'E', NIELIT Kolkata while Shri A. Das, Joint Director (F&A), NIELIT Kolkata presenting inaugural address to the participants

NATIONAL COMPUTER SAKSHARTA MISSION

Dr. Yumnam Jayanta Singh, Director, NIELIT Kolkata attended a Prize distribution function for Directors under National Computer Saksharta Mission (NCSM), Kolkata on September 04, 2017 and delivered an invited talk. The programme brought an opportunity to interact with 200 eminent Directors of the franchise organisations.

Director-Kolkata being felicitated during the program

OTHER NOTEWORTHY EVENTS

Shri Ravi Shankar Prasad, Hon'ble Minister, MeitY visited NIELIT Shimla centre on September 18, 2017 where he was briefed about centre's achievements by Shri Rajiv Aggarwal, Director-in-charge and future plans by Dr. M.M. Sharma, Executive Director. Hon'ble Minister in his visit encouraged the centre to strengthen digital training and skilling programmes.

EXPLORING JOINT COLLABORATION WITH WEST BENGAL GOVERNMENT

Meeting with Shri Debashis Sen, IAS, Additional Chief Secretary (IT), Govt of West Bengal

A team of NIELIT Officials led by Director, NIELIT Kolkata visited the Bolpur IT Park, West Bengal on July 21, 2017 and had a meeting with Shri Debashis Sen, IAS, Additional Chief Secretary (IT), Govt of West Bengal. The meeting was also attended by senior officers of Govt. of West Bengal and officers from different organizations about starting joint businesses at IT Park Bolpur equipped with ready building on "Plug & Play" model.

SENSITIZATION FOR EMPLOYABILITY OF DIFFERENTLY ABLED

Director-Kolkata delivering Talk during the workshop

A Workshop on Corporate Sensitization for Employability of differently-abled candidates was organized jointly by National Career Service Center (Ministry of Labour & Employment) & Dr. Reddy foundation on August 25, 2017 in Kolkata. NIELIT Kolkata shared ideas with Employers & training partners highlighting the possible jobs in IT/ITeS sectors.

CREATING CAPACITY THROUGH GST (GOODS AND SERVICES TAX) TRAINING

Shri Ryntihlang Rapthap, IAS, Deputy Commissioner, West Jaintia Hills District, Meghalaya delivering the welcome speech to the particpants

A day long workshop was organized by District Administration of West Jaintia Hills along with Office of Commissioner of Taxes and NIELIT Shillong for sensitization about Goods and Services Tax (GST) Act to Officials and Traders. The Workshop was held at the District Library Auditorium, Mynthong, Jowai, West Jaintia Hills on September 14, 2017. NIELIT Shillong officials were called in by the District Administartion as experts for lecture on GST Registration process.

GST workshop in Progress

The first session of the workshop was conducted for all district officers of West and East Jaintia Hills, Block Development Offices, accountants and cashiers while the second session was for all taxpayers, including dealers, contractors and suppliers of West Jaintia Hills district. A large number of local dealers participated in the workshop.

Dr. A.H. Moon, Executive Director, NIELIT J&K, in a panel discussion on the topic "The fourth industrial Revolution and the Emerging Technologies" broadcasted on 20th September 2017 by DD Kashir.

NOTEABLE EVENTS FROM TRIPURA

CYBER SECURITY WORKSHOP

A one day workshop on Cyber Security was organized by Directorate of Information Technology in collaboration with NIELIT Agartala Centre held at Pragna Bhavan, Agartala, Tripura on July 27, 2017. IT Nodal Officers of different departments of State Government participated in the workshop. The workshop was inaugurated by Shri M Nagaraju, Principal Secretary, IT, Govt of Tripura. The workshop witnessed the august presence of Shri Debapriya Bardhan, Director, DIT, Govt. of Tripura; Shri Salil Das, Additional Director, DIT, Govt of Tripura along with Shri Anurag Mathur, Director-in-charge, NIELIT Agartala Centre. The workshop proved to be a fruitful platform as it provided an insight into the best practices to be followed to protect networks, computers and data from attack, damage and unauthorized access.

INFORMATION SECURITY EDUCATION AWARENESS

Under ISEA Phase-II project, Shri Surajit Paul, Technical Officer, NIELIT Agartala and Shri Binoy Das, Technical Officer, NIELIT Agartala delivered presentations in Cyber Security Workshop organised for BSF Tripura Frontier, Salbagan, Agartala on August 22, 2017. Shri P. N. Shukla, Dy. Commandant (IT) along with 16 BSF Jawans and Officers of Tripura Frontiers participated in the workshop.

SOFT SKILLS CORPORATE TRAINING

A Training Programme on 'Certificate Course in Soft Skill & Communicative English' for the employees of Directorate of Economics and Statistics, Govt of Tripura was organized by NIELIT Agartala during September 11-22, 2017. Ten employees from the Directorate has attended the training programme aimed at improving work life of employees, thereby raising productivity and level of satisfaction.

GST: ONE NATION, ONE TAX SYSTEM

NIELIT Agartala conducted six workshops on 'Goods and Services Tax' (GST) at all the five study centres (Tripura University, Khumulwng, Khowai, Manughat & Kalachhara) including the main campus. The first workshop was held at NIELIT Agartala main campus on August 21, 2017. The Chief Guest for the event was Sri S. K. Majumder, Asst. Commissioner, CGST, Govt. of India. Also, Sri S K Choudhury, Superintendent of Taxes, CGST, Govt. of India and Sri Badal Baidya, Superintendent of Taxes, Office of the Commissioner of Taxes, Govt. of Tripura participated in the event as distinguished speakers. A total of 400 people attended the workshops at different places of the state and were made aware about the new tax regime "GST: one nation, one tax system."

The Master Trainers of the workshop, Shri H. Premananda Singh, Dy. Director (Finance) and Shri Siddhartha S.Roy, Sr. Asst. (Accounts), NIELIT Agartala provided detailed insights into GST framework and its implementation challenges in India.

INDUCTION PROGRAMME FOR NEW STUDENTS IN DIPLOMA IN ENGG. COURSES

An induction program for the 1st Batch of students of Diploma in Engineering Courses was conducted in line with AICTE norms on August 07, 2017. The new students have been made aware about NIELIT Agartala, the course curriculum, need of maintaining discipline in life and study, importance of respecting human values, maintaining of cleanliness in campus and society etc.

HIGHLIGHTS FROM CAPITAL

INNOVATION PROJECTS AT NIELIT DELHI

Project work is integral for classroom teaching to ensure that students gain hands-on learning experience which is also necessary for employability purposes. Some of the innovative technical projects undertaken by students of NIELIT Delhi Centre are:

Security Access Control of Students Entering in an Institute Using RC522 RFID: The project explains how only authorized persons enter the system by interfacing his/her card at the entrance, which actuates motor and opens the door.

Seen in the picture are Sh. Shameem Khan, Director I/c, NIELIT Delhi; Smt. Kanchan Rani, JD, NIELIT; Shri Manish Sinha, Sc 'B', NIELIT with the students

Radar using Arduino: The project continuously scan the area for traffic, population etc. and as well as protection of the vehicles to prevent accidents or minor scratches to the vehicles.

Arduino Based Smart Irrigation System: With the system, if the value of moisture in soil falls below threshold the water pump gets initiated. The pump is connected to servo motor which is mounted on the pump and sprinkles the water on the field at an angle of 180°.

Controlling Devices using Bluetooth Module and Arduino: The project makes use of android mobile phone for controlling devices. The user needs to turn on Bluetooth in the mobile. User can use various commands to control connected devices with the app.

RECRUITMENT FOR JHARKHAND GOVERNMENT

NIELIT Ranchi has successfully conducted computer based typing speed test for recruitment of manpower in the State Board of Technical Education, Govt. of Jharkhand using in house developed typing speed test software. The software has been developed by Shri Mithun Kumar Roy, Technical officer, NIELIT Ranchi centre and the software is being used for conducting similar exam by Ranchi Centre in various departmental examination of Govt. of Jharkhand.

INDUSTRIAL TRAINING PROGRAMME

Shri Shameem Khan, Director-in-charge, NIELIT Delhi Centre distributing certificates to the B.Tech students

A certificate distribution function was organized in NIELIT Delhi Centre on July 28, 2017 for the Students who had completed two months training as a mandatory program in their B.Tech. program. A total of 71 certificates were awarded and meritorious students were also appreciated with mementoes.

Shri Shameem Khan, Director-in-charge, NIELIT Delhi Centre congratulated and wished them success in their professional life. In his message, he emphasized that NIELIT would continue its support for the placement of the students along with capacity building and skill development program.

MULTIMEDIA TRAINING FOR DEFENCE PERSONNELS

NIELIT Delhi Centre has successfully provided training to candidates from Directorate General Resettlement. The training was conducted on "Certified Multimedia Developer" aligned with NSQF Level-5 for two batches, each with 43 candidates who were from Army, Navy and Air Force. The training of first batch was conducted during May 29 to August 18, 2017 and the training of second batch was conducted during June 19 to September 08, 2017. Shri Shameem Khan, Director I/c of the Centre distributed certificates to all passed out candidates and congratulated them on successful completion of the course.

TECH वार्ता

Multi-Dimensional Datawarehousing

1. Introduction

History of Data processing: 1960s → Sequential file system; 1970s → Relational Model; 1976s: ER Model for Databases; 1980s → SQL; 1990s → Client-Server Model, Object Databases, Web-based Tools, Online transaction processing (OLTP), OL analytical processing (OLAP) etc. 21st Century → Data analysis, Data Mining, Data Warehousing, etc. With various technological advancements, there is a drastic increase in the amount of data and it becomes cumbersome to store and retrieve this large amount of data.

1.1 Database Management systems: Database is a collection of interrelated data items that can be processed by one or more application systems. A Database Management System (DBMS) is a program that manages a database. DBMS have certain limitations such as highly dependency on network connection, bottlenecks during high demand, Low efficiency and Fault Tolerance, etc.

1.2 Data Warehouse (DW), Data Cube, Dimension table and Fact table: DW is a single, complete and consistent storage of data obtained from a variety of different sources made available to end users. A 'Data Cube' allows data to be modelled and viewed in multiple dimensions. 'Dimension' tables contain details of descriptive attributes. It consists of tuples of attributes of Dimension. It uses 'Fact' table that contains the measures that link to several 'dimension' tables. Dimensions provide the means to 'slice' and 'dice' the data. The data cube is yet a metaphor for multidimensional data storage. The actual physical storage of such data maydiffer from its logical representation.

2. The need for the Multidimensional databases (MDD)

Normally the traditional relational data models are not powerful enough for data warehouses applications. It may require complex joins of many tables and are non-trivial for untrained end-users. Relational Database uses a two-dimensional structure of rowsand columns to store data tables. MDD server typically contains indexes that provide direct access to the data, making it quickerwhen trying to solve a multidimensional business problem. MDD deliver impressive query performance by pre-calculating orpre-consolidating transactional data rather than calculating on the fly.

Features of MDD - Rotation(Data Slicing), Ranging (DataDicing), Hierarchies, Queries (for Roll-Ups and Drill-Down), Client-Server architecture, Multi-User access, better computationsand sparse Data handling, etc.

MDD is optimised for data warehouse and OLAP applications. It enhancesdata presentation and navigation by intuitive spreadsheet-like views that are difficult to generate in relational database. Itis easy to maintain because data is stored in the same way as it is seen, so no additional computational overhead is required. Data analysis and decision making are much easier through MDD than a relational database. Handling multiple inserts and multiplequery operations is still a point of concern with a MDD.

3. Example of some basic Data warehousing operations
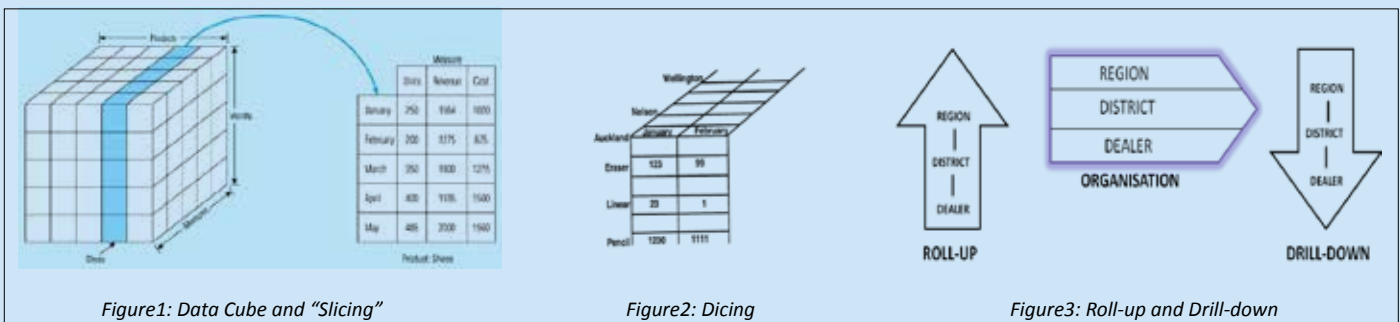

Figure1: Data Cube and "Slicing"   Figure2: Dicing   Figure3: Roll-up and Drill-down

"Slicing" focuses on particular partitions along (one or more) dimension, i.e., focuses on a particular slice of the cube. Slicing thedata cube produce a simple two-dimensional table or view. E.g., A slice is for the product named shoes. It uses WHERE clause inSQL.

"Dicing" helps in partitioning the cube into smaller sub-cubes and aggregated the points in each. It uses GROUP BY clausein SQL.

"Roll-up" operation corresponds to taking the current aggregation level of fact values and doing a further aggregationon one (or more) of the dimensions.

"Drill-down" presentation is equivalent to adding another column to the original report (inthis case, a column was added for the attribute "color").

4. Engines of Data warehouses

4.1 ROLAP (Relational Online Analytic Processing)

ROLAP is a form of online analytical processing that performs dynamic multidimensional analysis of data stored in a relationaldatabase. Data processing takes place within the database system, a mid-tier server or a client. In a 2-tiered architecture, the usersubmits a SQL query to the database and receives back the requested data. In a 3-tiered architecture, the user submits a requestfor multidimensional analysis and ROLAP engine convert the request to SQL for submission to the database. Then the operationis performed in reverse as the engine converts the resulting data from SQL to a multidimensional format before it is

returned tothe client for viewing. As it is typical of the database, some queries are created and stored in advance. If the desired information isavailable, then that query will be used which saves time. Since ROLAP uses a relational database, it requires more processing timeor disk space to perform the tasks.
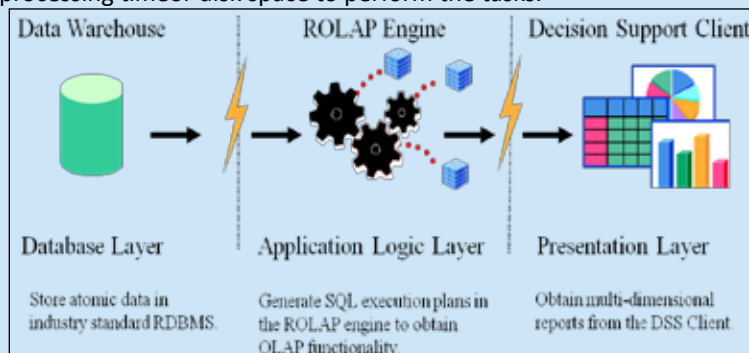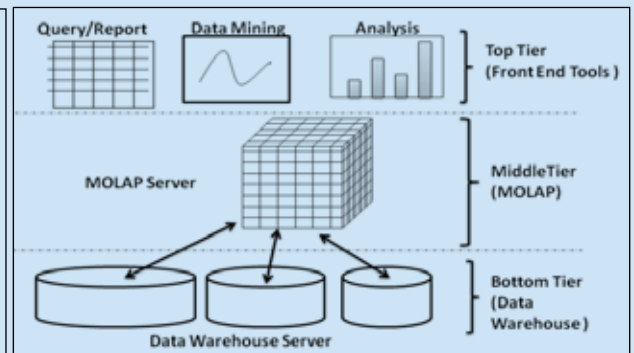

Figure 4. ROLAP

Figure 5: MOLAP architecture

4.2 MOLAP (Multidimensional OLAP)

MOLAP indexes directly with MDD. An OLAP application treats data multi-dimensionally; the user can view different aspects orfacets of data aggregates such as sales by time, geography and product model. If the data is stored in a relational database, it can beviewed multi-dimensionally, but only by successively accessing and processing a table for each dimension. MOLAP processes datathat is already stored in a multidimensional array in which all possible combinations of data are reflected, each in a cell that canbe accessed directly. For this reason, MOLAP is faster and more user-responsive than ROLAP.It uses array based multidimensionalviews of data. With multidimensional data stores, the storage utilization may be low if the data set is sparse. Therefore, MOLAPserves two levels of data storage representation to handle dense and sparse datasets. The advantages of MOLAP is that it allows faster indexing methods to the pre-computed summarized data and helps user connected to a network to analyse larger and less defined data. Integration of OLAP with data mining has resulted in a new promising direction of Online Analytical Mining (OLAM).

5. Current and future direction of research

Multi-dimensional data indexing structures aim at efficient storage and retrieval of multidimensional data. It exploits methods tostore existing or arriving data effectively, and at the same time provides capabilities to search, query and update stored data. Such Multi-dimensional data indexing structures usually implement a tree-like data structure called 'multi-dimensional tree.' Trees provide efficient partitioning, branching and pruning abilities for tree traverses through R-tree, R+trees, R*trees, X-tree, etc. The key idea of this data structure is to group nearby objects and represent them with their minimum boundary rectangle in the next higher level of the tree. Some of the Tree variants are as follows:

R* Tree is a variant of R-Tree with slightly higher construction cost than standard R-Tree as the data may be needed to be reinserted, but the resulting tree has better query performance.

R+ Tree adds a method for looking up data using location and avoiding overlapping of internal leaves if necessary.

X-tree is an extended node tree based on R-Tree used for storing data in many dimensions.

DC-Tree is based on the X-Tree and R-Tree. It is a hierarchical index structure that exploits the concept hierarchies defined for the dimensions of a data cube. "We aim to extend DC-tree to store and retrieve data more efficiently, using which an algorithm shall be prepared, and hence an extended data model will be formed."

-Compiled by Dr. Yumnam Jayanta Singh
Director, NIELIT, Kolkata

FAREWELL

Shri Rajeev Talwar, the then CFO, NIELIT welcoming Dr. Ashwini Kumar Sharma, the then DG, NIELIT in presence of Executive Directors and Other Senior Officers of NIELIT.

Dr. Ashwini Kumar Sharma, the then Director General, NIELIT was accorded a warm farewell on August 4, 2017 on successful completion of his five years tenure at NIELIT. Under his guidance, NIELIT has registered a stupendous growth both in terms of revenue earned as well as skilling of candidates.

Shri Rajeev Talwar, Chief Finance Officer, NIELIT HQ has moved on as Finance Officer in Rajiv Gandhi National Aviation University, Rae Bareli. He was accorded a warm farewell at a function held on August 28, 2017 at NIELIT HQ.

Smt. Chaman Sharma, DD (Finance), NIELIT welcoming Shri Rajeev Talwar, the then CFO NIELIT in presence of Shri Rajiv Kumar, DG NIELIT and Smt. Chetna Rathor, JD (Tech) NIELIT

NIELIT family wish them the best in their future endeavour!

NEW COURSES @ NIELIT CENTRES

NIELIT AURANGABAD

NIELIT Aurangabad is planning to start one-year PG Diploma Course in IoT, Cyber Security and Digital Forensics affiliated to Dr. BAMU University.

Course	PG diploma in IoT, Cyber Security and Digital Forensics
Eligibility:	☞ Graduate/ Diploma in Electronics/ Electronics & Communication/ Electrical/ Electrical and Electronics/ Instrumentation/ Biomedical/ Computer Science/ Information Technology or M.Sc in Electronics/ Instrumentation/ Computer Science/ Information Technology. ☞ Candidates who have appeared in the qualifying examination and awaiting results may also apply.

INDUSTRIAL TRAINING ON DIGITAL ADDRESSABLE SYSTEM

NIELIT Centre Imphal has organized a 3-Days Industrial Training by experts from ISTV (Information Service Television Network) Imphal for the students of Digital Addressable System (DAS) under the Sponsorship of Ministry of Skill Development and Entrepreneurship (MSDE) at NIELIT Imphal during August 9-11, 2017. The programme received good response from the students.

Students at the training

CAREER COUNSELING

A one Day Workshop on National Career Service was held at DM College of Commerce, Imphal on August 11, 2017, organized by Model Career Centre (MCC), NIELIT Imphal. Shri H. Rajendro Singh, Manager cum Counsellor of MCC, NIELIT Imphal explained the objective and purpose of MCC to the students. A similar programme was also organized on August 30, 2017 at Success School, Khurai, Imphal.

Shri H. Rajendro Singh, LIO NIELIT, Imphal interacting with students of Success School, Imphal

29TH FOUNDATION DAY @ NIELIT IMPHAL

NIELIT Imphal celebrated its 29th foundation day and fresher's meet at its campus on October 1, 2017. Shri Y. Khemchand Singh, Hon'ble Speaker of Manipur Legislative Assembly; Shri Th. Biswajit Singh, Hon'ble Minister for Public Works, RDPR, I& PR, AR, C&I, Govt. of Manipur; Shri Kh. Rajen Singh, State Informatics officer, NIC, Manipur and Shri Th. Prameshwor Singh, Executive Director, NIELIT Imphal graced the function as the Chief Guest, the President and the Guest of Honour. On this occasion, students performed various cultural programmes. Meritorious students were also awarded with prizes in the event. The event was widely reported in the local media.

Students of NIELIT Imphal presenting various cultural programmes

SOCIAL MEDIA CAMPAIGNS

"स्वच्छता ही सेवा"

(September 15, 2017 to October 2, 2017)

#SwachhataHiSeva

"So long as you do not take the broom and the bucket in your hands, you cannot make your towns and cities clean."
– Mahatma Gandhi

A Swachh Bharat is the best tribute to Mahatma Gandhi

@ Shimla

@ Imphal

@ Calicut

@ Kohima

@ Agartala

@ NIELIT Head Quarter

@ Delhi

@ Chandigrah

@ Chuchuyimlang

@ Gangtok

@ Guwahati

@ Ranchi

@ Shillong

SPECTRUM OF COURSES

PRIMARY SKILLS

DIGITAL LITERACY

- Awareness in Computer Concepts (ACC) – 20 Hrs
- Basic Computer Course (BCC) – 36 Hrs
- Course on Computer Concepts (CCC) – 80 Hrs
- CCC + – 126 Hrs
- Expert Computer Course (ECC) – 200 Hrs

SECONDARY SKILLS

NON FORMAL

- 'O' & 'A' Level in - Information Technology Hardware, Multimedia, Bio-informatics
- Certification Scheme in Information Security
- Diploma/ Certificate courses in e-Governance, GIS, IPR, Cloud Computing etc.
- Skill oriented Short Term Courses in specialized areas of IECT (Incl. ESDM)

FORMAL

- BCA
- 3 year Diploma in Electronic Production Design
- PG Diploma / Diploma in Electronics, Computer Science, Telecom

TERTIARY SKILLS

NON FORMAL

- 'B' Level in IT, Bio-informatics
- 'C' Level in IT

FORMAL

- Master in Computer Applications (MCA)
- B.Tech in Computer Science Engineering
- M.Tech in Electronic Design Technology
- M.Tech in Embedded Systems
- Ph. D.