FROM THE DESK OF DIRECTOR GENERAL

Dear Readers

In line with the vision of Digital India, NIELIT is trying to put in place a digitally egalitarian order by putting up formal cyberspace architecture towards ensuring free and safe internet access to all citizens. NIELIT with its various courses in IECT area is enabling the common man to embrace the evolution of digital ecosystem based on three pillars - Digital Inclusion, Digital Access and Digital Security.

To further promote an inclusive Cyber Space with focus on Growth, Digital Inclusion, Security and Diplomacy 5th Global Conference on Cyber Space- GCCS 2017 was organised by MeitY in New Delhi. In GCCS 2017, NIELIT mentored a session- "Digital Technologies: Enabler for the differently abled" and participated in various other sessions to grasp the developments in cyberspace with the objective to fine tune various Cyber related courses offered by NIELIT through its PAN India network of centres.

17th Meeting of NIELIT Management Board was held on 4th December, 2017 under the Chairmanship of Secretary, MeitY and in august presence of Ms Anuradha Mitra, ASFA, MeitY in which several important issues were highlighted and deliberated towards resolution. I am thankful to Shri Ajay Prakash Sawhney, Secretary, MeitY for his valuable inputs in guiding near future course of actions of NIELIT.

I would also like to highlight that recently first of its kind initiative, a Cyber Forensics R&D Lab and Training Facility was set up in Kohima, Nagaland with the sponsorship of MeitY. In order to further strengthen the capabilities, NIELIT Kohima has developed a web-based 'Cybercrime Case Management System' to maintain and manage the case reports efficiently and effectively.

This issue highlights multifarious activities held at various NIELIT centres across India in this quarter like – Training Programmes in Solar Power Plant Installation, Computer Hardware & Networking, e-Panchayat Applications, IoT etc.; Campus Placement Drives; Conduction of Workshops on emerging technologies like Information Security, Big Data Analytics using Hadoop, IoT & Advance Data Structures, Digidhan Melas; PRSG Meetings of NE Capacity Building Projects etc.

At the Beginning of this New Year, I would like to thank you all for your association with NIELIT and this New Year NIELIT wishes you happiness, peace and success, and look forward to continue serving the nation.

RAJIV KUMAR
The 17th Meeting of the Management Board of NIELIT was held on 4th December 2017, under the Chairpersonship of Shri Ajay Prakash Sawhney, Secretary, Ministry of Electronics and Information Technology (MeitY). The Meeting was also attended by Ms. Anuradha Mitra, Additional Secretary and Financial Adviser, MeitY; Shri Rajiv Kumar, Joint Secretary, MeitY and Director General, NIELIT; Dr. B.K.Murthy, Scientist ‘G’ & GC, MeitY; Shri A.K. Pipal, Scientist ‘F’ & HoD (HRD),MeitY; Shri R.P. Pradhan, Director, ABC Div., MeitY besides Executive Director of NIELIT Centres and other senior Officers from MeitY and NIELIT. The Board appreciated the overall performance of NIELIT.

**EXPLORING POSSIBILITIES FOR COLLABORATION WITH STATE GOVERNMENT**

On December 07, 2017, Shri Debapriya Bardhan, IAS, Director, Directorate of Information Technology & Inspector General of Prisons, Govt. of Tripura visited NIELIT Agartala along with other senior officials to assess feasibility of the State Govt. sponsored training programmes and various activities at the centre.

**DIGITAL LITERACY FOR ALL: TRAINING OF DOBASHIS –CUSTODIAN OF NAGA CUSTOMARY LAWS**

To penetrate every section of the society and promote IT education, NIELIT Kohima imparted a month long training on computer basics to the Dobashis (Custodians of Naga Customary Laws & Practices) of Deputy Commissioner's office, Longleng district, Nagaland.

**TRAINING ON GST**

NIELIT Agartala launched 06 (six) days GST training programme on 6th Nov 2017. The new training course would cater to the need of GST professionals to help businesses in areas such as GST registration and calculation of tax liability under the new tax regime. Total 19 students were trained in the first batch.

**ENTREPRENEURSHIP DEVELOPMENT**

NIELIT Agartala officials made a presentation on 'Payment, e-Marketing, HS Code & Bar Coding of Products' at BCDI, Lichubagan for HRD programme of Govt. of Tripura titled "Microfinance Entrepreneurship Development: Preparation of Business Plan, Project reports, Packaging, Export procedures etc” on November 19, 2017.

**COMPUTER PROFICIENCY TEST FOR LDA-CUM-COMPUTER ASSISTANT**

NIELIT Kohima conducted a computer proficiency test for the recruitment of LDA-cum-Computer Assistants, Department of Animal Husbandry & Veterinary Services, Govt. of Nagaland. 100 job seekers appeared in the proficiency test.
DIGIDHAN WORKSHOP

National Institute of Electronics and Information Technology (NIELIT) in association with Confederation of All India Traders has been awarded a project by the Ministry of Electronics and Information Technology (MeitY), Government of India entitled 'On-boarding of self organized small and medium businesses/traders on digital payment initiatives'. Under the project, NIELIT Aurangabad has organized a State Level Workshop on Digidhan at Nagpur on October 14, 2017. Around 125 traders have participated in the workshop which was graced by the presence of the Chief Guest Shri Thumane, Hon'ble Member of Parliament, Nagpur. Shri B.C Bhartiya, National President, CAIT and Shri Hemant Gandhi, President, Nagpur CAIT delivered an enlightening speech at the workshop. Shri Yashpal Gogia, NIELIT Aurangabad explained about Digital payments and its Importance.

HON'BLE MINISTER, GOVT. OF MAHARASTRA REVIEWS NIELIT AURANGABAD

Dr. Sanjeev Kumar Gupta, Executive Director, NIELIT Aurangabad held a meeting with Shri Subhash Desai, Hon'ble Minister of Industries, Govt. of Maharashtra and briefed about various activities of NIELIT Aurangabad.

CAMPUS PLACEMENT DRIVE

Model Career Center, NIELIT Aurangabad conducted Placement Drives at YB Chavhan College of Pharmacy and at SEBS college of Science, Aurangabad. More than 140 jobseekers attended the placement drives in which prominent companies (employers) like M/s. Ero Life Science Pvt Ltd. Waluj had participated.

NIELIT Aurangabad has participated in Skill Development Mela organized by Dr. Babasaheb Ambedkar Research and Training Institute on November 07, 2017 at Karad District, Maharashtra. Shri Rajkumar Badole, Hon'ble Minister of Social Justice and Special Assistance, Maharashtra inaugurated the event. He also visited the exhibit put up by NIELIT Aurangabad and was briefed about the skill development initiatives of NIELIT Aurangabad. NIELIT Exhibit was also visited by a large number of people.
NIELIT Aurangabad has submitted a joint proposal for funding support from Maharashtra for establishment of Centre of Excellence in IIoT at the premises of NIELIT Aurangabad in collaboration with CMIA. In this regard, Shri Sunil Porwal, IAS, Additional Chief Secretary, Industries, Energy and Labour Department, Government of Maharashtra visited NIELIT Aurangabad on November 29, 2017 along with CMIA officials.

Shri Rajiv Vaishnav, Vice President, Member Outreach at NASSCOM, visited the premises of NIELIT Aurangabad on December 01, 2017 and addressed the students and staff of NIELIT Aurangabad. Shri Rajiv Vaishnav is very passionate about realizing the potential of the Indian IT industry. He being an exceptional orator and motivator ignited passion among listeners for Technology. Two students' projects of NIELIT Aurangabad have been shortlisted among 300 entries under 'Magic scheme' of entrepreneurship. The students were mentored and guided by leading industrialist for establishing their own startup. In a similar fashion, one more student team project of solar powered motor cycle has been shortlisted for which efforts are on to help the team to get mentoring support from Tech Mahindra.

NIELIT Calicut conducted a 3 week training on 'Repair and Maintenance of Biomedical Equipment' for NIELIT Silchar. Shri Manab Kalita, Additional Director, NIELIT Silchar and 5 other officials of the Silchar Centre participated in the training. Tutorials on working principles and extensive hands-on training on Critical Care Equipment, Radiology Equipment and Operation Theatre Equipment were the salient features of the program.

NIELIT Calicut as a part of the efforts to keep up with the industrial needs visited the Malabar Cancer Centre for exploring possibilities of academic and research collaboration. Dr. B. Satheesan, Director MCC; Dr. M.P Pillai, Executive Director, NIELIT Calicut; Shri Pratap Kumar S, Sc. E, NIELIT Calicut; Shri Jayaraj U Kidav, Sc. D, NIELIT Calicut and Mr Ishant Bajpai, Sc. C, NIELIT Calicut participated in the meeting. During the meeting, it was decided to follow up a Joint proposal in early cancer detection as a long term plan and to take up projects through capacity building in PG Diploma Courses.
OUTREACH PROGRAM ON NCS AWARENESS

The Model Career Centre at NIELIT Calicut in collaboration with NCS Centre for SC/STs, Trivandrum conducted an outreach program on NCS awareness at Regional Centre, Sri Sankaracharya Sanskrit University, Koyilandy. Mrs. Kavitha, Asst. Professor & In-charge of the Career Guidance Cell delivered the welcome speech. The Program was inaugurated by Prof. K V Nakulan, Director In-charge, Regional centre, Koyilandy. Mr Ramachandran P G, SREO, NCS Centre for SC/STs delivered the keynote address. Mr. Nidheesh MK, Young professional explained the salient features of NCS Portal to the students. The program was attended by around 180 students of UG and PG program of the university. The MCC@NIELITCalicut made elaborate arrangements for registration of job seekers in the NCS Portal.

SKILL DEVELOPMENT IN SOLAR POWER PLANT INSTALLATION

5 day intensive training on sizing, installation, operation and maintenance of Solar Power Plant was organized and conducted by NIELIT Calicut. 33 members of Kerala State Electronic Technicians Association (KSETA) attended the training which addressed the re-employment of service technicians in electronics and electrical sector.

TECHNOLOGY ADOPTION

NIELIT Calicut acquired Ultrasound research machine - Vantage 64 under R&D project "Indigenous Color Doppler Ultrasound Scanner with PNDT Compliance". The machine enables high end ultrasound research in medical diagnosis by allowing the researcher to access raw ultrasound data from each channel, each signal processing stage to raw image. The researchers can develop their own algorithms and validate the performance by porting to the machine. The machine also enables clinical side research by providing access to medical ultrasound raw images as well as in DICOMM format. In this regard, a team of Scientists from US visited NIELIT Calicut on October 03, 2017 and provided training in installation and operation of the machine for Medical Ultrasound Research and a follow up training was also held in IIT Madras.

BRAINSTORMING SESSION WITH INDUSTRY AT MAKER VILLAGE KOCHI

A brainstorming session was organized at Maker village, a body jointly funded by MeitY and Govt. of Kerala to discuss the syllabus and structure of proposed course titled ‘Advanced PG Diploma on Electronic Product Design and Manufacturing’, to be offered at Maker Village with internship support from Industry. Representatives of more than 15 companies from electronic sector along with Shri Prasad Nair, CEO Maker Village; Shri Rohan Kalai, COO Maker Village; Shri K. P. Chandran, GM-ID, NEST and officials from NIELIT Calicut headed by Dr. M.P Pillai, Executive Director; Shri Pratap Kumar S , Sc. E; Shri Jayaraj U Kidav, Sc. D and Shri Ishant Bajpai, Sc C. of NIELIT Calicut participated in the brainstorming session.
District Employment Office, Ropar organized a camp at NIELIT Ropar Campus on November 10, 2017. Ms. Meenakshi Goel, District Employment Officer, Rupnagar addressed the students of NIELIT and guided them for career advancement. All students present were registered by the District Employment Office. The students attended the workshop enthusiastically as they were made aware of career opportunities and Industry requirements as per the local market demand.

**INDUSTRIAL TRAINING AT NIELIT ROPAR**

An awareness workshop highlighting the activities and training opportunities was conducted at NIELIT Ropar Campus for the students of Institute of Engineering & Technology (IET), Bhaddal on November 24, 2017. The students were made aware of Summer/ Industrial Trainings being offered at NIELIT Ropar. Shri Deepak Wasan, Director In-charge, NIELIT Ropar addressed the students during the workshop. Shri Akhil Arora, Technical Officer, NIELIT Ropar apprised them about various courses and trainings being offered at NIELIT Ropar. The students showed keen interest in courses being offered at the campus along with facilities available.

**MOU WITH GOVT. COLLEGE, SIKKIM**

With an attempt to take IT literacy across all districts of Sikkim, NIELIT Gangtok entered into an agreement with Namchi Government College under Directorate of Higher Education, Human Resource and Development Department (HRDD), Government of Sikkim on November 01, 2017. As per the agreement, NIELIT Gangtok would soon be starting the first batch of training at Namchi Government College, South Sikkim for the students of the college.

**TRAINING ON e-PANCHAYAT APPLICATIONS**

A training on e-Panchayat Applications was conducted during October 30-31, 2017 at NIELIT Gangtok using its state of art infrastructure by State Institute of Rural Development (SIRD), Govt. of Sikkim. The training was organized by State Institute of Rural Development (SIRD), Govt. of Sikkim. The inaugural session was attended by Director, Directorate of Panchayat, Rural Management and Development Department (RMDD), Government of Sikkim along with other officials of SIRD and RMDD, Government of Sikkim.
FAREWELL !!

A warm Farewell was accorded to Dr. A. H. Moon, Executive Director, NIELIT J&K on his superannuation. Dr. A.H. Moon will always remain inspiration for his epitomical contribution in NIELIT Growth during his 30 years of service with the organization. We, the members of NIELIT family take this opportunity to wish Dr. A.H. Moon a happy post retirement life.

TRAINING OF EMPLOYEES

40 employees of Shri Mata Vaishno Devi Shrine Board Katra attended 05 days course on “Basic Computer Skills” in the Month of November 2017. The training was aimed at enhancing basic computer skills of the employees under which two batches, consisting of 20 participants each was conducted at NIELIT Jammu.

INDUSTRIAL VISIT

A one day workshop on Advance Networking, MATLAB and Embedded System Design was conducted at NIELIT Jammu for IECS Polytechnic students of Jammu on November 03, 2017 during their visit to the Centre.

PROJECT HIMAYAT

Dr. A. H. Moon, Executive Director, NIELIT J&K along with senior officers of NIELIT J&K, Sh. V.S. Krishnamurthy, Sh. Mushtaq Ahmad and Sh. Gulshan Rohilla gave a detailed presentation to the Assessment Committee under the Chairmanship of Joint Secretary (Rural Skills), MoRD Govt. of India on November 7, 2017 at Thapar House, Janpath New Delhi (DDU-GKY HQ’s) for implementation of Project Himayat under DDU-GKY in Jammu & Kashmir State. Subsequently, Dr. A. H. Moon along with his team held a meeting with officials of Federation of Indian Chambers of Commerce & Industry (FICCI) at Federation house, FICCI, New Delhi on November 8, 2017 to discuss employment prospects under DDU-GKY Project.

COMPUTER HARDWARE AND NETWORKING TRAINING

A month long training on computer hardware & networking was conducted by NIELIT Leh- a Sub Centre of NIELIT Srinagar in the Ladakh region. The training was sponsored by Ministry of Micro Small Medium Enterprises (MSME) and attended by 25 candidates. The training commenced in the month of November 2017 and was conducted in association with various banks, Entrepreneurship Development Institute (EDI) and officials of MSME. The officials briefed the candidates about various Technologies, Hardwares, Basics of networking as well as various schemes available from EDI and Banks.
REVIEW OF NIELIT LEH

The 4th PRSG Meeting of Project “Setting up of Sub Centre of NIELIT Srinagar in the Ladakh Region of Leh” was held at NIELIT Sub Centre Leh on October 30, 2017 under the Chairmanship of Shri A. K. Pipal, Director & HoD (HRD) MeitY. Dr. A H Moon, Executive Director, NIELIT J&K, and Chief Investigator of the Project, apprised the committee members about the academic progress and consultancy projects undertaken by NIELIT Leh.

Sh. Phunshog Toldan, Scientist ‘C’, NIELIT J&K also informed the committee members about e-Governance Projects implemented by NIELIT Leh for Ladakh Autonomous Hill Development Council (LAHDC), Leh and District Administration, Leh. The Project Review and Steering Group members recommended the extension of the project till 31st October 2017 and suggested commencing courses as per local need and requirement. The PRGS was also attended by Shri Shankar Das, Scientist ‘C’ MeitY; Shri Partho Adhikari, Joint Director, NIELIT HQ; Shri V.S Krishnamurthy, CWS, NIELIT J&K; Shri Mohd. Amin Bhat, JD (A&F), NIELIT J&K; Shri Phunthsog Toldan, Scientist ‘C’, NIELIT J&K; Shri Ranjit Singh Sodhi, Asstt. Director (Admn.), NIELIT J&K and staff of NIELIT Leh.

INFORMATION SECURITY WORKSHOP

NIELIT Centre Chandigarh and SeMT/ ISMO (State e-Governance Mission Team/Information Security Management) Office, Haryana jointly organized a workshop on Awareness on Digital Payments and Information Security in various cities across the states such as Chandigarh, Panchkula, Gurugram, Palwal, Sirsa, Fatehabad and Hisar.

EXPERT LECTURE ON EMERGING TECHNOLOGY

An expert lecture on "Emerging Technology and Ongoing Trends" was delivered by Mr Rishi Partap Singh, Delivery Manager, Infosys Ltd. at NIELIT Chandigarh for the staff and students.

WORKSHOP ON LATEST TECHNOLOGIES FOR B. TECH STUDENTS

A 5-day workshop on Big Data Analytics using Hadoop and another workshop on Internet of Things (IoT) were conducted at NIELIT Chandigarh for the students of B. Tech course of DAV Institute of Engineering & Technology, Jalandhar. Similarly, a one day workshop on IoT & Advance Data Structures was also organized by NIELIT Chandigarh at Chandigarh College of Engineering.

INDUSTRY WORKSHOP

Delegates from industry, academia & start-up companies attended a workshop on "Bridging the Gap between Industry Requirements and NIELIT Courses" conducted by NIELIT Chandigarh to align the course curriculum of IT & Electronics according to industry needs and requirements.

ONE DAY SEMINAR ON INTERNET SECURITY

Ms. Swapanali, Deputy Director, NIELIT Chandigarh delivered lecture to members of Air Force Women Welfare Association, Chandigarh about Internet Security.
The Ministry of Electronics and Information Technology (MeitY) has organized Global Conference on Cyber Space (GCCS) on 23-24 November, 2017 at New Delhi. The prestigious global event was inaugurated by Hon’ble Prime Minister and was attended by delegates from more than 100 countries across the globe. NIELIT was entrusted with the responsibility of mentoring a Plenary Session titled ‘Digital Technologies: Enabler for the differently-abled’ with the focus area on IT as an enabler for differently-abled for Education, Employment and Entrepreneurship. The eminent speakers were Prof. Anupam Basu, Professor, IIT Kharagpur; Shri Dipendra Manocha, Developing Countries Coordinator, Daisy Consortium; Ms. Ira Singhal, IAS Officer, Govt. of Delhi; Shri Mohd. Asif Iqbal, Principal Consultant, PWC India and Ms. Shweta Bansal, IFS Officer, Indian Foreign Service. The session was moderated by Ms. Dolly Chakraborty, Joint Secretary, Dept. of Empowerment of Persons with Disabilities. Setting the pitch for discussion, Ms. Dolly highlighted that the rights of differently abled people cannot be ignored any further and building accessibility in ICT environment for inclusive growth is the need of the hour. Prof. Thereafter, Prof. Basu introduced the audience to numerous devices and technologies that have been created by IIT- Kharagpur, IIT Chennai, IIT Delhi for differently abled people. Introducing himself a representative of the differently abled people around the globe, Shri Mohd. Asif Iqbal motivated the audience through his energetic speech on how he had to face various situation of lacking empathy towards differently abled people in real life. Ms. Ira shared her story of how she overcame the challenges of her life as a differently abled person. Shri Manocha stressed on the need of development of a common website which will be same for differently enabled as well as enabled people. Ms. Shweta spoke about breaking the barriers with the use of ICT which has brought the goods and services to the doorstep of differently abled people. The discussion ended with an interactive session with the audience and the institution/organization/NGO’s for differently abled which participated through video conference. During the event, NIELIT exhibit was also put up to showcase various skill development and capacity building activities in IT & Electronics.

SEMIPAR ON DATA SCIENCE

Dr. Manish Arora, Additional Director, NIELIT Chandigarh delivered a talk on ‘Challenging the world through Data Science’ in Institute of Electronics & Telecommunication Engineers (IETE) during their foundation day. Ms Meenakshi Gaur, Additional Director, NIELIT Chandigarh was the Guest of Honour of the event.

CAPACITY BUILDING FOR SC/ ST Students

NIELIT Chandigarh in association with district administration, Panchkula recently started a month long training for the youth belonging to SC, ST and BPL categories along with women students of Morni and its surrounding area at Government Polytechnic, Morni. Bhagwati Devi, one of the eldest women of the area, inaugurated the training programme along with the Chief Guest, Gauri Prashar Joshi, IAS, Deputy Commissioner, Panchkula in the presence of Dr. M.M. Sharma, Executive Director, NIELIT Chandigarh; Shri Pankaj Setia, SDM, Panchkula; Ms. Meenakshi Gaur, Additional Director, NIELIT Chandigarh; Shri R.S Shangwan, Principal, Govt. Polytechnic, Morni and other dignitaries.
NIELIT Delhi has conducted 2 weeks training on 'Computer Networking and Windows Administration' for the Assistant Engineer/ Engineering Assistants (Group B and Other Staff) of “National Academy of Broadcasting and Multimedia” in two batches. The first batch was conducted during 6-17 November, 2017 and the second batch was conducted during 11-22, December, 2017. A total of 50 officers of NABM from all over India participated in the training. The programme was aimed at capacity building of the officers of all Doordarshan Kendra of India in the area of networking Fundamentals, Routing Technologies, Unix/Linux Installation, Configuration and Administration, Microsoft windows Server etc.

**TRAINING OF BSF OFFICERS**

NIELIT Delhi conducted a One day Workshop for the officers of Border Security Force (BSF) on Cloud Computing, Satellite Communication and Indian Regional Navigation Satellite System (IRNSS) at BSF Training Centre on 2nd December 2017. During the workshop, a detailed presentation on satellite communications, Cloud Computing and IRNSS was delivered.

**TRAINING OF DIRECTORATE GENERAL OF RESETTLEMENT (DGR)**

NIELIT Delhi started training for 35 JCOs/OR from Directorate General of Resettlement w.e.f 23rd October 2017. The training covers aspects of Computer Hardware Maintenance under CHM-O level which is a non-formal long term course of duration 400 hours which is aligned with NSQF Level 5.
NIELIT Delhi Centre has successfully completed the project “Assessment of Websites of States/UTs Police, Central Armed Police Forces (CAPFs) and Central Police Organisations (CPOs)”, awarded by Ministry of Home Affairs, Govt. of India. Total 44 websites were assessed on the parameters jointly identified by MHA and NIELIT in order to check the effectiveness, utility, security and popularity of the websites along with the extent to which these websites are meeting GIGW parameters’ compliance. The assessment also intends to identify the improvement areas in the websites for making them among the best in the world. It was for the first time NIELIT ventured in the field of websites assessment and successfully executed the project.

ANNUAL SPORTS MEET 2017

The Annual Sports Meet of NIELIT Kohima aimed at encouraging physical activity and to cultivate sports skills among the students was organized in the campus. Shri L. Lanuwapang, Director In-charge, NIELIT Kohima inaugurated the Meet and motivated the students to build team spirit, know each other better and develop sense of sportsmanship.

The two-day event comprised of a range of competitive contests like racquet sports, athletics, football, volleyball, group games, etc. which stirred the students' enthusiasm for sports. The students divided into four teams and competed with each other in all sports activities.

DIRECTOR GENERAL, NIELIT VISITS NIELIT KOHIMA

Shri Rajiv Kumar, Joint Secretary, MeitY, Govt. of India and Director General of NIELIT visited NIELIT Kohima on October 12, 2017 accompanied by Shri Rajeshwar Singh Janwar, Jr. Director (STPI), MeitY and Shri T. P. Singh, Executive Director of NIELIT Imphal. They were warmly received upon arrival by Shri. L. Lanuwapang, Director In-charge, NIELIT Kohima and other officials. Shri Rajiv Kumar reviewed recent activities made by the Centre and also chaired an interactive session wherein all the staff were given the opportunity to share their concerns and suggestions. Shri Rajiv Kumar was also briefed on the Cyber Forensics activities. During the visit, Shri Rajiv Kumar also launched 'Cybercrime Case Management System', a web-based Cybercrime Case Management System to maintain and manage the case reports efficiently and effectively at NIELIT Kohima.

TALK ON CYBER CRIME AND RELATED ISSUES TO PANEL LAWYERS

Shri. L. Lanuwapang, Director In-charge, NIELIT Kohima spoke on “Cyber crime prevention, protection and investigation process” as a Resource Person during the Refresher Training for Panel Lawyers on 17 November 2017 at Kohima, organised by the Nagaland State Legal Services Authority.
With the objective to enable and empower Cyber Security space, Cyber Peace Foundation (CPF) and Policy Perspectives Foundation (PPF) in collaboration with Ministry of Electronics and Information Technology (MeitY) and National Critical Information Infrastructure Protection Centre (NCIIPC), have organized Global Cyber Challenge at the Global Conference on Cyber Space (GCCS), 2017 during 23-24 November 2017. A runner-up event to GCCS was organized at IIT Patna. Director-in-Charge NIELIT Patna, Shri Alok Tripathi delivered a tech-talk on Cyber Security and also acted as Jury Member for Peace-a-thon event.

### STAKEHOLDERS MEETING ON NATIONAL DIGITAL PAYMENT MISSION (NDPM)

Under the Digital Payment mission, the government has assigned a target of 2,500 crore transactions to different sectors including the telecom sector. In addition, the government has instructed that priority is to be given for promotion of digital payment amongst citizens. In order to achieve the targets in telecom sector in Bihar Circle, a strategic session-cum-workshop was organized under the chairmanship of Shri P. K. Sinha, Advisor(F), Dept. of Telecommunication, Govt. of India on 4th December, 2017 at 11:00 A.M. NIELIT Patna also participated in the event along with NIC, CSC, NPCI and UIDAI in order to chalk out an action plan towards achieving the target. Speaking on the occasion, Shri Alok Tripathi, Director-in-Charge emphasized the significance of digital payments including NPCI BHIM.

### CAPACITY BUILDING OF BIHAR GRAM PANCHAYAT

NIELIT Patna has launched a training programme on 'Basic Computer Literacy and Use of Smart Phones' in 12 districts of Bihar State. The 04 days training programme is being organized in batches w.e.f 12th December, 2017 to 2nd February, 2018. The objective of this training is to enable the candidates in field of ICT by means of computer literacy so that they can communicate and process the information easily and effectively. The training programme also included a session on Bharat Interface for Money (BHIM) app and Goods and Services Tax (GST). This training programme will train 3104 elected PRI members of Bihar Gram Panchayat and provides training to efficiently work in the digital world. In this regard, the training of Trainers (ToTs) was also held during 23-26 November at NIELIT Patna centre. Shri Satya Prakash Tiwari, Joint Director, NIELIT Patna Centre was the coordinator of this training programme. Shri Om Prakash, Sr. Project Manager – Capacity Building, Bihar Gramin Swaraj Yojna Society, Govt. of Bihar delivered lectures on Adult Learning Principles and Persona of a Good Trainer. The training was attended by 24 Trainers of different Training Centres accredited by NIELIT Patna.
A meeting under the chairpersonship of Smt. Anuradha Mitra, Additional Secretary and Financial Adviser, MeitY was held at NIELIT Kolkata, Salt Lake Campus, Kolkata on Friday, 6th October 2017 with the stakeholders and Senior Officers from NIELIT Kolkata to review and further strategize the GST training in West Bengal for the MSME Sector and the Public at large. The Kolkata Centre was suggested about some new business opportunities as well during the meeting.

Shri Arun Goyal, Additional Secretary & Finance Advisor, Ministry of Skill Development & Entrepreneurship, Govt. of India visited NIELIT Imphal on 4th October 2017 to watch over the courses on Capacity Building for North Eastern Region at NIELIT Imphal. He also interacted with the staff and students of various courses. Subsequently, Shri Rajnish Kumar Gupta, Director, Ministry of Skill Development & Entrepreneurship, Govt. of India also visited NIELIT Imphal on October 6, 2017 to discuss various issues regarding the courses conducted under ‘Capacity Building for NE Region’. During his visit, he inspected the class rooms and other facilities and interacted with the teachers.

A Workshop was conducted on Android Development for Computer Science students at Chandigarh Group of Colleges. In the workshop certificates were also distributed to the participants.

Dr. Yumnam Jayanta Singh, Director, NIELIT Kolkata had delivered a speech as the Guest of Honour during the First International Symposium on Signal and Image Processing held at RCC-IIT, Kolkata during 1-2 November 2017.

NIELIT Kolkata has started operations from Bolpur IT Park for skilling the educated unemployed youth under the NIELIT framework with funding support from Govt. of West Bengal. In this regard, an advertisement was published in the newspaper before commencing the course- “Certificate Course on Office Automation & Hardware Maintenance”. NIELIT Kolkata has also provided a 3-day Corporate Training on Office Automation and e-Governance to 20 nos. of officials of Sub-Divisional Office (SDO), Bolpur from Bolpur IT Park from 20th December 2017.
IN OTHER NEWS

RECRUITMENT TEST FOR MANIPUR GOVERNMENT

NIELIT Kolkata has successfully conducted recruitment test for the post of “Office Assistant” for General Administration Dept (GAD), Govt. of Manipur on 11th November, 2017 from its Jadavpur University Campus centre.

INAUGURATION OF 2ND BATCH COURSES IN CAPACITY BUILDING FOR NE REGION AT NIELIT IMPHAL

NIELIT Imphal inaugurated 2nd Batch Courses in Capacity Building for NE Region on October 6, 2017. The Function was graced by Shri Th. Radheshayam Singh, Hon'ble Cabinet Minister, Education, Labour & Employment, Govt. of Manipur, Shri E. Ibocha Singh, Director, Science & Tech. Govt. of Manipur and Shri Th. Prameshwor Singh, Executive Director, NIELIT Imphal as the Chief Guest, the Guest of Honour and the President respectively.

INAUGURATION OF JEEVAN PRAMAAN FACILITY AT NIELIT KOLKATA

NIELIT Kolkata now offers Jeevan Pramaan services to Senior Citizens and Pensioners from its new campus at BF-267, Sector-1, Salt Lake, Kolkata - 700064. The facility was inaugurated by Shri Sudhir Kumar Saha, Mayor-in-Council (Electric & Park) of Bidhannagar Municipal Corporation on 13th November 2017 in presence of Dr. Y. Jayanta Singh, Director, Shri Arup Chattopadhyay, Addl. Director and other staff members of NIELIT Kolkata, Media person from Laban Hrad Sambad and residents of BF & CF Blocks.

SIGNIFICANT NEWS FROM GANGTOK

Social Justice, Empowerment and Welfare Department, Government of Sikkim awarded the work of data entry of beneficiaries under National Social Assistance Program (NSAP) to NIELIT Gangtok. The entries would be made in the NSAP portal for the beneficiaries of the schemes such as Indira Gandhi National Old Age Pension Scheme (IGNOAPS), Indira Gandhi National Widow Pension Scheme (IGNWPS) and Indira Gandhi National Disability Pension Scheme (IGNDPS). NIELIT Gangtok in association with Securelynkx Networks, has provided placement to two students of NIELIT ‘O’ level course in the Tourism Industry of Sikkim (Hotel Lemon Tree, Gangtok - a client of Securelynkx Networks) as Technical Support Engineers.

INVITED TALK ON “E-WASTE MANAGEMENT AND CYBER SECURITY”

Invited talk on “e-Waste Management and Cyber Security” was delivered by Shri Kalyan Baital, Scientist-C, NIELIT Kolkata at Bargarh Book Fair 2017 for 300 general people and local NGOs, Kalyan Mandap, Padampur for 200 college students, teachers, ADM-Padampur, local officials and also other places across the state.
NIELIT Imphal celebrated its 29th Foundation Day and Fresher's Meet on 1st October 2017. Shri Y. Khemchand Singh, Hon’ble Speaker of Manipur Legislative Assembly; Shri Th. Biswajit Singh, Hon’ble Minister, Works, IPR, Industry and Power, 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 Guests of Honour.

On the occasion, prizes were also distributed to meritorious students of the Institute. Students also participated in the function by performing Cultural programmes and other events.

Inauguration of “Training on Solar PV Installer (SURYAMITRA)” under the sponsorship of Ministry of Skill Development and Entrepreneurship (MSDE), Govt. of India was held at NIELIT Churachandpur Extension Centre on 11th October 2017. The function was graced by Shri Shyam Lal Poonia, IAS, Deputy Commissioner, Churachandpur District in presence of Shri Y. Subhaschandra Singh, Additional Director, Shri L. Shyam Sundar Singh, Joint Director (Admin & Finance) from NIELIT Imphal and Shri RK. Bigensana Singh, Scientist-D, NIELIT Churachandpur Extension Centre.

Voter Registration Facility Centre (VRFC) was opened at NIELIT Imphal, Akampat for two days. VRFC was jointly organized by NIELIT Imphal and Chief Electoral Officer, Govt. of Manipur during 23-24 October, 2017. During the two days’ program, facilities such as Correction of entries, Enrollment of new voters and Editing in existing names were provided.

All India Radio, Tezpur invited Shri Raju Sharma, Centre In-charge, Tezpur EC of NIELIT Guwahati to speak in the program, ‘Career Guidance’ on 9th November 2017. Shri Raju Sharma, talked about various job oriented training programmes provided by NIELIT across the country.
OFFICIALS FROM MINISTRY OF DONER VISITED NIELIT IMPHAL

Ms. V. L. Roui Kullai, Director, Ministry of Development of North Eastern Region, Govt. of India visited NIELIT Imphal on 2nd November 2017 to discuss grievances regarding the courses Suryamitra, DAS Set-Top Box Installer & Service Technician and LED Light Repair Technician under Capacity Building for North Eastern Region undergoing at NIELIT Imphal. She inspected the classes and also interacted with the Staff and students of the courses.

VOLUNTARY BLOOD DONATION CAMP

NIELIT Imphal organized a Voluntary Blood Donation camp jointly by NSS Unit of NIELIT Imphal, Life Savers of Manipur, State Blood Cell, NHM and Blood Bank & Transfusion Unit, Jawaharlal Nehru Institute of Medical Sciences (JNIMS), Imphal at the campus of NIELIT Imphal on 7th November 2017. On the occasion, Dr. L. TomchaKhuman, who is an inspiration for blood donators in the region was felicitated on his 50th blood donation. The book “My Journey to 50 Voluntary Blood Donations” authored by Dr. L. TomchaKhuman was also launched in the event. The function was graced by Prof. L. Ranbir Singh, Medical Superintendent, Jawaharlal Nehru Institute of Medical Sciences (JNIMS); Shri Th. Prameshwor Singh, Executive Director, NIELIT Imphal; Dr. Th. Bimol Singh, President, Life Savers Manipur and Mr. Seiminthang Lenthnag, State NSS Officer, Govt. of Manipur as Chief Guest, President & Guest of Honours respectively.

WORKSHOP ON DEVELOPING SOFT SKILLS AND COMMUNICATION SKILLS

A 03 days long workshop was organised by NIELIT Guwahati on Developing Soft Skills and Communication Skills for the students of NIELIT Guwahati and its Kokrajhar Extension Centre. Kokrajhar EC attended the workshop held at NIELIT Guwahati, in Virtual Mode through video conferencing. Mrs. Lipika Bora Das, ITeS Faculty of NIELIT Guwahati was the resource person for the training.

Ms. V. L. Roui Kullai, Director, Ministry of Development of North Eastern Region, Govt. of India, being welcomed by Shri Th. Prameshwor Singh, Executive Director, NIELIT Imphal and Senior Officers of NIELIT Imphal.
Hon’ble Union Minister for Electronics & Information Technology and Law & Justice, Shri Ravi Shankar Prasad was welcomed by officials of NIELIT Kokrajhar EC at Kokrajhar Circuit House with a "Aronai" during his visit to the town. He reviewed the activities of NIELIT Kokrajhar Extension Centre while Shri Rintu Das, Dy. Director(Tech), NIELIT Guwahati and Sri K. K. Baglari, Technical Officer, NIELIT Kokrajhar briefed him about the achievements of the Centre in recent past. Hon’ble Minister also visited Tezpur town and took stock of the progress made by NIELIT Tezpur Extension Centre while interacting with the officials from NIELIT Tezpur at the Circuit house of Kaliabar, near Jakhalabandha. He insisted upon employability of the local youths of Tezpur and Kaliabar in the field of Electronics & Information Technology. He also desired that NIELIT should conduct such trainings so that the local youths get employment opportunity. He also desired that services of NIC should be scaled up in the district of Nagaon and Sonitpur.

BIOINFORMATICS TRAINING

NIELIT Guwahati conducted a Training Workshop on Bioinformatics from 31st October to 7th November 2017. Post Graduate students of Handique Girls’ College participated in the Training Programme. Another Bioinformatics Training programme was conducted for the students of Anthropology and Zoology Department of Arya Vidyapeeth College, which was concluded on 14th November 2017.

5TH PRSG OF NE CAPACITY BUILDING PROJECT

5th Meeting of the Project Review & Steering Group (PRSG) of the project “Development of North-Eastern Region by enhancing the Training/Education capacity in the Information, Electronics & Communications Technology (IECT) Area” was held on 2nd December 2017 at Guwahati under the Chairmanship of Dr. B. K. Murthy, Senior Director & Group Co-ordinator, MeitY, Govt. of India. Shri A.K. Pipal, Director & HoD, HRD, MeitY; Prof. S.K. Nandi, IIT Guwahati; Prof. A. Saha, Ex-VC, Tripura University; Executive Directors/ Directors/ Director In-charge from all 8 NER NIELIT centres, Officials of state Govt. of Meghalaya, Members from PMC’s namely NPCC, HSCL & NBCC also attended the meeting. Sri K. Baruah, Director, NIELIT Guwahati & Chief Investigator of the Project made a detailed presentation about the progress made in the project.
CONSULTATION MEETING OF MEITY, GOVT. OF INDIA

A consultation meeting was chaired by Dr. Ajay Kumar, then Additional Secretary, MeitY, Govt. Of India to prepare a road map for Digital North East 2022. Shri Rajiv Kumar, Joint Secretary, MeitY and Director General, NIELIT along with other senior officers of MeitY and NIELIT Centres attended the meeting. NIELIT Guwahati organised the meeting on behalf of MeitY at Guwahati.

LIVE RADIO BRIDGE PROGRAMME ON CYBER CRIME AND SOCIAL MEDIA

North Eastern Service of AIR broadcasted a Live Radio Bridge Programme on “Cyber Crime and Social Media” on 1st December 2017. Representing the State, Shri North Eastern Service of AIR broadcasted a Live Radio Bridge Programme on “Cyber Crime and Social Media” on 1st December 2017. Representing the State, Shri Morimenba Amer, Deputy Director, NIELIT Kohima participated in the discussion and spoke on the present trend of social networking and cyber security issues and State initiatives thereof. The programme was anchored by North Eastern Service, AIR Shillong and broadcasted by AIR Kohima, Agartala, Imphal and Shillong.

FACULTY DEVELOPMENT PROGRAMME

NIELIT Jorhat EC of Guwahati conducted 14 days Faculty Development Program on “e-content development - using Moodle” for teachers of J. B. College, Jorhat during 10-29 November 2017. A total of 26 teachers participated in program. The certificate distribution function was held on 29th November 2017. The occasion was graced by Dr. Bimal Borah, Principal, JB College; Mr. Porag Sarmah, coordinator of IQAC of JB College; Shri P. K. Tamooli, Centre In-charge of NIELIT Guwahati and also present on the occasion.

ANNUAL SPORTS & CULTURAL MEET 2017

As part of 1st Annual Sports and Cultural Meet of NIELIT Guwahati, Badminton Championship and Cricket Tournament was organised by NIELIT Guwahati, among its students and faculties on 25th & 26th of November 2017 at Gauhati University Sports Complex. Following the sports programme, cultural programmes and various competitions such as quiz, essay, poster making etc. were held at the Centre on 8th December 2017.

CAPACITY BUILDING OF U.P. SECRETARIAT

The State Government of Uttar Pradesh is in the process of implementing computerized working of all departments using e-Office software. In this regard, Shri Mahesh Kumar Gupta, Principal Secretary, SAD, Shri Subhash LY, Special Secretary and Shri S.K. Shukla, Joint Secretary, UP Secretariat awarded training of all employees of UP secretariat to NIELIT Lucknow. NIELIT Lucknow has trained a total of 3345 officers till date including Special Secretary, Under Secretary, Joint Secretary, Deputy Secretary, Section Officers, Review Officers, Assistant Review Officers, Computer Assistants and PS to Ministers/ Senior Officers. This training program is running under the direction of Shri Ashish Kumar Mishra, Director Incharge, NIELIT Lucknow and Dr. A.K.D. Dwivedi, Executive Director, NIELIT Gorakhpur.
EFFICIENT USAGE OF ENERGY IN DATACENTERS FOR A POSSIBLE ‘GREEN CLOUD COMPUTING’

Prof.(Dr). Yumnam Jayanta Singh
Director, NIELIT Kolkata

Introduction: The cloud datacenters are the fastest growing service providers. Cloud Computing provides computing resources with on-demand and pay-as-you-go models. Energy consumption is very high in cloud data centers. 91% of energy is consumed by the computing resources while average CPU utilization is <50%. There are three Main Types of Services

(I) Infrastructure-as-a-Service (IaaS): like Amazon EC2, Google Compute engine etc.
(ii) Platform-as-a-Service (PaaS): like Google App Engine (GAE), Microsoft Azure etc.
(iii) Software-as-a-Service (SaaS): like Google Apps, IBM blue cloud etc.

The virtualization technology (VT) helps to minimize energy consumption in the Datacentres. VT supports Datacenters to run with optimised physical servers and hence reduces the cost of the required hardware and operational cost. There are challenges to managing the virtual machines (VMs). Proper allocation of VMs, reduces the energy consumption and minimises the service level agreements (SLAs). So dynamic VM consolidation is essential w.r.t variable workloads.

Problem Area: According to McKinsey report on “Revolutionizing Data Center Energy Efficiency,” a typical Datacenter consumes the energy that can be used in 25,000 households. The total energy bill for data centers in 2010 was over $11 billion and energy cost in typical Datacenter doubles every five years. Such cloud data centers are alone using 1.5% of entire electricity for the US. Facebook’s Datacenters uses its 10.52% of total power consumed for IT, Google uses it’s 7.74%, while YouTube 3.27%. This is 2% of global CO₂ emissions. Governments give pressure worldwide to reduce carbon footprints that leads to climate change.

Possible Solution: Cloud service providers need to adopt measures to combat climate change and also to ensure their profit margin. Green Cloud computing model achieves not only efficient processing, utilization of infrastructures but also minimizes energy consumption. A study is conducted to find solutions for efficient Energy usages in Cloud Computing Datacenters. Study revealed that the allocation of VM should be done efficiently to utilize the resources appropriately for example switching off the idle server or putting it in sleep mode. Several Metaheuristic algorithms (like Honeybee algorithm, Ant colony optimization, Particle swarm optimization, etc.) have been used in the past for VMs efficient placement and allocation.

Energy consumption: by a server is defined as a linear function from CPU utilization which changes with time, i.e., \( u(t) \). The total energy consumed \( (E) \) is given by the metrics and calculation model is as follows:

CPU utilization: Let \( F \) be the clock frequency to model the capacity of a single core CPU. The CPU utilization of a VM, \( u_i \) is relative to the VM’s CPU frequency \( fi \) which is a fraction of the host CPU utilization \( U \). The host CPU utilization can be taken as summed up over the \( N \) VMs allocated to the host. For a multi-core CPU with \( n \) cores, \( F \) will be replaced by \( nf \).

\[
NiUFfiui=\ldots (1)
\]

Metric for describing SLA violation can be defined by

\[
SLAV=SLAOT \times PDM \ldots (2)
\]

SLAOT is SLA with overtime. PDM is performance degradation due to migrations.

Overall energy consumption is given by both energy consumption \( (E) \) and the level of SLA violations.

\[
ESLA = E \times SLAV \ldots (3), \text{Where ESLA is Energy with SLA.}
\]

Simulation result: A meta-heuristic algorithm (Hierarchical cluster based modified Firefly (HCMFF) is performed. The data for power consumption is taken from SPEC power benchmark. It follows the VMs selection policies such as Maximum Correlation, Minimum Migration Time, Minimum Utilization and Random Selection. The simulation was performed with 800 heterogeneous PMs in a data center. The result is compared with the existing algorithms such as Honeybee, Honeybee cluster based technique (HCT). This proposed HCMFF is more efficient than the other algorithms. It consumes 12% less energy than Honeybee, 6% less than HCT and 2% less than original Firefly. The usage of the appropriate algorithm can help in efficient energy usage in the cloud, contributing to a ‘Green Cloud Computing’.
NEW COURSES @ NIELIT CENTRES

**COURSE**: AGILE SOFTWARE DEVELOPMENT USING ANDROID  
**ELIGIBILITY**: Final year Graduate (Computer Science/IT), O Level  
**DURATION**: 80 Hours

**COURSE**: BIG DATA ANALYSIS USING ADVANCED SPREADSHEETS  
**ELIGIBILITY**: Final year Graduate (Computer Science/IT), O Level  
**DURATION**: 80 Hours

**COURSE**: SHORT TERM COURSE ON E-WASTE MANAGEMENT  
**ELIGIBILITY**: 10 + 2  
**DURATION**: 30 Hours

**COURSE**: TRAINING ON GST  
**ELIGIBILITY**: Open to all  
**DURATION**: 40 Hours

**COURSE**: BIG DATA USING HADOOP  
**ELIGIBILITY**: Final year Graduate (Computer Science/IT), O Level  
**DURATION**: 80 Hours

**COURSE**: CERTIFICATE COURSE IN ARDUINO BASED EMBEDDED SYSTEM DESIGN  
**ELIGIBILITY**: Diploma in Electronics/ E&C/ Electrical/ Electrical & Electronics/ Instrumentation/ Biomedical/ CS/ IT or B.Sc. in Electronics/ Instrumentation/ CS/  
**DURATION**: 300 Hours  
**NSQF Level**: 4

**COURSE**: PG DIPLOMA IN INTERNET OF THINGS (IoT)  
**ELIGIBILITY**: M.E./ M.Tech or B.E./ B.Tech in Electronics/E&C/ Electrical/ Electrical & Electronics/ Instrumentation/ Biomedical/ CS/IT or Msc in Electronics/ Instrumentation/ CS/  
**DURATION**: 470 Hours  
**NSQF Level**: 7

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