

# National Institute of Electronics and Information Technology (ISO 9001:2015 Certified Organisation)

An Autonomous Scientific Society of Ministry of Electronics and Information Technology, Government of India

# NEWSLETTER

Vol. 10 Issue 02/April 2022 (Quarterly)

# HIGHLIGHTS

- Director's meeting at NIELIT HQ
- Visit of Director General, NIELIT to various NIELIT Centres
- Training Program for Defence Personnel of Indian Army
- Capacity building of DGR Candidates
- Government Officials Training Program for BSF HQ Delhi
- Online on- demand Exam Agreement with DGCA



**Dr Pratap Kumar S** 

## **EDITOR-IN-CHIEF'S DESK**

We are delighted to present to you the NIELIT Newsletter for the 1st quarter of 2022. This quarter was special with many significant events.

Dr Madan Mohan Tripathi took charge as the new Director General on January 31, 2022. On behalf of the NIELIT family, I am glad to welcome the new Director General and wish him a successful tenure at NIELIT.

NIELIT family also bid a heartfelt adieu to our former Director General Dr Jaideep Mishra, who was holding the additional charge for over 3 years and made a remarkable contribution to the organization. We thank Dr Mishra for being a mentor and for leading the organization to its present state.

21st NIELIT Director's meeting was held under the chairmanship of the new Director General on 18th and 19th February 2022 at NIELT HQ, Dwarka, New Delhi after a gap of nearly 5 years. The meeting deliberated on the vision and road map of NIELIT for the next 20 years.

Read on to know about various activities undertaken in this quarter including conferences and workshops, corporate training, collaboration with academia and industry, and R&D and innovation efforts at the NIELIT centres

Thank you for your overwhelming support. We hope that you enjoy this edition of the NIELIT newsletter. Please share your suggestions and feedback at newsletter@nielit.gov.in

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# MESSAGE FROM THE DIRECTOR GENERAL

#### Dear All,

I am ecstatic and delighted to re-join the organization that I had left a few years back. It is a blissful experience being welcomed back by some known old and new smiling faces. The organisation has grown manifold and has endeavoured to reach nearly all the corners of the country.

It is really a matter of great pride and pleasure to see that NIELIT is standing at the cusp of making it really big at the National level. NIELIT's main forte has been its vast repertoire of courses in disruptive & legacy IT subjects, the Electronics Sector, and other allied fields.



It is my earnest desire that NIELIT with its vast outreach, wide gamut of

courses both in IT and Electronics domain in Formal and Non-Formal sector, ability to conduct Online & Offline examinations, and 3rd Party assessment, should be given due recognition as an Institute of National Importance.

NIELIT will take its range of skilling courses to every part of the Country through its Centres as well as Virtual Academy. Also, NIELIT will strive to become the largest contributor to the Skill/Talent pool of the country as well as worldwide in emerging technologies to create 1 Crore skilled manpower in the next 5 years.

#### <mark>"Alone we can do so</mark> little; together, we can do so much" – Helen Keller

I am sanguine that every NIELIT employee serving this great organisation has the potential to make some contribution that will help us in catapulting ourselves onto the next big stage. Let us all follow these words by Helen Keller in true letter and spirit.

Let all be assured that I look forward to working with you for the betterment of our esteemed organisation.

## **IMPORTANT EVENTS**

#### 21<sup>st</sup> Director's Meeting

The 21st NIELIT Directors' Meet of NIELIT was held under the Chairmanship of Dr. Madan Mohan Tripathi the new Director General, NIELIT, from 18<sup>th</sup> – 19<sup>th</sup> February 2022 at NIELIT HQ., at Dwarka, New Delhi after a gap of over 5 years. Heads of over 25 centres, the Registrar, CFO and other senior officials from the HQ were present. The meeting deliberated on the Vision and road map of NIELIT



for the next 20 years and outlined the strategy that should be followed to make NIELIT the number one destination for advanced skill training offering any time anywhere learning employing digital technologies.

Major strategic decisions taken during the meeting are i) redefine the vision and mission of NIELIT ii) create task forces for Cyber Security, Blockchain, Artificial Intelligence and IoT, iii) launch NIELIT Virtual Academy, iv) create an Alumni network and placement cell, and v) making each NIELIT centre a centre of excellence in one of the technology domains.





# **IMPORTANT EVENTS**

#### Visit of Director General, NIELIT to Various NIELIT Centres

Dr M M Tripathi after taking charge as the new Director General of NIELIT took a visit to various NIELIT centres and interacted with their staff members and students to get first hand information on their activities and strengths, capabilities and various issues to be resolved.

Dr. Madan Mohan Tripathi, Director General, NIELIT along with Shri Himanish Roy, Additional Director (Finance) visited Kolkata during 06th to 07th March, 2022. A review meeting was held on 07th March, 2022 at the JU Campus



At NIELIT Kurushetra with Director In-charge Sh. Shiv Kumar

Director General NIELIT welcomed by NIELIT Kolkata

office of NIELIT Kolkata wherein Shri V.Krishnamurthy, Executive Director, NIELIT Kolkata, Shri Himanish Roy along with other Senior Officers of the Centre were present. Director General NIELIT, also visited NIELIT Kurukshetra for reviewing the various activities performed by centre.

## **CONFERENCES/ WORKSHOPS**

#### Cyber Security Training to Defence Personnel at Pachmarhi, Madhya Pradesh

NIELIT HQ in collaboration with other NIELIT Centres have been conducting a tailor-made training on Advanced IT & Network, Cyber Security & Digital Forensic, and Social Media module for the Defence Personnel of Govt of India at AEC Training College & Centre, Pachmarhi, Madhya Pradesh since 04th Feb, 2022. NIELIT Kolkata conducted the Cyber Security portion of the training. Shri Bhaskar Banerjee, Scientist-C, Shri Kalyan Baital, Scientist-C and Shri



Mithun Kumar Roy, Sr. Technical Officer were the Resource Persons.

#### **Online Workshop on e-Waste Management**

An online workshop was conducted for various Subdivisions, Blocks and Municipalities of Murshidabad district on the modalities and procedure for disposal of e-Waste was organized by WEBEL, GoWB in association with DM Office of Murshidabad and WBPCB, GoWB on 16th March, 2022. Shri Kalyan Baital, Scientist-D from NIELIT Kolkata handled the sessions. 100 participants from various Murshidabad district offices were present.







#### Lecture on e-Waste Management at STPI, Kolkata

On the occasion of observance of Swachhta Pakhwada during 1-15th February, 2022 Shri Anirban Jyoti Hati, Scientist-B of the Centre delivered a lecture on 14 Feb, 2022 at STPI, Kolkata on e-Waste management, plastic waste management, cleanliness and ban of single use plastic (SUP).

#### Awareness Programme on "Tackling Crimes in Digital Space"

An awareness programme on "Tackling Crimes in Digital Space" was organised by NIELIT Kohima for paramilitary force (Assam Rifles) personnel on 14th March, 2022 Under the project "Development of Cyber Forensic Training cum Investigation Labs in North-Eastern States and Cloud Based Centralised Cyber Forensics Lab Infrastructures".



#### Awareness Program on "Cyber Security & Emerging Technologies"

NIELIT Kohima organized a one-day awareness program on "Cyber Security & Emerging Technologies" for the students of Model Christian College, Kohima on 18th March 2022 and for the students of Modern College, Kohima on 25th March, 2022 under the project "Capacity Building in IECT Including Training in Digital Skillset and Current Industry Demanding Technologies for Various Section of Society in the NE States"



#### Workshop on Digital Awareness for Elderly People

NIELIT Gangtok with the support of State Institute of Rural Development and Panchayati Raj, RDD, Govt. of Sikkim organised a one day workshop on 31st March, 2022 for elderly persons on "Awareness on Use of Mobile Applications for Digital Payment and e-Governance Services "at Ward Development Society, Luing Perbing Gram Panchayat Unit, East Sikkim under a project of Ministry of Electronics and IT



Elderly citizens attending the awareness session.

(MeitY), Govt. of India. 52 senior citizens of the ward and nearby areas attended the workshop. Khagendra Sharma, Scientist-D, handled the session.



#### Training on Use of Mobile App & e-Governance Services for Women

NIELIT Gangtok with the support of State Institute of Rural Development and Panchayati Raj (SIRD&PR), RDD, Govt. of Sikkim organised a three days training from 21st - 23rd March, 2022 for Women on "Awareness on Use of Mobile Applications for Digital Payment, e-Governance Services, IT applications and cyber security" at Gram Vikas Kendra (GVK), Rey Mindu Gram Panchayat Unit (GPU) - Ranka, East Sikkim under a project of Ministry of Electronics and IT (MeitY), Govt. of India.

#### Workshop on Internet of Things

Five-Day Hands-on Workshop on Internet of things (IoT): Technologies, Protocols & Applications held on 28th Feb, 2022. Dr. S.D Sudarsan, Executive Director, CDAC, Bangaluru & Mr. Sri Chandra, Sr. Director IEEE, India graced the valedictory event.



Future Prime Skills -Workshop at NIELIT J&K on Blockchain Technology

Workshop on

**Govt.** Officials

was conducted at NIELIT Srinagar and

this workshop.

officials of J&K under **Future Prime Skills** Initiative . 29 Govt.



#### Seminar on "Integrated Approach in S&T for Sustainable Future"

Seminar on the topic "Integrated approach in Science & Technology for sustainable future" was conducted on 28th Feb, 2022 at Govt. Degree College, Patten Srinagar to celebrate National Science Day.





#### Workshop on "Introduction to Blockchain Technology & its Applications"

NIELIT Ranchi in association with the Department of Information Technology & e-Governance, Govt. of Jharkhand organized a one day workshop on "Introduction to Blockchain Technology & its Applications" for officials of Govt. of Jharkhand on 17th February, 2022. Shri Kripa Nand Jha, IAS, Secretary, DoIT&e-Gov, Govt. of Jharkhand inaugurated



the session and Shri J K Sah, Pr. Tech. Officer of NIELIT Ranchi conducted the technical session. A total of 60 officials were present.

#### Workshop on e-Governance and Information Security for Govt. Officials



e-governance and Information Security Education and Awareness workshop conducted successfully for 246 officers/ officials of Saran (Chhapra) district administration on 30th March, 2022.



A day-long Workshop on e-governance and Information Security for 160 Purnea District Administration officers was completed successfully by the NIELIT Patna team on 24th March, 2022.



A 2 days workshop on e-Governance & Information Security was conducted successfully for 150 officers of Supaul district administration on 25-26th February, 2022 by NIELIT Patna team.



#### Hands-on Workshop on Internet of Things

Five-Day Hands-on Workshop on Internet of Things (IoT): Technologies, Protocols & Applications was conducted from 28th February, 2022 at NIELIT Aurangabad in collaboration with CDAC and IEEE India. This workshop focussed on Fundamentals of IoT systems, Microcontrollers for IoT systems, Programming for Sensors/Actuators, Microcontroller, Wireless Technologies in IoT, IoT data exchange protocols, IoT applications and demos. The program was attended by 45 participants from various colleges. The workshop was coordinated by Shri Prashant Pal, Scientist 'B', NIELIT Aurangabad.



## **CORPORATE TRAINING/ FDPs**

#### **Training Program for BSF Officials**

NIELIT Chennai has conducted the Government Officials Training Program for BSF HQ Delhi on Customization and Hosting of Cloud based LMS service in NIELIT Chennai. Totally 73 BSF officials have participated in the training program. The Training Program was aimed at customization of Moodle LMS service for Conducting Programs



Training program for BSF officials

which gives the officials general knowledge about LMS Service Administration and Management, Activity Scheduling, Exam and Quizzes, Monitoring, allocation of privileges for student and teachers, backup and storage etc. Dr Munivel E, Scientist D handled the sessions.

#### Training on Artificial Intelligence and Cloud Computing to the Indian Army officials

NIELIT Delhi Centre conducted a 4-day training programme for Army Educational Corps Training College and Centre, Pachmarhi from 14th March to 17th March 2022. Mr. Anirudra Diwakar, Project Engineer, was the trainer





for "Artificial Intelligence using Python Language" and Mr. Amit Dahat, Project Engineer, disseminated his knowledge on "Big Data Technologies and Cloud Computing". A total of 40 participants were trained with hands-on practical coding sessions and a mix of theory lectures.



#### **Training Program for Defence Personnel of Indian Army**

NIELIT Aurangabad conducted training programme on "Cyber, IT & Psychological Warfare/Perception Management Tasks" at AEC Training College Pachmarhi Madhya Pradesh. 41 Defence Personnel of Indian Army attended the 8 weeks training program. Brigadier V K Bhat, Commandant of AEC Training College, Panchmarhi addressed the participants during the valedictory function.



#### **Training Programme for Panchayati Raj Functionaries**

NIELIT Gangtok in collaboration with State Institute of Rural Development & Panchayati Raj (SIRD&PR), Govt. of Sikkim organized training programme for PRI functionaries attended by 38 participants during 14th February, 2022 to 12th March, 2022.



A collaborative programme by SIRD&PR, Govt of Sikkim and NIELIT Gangtok



#### First batch of "Certified Multimedia Developer" Sponsored by DGR Started

The first-ever batch of "Certified Multimedia Developer" sponsored by Directorate General of Resettlement, Ministry of Defence, Govt. of India at NIELIT Bhubaneswar commenced on 3rd January 2022 with 38 candidates . The course is aligned at NSQF Level-3 and interalia also covered Resume building & Soft Skill modules.

#### Basic Computer Course (BCC) Training for officials of Jharkhand Finance Service, Govt. of Jharkhand

NIELIT Ranchi Organized Five Days Basic Computer Course (BCC) Training Program from 31st January 2022 to 4th February 2022 for 65 Nos. officials of Jharkhand Finance Service, Govt. of Jharkhand at Shri Krishna Institute of Public Administration (SKIPA), Ranchi.



#### Basic Computer Course (BCC) Training for Junior Engineers Water Resources Department, Govt. of Jharkhand

NIELIT Ranchi Organized Five Days Basic Computer Course (BCC) Training Program in 13 Batches for 482 Junior Engineers Water Resources Department, Govt. of Jharkhand at Shri Krishna Institute of Public Administration (SKIPA), Ranchi.







#### Training of DSP Probationers in the area of Information Technology

NIELIT Patna conducted I.T. Training of 64th batch of DSP Probationers at Bihar Police Academy, Rajgir. Total 34 candidates were trained in various IT tools, networking & Cyber security.



#### **Capacity Building of DGR Candidates**

 NIELIT Delhi Centre has successfully completed training of Directorate General of Resettlement (DGR) sponsored defense officials in NIELIT 'O' Level (NSQF Level 5), CHM 'O' Level (NSQF Level 4) & Certified Multimedia Developer (NSQF Level-5) for a total of 125 JCOs/OR's in three batches.

Dr. Madan Mohan Tripathi DG NIELIT, graced the Valedictory programme of NIELIT 'O' Level with his auspicious presence and encouraged the participants to upgrade their technical skills to hold good positions in their second career

 In the valedictory programme for the batch of Certified Multimedia Developer, Cmde Sharad Kumar Chauhan & Lt Col Gaurav Vashishtha were Special Guests from DGR. Sh. Shameem Khan, Registrar, Mr. Alok Tripathi, Chief Controller of Exam and Smt. Sheetal Chopra, DIC Delhi Centre congratulated the batch and awarded certificates to participants. Since Feb



2022, three more training programs have started in the Centre; NIELIT 'O' Level (NSQF Level 5), CHM 'O' Level (NSQF Level 4) & Certified Multimedia Developer (NSQF Level-5) with a total of 50 officials of Army, Navy and Air Force in each batch.

#### **Training Program for Defence Personnel**

NIELIT Aurangabad in association with Directorate General Resettlement has conducted training program in Certified Multimedia Developer. Army, Navy and Air force Officials from all over the country participated in the training program. 18 candidates have undergone training from 03rd Jan, 2022 to 25th March, 2022 at NIELIT Aurangabad.



#### DGR Sponsored Resettlement Training for the JCO/ORs

NIELIT Kolkata conducted DGR sponsored Resettlement Training for the JCO/ORs on Certified Multimedia Developer from 03rd Jan, 2022 to 25th March, 2022 and the certificates were distributed by Shri V.Krishnamurthy, Executive Director, NIELIT Kolkata to the Defence personnel on successful completion of the training on 25th March, 2022.



4th batch of Resettlement Training on NIELIT "O" level for JCOs/OR sponsored by DGR has commenced on 21st February, 2022 in Class room mode. Total of 36 students have joined the training. Dr Pratap Kumar S, Director, NIELIT Chennai, Dr. Sanjeev Kumar Jha, Joint Director





(Technical), Course Coordinator & all the faculties along with candidates took part in the inauguration ceremony. During the ceremony Dr. Pratap Kumar S, has highlighted importance of course and required skill sets to be developed during the training.



Inauguration Ceremony of DGR Training at NIELIT Chennai

## **TRAINING PROGRAMS**

#### **Post Graduate Program in Cloud Computing**

NIELIT Chennai has started Post Graduate Program in Cloud Computing and Cloud Computing Engineer Courses in online mode on 31st January 2022. Dr. Munivel, Scientist D handled the sessions. The course covers basic configuration and administration of OS Server, Networks, Database & its Security, Virtualization, Cloud Services – SaaS, PaaS, IaaS, IaaS models – Vsphere, Citrix xenserver, AWS with the skills required to develop and manage cloud services and to build cloud based infrastructure and also maintain cloud security approaches.

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PG Program in Cloud Computing, Cloud Computing Engineer

#### Training Program in Artificial Intelligence

The training program "Certified Artificial Intelligence (AI) Associate" was started on 17th January 2022. Total of 15 students have joined the program. Shri Ripunjay Dinanath Singh, Scientist "D" is handling the sessions.



Course Overview of Certified Artificial Intelligence (AI) Associate



#### Course on Development of FDM Based 3D Printer

Online Certificate Course on Development of FDM Based 3D Printer in Online-Blended mode was started on 25th February, 2022. Total of 32 candidates have registered for the course. Mr. Mariyappan D, Consultant (3DP/AM) handled the sessions. The course on Development of FDM Based 3D Printer provides an Introduction to 3D Printing/AM, Development of 3D Printer Structure, Configuring the Electronic Components to 3D Printer, Firmware Installation, Printer Assembly, Case Studies, Print Settings and Calibration.



Online Certificate Course on Development of FDM Based 3D Printer

#### Online Course on Computer Aided Design using CATIA V5

Online Certificate Course on Computer Aided Design using CATIA V5 was started in Online-Blended mode on 07th March, 2022. Total of 19 candidates have registered the course. Mr. Mariyappan D, Consultant (3DP/AM) handled the sessions. The course on Computer Aided Design using CATIA V5 provides an Introduction to CAD, 2D Sketching, 3D Part Modeling, Design Assembly and Drafting.



Online Certificate Course on Computer Aided Design using CATIA V5



#### Capacity building of Law Enforcement Agency to Tackle Cybercrimes

A three day long Intensive Training on "Digital Forensics & Cyber Crime Investigation with Hands-on" was conducted at NIELIT Kohima for two different batches in February and March, 2022.



#### Training of Judiciary Officials on Cyber Forensics

NIELIT Gangtok has started training of Judiciary Officials of Sikkim on Cyber Forensics under the MeitY project "Development of Cyber Forensic Training cum Investigation Labs in North-Eastern States and Cloud based centralized Cyber Forensics Lab Infrastructure" 15 officials



Training of Judicial Officials in progress

#### Training on AR/VR Technologies for Govt. Officials

NIELIT Gangtok as a Co-Lead centre for Augmented and Virtual Reality (AR/VR) Under FutureSkills PRIME project of Ministry of Electronics and IT (MeitY) started the fourth batch of training on AR/VR Technologies for Govt. Officials from 21st March, 2022 which was attended by 52 nos.



A Govt official exploring the VR world using headsets during the lab sessions



Participants during the training on AR/VR



# Training on Cyber Crime Investigation for Police Officers

5 days training on 'Cyber Crime Investigation course' for Police officers was conducted at Cyber Forensic Lab, KTDS Police training College, Tripura. Officer In-charges of various police stations attended the training course.



#### Launch of Certified Multimedia Developer Course for DGR

NIELIT Jammu introduced a Certificate course on Multimedia developer for JCOs/OR sponsored by DGR (Directorate General of Resettlement). The course started on 11th Jan ,2022 with 24 JCOs/OR. Certified Multimedia Developer is NSQF aligned Level 4 job oriented course designed to cater the needs of the growing Animation & Multimedia Industry. The course gives an insight into the latest tools and technologies available in the multimedia development field.

#### Skill Hub Initiative – PMKVY 3.0 Scheme Launched at NIELIT J&K

NIELIT J&K inaugurated the training program titled "Skill Hub Initiative" under the PMKVY 3.0 scheme of NSDC. Under this two courses were launched namely Junior software developer(JDS) and Domestic data entry operator (DEO). These courses are offered free-of-cost to the eligible candidates. The first batch started on 22nd Feb, 2022 with 160 participants.



#### "Industrial Training on Computer Network and Cyber Security"

NIELIT Aizawl conducted Industrial Training on Computer Network and Cyber Security during 6th – 31st January, 2022. The training was designed for university students to experience industry standard hands-on experience in the field of Computer Networking and Cyber Security.

#### "Digital Forensic & Cyber Crime Investigations with Hands-on"

Shri Lalchamliana, Hon'ble Home Minister, Government of Mizoram graced the inauguration of 3-days beginner's level training for police officials on "Digital Forensic & Cyber Crime Investigations with Hands-on" organised by NIELIT Aizawl in collaboration with Mizoram Police on 21st March 2022. Prof RP Vadhera, Vice-Chancellor, ICFAI University Mizoram



graced the function as special invitee. Valedictory function was graced by Shri Devesh Chandra Srivastava, IPS, DGP, Government of Mizoram. Other dignitaries are Shri Parwaiz Ahmed, IPS, IGP (Training) and Shri Rakesh Paweriya, IPS, SP(Crime), Govenrment of Mizoram.





#### **Training Program on Web Development**

NIELIT Aurangabad has started a 400 hours training program on Web Development from 24th March, 2022 aimed at building competence in building complete web applications including frontend, backend, and database management. Twenty-five students are attending the training program. Shri Lakshman Korra, Dean (Skill Development) and Sc/E 'D' and Shri. Chaitanya K, Sc/E 'C' are the coordinators for the course.







#### **Training Program on Junior Software Developer**

NIELIT Aurangabad has started a 400 hours training program on Jr. Software Developer: First Batch with 23 candidates commenced from 18th February, 2022 and second batch with 20 candidates commenced from 28th March, 2022. Shri. Lakshman Korra, Dean (Skill Development) & Sc/E 'D' and Sc/E 'D' Shri. Chaitanya K, Sc/E 'C' are the coordinators for the course. The course aims to provide specialized technical skills to candidates so that they can develop reliable and efficient software, and build a career in software development and assist the development team in all aspects of software design and coding.



#### Short Term Certificate Course on Internet of Things (IoT)

NIELIT Aurangabad has successfully conducted an online short term Certificate Course on Internet of Things from 27th December, 2021 to 7th January, 2022. Participants included Government Officials. Prashant Pal, Scientist 'B' was the resource person and coordinator for the training.

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#### Certificate Course in Data Analysis"

"Certificate Course in Data Analysis" was conducted for the students of Department of Economics , Malabar Christian College, Calicut as per the MoU with NIELIT for collaboration in academic and skill development related activities, Dr. M K Jararaj, Honorable Vice Chancellor, University of Calicut and Dr. M P Pillai, Executive Director, NIELIT Calicut distributed the certificates in the presence of Dr. Sachin P James , Principal-in-Charge , Dr. Bjiu Mathew, HOD, Department of Economics, Malabar Christian College, Calicut





#### Training Programme for Rajiv Gandhi National Institute of Youth Development, Sriperumbudur

Various Training Programmes were conducted for Rajiv Gandhi National Institute of Youth Development, Sriperumbudur during March, 2022. 182 students from various colleges attended the courses and were benefited by it. All the online sessions for the courses were scheduled for 3 days with 5hrs/day. 48 students participated in the Certificate Course on Electric Vehicle Technology held during 14th – 16th March, 2022. 48 students participated in the Certificate Course on Solar Power Installation Operation and Maintenance held during 16th – 18th March, 2022. 36 students participated in the Certificate Course on Embedded and IoT Systems held during 17th – 19th March, 2022, and 50 students participated in the Training on Cyber Security & Cloud Computing held during 23rd – 25th March, 2022.

#### **Online Courses @ NIELIT Calicut**

NIELIT Calicut continues spreading knowledge with various courses and has trained around 1000 participants during January – March, 2022. Short duration courses ranging from 1 day to 5 days were conducted in Data Analysis using Python, Natural Language Processing Techniques using Python, Industrial Training on 3D Printing/ Additive Manufacturing, Cyber security Tools, Basics of MATLAB and Simulink, EV Technology & Public Charging Station, Solar Power Installation, Industrial Automation with PLC & SCADA and Machine Learning with Spreadsheets. Internship Program on Embedded & IoT Systems was also conducted.

#### **Training Partner for PMKVY**

Pradhan Mantri Kaushal Vikas Yojana (PMKVY) the flagship scheme of the Ministry of Skill Development and Entrepreneurship (MSDE) implemented by National Skill Development Corporation (NSDC), enables Indian youth to take up industry relevant skill training that will help them in securing a better livelihood. Individuals with prior experience are also assessed and certified under Recognition of Prior Learning (RPL). Empowering India's youth and continuing the journey of Skill India Mission in building India as the skill capital of the world, the Ministry of Skill Development and Entrepreneurship (MSDE) launched the third phase of its flagship scheme-Pradhan Mantri Kaushal Vikas Yojana (PMKVY 3.0). NIELIT Calicut has been recognized as training partner under PMKVY 3.0.



# SUMMER TRAINING/INTERNSHIPS

#### Training on PCB Design, Analysis and Manufacturing Techniques

Training on "Printed Circuit Board Design, Analysis and Manufacturing Techniques" for the students of NIT Agartala commenced on 12 March, 2022 at NIELIT Agartala under MeitY sponsored project 'Capacity Building and Training in Emerging Technologies for Enhancing Employment Opportunities and Skilling'



#### Industrial Training on IoT with Cloud Application

NIELIT Jammu organized a 6 weeks industrial training program in "IoT with Cloud Application" for 3rd semester students of M.Sc Electronics of Jammu University. 33 students were enrolled in the training program. Various concepts of IoT, Wireless Networks and Cloud Technologies were introduced to participants.

#### Industrial Trainings in Collaboration with IIT Jammu

NIELIT Jammu in collaboration with IIT Jammu conducted industrial training on Artificial Intelligence, Machine Learning and Internet of Things (IOT). The 6 week program on IoT was held from 05th Dec, 2021 to 15th Jan, 2022. The curriculum provided comprehensive

knowledge about the IoT Ecosystem, IOT Architecture, Application Layers, Networking Protocols, Security measures, and Integration of Applications in IoT. Students Learned how to work with Arduino UNO, Arduino Nano, Sensors, Displays, Keypads, Relays and Power converters.

AI with Machine Learning is a 6 months industrial program which started on 3rd March, 2022. This course covers the concepts of Python



Programming and its fundamental data structures. Students will learn how to program and work on data science libraries like Numpy and pandas, apply data analysis, data cleaning techniques, data visualization etc. The concept of Machine Learning, its models and implementation of its algorithms will be covered in detail.



#### **Computer Based Typing Test**

NIELIT J&K conducted a Computer based Typing test for the post of Election assistant for Jammu and Kashmir Services Selection Board(JKSSB). The Typing test of about 5000 candidates at NIELIT Jammu and 11000 candidates at NIELIT Srinagar was successfully conducted in co-ordination with JKSSB. The test was conducted from 14th Feb, 2022 to 10th March, 2022.



#### Shorthand Type Test for JKSSB

NIELIT Jammu conducted computer based Shorthand type test for the post of Junior Scale Stenographer for JKSSB for 654 candidates. The test was conducted between 11th to 14th Jan, 2022.

#### Industrial Training & Internship on Web Development

NIELIT Patna organised an "Industrial Training & Internship on Web development using PHP & My SQL" for a batch of Diploma students of Govt. Polytechnic Gopalganj, Bihar.

#### Final Year MCA Major Project

4 (Four) MCA Final Year students from Assam Don Bosco University are doing their major project at NIELIT Shillong under the guidance of NIELIT Officers on topics such as Data Science, IoT and Web based development.







# **CAPACITY BUILDING PROJECTS**



#### CHM-O Level Training for JCO's and OR's

DGR sponsored training for JCO's and OR's started from 21st March, 2022 for CHM-O level course.

#### **Capacity Building in IECT in North Eastern Region**

Under "Capacity Building in IECT including training in Digital Skill sets and Current Industry Demanding Technologies for various sections of society in the NE States". The following trainings were conducted from 1st March, 2022. Awareness programs of 1-day to 6-days durations were conducted for over 1300 candidates in topics like use of ICT for effective farming and marketing, mobile applications for digital payment and e-governance services, cyber security and emerging technologies, The target audience were farmers, women, elderly persons, and school and college students.



#### **Government Officer Training in 3DPAM**

NIELIT, Calicut, the Lead Centre in FS Prime 3DPAM stream conducted the sixth batch of a program titled "INDUSTRIAL TRAINING IN ADDITIVE MANUFACTURING & ITS APPLICATIONS" for Government officials under "GoT FutureSkills PRIME - 3D Printing and Additive Manufacturing" technology.



More than 150 officials of Government Polytechnics & Government Engineering Colleges participated in the program. The 40 hours duration program was conducted between 23rd February, 2022 and 8th March, 2022 through online mode. An assessment through proctored mode was also conducted and all officials who have attended, successfully cleared the assessment tests. The program was co-ordinated by Sh.Ramesh Kumar M.S., STO.

# Awareness Program on use of Mobile Application for Digital Payment, e-Governance Services, IT Application, Cyber Security for women

Awareness Program for women was conducted at NIELIT Shillong and in ST Anthony College under the project "Capacity Building in IECT including training in Digital Skill sets and Emerging Technologies for various section of society in the NE States". A total of 94 candidates participated in the Program.



#### Awareness Program on Cyber Security & Emerging Technologies

Awareness Program on Cyber Security and Emerging Technologies was conducted at various schools of Shillong, Meghalaya. A total of 1294 candidates participated in the Program from 7 schools.





# Awareness Program for Farmers on "Use of ICT Technology for Effective Farming & Marketing

One day Awareness Program for Farmers was conducted at Mawthadraishan Eastern West Khasi Hills District on the 25th March, 2022. A total of 40 candidates participated in the training.







## **R&D PROJECTS & INNOVATION**

#### NIELIT Calicut invites EoI for Transfer of Technology

NIELIT Calicut has invited the Expression of Interest (EoI) from various industries including startups for the transfer of technology know-how developed under the Indigenous color Doppler Ultrasound scanner project. The identified EoI partner will commercialize the Indigenous color Doppler ultrasound scanner technology for the nation. This is the first time in the history of NIELIT an EoI is invited for the transfer of technology know-how developed as part of and R&D project. Dr Jayarj U Kidav, Scientist/Engineer E was leading the development.



Ultrasound Transceiver Hardware



Ultrasound System HV and LV power supply board

#### ICT Intervention in Travel and Tourism Industry through Capacity Building in New Age Digital Technologies Project Awarded

NIELIT Gangtok has been awarded a project titled "ICT Intervention in Travel and Tourism Industry through Capacity Building in New Age Digital Technologies" by Ministry of Electronics and IT (MeitY), Govt. of India.



# INDUSTRY/ACADEMIA COLLABORATION

#### MoU Signed for Implementation of School of Excellence Program in Nagaland

NIELIT Kohima has entered into a tripartite MoU with Department of Employment, Skill Development & Entrepreneurship and Department of School Education for implementation of School of Excellence Program in the State of Nagaland on 8th Feb, 2022. The objective is to Sow and Nurture IT education right from school level enabling students to become IT aware and achieve the career aspiration of expert level performers in IT field. The program is funded by the Ministry of Skill Development and Physical infrastructure and student's participation will be provided by the Department of School education and NIELIT Kohima will be the executing agency and knowledge partner.

#### Signing of Agreement with Department of Agriculture & Farmers Welfare (DA&FW)

NIELIT Kolkata Centre signed an agreement with Dept of Agriculture & Farmers Welfare (DA&FW), Ministry of Agriculture, GoI towards execution of the Agriculture Census 2020-21

project on 17th Feb., 2022 in the office of DA&FW, New Delhi. The agreement signing ceremony was graced by Dr. Dalip Singh, DDG(AC), DA&FW, Dr. T. R. Sreenivas, ADG(Agri-Census) and also by Shri V.Krishnamurthy, Executive Director, NIELIT Kolkata Centre and other senior officers of both the organisations.



#### Signing of MoU with L&T

An MoU was signed between NIELIT Kolkata and CSTI Serampore, L&T Construction (MMH) on 15th March, 2022 for renewal of the agreement for evaluation and certification by NIELIT Kolkata to the Diploma/ITI candidates after their completing the AutoCAD training modules provided by CSTI. The ceremony was graced by Shri V.Krishnamurthy, Executive Director, NIELIT Kolkata and Shri Debashish Karmakar, Head HR(W) & Principal CSTI Serampore, L&T Construction(MMH) and also by other senior officers of both the organisations.





#### **Online On-Demand Exam for DGCA**

NIELIT Delhi Centre has signed an agreement with DGCA for the conduction of On-Demand online examinations for Flight Crew (FC) and Aircraft Maintenance Engineers (AME) for a period of 18 months in September, 2021. Delhi Centre successfully developed and launched the application in a record time of 45 days and launched the same on 22nd October, 2021. After conducting a pilot exam in one city for a couple of months, this project has now been rolled out in Delhi, Mumbai, Chennai, Kolkata and Bengaluru on a monthly basis. This project was included in the 100 days scheme of Ease of Governance. NIELIT has conducted three examination cycles under this project in completely online mode.



#### **Recruitment Exams for Nearly 2 Lakh Candidates Conducted**

NIELIT Delhi Centre has been in the forefront of providing exam related services to various organisations. It has successfully completed/conducted recruitment exams for nearly 2 lakh candidates:

- Recruitment exam of UDC/LDC for the Ministry of Ayush for 189720 candidates
- Recruitment exam of Scientist C and Scientist D for MeitY for 4299 candidates
- Recruitment exam of Drivers for MeitY for
   1825 candidates



#### **MoU Signed with C-MET**

NIELIT Aurangabad and C-MET signed an MoU for technical collaboration and exchange of ideas for R&D and skilling in the emerging areas of IECT on March 07, 2022.



#### Meeting with Hon'ble Vice Chancellor, Rajasthan Technical University, Kota

A Meeting was held with Prof. R A Gupta, Honourable Vice Chancellor, Rajasthan Technical University, Kota, by Dr. Sanjeev Kumar Gupta, Executive Director, NIELIT Aurangabad along with Shri. Yashpal Gogia, Director, NIELIT Ajmer, for discussions regarding autonomous status to NIELIT Ajmer for starting of formal courses with degrees to be awarded by RTU.



Meeting with Hon'ble Vice Chancellor, Vardhman Mahaveer Open University, Kota

A Meeting was held with Prof. Ratanlal Godaraa, Honourable Vice Chancellor, Vardhman Mahaveer Open University, Kota by Dr. Sanjeev Gupta, ED, NIELIT Aurangabad for exploring possibilities for collaboration between NIELIT and University for offering skill courses, conduction of examination among others.





#### Meeting with Shri. Arjun Meghwal, Honourable Member of Parliament, Bikaner

A meeting was held with Shri. Arjun Ram Meghwal, Honourable Member of Parliament, Bikaner by Dr. Sanjeev Kumar Gupta regarding opening of NIELIT Centre at Bikaner.

#### Meeting with Hon'ble Vice Chancellor, Maharaja Ganga Singh University, Bikaner

A meeting was held with Prof. Vinod Kumar Singh, Hon'ble VC, Maharaja Ganga Singh University, Bikaner by Dr. Sanjeev Kumar Gupta, Executive Director, NIELIT Aurangabad, regarding handing over possession of land for opening of new NIELIT Centre at the earliest. A formal letter in this regard was handed over by Sh. Yashpal Gogia, Director, NIELIT Ajmer to Registrar, MGS University.



#### MoU Signed with Directorate of General Education (VHSE Wing), Govt. of Kerala

NIELIT Calicut signed an MoU with Directorate of General Education (VHSE Wing), Govt of Kerala for the assessment and certification of 2262 students from 83 Vocational Higher Secondary Schools across Kerala in 'Advanced Diploma in Computer Application Accounting and Publishing', a course aligned under NSQF Scheme.



## **CSR ACTIVITIES**

#### **Career Talk at NIELIT Ranchi**

Career Talk Programme organized by National Career Service Centre for SC/ST, Ministry of Labour & Employment Govt. of India in collaboration with Staff Selection Commission, Kolkata at NIELIT Ranchi on 3rd March, 2022. The Event was graced by Shri Arun Kumar Sarkar, Deputy Director, Ministry of Personnel Public Grievances & Pensions Govt. of India and Dr. Ranjit Kumar Mandal, Sub-Regional Employment Officer, National Career Service Centre for SC/ST, Ranchi.



#### Celebration of "Azadi Ka Amrit Mahotsav"

NIELIT Delhi Centre organized various events to celebrate and commemorate 75 years of Progressive India's glorious history of its people, culture and achievements in as part of "Azadi Ka Amrit Mahotsav". Webinars on the topics "Big Data Technologies" on 9th Feb., 2022 & Blockchain Technology on 15th March, 2022 were organized for Government employees, students and industry professionals. Mr. Anirudra Diwakar, Project Engineer, NIELIT Delhi Centre and Ms. Manvi Setiya, Technical Writer, NIELIT, were the speakers for the event. The Big Data webinar disseminated knowledge about the foundations of Big Data Systems, key assumptions for Big Data Analytics, the platform and tools required to perform predictive analytics such as Hadoop and Spark and the Block chain webinar emphasized on understanding cryptocurrency and distributed database system.





workshops on "Plastic waste Management and ban of Single use Plastic" and "e-Waste Management" were conducted in February. Sh. B.B. Dua, Addl Director was the speaker for both the events.

## **STUDENT SECTION**

#### Swachhta Pakhwada

During the Swachhta Pakhwada, NIELIT Centres organised various activities with whole hearted participation of the staff members and students.



Cleanliness drive in NIELIT Agartala



Cleanliness drive in NIELIT Aurangabad

#### NIELIT e-Sports 2022

In the midst of closure of institutions and introduction of online education due to pandemic, NIELIT Aizawl conducted NIELIT e-Sports 2022 to continue and uphold the spirit of education for the regular students of DCSE, DETE, BCA and MCA. NIELIT e-Sports 2022 was organised during 1st to 4th Feb., 2022.



#### **INAUGURATIONS & OTHERS**

#### **Appreciation Certificate to NIELIT Agartala**

Prof. Smt. Rita Bahuguna Joshi & Shri Pradeep Tamta, Hon'ble Members of Parliament handing over the appreciation certificate to Shri Jayanta Chakraborty, Director In-charge, NIELIT Agartala on 2nd Sub-Committee meeting of 'Committee of Parliament on Official Language' held on 7th March, 2022 at Agartala.





#### **Staff Development Programs**

The NIELIT Agartala Centre has taken initiatives for the development of its employees by instilling training in advanced technologies from its own Staff Development fund. S Training in Cyber security, and Block chain and Ethereum were given to 12 members of staff.

#### Pariksha Pe Charcha 2022 Programme

NIELIT Kolkata and Aizwal organised the live streaming of the 5th edition of Pariksha Pe Charcha 2022 Programme, wherein the Honourable Prime Minister Narendra Modi interacted with students, parents, and teachers from across India about how to stay cool and relaxed during the upcoming exam season, on 01.04.2022.



Live streaming of Pariksha Pe Charcha at NIELIT Kolkata



Live streaming of Pariksha Pe Charcha at NIELIT Aizwal

#### Visit by Dignitaries

Shri Bhuvnesh Kumar, Joint Secretary, Ministry of Electronics and IT (MeiY), Govt of India visited NIELIT Agartala on 8th March, 2022. Registrar in-charge, NIELIT; Director in-charge & Senior Officers of NIELIT Agartala briefed him about various activities of the centre.



#### National Voters' Day 2022 at NIELIT

On the occasion of National Voters' Day 2022, across NIELIT with National Voter's Day pledge and awareness talks on 25th January, 2022.



Pledge For National Voters' Day in NIELIT Shillong



Pledge For National Voters' Day in NIELIT Aurangabad



#### NIELIT Celebrated International Women's Day

To honour womanhood, NIELIT celebrated International Women's Day on 8th March, 2022. In NIELIT Delhi Women's Day celebration started with the discussion on the topic Gender Equality Today for a Sustainable Tomorrow ". All women employees along with male employees shared their views on the occasion. On the occasion of women's day, NIELIT Aurangabad felicitated one of their alumni, Dr. Vandana B Malode, who is presently working as an Associate Professor at Jawaharlal Nehru Engineering College (JNEC). The employees of NIELIT Chennai shared their views on Gender Equality, women empowerment and improving the socio-economic status of women.





#### 73rd Republic Day Celebrated

The 73rd Republic Day was celebrated at HQs and all the NIELIT Centres across India by the employees and students with patriotic fervor. A day of pride, the national republic day, is celebrated every year to commemorate the Indian Constitution which came into effect on this day in the year 1950. On the occasion, NIELIT employees have put light on the sanctity of the occasion and the role played by the constitutional makers, with particular reference to Dr. B.R. Ambedkar. A flag hoisting was also done at HQs and all the NIELIT centres.



#### **Paper publications:**

- Jayaraj U Kidav, Akula Sri Rama Pavan, Rajesh M, Navin Kumar W "A PC based Ultrasound back-end signal processor using Intel® Performance Primitives" VLSID 2022 35th International conference on VLSI Design, 21st international conference on Embedded Systems, Feb 2022.
- NIELIT Calicut R & D group presented a paper titled "A PC based Ultrasound back-end signal processor using Intel® Performance Primitives" in VLSID 2022, the premier Global conference in VLSI and Embedded Systems with legacy of over three and a half decades.

# NIELIT VIRTUAL ACADEMY

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