Skill Development Course on Internet of Things (IoT)

CSIR-CEERI Pilani organized its first course on Internet of Things (IoT) at CSIR-CEERI's Incubation-cum-Innovation Hub, Jaipur Centre during 4th June to 13th July 2018 in association with Rajasthan ILD Skills University (RISU) and National Skill Development Corporation, New Delhi.

The inaugural function was organized on 4th June 2018, in which Dr. Lalit Kumar Pawar, honourable Vice Chancellor of Rajasthan ILD Skill University (RISU) was the chief guest, Dr. S.C. Bose, Chief Scientist and Area Coordinator, Cyber Physical System presided over the function. At this occasion Dr. Kota Solomon Raju, Head, Skill Development Programme (SDP), CSIR-CEERI was also present. Dr. Ram Prakash, Scientist-in-Charge, CSIR-CEERI's IIH, Jaipur Centre conducted the programme. In this there were total 22 participants who attended the course, which included engineering students, teaching faculties from well recognized institutions and also members of Industry from Rajasthan.

Dr. Ram Prakash, Scientist-in-Charge, CSIR-CEERI's IIH, Jaipur Centre welcomed the key delegates, trainers, IoT course participants and other members present in the inaugural function. He gave introductory remarks on CSIR-CEERI's IIH, Jaipur Centre and the facilities are being created at this centre. He spoke on reasons for the course was being conducted at CSIR-CEERI's Jaipur Centre and how it would be beneficial for the participants. He then requested the on dais dignitaries to lighten the lamp to officially declare the start of the first skill development programme on IoT at Jaipur Centre.

Dr.Ram Prakash welcoming the chief delegates	Lighting of the Lamp Ceremony

Dr. S. C. Bose delivered his welcome address and explained the need of IoT course for skill development. He also briefed about different applications of IoT for industrial domains. He emphasized that India need to be ready for future Industrial revolution, i.e. 4.0 and 5.0 which will be based on digital electronics and IoT will be the key component in it.

Dr. Lalit Kumar Pawar, VC, RISU speaking during the inaugural session

Dr. Lalit Kumar Pawar, VC, RISU and Chief Guest in his address talked about the need for skill development courses to make people more employable by industries. He thanked Prof. Santanu Chaudhury, Director, CSIR-CEERI Pilani for signing a MoU with RISU to make CSIR-CEERI's IIH Jaipur Centre as a Centre of Eminence for Skill Development and RISU's collaboration. He mentioned about the courses offered by Rajasthan ILD Skill University and future plan of the courses with CSIR-CEERI. He also mentioned that the skill training should be based on the demand by various manufacturers and industrial houses and if our youth is not skilled in latest technologies, then about 21% of them will become unemployed within next 5 years time scale because of the change in the technology base globally.

He said that IoT will play a major role in the revolutionizing industrial functioning and automation. He also inspired the participants to work hard and extract as much as knowledge possible from the scientists who will be giving training during this course. He said that there exist a huge opportunity for the youth to work in the upcoming areas, such as, Internet-of-Things (IoT), Artificial Intelligence, Augmented reality, Virtual reality, Machine learning, etc. He added that the future of the technologies will be based on these upcoming areas and we must be skilled on all of these otherwise somebody else will be deciding the

dynamics of Indian economy. At the end he praised Dr. Ram Prakash, Scientist-in-charge for his efforts in creating such an excellent Incubation-cum-Innovation Hub facility at Jaipur in a very short span of time. He admired the vision of CSIR and CSIR-CEERI authorities to support Indian Government Make in India, Startup India and Skill India Programmes at this uniquely designed public oriented facility at Jaipur.

Dr. Kota Solomon Raju, Head, SDP, CSIR-CEERI spoke in detail on the course structure and its content. He mentioned about certain real life applications of IoT and gave a few examples related to solar energy systems, smart homes and smart cities. He mentioned that the primary focus of this course is on practical applications. He requested participants to ask questions frequently during the period of the course work so that they can learn fast. He also discussed entire schedule of the course and day by day activities planned by the individual faculties and at the end evaluation scheme for this course. He also proposed vote of thanks in the inaugural session.

Participants during Practical Class

Valedictory Function and Certificate Distribution:

At the end of this course on IoT a valedictory session was organized on 13th July, 2018 at CSIR-CEERI's Incubation-cum-Innovation Hub, Jaipur Centre. The key delegates of the function were Prof. Santanu Chaudhury, Director, CSIR-CEERI, Dr. Lalit Kumar Pawar, Vice Chancellor, RISU, Shri. Ajay Kumar Gupta, Managing Director M/s Kamtech Associates Pvt. Ltd. Jaipur, Dr. Kota Solomon Raju, Head, Skill Development Programme and Dr. Ram Prakash, Scientist-in-Charge, CSIR-CEERI's Incubation cum Innovation Hub, Jaipur.

On dais dignitaries during the valedictory session

In his address Prof. Santanu Chaudhury, Director, CSIR-CEERI, while presiding over the function, thanked Dr. Lalit Kumar Pawar, Chief Guest and Shri. Ajay Kumar Gupta, Guest-of-honourr for their presence during the valedictory session. He also greeted the participants at this occasion and expressed his best wishes for their future endeavour. Prior to the valedictory session he also delivered a popular lecture on "Internet-of-Everything (IoE)", which was very well appreciated by the participants and was curtain raiser for them.

Director, CSIR-CEERI delivering a popular lecture	Director, CSIR-CEERI during the valedictory session.

Shri. Ajay Kumar Gupta, Managing Director M/s Kamtech Associates Pvt. Ltd. Jaipur, and guest-of-honour of the day talked about the entrepreneurship opportunities for youngsters in disruptive technologies. He also discussed about the role of Industrial Project Consultancy, Management Systems and Best Practices, International markets and surveying mechanism, Technology and investment advisory, Compliance value creation, Design support and solutions in industrial environment. He showed his happiness while interacting with the participants for this first skill development course at CSIR-CEERI's IIH Jaipur and gave his best wishes to them.

Prof. Santanu Chaudhury, Director, CSIR-CEERI along with Dr. Lalit Kumar Panwar, VC, RISU and Shri. Ajay Kumar Gupta, Managing Director, KAPL distributed certificates to the participants.

Distribution of the certificates of the first IoT course at Jaipur to the participants

In his address to the participants Dr. Lalit Kumar Panwar, VC, RISU and chief guest of the day showed his satisfaction for the successful completion of the first skill development course at CSIR-CEERI's Jaipur Centre. He was quite impressed while interacting with the participants and their feedback. He mentioned that I was in hope that there will be many things to take away from this course and youngsters will get ample opportunities to start their career with the industries where IoT is in high demand. He thanked entire CSIR-CEERI team including Prof. Santanu Chaudhury, Director, CSIR-CEERI, Dr. K. S. Raju, Head, SDP, CSIR-CEERI and Dr. Ram Prakash, Scientist-in-charge, CSIR-CEERI's Jaipur Centre for their consistent efforts to make this course on IoT happen first time in the state of Rajasthan. At the last but not least he uttered his open heart support for every Skill Development Programmes of CSIR-CEERI's at this Centre of Eminence for Skill Development. Dr. Ram Prakash Scientist-in-charge, CSIR-CEERI's Jaipur Centre coordinated the valedictory session and Dr. K. S. Raju, Head, SDP, CSIR-CEERI, Pilani delivered the vote of thanks.