## The Institution of Engineers (India)

AN ISO 9001: 2008 CERTIFIED ORGANISATION (Established 1920, Incorporated by Royal Charter 1935)

SILCHAR LOCAL CENTRE

Trunk Road, Silchar - 788 001, Assam, India

Er. G Dutta Choudhury,MIE Chairman Er. B Purkayastha,MIE Hony. Secretary



Phone:(03842)238945,8812994606 7002914942

e-mail: silcharlc@ieindia.org duttachoudhury.gdc@gmail.com biswajitpurkayastha1960@gmail.com www.ieisilchar.org

### A Century of Service to the Nation

#### **ACTIVITY REPORT**

# A BRIEF REPORT OF CELEBRATION OF 55<sup>th</sup> ENGINEER'S DAY 2022 **Theme:** "Smart Engineering for a better World".

The 55<sup>th</sup> Engineer's Day was observed at Silchar Local Centre of The Institution of Engineers (India) on 15<sup>th</sup> September 2022 to commemorate the birth day of Sir Mukshagundam Visvesvarayya as per the programme enlightened in the invitation letter. The inauguration of the ceremony was started with lighting the lamp. The meeting was presided over by Er. Gautam Dutta Choudhury, Chairman,of the Silchar Local Centre. The Chief Guest of the function was Er.Jitesh Choudhary ,Director of Centre for Development of Advance Computing commonly known as C-DAC, a Govt of India, R & D organisation and the another Guest of Honour cum Keynote Speaker was Professor Promod Kumar Patowari from Deptt. Of Mechanical Engineering, NIT ,Silchar.

Prof.Ashim Kanti Dey, from Civil Engineering deptt., NIT, Silchar also a fellow member of IE(I), Silchar Local Centre was the Guest of Honour cum Keynote Speaker on the theme, but could not be able to grace the occasion due to inevitable circumstances.

At the outset, Chairman of the Centre welcomed Er.Jitesh Choudhary a Chief guest & Professor Promod Kumar Patowari, the Guest of Honour cum keynote Speaker. Professor Ashim Kanti Dey would not be able to grace the occasion as a Guest of Honour cum Keynote Speaker due to certain inevitable circumstances.

The Chairman also welcomed corporate members of the IE(I), SLC, engineers working professionals, non-member practicing engineers, engineering students and researchers who registered their name for the programme attended the 55<sup>th</sup> Engineers' Day. The Chairman highlighted the life of Dr. Visvesvarayya who was born in 1861. About 50 numbers of people registered their name and attended the meeting. A short video presentation was shown on the life and achievements of Bharat Ratna Sir M. Visvesvarayya. In the welcome address, the Chairman of the local centre highlighted on the theme "Smart Enginering for a better World" The Chairman emphasizes that with the innovation of smartphones a few years ago, scientists and engineers have built modern society. Some brilliant engineering innovations have made modern living convenient, efficient and satisfactory.

The effective utilization of locally available waste material has certainly been of great importance in civil engineering in recent years. The various materials such as flyash, silica sand, ceramic dust, steel scraps from the lathe, and polyurethane foam etc were used as smart materials to decrease the various problems that occur during and after construction.

Smart engineering for a better world comes into the discussion for developing and strengthening the skills i.e., capacity-building instincts, abilities, processes in the road and railway connectivity, drinking water, agriculture, health, and nutrition, affordable housing, and better governance through induction of smart technology to achieve sustainable development goals. The "Smart Engineering encompasses the issue of environmental sustainability.

With the new smart technological advancements that can improve the way we live, the use of devices like drones helps to detect and reach survivors and helps to build shelters and safe water and waste disposal systems. This way, We as engineers, through smart engineering, can make the world a better place.

Er. Jitesh Choudhary ,Director C-DAC, focussed in his speech that Smart Engineering is strategies, procedures, and tools for the system-oriented, multidisciplinary creation of creative, intelligent, and networked products, manufacturing facilities, and infrastructures. These elements are usually referred to as "Industry 4.0."

The applications of Smart Engineering research begin in the product development planning stages. This is because the structure and related information models have already started, considering potential boundary circumstances.

This digital development process ultimately results in the certification and networking of production and modelling processes and automation technologies. The foundation for this is effective communication between sub-processes and manufacturing facilities, which is all about smart engineering.

Er. Jitesh Choudhary pointed out that the smart engineering is required for :-

- 1. Interdisciplinary Engineering: Cross-Pollination
- 2. Improvised Engineering: Clock, communication media
- 3. Intelligent Engineering: Sensors, Actuators, Intelligence
- 4. Sustainable Engineering: Environmental Effect
- 5. Nature Inspired Engineering: No waste or reusable products
- 7. Need of the Hour Engineering: every era has different requirements,: Ancient time: Protection tools then agri age: different requirements, Industry era: industrial manufacturing engineering today in the cyber age: smart tools required.

In the Technical session, Professor Promod Kumar Patowari Guest of Honour cum Keynote Speaker delivered the nice power point presentation on the theme. He mentioned that the the **Smart manufacturing**, which is also termed as **Industry 4.0**, is called the fourth industrial revolution. This is the realization of the digital transformation in the field of manufacturing, which enables real-time decision making, enhanced productivity, flexibility and agility. This is still in the dawn stage and there is a long a way to go for its complete realization in the industries. At present there are some transformations taking place in the manufacturing industries and the world is moving from mass production to mass customization. In this talk, an overview on **Smart manufacturing** alias **Industry 4.0** will be given. This will cover importance of manufacturing, evolution of manufacturing industries, allied technologies and philosophies, enablers and their roles to play towards the realization of of smart manufacturing.

The meeting was convened by Er. Pratip DasGupta a member of the Local committee. At the end of the programme, Er. Biswajit Purkayastha, Honorary Secretary of the SLC offered the vote of thanks to the members. The Celebration came to an end with the National Anthem

PHOTOGRAPHS OF 55<sup>TH</sup> ENGINEERS DAY'2022 AT SILCHAR LOCAL CENTRE

#### THE EVENING'S ITINERARY

6:30 pm: Registration

6:45 pm : Inauguration & Felicitation of Dignitaries

7:00 pm : Welcome Address by the Chairman

7:10 pm : Felicitation of Engineers

7:30 pm : Address by the Dignitaries

TEA BREAK

7:50 pm: TECHNICAL SESSION

Presentation on the theme "SMART ENGINEERING FOR A BETTER WORLD"

9:00 pm : Vote of Thanks 9:15 pm : National Anthem followed by DINNER

# The Institution of Engineers (India) silchar local centre: silchar

request the pleasure of your gracious presence in the celebration of

### 55th Engineers' Day 2022

to commemorate the birthday of

Bharat Ratna Sir Mokshagundam Visvesvaraya

on 15th September, 2022 (Thursday)

at Silchar Local Centre premises, Trunk Road, Silchar - 788 001.

Er. Jitesh Choudhary, Director, C-DAC, NIT Campus, Silchar has kindly consented to grace the occasion as Chief Guest.

Prof. Promod Kumar Patowari, Deptt. of Mechanical &

Prof. Ashim Kanti Dey, Deptt. of Civil Engineering, NIT, Silchar will grace the occasion as Guest of Honour cum Keynote Speaker.

Er. Gautam Dutta Choudhury, MIE Chairman Er. Biswajit Purkayastha, FIE Hony. Secretary





