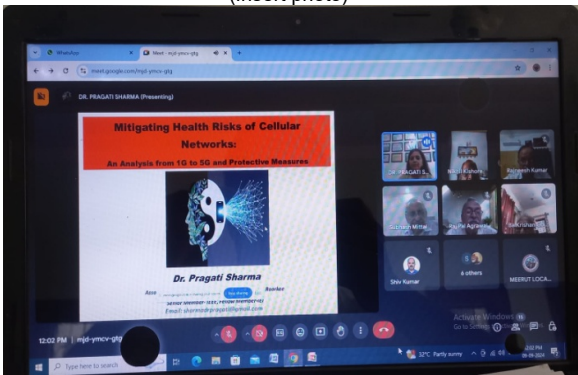



TECHNICAL ACTIVITY CARRIED OUT BY CENTRES

Name of Centre	Meerut Local Centre		
Title of Activity:	Royal Charter Day		
Activity under Divisional Board	Statutory Day		
Date:	09-09-2024	Venue:	Webinar from own place

(Insert photo)	(Insert photo)
	
Title of photo : Presentation by Dr. Pragati Sharma	Title of photo: Screenshot of the webinar

Brief Report :-

On the occasion of Royal Charter Day, a webinar was organized on Sept. 9, 2024, under the chairmanship of Er. R.P. Agrawal, Chairman of LC Meerut, The Institution of Engineers (India). The event began with a welcome address from the convener, Er. Nikhil Kishore, Joint Secretary of LC Meerut, who greeted the members and acknowledged the significance of Royal Charter Day. He provided a brief introduction, noting that The Institution of Engineers (India) (IEI) commemorates Royal Charter Day annually on 9th September to honour the day in 1935 when the institution was incorporated by Royal Charter by King George V at the court of Birmingham Palace, London. IEI remains the only professional body in India to have received this prestigious honour.

Er. Nikhil explained the significance of a Royal Charter, describing it as a formal document issued by a monarch, granting rights and powers to an organization. The Royal Charter defines an organization's objectives, constitution, and powers to manage its own affairs. He highlighted that IEI, established in 1920, is the largest multidisciplinary professional organization for engineers in India. The Royal Charter grants IEI's corporate members the right to use the title "Chartered Engineer," signifying their professional qualifications and recognition. He also mentioned that IEI is recognized as a Scientific and Industrial Research Organization by the Ministry of Science & Technology.

Following this introduction, Er. R.P. Agrawal delivered his welcome address, acknowledging all attendees. The convener, Er. Nikhil Kishore, expressed his gratitude to Er. Agrawal and then introduced Er. Rajneesh Kumar, Former Chairman, to present on the historical background and the process of obtaining the Royal Charter. Er. Rajneesh Kumar provided a comprehensive overview of the application process for the Royal Charter and shared that IEI began celebrating Royal Charter

Day five years ago. The convener thanked Er. Rajneesh for his informative presentation.

Next, Er. Nikhil invited Er. R.P. Agrawal to deliver a presentation on the Devanagari script. Er. Agrawal offered a detailed analysis of the changes in both format and vocabulary of the Devanagari script over the years. He showcased historical records and shared examples of changes dating back to 1954. He also presented a newspaper clipping showing a recent change in the script's usage during a budget session. The convener thanked Er. Agrawal for his insightful presentation on the Devanagari script.

The event then moved on to a presentation by guest speaker Dr. Pragati Sharma, Associate Professor at Phonics Group of Institutions, Roorkee. Dr. Sharma's talk focused on the topic of "Mitigating Health Risks of Cellular Networks," covering the evolution from 1G to 5G. Er. Nikhil introduced Dr. Sharma, noting her impressive qualifications, including a Ph.D. in Electronics and Communication (awarded in 2020), 22 years of teaching experience, expertise in circuit design and development, and her membership in IEI. Dr. Sharma has published 13 papers in national and international journals.

In her presentation, Dr. Sharma discussed the growing concerns surrounding radiofrequency (RF) radiation from cellular networks and its potential health risks. She explained how RF energy, emitted by mobile phones, can heat body tissues, leading to thermal effects that may cause health issues like blindness. Dr. Sharma elaborated on how RF energy is absorbed by the body, particularly at resonant frequencies, and how this can result in tissue damage. She highlighted several methods to mitigate RF radiation, including the use of microwave absorbers, metamaterials, highly directive antennas, and RF shields. She also mentioned ongoing research into using metamaterials and MIMO antennas to further reduce radiation. The convener thanked Dr. Sharma for her thorough and informative presentation and suggested that advancements in Artificial Intelligence could aid in addressing these health concerns more effectively.

Finally, Er. Nikhil Kishore invited Hony. Secretary Er. S.C. Mittal to deliver the vote of thanks. Er. Mittal expressed his gratitude to Er. Rajneesh Kumar for explaining the importance of Royal Charter Day, to Er. R.P. Agrawal for his illuminating presentation on the Devanagari script, and to Dr. Pragati Sharma for her educational talk on cellular network health risks. He also thanked the convener, Er. Nikhil Kishore, for successfully organizing and managing the webinar, and all the members for their active participation.