

VINAYAKA MISSIONS RESEARCH FOUNDATION

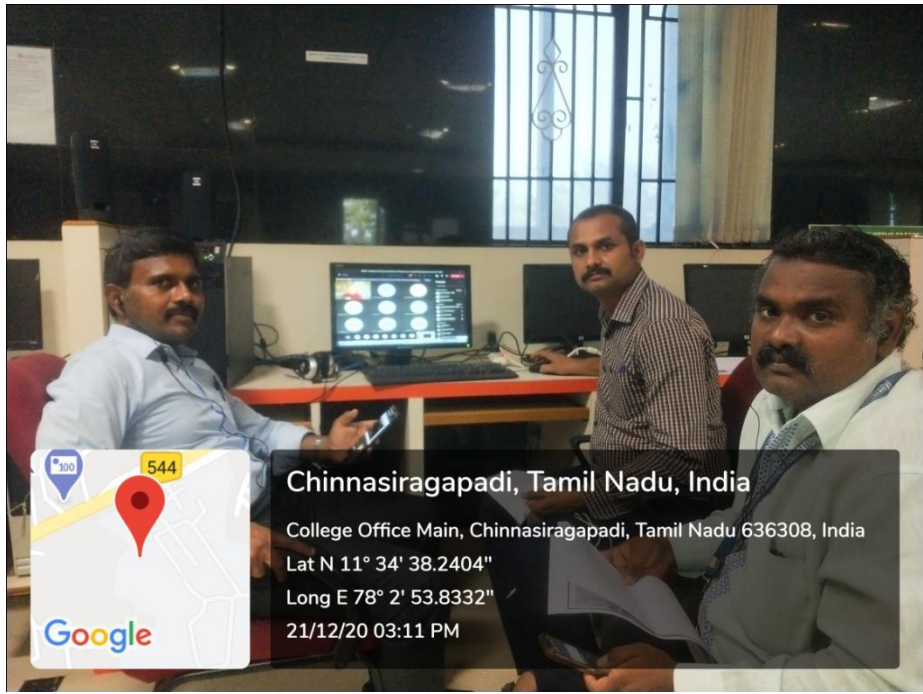
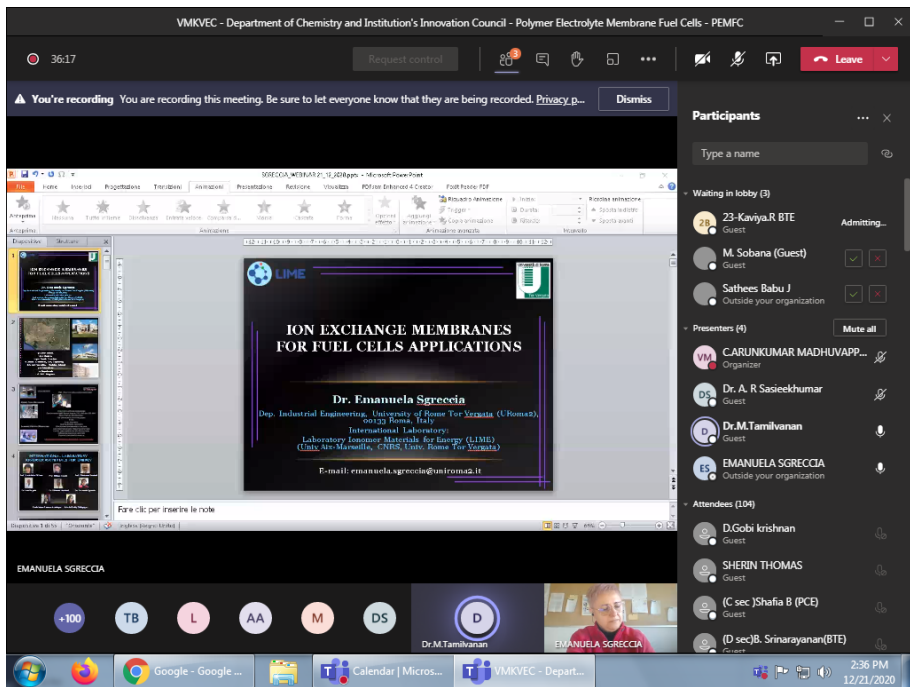
(Deemed to be University), Salem

VINAYAKA MISSION'S KIRUPANANDA VARIYAR ENGINEERING COLLEGE

PERIYASEERAGAPADI, SALEM –636308

Department Of Chemistry, Centre for Research and Development & IIC REPORT

An International webinar on “Polymer Electrolyte Membrane Fuel Cells” was jointly organized by Department of Chemistry, Centre for Research and Development and Institutions Innovation Council, Vinayaka Missions Kirupananda Variyar Engineering College, Salem on 21.12.2020 at 2.30 pm. Prof. A. Gilbert Sunderraj, course Coordinator- Chemistry has delivered the welcome address. Dr. A. Nagappan, Principal, Vinayaka Mission’s Kirupananda Variyar Engineering College, Salem delivered the presidential address. Prof. P.K.Kumerasan, Vice Principal felicitated the event. The webinar convener Dr. M. Tamilvanan, Assistant Professor of chemistry gave a short introduction about the resource person Dr. Emanuela Sgreccia, International Associated Laboratory “Ionomer Materials for Energy” Dept. Industrial Engineering, University of Rome Tor Vergata, Rome, Italy. In her presentation, Dr. Emanuela Sgreccia discussed about ion exchange membranes for fuel cells applications. It included about the synthesis of polymer composite membranes with SPEEK, hydrophilic and hydrophobic TiO_2 . The water uptake measurements, annealing and its fuel cell efficiency were well explained. Dr. Emanuela Sgreccia concluded that the modern energy storage and conversion technologies can be part of the solution. After the lecture, there was a group discussion with the participants. Finally, co-convener Dr. A.R.Sasieekhumar, Assistant Professor of chemistry concluded the session with the vote of thanks. About 220 participants including HoDs, faculty members, students and participants from various institutions participated in the programme.



15:05



Microsoft PowerPoint window titled "SGRECCIA_WEBINAR_21_17_2020.pptx". The slide content is as follows:

WATER UPTAKE

$$\lambda = \frac{(W_{wet} - W_{dry})}{18 \times W_{dry}} \times 1000$$

- S untreated, dry
- P untreated, immersion 4h at 25°C
- E treated, dry
- K treated, immersion 4h at 25°C
- K treated, immersion 4h at 145°C

Swelling in liquid water of S-PBKK (DS = 0.9) membranes untreated and treated at 160 °C for 64h.

Swelling in liquid water of S-PEEK (DS = 0.9) membranes untreated and treated at 160 °C for 64h.

Fare clic per inserire le note



EMANUELA SGRECCIA

