



**MADANAPALLE INSTITUTE OF TECHNOLOGY & SCIENCE
(UCG-AUTONOMOUS)**



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Recognised as Scientific & Industrial Research Organization by DSIR of DST
Department of Electronics & Communication Engineering

Report on
International Seminar on
Electronic and Transport Properties of
Two-dimensional Transition Metal Carbides and Carbonitrides (MXenes)
24.03.2021



No. of Participants – 80

The resource person was: **Mr. Kanit Hantanasirisakul** is presently a Ph.D candidate under the supervision of Prof. Yury Gogotsi (MXene Founder) at Department of Materials Science and Engineering Drexel University, Philadelphia, USA. His research focus on “Electronic and magnetic properties of 2D transition metal carbides and nitrides (MXenes)”. He has completed his master degree from Department of Materials Science and Engineering, Drexel University, Philadelphia, USA. Apart from this, He has completed Bachelor degree from Mahidol University, Bangkok, Thailand. He has published more than 35 research articles in various esteemed journal including Science, Nat. Commun., Nanoscale Horiz., Chem. Mater., Nat. Commun., Adv. Mater., Adv. Electron. Mater., and etc. Additionally, He had filed two US patents, out of which one is published. His research interest is in various fields including Electronic and magnetic properties of 2D materials, Materials for energy storage devices, i.e., Li-ion and other types of battery, supercapacitors, Photo- and electrocatalysts for fuel production.

The department of Electronics and Communication Engineering, MITS, Madanapalle organized an International webinar on “**Electronic and Transport Properties of Two-dimensional Transition Metal Carbides and Carbonitrides (MXenes)**”. This webinar on 24/03/2021 from 7:30 pm to 9:00 pm.

In this webinar **Mr. Kanit Hantanasirisakul** was enlighten with the fundamentals of development of MXenes nanomaterials using different synthesis approach. He explored very interesting properties including structural, crystalline and electrical of MXenes. This material is novel and very useful for electronics device application such as supercapacitor, solar cell, battery and etc.