



**ONLINE ONE DAY WORKSHOP FOR FACULTY DEVELOPMENT PROGRAM ON  
“Atomically Thin metal membrane: A computational study”  
(5<sup>th</sup> March, 2022)**



**Organized by**

**Department of Chemistry, NIT Warangal  
(Sponsored by Science and Engineering Research Board,  
Department of Science and Technology, Government of India)**



**Co-ordinator**

**Dr. Ravinder Pawar  
Assistant Professor  
Department of Chemistry**

**Overview of the Workshop:**

This Faculty Development Workshop is aimed to impart importance of low-dimensional (1D and 2D) materials and the role of Quantum chemistry and computational methodologies to understand their structure, stabilities and properties (particularly metals in their 2D forms). This workshop would certainly provide better opportunity to the faculty and researchers to introduce new topics related to 2D metals in their curriculum.

Further, this workshop also provides hands-on experience on free computational chemistry software for 2D material designing (specifically metal) and to gain insight into their stability, properties and applications.

**Major Course Contents:**

- The basic free software will be introduced to enable participants for modelling the 2D materials (particularly metals)
- Provide fundamentals on the free quantum chemistry software for calculation and data analysis to probe the structure, stability, properties and applications of these materials
- To empower the participants to transfer their learning experiences into their classroom-teaching practices for designing small-scale projects on materials

**Eligibility:**

The program is open to all NBA and AICTE approved Engineering/Polytechnic college teachers, all University faculty members, Degree college lecturers, and research scholars

**Resource Persons**

- Faculty Members of the Chemistry Dept., NITW

**Registration Fee Particulars:** NIL

**How to apply:**

Eligible candidates should apply through the following Google form <https://forms.gle/4hVvTJbC27joUPnE6>. The candidates must complete the filling of application through the google form latest by 03.03.2022

**Selection Criteria:**

Selection will be done based on first-come-first-serve basis to a maximum number of **25 No's**. The list of selected participants will be intimated through e-mail. Candidates will be issued participation certificates on successful completion of the workshop.

**Important dates:**

<b>Last date (Application)</b>	<b>03/03/2022</b>
<b>Selection List by E- mail</b>	<b>04/03/2022</b>
<b>Duration</b>	<b>5<sup>th</sup> March, 2022</b>

**About Chemistry Department at NITW:**

The Department of Chemistry was established in the Year, 1959, as an integral part of the Regional Engineering College Warangal (RECW). Since its inception, the department is greeted as one of the most academically active departments in the Institute. Department offers chemistry course to all engineering branches and two years M.Sc. Chemistry with specialization in Organic and Analytical Chemistry. The department has been conducting cutting-edge research in contemporary topics of Organic, Inorganic, Physical and Analytical Chemistry. In the department, various state-of-the-art facilities such as 400 MHz NMR, HRMS, gas chromatography, HPLC, FTIR, UV-vis-NIR fluorescence, electrochemical workstation, computational chemistry software.