

## Seminar

**Date: Fri. 29<sup>th</sup> Dec. / Time: 10 am – 12 am / Place: Room 408F, Building T1**

**334 Nguyễn Trãi, Thanh Xuân, Hà Nội**

*Kính mời thầy cô và các bạn quan tâm đến dự / Everyone is welcome !*

**Speaker: Pham Nam Thang, PhD student, Researcher (Institute of Materials Science, Vietnam Academy of Science and Technology)**

**Title: GRAPHENE QUANTUM DOTS AND PLASMON EFFECT ON OPAL STRUCTURE SILVER FILM**

**Abstract:** Graphene quantum dots were prepared and their characteristics identified by Raman spectra and HR-TEM. In addition, the absorption and photoluminescence were studied for their optical properties. The Raman scattering effects were studied for graphene quantum dots (GQDs) coupling with the corrugated structure silver films. The corrugated silver films were prepared by evaporating metallic Ag on opal crystal substrates. The opal crystal substrates were fabricated from SiO<sub>2</sub> spheres. The intensity enhancement of photoluminescence and Raman spectral bands of the GQDs on the corrugated Ag films was observed and explained. Study of Raman spectra showed the surface-enhanced Raman scattering effect.