

Learning Through Projects (II): Remote lab through home projects

Project Number: 6000758

Principal Investigator: Dr. LY Thuc HUE

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Abstract:

The new subject "BCH3082, Graphene: Fundamentals and Emergent Applications", launched in 2018/2019, has been highly welcome by the students. This project is to develop the "remote lab" component for this subject. The students will learn to do the "home experiments" using the home utensils on various topics of graphene and two-dimensional (2D) materials. Meanwhile, the students will get the comprehensive video introductions and database of the most up-to-date scientific instrument & labs related to 2D materials, and learn the analysis tools and methods for graphene and two-dimensional materials. The students will be instructed by the subject leader and teaching assistants on the analysis methods using several scientific softwares. A series of projects will be organized remotely, based on guided scientific literature reading, remote experiments or home experiments, data analysis, presentations and reports. The students in class and who are interested in these topics will be accessible to the current research frontiers widely in physics, chemistry, materials science and engineering fields. This will cultivate the scientific insights, critical thinking and deep interests in science and research for the students.