

# MAZLIANA AHMAD KAMARUDIN Ph.D. (University of Lancaster)

Senior Lecturer (Dr.)
Department of Physics
Universiti Putra Malaysia
Tel:03-89466649
Fax:03-89454454
mazliana\_ak@upm.edu.my

#### **EXPERTISE**

QUANTUM DOTS, SEMICONDUCTOR NANOMATERIALS



Dr. Mazliana Ahmad Kamarudin, currently work as a Senior Lecturer at Department of Physics, Universiti Putra Malaysia. She received her PhD in Physics from Lancaster University, United Kingdom in in 2010. During her PhD she works on growths of GaSb/GaAs quantum dots (QDs) by molecular beam epitaxy (MBE) and low-temperature photoluminescence (PL) in magnetic field (magneto-PL). In 2014, she did her postdoc at Nottingham University, UK where she worked on synthesized PbS colloidal nanoparticles. Her research fields are mainly in physics and nanoscience.

### **Current Research Interest:**

#### Nanoscience

Dr. Mazliana research interest areas involve fundamental theory and synthesis of semiconductor nanostructures in different materials systems (II-VI, IV-VI and III-V) and application of nanostructures. She studies the structural and optical/electrical properties of quantum dots. Her current research is focus on aqueous synthesis and application of core shell quantum dots in bio-imaging, cancer detector and water treatment. Characterization using PL, UV-Vis, HRTEM, FTIR and ESR.

## LINK TO POSTGRADUATE FIELD OF STUDY:

Nanoscience, Material Science, Physics

## ADDITIONAL INFORMATION:

http://profile.upm.edu.my/mazliana\_ak