



**Prof. Dr. Norsarahaida Saidina Amin**

**Mathematical Modelling of Physiological Fluid Flows**

*Abstract*

This workshop is intended for graduate students and researchers working in any areas of mathematics including pure mathematics notably researchers in mathematical and numerical analysis to be exposed and to gain experience in applied mathematics research which primarily involves mathematical modelling. Its content covers fundamental techniques on problem formulation particularly the derivation of governing equations to suit certain boundary and initial conditions. Examples are drawn from areas including blood flow in an artery, airflow in a trachea and flows at branched and diseased arteries under the influence of gravity and magnetic forces. Participants will also have an added advantage of a hands-on skill to tackle such problems via both analytical and numerical techniques.