

**SIDEK HJ. AB. AZIZ**  
**Ph.D. (University of Bath)**

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**EXPERTISE**MATERIALS SCIENCE/ULTRASONICS

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Professor Dr Sidek received his Doctorate in 1989, from University of Bath, United Kingdom. He then instinctively equipped his laboratory with basic ultrasonic research facilities to study and continue his research on the ultrasonic properties of natural latex, palm oils, as well as various species of tropical wood and concrete filled with natural rubber. Sidek and his team initiated to synthesize some borate, phosphate and tellurite glasses for ultrasonic, thermal, optical and electrical characterization. The Glass and Ultrasonic Research Laboratory at UPM that started off with very basic facilities picked up its momentum and is now amongst a very active laboratory in this region specializing in glass research. In the last 30 years, his research group has been successful in securing more than RM 2.5 million research grants.

**CURRENT RESEARCH INTERESTS:**

Currently, his research activities are mainly emphasized on physical studies of advanced materials, specifically with borate, phosphate and tellurite based glasses doped with various oxide substances. Diverse experimental techniques such as ultrasonic, thermal, electrical and dielectric have been carried out to characterize those amorphous materials.

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**LINK TO POSTGRADUATE FIELD OF STUDY:****• Ultrasonic techniques**

His expertise mainly focuses on Solid State Physics as well as low temperature and high pressure ultrasonic techniques for any type of bulk materials including glass and glass-ceramics.

**• Materials Characterization**

Research interests of Prof Sidek also include the Science and Design of Advanced Materials, and Multi-scale Microstructural Characterization using techniques such as Transmission Electron Microscopy and 3D Atom Probe Field Ion Microscopy, as applied to the study of electronic materials and solid-state phase transformation.

**ADDITIONAL INFORMATION:**