

THAHIRA BEGUM**Ph.D. (Universiti Putra Malaysia)**

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**EXPERTISE**

Inorganic Synthesis, Biological Studies

Dr Thahira completed her Masters and PhD in Synthesis in 2005 and 2008, at Universiti Putra Malaysia. She joined UPM as a Senior Lecturer in 2010. Dr Thahira Begum's major research areas involve the synthesis, characterization, biological studies and single crystal X-ray diffraction analysis of nitrogen sulphur ligands, and their transition metal complexes. The focus of her work includes structural studies of novel nitrogen sulphur Schiff bases and their specificity and selectivity in biological reactions when a small functional group on the Schiff bases are altered or replaced with other functional groups. She has authored and co-authored more than 20 technical papers. Major sponsors of her research include the Fundamental Research Grant Scheme (FRGS), Research University Grant Scheme (RUGS) and the ScienceFund. Dr Thahira is a Fellow of the Royal Society of Chemistry UK since 2016 and an affiliate member of the Young Scientists' Network of the Academy of Sciences, Malaysia. Since 2013

CURRENT RESEARCH INTERESTS:**Synthesis and Biological Activities**

Main research interests include the synthesis of Schiff bases, and complexation together with biologically relevant molecules such as saccharin and imidazole, and their reactions with first-row transition metals. The potential bioactivities against an array of microbes, and cancer cell lines, specifically breast cancer cell lines (both estrogen receptor positive and negative cells) and bladder cancer cell lines are also investigated. The characterization of these complexes via physico-chemical and spectroscopic analysis as well as thermal analysis is of interest.

Structural Studies

Structural studies of these Schiff bases and their transition metal complexes are carried out by single-crystal X-ray diffraction analysis and the data obtained is currently being utilized in some computational studies involving molecular docking and QSAR. Thus far, we have obtained promising data on the bioactivities of these complexes and initial analyses indicate that small changes in the backbone of the structure of the complexes were able to either enhance or reduce the bioactivity of the metal complexes especially against the cancer cells tested.

LINK TO POSTGRADUATE FIELD OF STUDY:

-Inorganic Synthesis, Medicinal Chemistry

ADDITIONAL INFORMATION:https://scholar.google.com/scholar?hl=en&q=Thahira+bsa+ravoof&btnG=&as_sdt=1%2C5&as_sdtp=