

MOHAMMAD NORAZMI BIN AHMAD



- KULLIYAH OF SCIENCE
- IIUM Kuantan Campus
- Email address:
mnorazmi@iium.edu.my

ACADEMIC QUALIFICATION

- Doctor of Philosophy (Chemistry)
- Master of Science (Chemistry)

TEACHING RESPONSIBILITIES

ADVANCE ANALYTICAL METHODS FOR HALAL HARAM PRODUCTS	2016/2017 2017/2018 2018/2019
COMPUTER IN SCIENCE	2019/2020
ENVIRONMENTAL CHEMISTRY	2019/2020
FOOD CHEMISTRY & BIOTECHNOLOGY	2015/2016 2016/2017 2017/2018 2018/2019 2019/2020
GOOD LABORATORY PRACTICE	2019/2020 2020/2021
HALAL AND HARAM IN FOOD INGREDIENTS AND PROCESSING	2015/2016 2016/2017 2017/2018
HALAL FOODS AND RELATED PRODUCTS	2016/2017 2017/2018 2018/2019 2019/2020 2020/2021
INDUSTRIAL CATALYSIS	2015/2016 2019/2020
INORGANIC CHEMISTRY I	2020/2021
INSTRUMENTATION AND TECHNIQUES IN PLANT SCIENCES II	2016/2017 2017/2018 2018/2019
POLYMER CHEMISTRY	2016/2017 2017/2018
PRINCIPLES OF BIOCHEMISTRY	2015/2016 2016/2017 2017/2018 2018/2019 2019/2020

RESEARCH PROJECTS

In Progress

**2019 -
Present**

Analysis of Blackwater Treatment of the Green Toilet System in Auto-City, Penang

- 2019 - Present** Chemosensor Development for Metal Ions Recognition in Lake and River Water Samples
- 2019 - Present** Optimizing and Mechanistic Interaction Studies of a Fluorescent Chemosensor for Metal-Ion Recognition in Aqueous Media and Living Cells using Linked Thiosemicarbazone?PAHs: Experimental and Theoretical Approaches
- 2016 - Present** Synthesis, Characterization and Reaction Mechanism Study of a Novel HIV Protease Inhibitor from a Sugar-based Thiosemicarbazone Series using Density Functional Theory
- 2015 - Present** Supercritical Fluids Extraction Method Development for Extraction of a New Potential Halal Protease from Anacardium occidentale Fruit

Completed

- 2016 - 2020** Synthesis, Characterization and Reaction Mechanism Study of a Novel HIV Protease Inhibitor from a Sugar-based Thiosemicarbazone Series using Density Functional Theory
- 2015 - 2019** Supercritical Fluids Extraction Method Development for Extraction of a New Potential Halal Protease from Anacardium occidentale Fruit
- 2015 - 2019** Density Functional Theory Studies on Synthesis, Characterization and Antibacterial Activity of Heteroaromatic Substitution on 4N-Sulfonamide Thiosemicarbazones

PUBLICATIONS

Article

- 2020** [Artocarpus altilis extracts as a foodborne pathogen and oxidation inhibitors: RSM, COSMO RS, and molecular docking approaches.](#) Scientific Reports , 10 pp.1-14
- 2020** [Inhibitory effects of Manihot esculenta extracts on food-borne pathogens and their antioxidant properties: supercritical fluid extraction, statistical analysis, and molecular docking study.](#) Journal of Food Process Engineering , e13452
- 2020** [The applicability of using a protease extracted from cashew fruits \(Anacardium occidentale\), as possible meat tenderizer: an experimental design approach.](#) Journal of Texture Studies
- 2020** [Silver\(I\) dicyanonitrosomethanide, Ag\[ONC\(CN\)2\] complex as catalyst for the selective oxidation of styrene to benzaldehyde.](#) Science Letters , 14 (2) pp.74-87
- 2020** [Synthesis of thiosemicarbazone-based colorimetric chemosensor for Cu²⁺ ions' recognition in aqueous medium: Experimental and theoretical studies.](#) Journal Of Molecular Structure , 1212 pp.1-10
- 2020** [Optimization of a protease extraction using a statistical approach for the production of an alternative meat tenderizer from Manihot esculenta roots.](#) Journal of Food Science and Technology , 57
- 2020** [Friedel-Crafts benzylation of toluene catalyzed by ZnCl₂/SiO₂ heterogeneous catalyst to para- and ortho-monobenzylated toluene.](#) Journal of The Iranian Chemical Society

- 2020** [Mechanical and thermal properties of binary blends poly lactic acid \(PLA\) and recycled high-density polyethylene \(rHDPE\).](#) IOP Conference Series: Materials Science and Engineering , 736 (5) pp.1-4
- 2020** [Mechanical and thermal properties of polyurethane/ neoprene/graphene blends.](#) IOP Conference Series: Materials Science and Engineering , 736 (5) pp.1-10
- 2020** [DFT/TD-DFT study on development and optimization of 1- anilino-3-phenyliminourea as a colorimetric chemosensor for Hg²⁺ recognition in aqueous medium.](#) Journal of Molecular Structure , 1206 pp.1-7
- 2019** [Chemosensor development of Cu²⁺ recognition using 1,5-diphenylthiocarbazone: optimization, COSMO-RS and DFT studies.](#) Journal of The Brazilian Chemical Society , 30 (9) pp.1850-1859
- 2019** [COSMO-RS and DFT studies on development and optimization of quercetin as a chemosensor for Fe³⁺ recognition in aqueous medium.](#) Journal Of Molecular Structure , 1184 pp.538-545
- 2019** [Influence of Mg/CTAB ratio on the structural, physicochemical properties and catalytic activity of amorphous mesoporous magnesium silicate catalysts.](#) RSC Advances , 9 pp.38760-38771
- 2019** [Optimization of a protease extraction using a statistical approach for the production of an alternative meat tenderizer from Spondias cytherea roots.](#) Journal of Food Processing and Preservation , 43 (11) pp.1-14
- 2019** [The effect of vanillin on the oxidative stability of palm olein.](#) Malaysian Journal Of Analytical Sciences , 23 (5) pp.861-869
- 2019** [Adsorption study on the removal of copper ions from aqueous solution using sodium hydroxide-modified Carica papaya peels.](#) Malaysian Journal of Analytical Sciences , 23 (6) pp.926-937
- 2019** [Preparation and characterization of Poly \(lactic acid\) \(PLA\)/Polyamide 6 \(PA6\)/ Graphene Nanoplatelet \(GNP\) blends bio-based nanocomposites.](#) Materials Research Express , 6 (5) pp.1-8
- 2018** [Synthesis, characterization and preliminary study on acetylpyrazine N\(4\)butylthiosemicarbazone as a potential CDK2 inhibitor combined with DFT calculations.](#) Journal of Brazilian Chemical Society , 29 (10) pp.2197-2206
- 2013** [Protease of the horse mango \(Mangifera foetida Lour\) Kernel: Optimum Conditions for Extraction.](#) Protease of the Horse Mango (Mangifera foetida Lour) Kernel: Optimum Conditions for Extraction , 15 (1) pp.20-26
- 2012** [Optimization by a response surface methodology optimization of protease extraction from horse mango \(Mangifera foetida Lour\) kernels by a response surface methodology .](#) Bioscience, Biotechnology, and Biochemistry , 76 (8) pp.1438-1444

Conference or Workshop Item

- 2019** [2-acetylthiophene thiosemicarbazone as mushroom tyrosinase inhibitor: insights from kinetic, RDG, molecular docking, and DFT studies. In: International Conference in Organic Synthesis 2019 \(ICOS2019\)](#)

- 2019 [Preliminary study in discovering 2-geranylphenol from Lansium domesticum leaves as oxidation and tyrosinase inhibitor for anti-aging and skin whitening agents: experimental and theoretical study.](#) In: **The 32nd Symposium of Malaysia Analytical Sciences : Simposium Kimia Analisis Malaysia (SKAM 32)**
- 2019 [Salasa adulis as a novel dual-functional food additive for antimicrobial and antioxidant properties: experimental and theoretical approach.](#) In: **The 32nd Symposium of Malaysia Analytical Sciences : Simposium Kimia Analisis Malaysia (SKAM 32)**
- 2019 [Preliminary study in discovering 2-propen-1-one, 1-\(2,4-dihydroxyphenyl\)-3-\(4-methoxyphenyl\)- from syzygium aqueum leaves as a tyrosinase inhibitor in food product: experimental and theoretical approach.](#) In: **International Conference on Clean Water, Air and Soil (CLEANWAS 2019)**
- 2019 [Chemosensor development for cobalt ion recognition using 2-acetylpyrazine thiosemicarbazone: experimental and theoretical approach.](#) In: **32nd International Conference of Analytical Sciences (SKAM32)**
- 2019 [Preliminary study on developing 1,5-Diphenylcarbozone as a chemosensor againts Hg²⁺ ions recognition in aqueous media.](#) In: **International Conference on Clean Water, Air and Soil (CLEANWAS 2019)**
- 2019 [Thermal stability of melt-blended poly \(lactic acid\) \(PLA\)/polyamide 66 \(PA66\)/graphene nanoplatelets \(GnP\).](#) In: **1st Process Systems Engineering & Safety (ProSES) Symposium 2019**
- 2018 [Discovery and development of halal protease from Spondias cytherea for meat tenderization.](#) In: **International Conference of Analytical Sciences (SKAM31)**
- 2018 [Chemosensor development of cu²⁺ recognition using 1,5-diphenylcarbazone: optimization, cosmo-RS and DFT studies.](#) In: **International Conference of Analytical Sciences (SKAM31)**
- 2018 [Chemosensor development using 2-acetylpyrrole thiosemicarbazone for cu²⁺ ion recognition in aqueous medium: experimental and theoretical studies.](#) In: **International Conference of Analytical Sciences (SKAM31)**
- 2018 [Synthesis, characterization, reaction mechanism and theoretical study of antimicrobial inhibitor from heteroaromatics based thiosemicarbazone.](#) In: **International Conference of Analytical Sciences (SKAM31)**
- 2018 [Statistical analysis and molecular docking study on halal potential antioxidant from anacardium occidentale fruits.](#) In: **International Conference of Analytical Sciences (SKAM31)**
- 2017 [Adsorption study on the removal of cu ions from aqueous solution using NAOH-modified Carica papaya peels.](#) In: **International Conference of Analytical Sciences (SKAM30)**
- 2017 [Extraction of protease from Anacardium occidentale \(Cashew\) fruit using response surface methodology.](#) In: **6th International Conference on Advancement in Science and Technology (iCAST 2017)**

Book

- 2014 [Protease extraction from Horse mango \(Mangifera foetida lour\) kernels.](#) LAP Lambert Academic Publishing . ISBN 978-659-58540-1

Book Section

2019 [Optimization of research and manufacturing processes in product and service.](#) In: **Industrial Revolution 4.0 : a future outlook** Universiti Malaysia Pahang . ISBN 9789672226505 , pp.128-141