

ChM. Norhazlin Zainuddin, PhD

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» Education

Imperial College London, United Kingdom

Doctor of Philosophy, Biomaterials/Materials Chemistry, 2009

Universiti Putra Malaysia, Malaysia

Master of Science, Polymer Chemistry, 2003

Universiti Putra Malaysia, Malaysia

BSc (Hons)- Industrial Chemistry, 1999

» Work Experience

Universiti Putra Malaysia, Malaysia

Senior Lecturer, 2009-present

Universiti Putra Malaysia, Malaysia

Tutor, 2002-2009

Malaysian Nuclear Agency, Malaysia

Research Officer, 2002

» Awards

- Excellent Service Award, 2014 and 2018
- Excellent Service Certificate, 2013, 2015, 2017, 2019
- National Science Fellowship, Malaysia, 2000-2002
- Outstanding Teaching Certificate, Faculty of Science, 2012-2018
- *Insentif Makalah Jurnal UPM* 2016 and 2020
- Best Student Award for Chemistry Department, 1999

» Research Projects

- Structural and setting reaction studies of dental materials from soda lime silica waste glass and ark clam shell by Solid State NMR Spectroscopy
- Removal of heavy metal from aqueous solutions by starch-based polymer
- Formulation and Evaluation of Newcastle Disease Virus (NDV) Vaccine Encapsulated with Biodegradable Carriers For Effective Mass Vaccination Approach in Chicken

» Supervision

- Supervise 2 PhD student (ongoing)
- Supervise 8 MSc students (1 ongoing, 7 graduated)
- Co-supervise 8 PhD student (4 ongoing, 4 graduated)
- Co-supervise 20 MSc students (6 ongoing, 14 graduated)
- Supervise 38 undergraduate students (3 ongoing, 35 graduated)

» Selected Publications

Journal

1. Amyrah Auni Keirudin, Norhazlin Zainuddin and Nor Azah Yusof. **Crosslinked Carboxymethyl Sago Starch/Citric Acid Hydrogel for Sorption of Pb²⁺, Cu²⁺, Ni²⁺ and Zn²⁺ from Aqueous Solution**. Polymers, 2020, 12(November), p2465. (Impact factor:3.426)
2. Nur'Izzah Md Nasir, Emilia Abdulmalek and Norhazlin Zainuddin. **Preparation and Optimization of Water-Soluble Cationic Sago Starch with a High Degree of Substitution Using Response Surface Methodology**. Polymers, 2020, 12(November), p2614. (Impact factor:3.426)
3. Normastura Sulta, Norhazlin Zainuddin, Mansor Ahmad and Mas Jaffri Masarudin. **Preparation, Characterization and Swelling Studies of Carboxymethyl Sago Starch Hydrogel**. Malaysian Journal of Analytical Sciences, 2020, 24 (2), p247-257.
4. Nur Fitrah Che Nan, Norhazlin Zainuddin and Mansor Ahmad. **Preparation and Swelling Study of CMC Hydrogel as Potential Superabsorbent**. Pertanika Journal of Science and Technology, 2019, 27 (1), p489 – 498.
5. Nur Fattima'Al-Zahara'Tuan Mohamood, Norhazlin Zainuddin, Mansor Ahmad@Ayob and Sheau Wei Tan. **Preparation, optimization and swelling study of carboxymethyl sago starch (CMSS)-acid hydrogel**. Chemistry Central Journal, 2018, Volume 12:133, p1-20. (Impact factor:3.066)
6. Sri Norleha Basri, Norhazlin Zainuddin, Kamaruddin Hashim, Nor Azah Yusof. **Preparation and characterization of irradiated carboxymethyl sago starch-acid hydrogel and its application as metal scavenger in aqueous solution**. Carbohydrate Polymers, 2016, Volume 138, p34–40. (Impact factor: 4.689)
7. Nur'Izzah Md Nasir, Norhazlin Zainuddin, Wan Md Zin Wan Yunus, and Khamirul Amin Matori. **The Influence Of Modified Sodium Montmorillonite As Filler On The Performance Of Glass Polyalkenoate Cement**. Malaysian Journal of Analytical Sciences, Volume 18, No. 3, 2014, page 572-583. (Impact factor: 0.035)
8. V. W. Francis Thoo, N. Zainuddin, K. A. Matori, and S. A. Abdullah. **Studies on the Potential of Waste Soda Lime Silica Glass in Glass Ionomer Cement Production**. Advances in Materials Science and Engineering, Volume 2013 (2013), Article ID 395012, 6 pages. (Impact factor: 0.897)
9. Norhazlin Zainuddin, Natalia Karpukhina, Robert G. Hill and Robert V. Law, **A long-term**

study on the setting reaction of glass ionomer cements by ^{27}Al MAS-NMR spectroscopy. Dental Materials, 25(2009), p290-295. (Impact factor: 3.1)

10. Ahmad, M. B., Hashim, K., Mohd Yazid, N., and Zainuddin, N. **Preparation and Characterization of Hydrogels from Grafting of Vinyl Pyrrolidone onto Carboxymethyl Cellulose.** Pertanika J. Sci. & Technol. 2012, 20 (2): p425 – 433.

11. Norhazlin Zainuddin, Natalia Karpukhina, Robert V. Law, Robert G. Hill. **Characterisation of a remineralising Glass Carbomer® ionomer cement by MAS-NMR Spectroscopy.** Dental Materials, 2012, Volume 28, Issue 10, p1051–1058. (Impact factor: 3.1)

Chapter in Book

1. Norhazlin Zainuddin, Haslina Ahmad, Thahira Begum, Norizah Abd Rahman, Siti Mariam Mohd Nor. **Modular Chemistry Courses in Modular Approach to Science and Mathematics Courses.** 2015. UPM Press

Patent

1. Nur Kartinee Kassim, Norfadzliyah Yusof and Norhazlin Zainuddin. **Therapeutic Thermal Regulation Device and Method to Manufacture Thereof.** 2018. PI2018701432. Patent pending