

RESEARCH INTERESTS

Pharmaceutics and Pharmaceutical Technology
Pharmaceutical Formulation
Polymers
Hydrogels and Microgels
Microparticles
Supercritical Fluids
Controlled Drug Delivery
Targeted Drug Delivery

PROFESSIONAL QUALIFICATIONS

MSc in Pharmacy\Pharmaceutical Technology from Jordan University of Science and Technology (2013)

BSc in Pharmacy from Philadelphia University/Jordan (2010)

RESEARCH SUMMARY

Mohammad Bayan began his PhD studies in the area of pharmaceutical technology and drug delivery in October 2014 under his supervisor, Professor Colin McCoy and secondary supervisor, Professor Gavin Andrews. Mohammad's research involves the development of smart microgels for controlled and targeted drug release purposes using Microfluidic Technologies. His work involves organic synthesis, synthesis and characterisation of polymeric materials and performing drug release studies. Before joining QUB, Mohammad worked as a part time lecturer in Faculty of Pharmacy at Philadelphia University/Jordan (June 2014 – August 2014) and in school of Pharmacy at Jordan University of Science and Technology (September 2013 – June 2014).

PUBLICATIONS

- [1] Obaidat RM, Tashtoush BM, Bayan MF, Al Bustami RT, Alnaief M. Drying Using Supercritical Fluid Technology as a Potential Method for Preparation of Chitosan Aerogel Microparticles. *AAPS PharmSciTech* 2015:1-10.
- [2] Preparation of pH-Responsive Microgels Using Microfluidic Technology, Colin P. McCoy, Mohammad F. Bayan, Md. Taifur Rahman, Gavin P. Andrews, Proceedings of the 6th APS International PharmSci, 7-9 September, 2015, East Midlands Conference Centre, Nottingham.
- [3] Preparation of Monodisperse Smart Microgels Using Microfluidic Technology, Colin P. McCoy, Mohammad F. Bayan, Md. Taifur Rahman, Gavin P. Andrews, Oral presentation at the 38th All Ireland Schools of Pharmacy Research Conference, 21-22 March, 2016, Royal College of Surgeons in Ireland, Dublin.
- [4] *In Vitro* Release of Na-Fluorescein from pH Responsive Microgels, Colin P. McCoy, Mohammad F. Bayan, Md. Taifur Rahman, Gavin P. Andrews, Proceedings of the 10th World Meeting on Pharmaceutics, Biopharmaceutics and Pharmaceutical Technology, 4-7 April, 2016, Scottish Exhibition and Conference Centre, Glasgow.