

## **Dr. AHMED ALAGHA MSc (Jordan), PhD (NUI/RCSI)**

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Citizenship: Palestinian, Irish

### **Education**

**2009** PhD in Pharmaceutical and Medicinal Chemistry, Royal College of Surgeons in Ireland (RCSI), Ireland.  
Research topic: Synthesis of new carboxylate and hydroxamate inhibitors of the enzyme prostaglandin-H-synthase (PGHS) and the synthesis and structures of novel metal hydroxamate complexes.

**2005** MSc in Pharmaceutical Science, University of Jordan, Jordan  
Taught Masters with 6 months research project, University of Jordan, Jordan, 75% (I) overall Mark achieved.

Research Project: Investigation of Diclofenac –Bismuth complex as an oral suspension preparation

**2002** Diploma in Sales and Marketing, American University in Cairo (AUC)

**2001** BSc in Pharmacy, Alazhar University, Palestine

### **Career to date**

**Oct 2016–May 2019** Lecturing to students of pharmacy and medicine in the School of Pharmacy and Department of Pharmaceutical and Medicinal Chemistry, Royal College of Surgeons in Ireland (RCSI)

**Oct 2013-June 2016,** WESTMORE COMPANY ( Pharmaceutical Company) , SALES DIRECTOR , IL, USA

**Oct2009- August 2013** Post-doctoral Fellowship, Department of Pharmaceutical and Medicinal Chemistry, RCSI. Supervisor: Prof Kevin B Nolan

**Oct 2005- Oct 2009** Senior Demonstrator to students of pharmacy and medicine, Department of Pharmaceutical and Medicinal Chemistry and School of Pharmacy, RCSI, Ireland during my PhD study

**Oct 2002- Sept 2003** Medical representative, Novartis Ophthalmic Palestine.

**June 2000 - Feb 2001** Quality Control Training, Middle East Industrial Factory, Palestine

## Laboratory Skills and Qualifications

- Research experience in pharmaceutical, biotechnological and analytical laboratory techniques and new product synthesis (organic and inorganic)
- Knowledge and understanding of the following areas: Stability Analysis, QC Analysis, Analytical R&D
- Knowledge and experience in analytical laboratory techniques including characterization of Active Pharmaceutical Ingredients using IR, FTIR, Spray drying Elemental analysis, HPLC, GC-MS, LCMS, UV-Vis, X-ray Powder Diffraction (XRD), NMR ( $^1\text{H}$ ,  $^{13}\text{C}$ , COSY, NOSY, DEPT), TLC, Pharmacopia Methods of analysis, wet chemistry
- Interpreting results of X-ray crystallographic and pH titration studies
- Experience in the following: Industrial techniques particle size, dissolution, disintegration, Mastersizer 3000, hardness, granulation, compression, blending testing, tableting, capsule filling, moist agglomeration, atmospheric spray-freeze-drying, and protein degradation during filling and dosing
- Development of new synthetic pathways and testing of their suitability for large-scale use
- Molecular and cellular technology laboratory techniques including tissue culture, testing and measurement of enzyme activity of drugs (COX, POX, blood platelets)
- Understanding of Good Manufacturing Practices (GMPs) and Good Documentation Practices (GDPs)

## Teaching interests

My teaching covers several areas including Analytical Chemistry, Organic and Inorganic Chemistry, Practice of Chemistry and Solving Chemical Problems to Students of Pharmacy, Foundation year of Medicine, and Pharmaceutics to Students of Pharmacy

## Additional Skills

- Have attended courses on Health and Safety Training including Laboratory and Risk Assessment, Chemical Spill and Emergency First Aid)
- Proficient with Microsoft Programs Excel, Word, Power Point and Outlook)
- Proficient in using PubMed, Beilstein, Scifinder, Chem Draw...
- Fluent in Arabic and English
- Full driving license

## Poster Presentations (National and International Conferences & Meetings)

Attending 16-21 Sept 2018, 22ND INTERNATIONAL CONFERENCE ON ORGANIC SYNTHESIS (22-ICOS) FLORANCE , ITALY

Attending Pharma Chem Congress 2018. Pharmaceutical chemistry and Technology Dublin, Ireland. June 28-29, 2018

Attending the 13<sup>th</sup> International Symposium on the Synthesis and Applications of Isotopes and Isotopically Labelled Compounds is going to be held on June 3<sup>rd</sup> – 7<sup>th</sup> 2018 in the capital of the Czech Republic – Prague

Attending 3rd International Conference on Organic & Inorganic Chemistry July 17-19, 2017 Chicago, Illinois, USA (10 Plenary Forums - 1Event)

Hydroxamate Inhibitors of Prostaglandin H. **Alagha A**, Gaynor D, Müller-Bunz H, Starikova Z, O'Brien EC, Farkas E, Nolan KB. RCSI. Research Day, Royal College of Surgeons in Ireland, April 2011

Diacetylsalicylhydroxamic acid as a potent inhibitor of cyclooxygenase. **Alagha A**, Chubb A, Nolan K.B. Research Day, Royal College of Surgeons in Ireland, April 2010

Design, synthesis and evaluation of aspirin analogues having an additional carboxylate substituent for antithrombotic activity. **Alagha A**, Moman E M, Adamo M F A, Nolan K B, Chubb A. Research Day, Royal College of Surgeons in Ireland, April 2010

Metal Hydroxamate Complexes Structure of 4-aminophenylhydroxamate iron (III) and Zn (III). **Ahmed Alagha**, Helge Mueller Bunz and Kevin B Nolan. Symposium, Inorganic Chemistry, Royal College of Surgeons in Ireland, Sep 2008.

Abiomimetic system for serine protease activity. **Ahmed Alagha**, Oswaldo Nunez, Fiona Butler, and Kevin B Nolan. Eurobic9 - 9th European Biological Inorganic Chemistry Conference, Wroclaw, Poland, 2-6 September 2008,

Diacetylsalicylhydroxamic acid is a much more potent cyclooxygenase inhibitor than aspirin **Alagha A**, Chubb A, Nolan K B, Research Day, Royal College of Surgeons in Ireland & 60<sup>th</sup> Irish Universities Chemistry Colloquium Cork. March & June 2008

Triacetylsalicylhydroxamic acid: Conformation and hydrolysis. Oswaldo Nunez, Eva Torres Costa, **Ahmed Al Agha**, Kevin B Nolan, CSCB Symposium Trinity College Ireland.

Speciation and solid state studies of the aminophenylhydroxamate with Cu (II), Ni(II), Zn(II) and Fe(III) system **Al agha A**, Krot K, Nolan K B. ICBIC 13 Vienna Austria, July 2007

Hydroxamic Acids Analogues of Aspirin as anti Thrombotic, **Alagha A**, Nolan, K.B. "59th Irish Universities Chemistry Colloquium", DCU, June 2007

Diacetylsalicylhydroxamic acid is a much more potent cyclooxygenase inhibitor than aspirin **Alagha A**, Chubb A, Nolan K B. Research Day, Royal College of Surgeons in Ireland, April 2007

Diacetylsalicylhydroxamic acid is a much more potent cyclooxygenase inhibitor than aspirin **Alagha A**, Chubb A, Nolan K B, DCU Colloquium, April 2007

Metal Aminophenyl Hydroxamate Complexes. **Alagha A**, Krot K, Nolan K B. CSCB Symposium, Galway, Ireland, 2006

Speciation and solid state studies of the aminophenylhydroxamate with Cu(II), Ni(II), Zn(II) and Fe(III) systems, **Al agha A**, Krot K, Nolan KB. Research Day, Royal College of Surgeons in Ireland, April 2006

## Publications

**Ahmed Alagha**, Anthony J. Chubb, Oswaldo Nunez and Kevin B. Nolan\*Mode of action of acetylated aspirin analogue explained using crystallography, kinetics and *ex vivo* studies, submitted to *Bioorg Med Chem Lett* 2018

- Paul A MacMullan, Anne M Madigan, Nevin Paul, Aaron J Peace, **Ahmed Alagha**, Kevin B Nolan, Geraldine M McCarthy, Dermot Kenny, Sulfasalazine and its metabolites inhibit platelet function in patients with inflammatory arthritis., *Clin Rheumatol* 2016;35(2):447-55. doi: 10.1007/s10067-014-2769-x
- **Ahmed Alagha**, David A. Brown, Mohammed Elawad, Helge Müller-Bunz, Hassan Nimir, Alexander I. Yanovsky, Kevin B. Nolan, The preparation and crystal structure of acetatobis (L-arginine) zinc(II) acetate trihydrate, the first reported X-ray structure of a zinc(II)-arginine complex, *Inorg Chim Acta*, 2011; 377(1):185-18. doi: 10.1016/j.ica.2011.08.015
- **Ahmed Alagha**, Laavanya Parthasarathi, Declan Gaynor, Helge Müller-Bunz, Zoya A. Starikova, Etelka Farkas, Eimear C. O'Brien, Marie-Jose Gil and Kevin

- B. Nolan, Metal complexes of cyclic hydroxamates. Synthesis and crystal structures of 3-hydroxy-2-methyl-3H-quinazolin-4-one (ChaH) and of its Fe(III), Co(II), Ni(II), Cu(II) and Zn(II) complexes, *Inorg Chim Acta*, 2011;368(1)1, 158-66. doi: org/10.1016/j.ica.2010.12.047
- **A. B. M. Alagha**, D. Gaynor<sup>a</sup>, H. Mueller Bunz, K. B. Nolan and L. Parthasarathi, Metal Hydroxamate Complexes. Structure of Tris(4-aminobenzohydroxamato) iron(III) ethanol solvate, *Acta Cryst Section E*, 2010. E66, Part 7, m853-m854. doi: 10.1107/S160053681002413X
  - **Ahmed Alagha**, Edelmiro Moman, Mauro F. A. Adamo, Kevin B. Nolan, Anthony J. Chubb. Design, synthesis and evaluation of aspirin analogues having an additional carboxylate substituent for antithrombotic activity, *Bioorg Med Chem Lett*. 2009;19(15):4213-6. doi: 10.1016/j.bmcl.2009.05.120. Corrigendum: doi: 10.1016/j.bmcl.2013.11.011

## Referees

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