Dr Nicholas Paul Chatterton 10 Park Avenue South, London, N8 8LT

<b>Qualifications</b>	with	Awarding	Rody	and Date
Qualifications	WILLI	Awarumg	Duu	anu Date

Qualifications with Awarding Dody and Date		
1996	<b>Selwyn College, Cambridge University.</b> MA. Natural Sciences (Class 2 Division 1). Awarded July 1996.	
1999	<b>Imperial College, London.</b> MSc in Chemical Research (distinction). Awarded September 1999.	
2003	<b>King's College, London.</b> PhD. "Oxidative Addition at transition metal centres: Structural, chemical and computational studies of $M(\eta^2\text{-HX})$ intermediates". Supervised by Professor Sean McGrady. Awarded October 2003.	
2008	<b>London Metropolitan University.</b> PG. Cert. in Higher Education Teaching and Learning (Merit). Awarded November 2008.	
Membership of Prof	essional Bodies and Learned Societies	
2008 – present	Member of the Royal Society of Chemistry.	
2014 - present	Fellow of the Higher Education Academy.	
Career Details – Present employment		
Career Details – Pre	esent employment	
Career Details – Pre	Central Academic Staff and Lecturer, The Open University	
6/2015 – present	Central Academic Staff and Lecturer, The Open University  Associate Lecturer, Birkbeck College, University of London	
6/2015 – present 10/2010 - present	Central Academic Staff and Lecturer, The Open University  Associate Lecturer, Birkbeck College, University of London	
6/2015 – present  10/2010 - present  Career Details – Pre	Central Academic Staff and Lecturer, The Open University  Associate Lecturer, Birkbeck College, University of London  evious employment  Senior Lecturer and Course Leader in Pharmaceutical Sciences, London Metropolitan University. Member of Molecular	
6/2015 – present  10/2010 - present  Career Details – Pre  6/2007 – 5/2015	Central Academic Staff and Lecturer, The Open University  Associate Lecturer, Birkbeck College, University of London  evious employment  Senior Lecturer and Course Leader in Pharmaceutical Sciences, London Metropolitan University. Member of Molecular Systems for Health Research Group.	

2004-2005	Post-doctoral research fellow in the group of Dr Marinella Mazzanti, Commissariat à l'Energie Atomique, Grenoble, France.
2003-2004	Teacher of Chemistry (A level/GCSE) and Head of Middle School. Ashbourne Independent School, London
1996-1998	Technical Consultant, Cambio Ltd, Cambridge.

## **Teaching and Learning in Higher Education**

## **Teaching Experience**

2007 - 2015

2000-2002 **King's College London** undergraduate tutor in year 1 physical and inorganic chemistry

Sheffield University: Coordinating and running all teaching sessions in practical organic chemistry at levels 1 and 2.

Lecturer in *Main Group* chemistry (8 lectures) at level 2.

Personal tutor to 8 students each year. Undergraduate tutorials in general chemistry (year 1) and physical and inorganic

chemistry (year 2).

London Metropolitan University: old modules - module convenor and lecturer on *Chemistry 1* and *Chemistry 2* for foundation year in science (24 lectures, ~ 300 students). Lecturer in all aspects of *General Chemistry* (20 lectures, ~ 220 students). Lecturer on *Metals in Pharmaceutical Science* (6 lectures, ~ 50 students). Module convenor and lecturer on *Bioinorganic and Organometallic Chemistry* (8 lectures, ~ 15 students. Tutor on *Organic Chemistry 1* and *Bioanalytical Techniques 1 and 2*.

New modules (Sept 2012 onwards) – module convenor and lecturer for *Chemistry* at foundation level (~ 200 students, 16 lectures) Mathematics lectures for *Scientific Studies* at foundation level (~ 200 Students, 4 lectures). Lecturer in all aspects of *Concepts of Chemistry* (~ 100 students, 16 lectures) and *Chemistry and Biochemistry* (~200 students, 6 lectures) at year 1, Lecturer and tutor for *Inorganic Chemistry* (~50 students, 6 lectures), *Drug Delivery and Actions* (~50 students, 4 lectures) and *Bioanalytical Science* at year 2 (~150 students, 4 lectures). Module convenor and Lecturer for *Advanced Inorganic and Materials Chemistry* (~40 students, 16 lectures). Undergraduate and MSc research projects on topics including synthesis of lanthanide complexes for sensor applications, layered double hydroxide salts for sensor applications, protein uptake of titanium containing potential anti-cancer drugs, drug

2

delivery systems based on biodegradable microspheres or nanospheres and electrospun nanofibers.

2010 – present **Birkbeck College.** Lecturer on Chemistry evening course

which is half of the yearlong (year I equivalent, Level 4 qualification) "Certificate for Subjects Allied to Medicine"

(~25 students annually).

2015 – present The Open University. Production of chemistry content for a

new 1<sup>st</sup> year module (S111) and a new practical residential school (SS002). Presentation and production of chemistry content on 3<sup>rd</sup> year module (S315) (NMR, drug-drug

interactions, molecular orbital theory).

Design of remote access experiments utilizing flow chemistry

techniques.

Strand leader for third year practical module (SXM390).

## **Curriculum Design**

Design and implementation of two year-long 30 credit modules, one at level 3 ("Chemistry") and one at level 6 ("Advanced Inorganic and Materials Chemistry"); the latter was reviewed as part of the recent (2013) successful accreditation of the LMU Chemistry degree.

Design of a master's level short course ("Research Skills for Pharmaceutical Sciences"); first implementation summer 2015.

#### Teaching innovations and other teaching related responsibilities

Member of departmental committee for Teaching and Learning; organisation of staff developments sessions on the use of e-learning and technology to enhance student learning (2009-2011).

School representative on Faculty Undergraduate Postgraduate taught course committee (2014-15).

At London Met my teaching innovations included instigation and use of text-messaging to enhance student-learning in large group sessions and utilizing student learning spaces for student drop-in sessions (<a href="twitter.com/chemdrop">twitter.com/chemdrop</a>) ,and use of prelecture learning materials (video clips + formative assessment) to enhance RPA at year 0 (level 3).

Currently involved in a funded project to develope the use of online clinics and structured content to improve student RPA in level 2 chemistry modules.

Outreach activities have included general lectures for local school children entitle "Fantastic Fuels and Real Rockets" and in organising events for AimHigher and National Science Week.

# **Teaching Awards**

Voted by students in May 2012 as the "Most Supportive Lecturer" at London Metropolitan University Student-Led Teaching Awards and nominated for all other awards (Best Lecturer, Best Feedback, Most Innovative, Most Inspiring – one of 20 lecturers university wide).

Shortlisted for "Overall Best Lecturer" prize in the same awards in May 2013 (http://www.londonmetsu.org.uk/slta/).

Shortlisted for "Overall Best Lecturer" in Faculty of Life Sciences and Computing in April 2015.

# Research and Knowledge Transfer

#### **Grants and Contracts**

2005	Jointly with Dr Simon Jones, for £100,000 (NESTA/Chemistry for our Future) for the first dedicated schools laboratory housed in university in the UK at Sheffield.
2009	Emerald Fund award from the London Development Agency of £10,000 to support patent application and commercialisation activities of a molecular sensor.
2014	Royal Society of Chemistry Undergraduate Bursary (£2000) in summer 2014 to sponsor student work on an ultra-sensitive ammonia detector.
2015	eSTEeM funding (OU internal) for the development of online chemistry clinics (£2500) for the year 1 to 2 transition.
2016	Synergy project funding (OU internal) for purchase of electrospinning and electrospraying equipment (£4000).

## **Doctoral Supervision**

Doctor at Super v	151011
2008 – 2012	Gaoyun Chen, "Lanthanide complexes of phthalimide and phthalamate containing ligands: synthesis, photophysical properties and their potential applications," (co-supervisor; self-funded student). PhD awarded October 2012.
2011 – 2015	Eranka Illangakoon, "Advanced drug delivery systems prepared by electrospinning," (Director of Studies; London Metropolitan University Vice Chancellor's Scholarship). PhD awarded October 2015.

2011 – 2015 Yacine Kassiss, "Low-dimensional matrices for the delivery of

pharmaceutically active agents," (2<sup>nd</sup> supervisor; self-funded

student). PhD awarded November 2015.

2015- Erum Noureen working on passive cellular uptake of nano-

materials (Director of Studies; self-funded student).

#### PhD viva examinations

2015 Ravi Velaga (London Metropolitan University; supervised by

Dr Ken White).

2016 Heli Brahmbhatt (The Open University; supervised by Dr Nick

Turner)

## **Post-Doctoral Supervision**

Gaoyun Chen worked on developing electrospun materials

loaded with luminescent terbium complexes with potential as ultra-sensitive ammonia detectors. (Supevisor; internal funding

from London Metropolitan HEIF allocation).

## **Knowledge Transfer**

2012 Due diligence work on for potential investors in Biomimetic

Healthcare Industries

#### **Professional Practice**

2006 Content and context author for new Edexcel A-level

specification

2008- Referee for the journals Organic and Biomolecular Chemistry,

Colloids and Surfaces B, Chemical Communications, Materials Chemistry and Physics, Journal of Nanostructure in Chemistry,

International Journal of Pharmaceutics, RSC Advances, European Journal of Pharmaceutical Science, Nanomaterials.

2008-2015 Departmental representative for Royal Society of Chemistry

2009 Scientific consultant on book ("Chemistry: Getting a Big

Reaction"; Pan Macmillian – part of the 2 million selling "Basher" series) aimed at Keystage 3 and GCSE school

children published late 2009.

2009-2011	Departmental representative for HE Academy Physical Sciences Centre and Royal Society of Chemistry
2012-	Scientific consultant for WJEC exam board on new A level chemistry syllabus
2014-	Associate Editor for journal International Journal of Theoretical and Applied Nanotechnology
2014-2015	Member of scientific committee for 6 <sup>th</sup> International Conference on Nanotechnology: Fundamentals and Applications (Barcelona, 2015).
2015-	Associate Editor for RSC Advances (dealing with submissions in the area of synthesis of nanomaterials; stipendiary role).