

Warwick Chemistry is one of the top UK Chemistry Departments and is at the core of the science faculty at Warwick with both our teaching and research spanning all scientific disciplines. We continue to invest heavily in our infrastructure to guarantee and nurture a world-class quality in education and cutting-edge research. Recent investments include new chemical biology and theory and computational research wings, a world-leading magnetic resonance centre, and a new building for Materials and Analytical Science, due to open in 2012. This drive for excellence is increasingly becoming a magnet for the world's best scientists; we have recently attracted academic staff from Edinburgh, Imperial College London, Cambridge, the Max Planck Institute in Germany, and Boston University in the US.

We currently hold one of the UK Chemistry Departments' largest EPSRC research grant portfolios, as well as significant funding from other research councils, industry and charities. Our industrial links include Syngenta, GlaxoSmithKline, AstraZeneca, Pfizer, Rhodia, BASF, Unilever, Procter & Gamble, Dr Reddys, Wacker Chemie, SABIC, Infineum, Johnson & Johnson, Akzo-Nobel, BP Exploration, Varian, Lubrizol, Warwick Effect Polymers, Rhodia, Lilly, Hypersil, dhg consultancy, Knoll, Aventis, Roche, Akzo Nobel, Johnson Matthey plc, Saint Gobain, Mologic Ltd.

Research interests in the Department cover all areas of contemporary chemistry research, and our staff collaborate in interdisciplinary research with other departments including Physics, Life Sciences and Engineering. We are involved in several projects in the areas of Energy, Materials and Medicine funded under the Birmingham Science City Initiative.

## RESEARCH DEGREES

PhD IN CHEMISTRY

PhD IN CHEMISTRY WITH INDUSTRIAL COLLABORATION

## TAUGHT MASTER'S DEGREES

AS:MIT: ANALYTICAL SCIENCE: METHODS AND INSTRUMENTAL TECHNIQUES

MSc IN MATHEMATICAL BIOLOGY AND BIOPHYSICAL CHEMISTRY (MBBC) (see MOAC page 130)

MSc IN CHEMISTRY WITH SCIENTIFIC WRITING (CSW) (see MOAC page 130)

MSc IN SCIENTIFIC RESEARCH AND COMMUNICATION (SRC) (see MOAC page 130)

MSc IN COMMUNICATING MULTIDISCIPLINARY SCIENCE (CMS) (see MOAC page 130)

## CONTACT DETAILS

Director of Graduate Studies, Professor Martin Wills,  
[m.wills@warwick.ac.uk](mailto:m.wills@warwick.ac.uk) or Graduate Secretary,  
[chem-postgraduate@warwick.ac.uk](mailto:chem-postgraduate@warwick.ac.uk)

Department of Chemistry  
University of Warwick  
Coventry CV4 7AL  
United Kingdom

# DEPARTMENT OF CHEMISTRY

[www.warwick.ac.uk/go/chemistry](http://www.warwick.ac.uk/go/chemistry)

(see also MOAC on page 129)

## RESEARCH AREAS

Research in the Chemistry Department is grouped into the following five themes:

**Chemical Biology** has the guiding view that "chemistry is the language of biology" and has considerable strength in natural products chemistry and biology, mechanistic enzymology, bioinorganic chemistry, membrane proteins and biophysical chemistry. See [www.warwick.ac.uk/go/chemistry/research/chemicalbiology](http://www.warwick.ac.uk/go/chemistry/research/chemicalbiology)

**Interfaces & Materials** focuses on the synthesis of macromolecules, colloids, and inorganic solids, their assembly into larger molecular and colloidal meso- and macroscale structures, and their use to design materials with advanced functional properties. See [www.warwick.ac.uk/go/chemistry/research/interfacesandmaterials](http://www.warwick.ac.uk/go/chemistry/research/interfacesandmaterials)

**Analytical Science & Instrumentation** is an underpinning discipline, at the nexus between many areas, which leads to collaborations between specialist analytical scientists and colleagues in the bio- or life- sciences, materials or industry. These links with clinicians, pharmaceutical and chemical companies etc. can often result in major leaps in scientific understanding. See [www.warwick.ac.uk/go/chemistry/research/analyticalscience](http://www.warwick.ac.uk/go/chemistry/research/analyticalscience)

**Synthesis & Catalysis** covers the breadth of chemical synthesis, including medicinal, organic, organometallic and inorganic, with particular strengths in catalysis and reaction mechanisms. See [www.warwick.ac.uk/go/chemistry/research/syntheticchemistry](http://www.warwick.ac.uk/go/chemistry/research/syntheticchemistry)

**Theory & Simulation** has activities extending from fundamental studies of atoms and small molecules, using state-of-the-art quantum mechanics, through to large-scale modelling of macroscopic systems; they embrace development of quantum, statistical-mechanical and thermodynamic methods, with applications to the areas of the other four themes. See [www.warwick.ac.uk/go/chemistry/research/theoryandsimulation](http://www.warwick.ac.uk/go/chemistry/research/theoryandsimulation)

## RESEARCH DEGREES

### PHD IN CHEMISTRY

**Standard Duration: Typically 3-4 years in length, depending on the funding scheme**

### PHD IN CHEMISTRY WITH INDUSTRIAL COLLABORATION

**Standard Duration: 4 years**

PhD students at Warwick can study in any of the areas of ongoing research in the Department. The PhD with Industrial Collaboration is conducted with an industrial co-funder.

## APPLICATION FACT FILE (RESEARCH DEGREES)

### Entry Requirements

Typically 2:i or higher at MChem, or equivalent non-UK qualification. Applicants will be interviewed by potential supervisors

### English Language Requirements

IELTS 6.5, TOEFL (iBT) 92 or equivalent

### Application

All applications are made online at [www.warwick.ac.uk/go/pgapply](http://www.warwick.ac.uk/go/pgapply)

### Tuition Fees

(2011/2012 rate; please note that fees for 2012/13 will be published online in spring 2012)

Home/EU: Full-time £3,900, Part-time £2,340

Overseas: (Band 1) Full-time £12,115, Part-time £7,269

(Band 2 – lab based) Full-time £15,460, Part-time £9,276

### Funding

PhD students in the Department are funded by a range of sources including research councils (e.g. EPSRC, BBSRC), industries, charities and overseas governments. See the Departmental website for further information. Details of the Chancellor's Scholarships and other funding opportunities are available from: [www.warwick.ac.uk/go/graduateschool](http://www.warwick.ac.uk/go/graduateschool)



**Jennifer Butler**  
*PhD candidate*  
*Department of Chemistry*

“I wanted to pursue my PhD directly after my primary degree. I always enjoyed Inorganic Chemistry during my BSc and from that I was interested in Inorganic Anticancer Complexes for my PhD. I chose Warwick University because of a particular research group in the area that interested me, its excellent academic reputation and the research facilities that it offers to each PhD student. Warwick’s Postgraduate Skills Certificate is another aspect of the PhD programme that impressed me because it focuses on the personal development of each PhD student with regard to their individual skills required. My PhD included funding from the European Council.

Of course it’s not all work and no play! I divide my time between the Warwick Arts Centre, which is equipped with a cinema and various theatres, and the gym in the Sports Centre – a great place to do some exercise especially during the winter nights and to meet new people. Furthermore, the student population of Warwick is known for its high international percentage so you are sure to meet new people as well as people from your home country!”

## TAUGHT MASTER'S DEGREES

### AS:MIT: ANALYTICAL SCIENCE: METHODS AND INSTRUMENTAL TECHNIQUES

#### Standard Duration:

1 year full-time or up to 3 years part-time

Places available: 20

AS:MIT provides a coherent education programme for students of Analytical Science. This central and inherently interdisciplinary science supports research and development in key industries and underpins many aspects of Biological and Clinical Sciences, Environmental Sciences, Pharmaceutical Sciences, Materials Science and Synthetic Chemistry. The course is delivered by internationally-leading experts from Warwick Science departments and collaborating companies such as Syngenta and AstraZeneca. Students gain hands-on experience in a variety of relevant techniques, enabling graduates to work in any modern laboratory since the skills they acquire are readily transferable between disciplines. A key feature of the course is the opportunity to undertake cutting-edge research with a world-leading group or company.

## APPLICATION FACT FILE (TAUGHT MASTER'S DEGREES)

### Entry Requirements

2:ii Undergraduate degree in a relevant Science or equivalent

### English Language Requirements

IELTS 6.5, TOEFL (iBT) 92 or equivalent

### Application

All applications are made online at [www.warwick.ac.uk/go/pgapply](http://www.warwick.ac.uk/go/pgapply)

### Application Deadline

31 July

### Tuition Fees

(2011/2012 rate; please note that fees for 2012/13 will be published online in spring 2012)

Home/EU: Full-time £6,080, Part-time £3,040

Overseas (Band 1): Full-time £12,325, Part-time £7,269

Overseas (Band 2): Full-time £16,000, Part-time £8,000

### Funding

See Departmental website for funding information. Other funding opportunities are listed on the Graduate School Website:

[www.warwick.ac.uk/go/graduateschool](http://www.warwick.ac.uk/go/graduateschool)