CARDIFF UNIVERSITY
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School of Chemistry

A Guide for International Students

www.cardiff.ac.uk/chemy

Discover the Cardiff Experience

A leading university . . .

- You'll be part of a Russell Group university – one of the UK's world-class universities.
- You can choose from more than 300 degree programmes. The Cardiff University degree is known and respected worldwide with a substantial number accredited by the professions and other external bodies.
- You'll benefit from outstanding teaching in a research-led environment – Cardiff is ranked in the UK's top 5 universities for research quality.
- Staff include a Nobel Laureate and numerous Fellows of the Royal Society and other prestigious institutions.

in an outstanding city . . .

- You'll live in a friendly, compact and safe city with all your study, living and leisure needs within walking distance.
- Your money will go further at Cardiff with capital city attractions at provincial prices – including one of the lowest average costs of living for university cities.[1]

with able and motivated students . . .

- You'll be at a first choice university where demand for places is strong.
- You'll be studying in an environment with able and motivated students who have high grades at A-level or equivalent.
- You'll be at an international university with students from more than 100 countries.

who have excellent career prospects.

- You can be confident of your future prospects – typically, 95% of our students were employed or had entered further study within six months of completing their studies.[2]
- You'll be in demand – Cardiff is among the top 25 universities targeted by employers seeking high calibre graduates.[3]

Notes

1. Moneysupermarket.com
   Quality of Living Index 2014
2. HESA Destination of Leavers Survey 2013
3. High Fliers Research
   The Graduate Market 2015

Welcome

The School of Chemistry provides an outstanding and stimulating environment for chemical research and education.

Each year, it admits approximately 170 students to undergraduate MChem and BSc programmes, 30 students to MSc programmes, and 50 to postgraduate research. The research and teaching is led by 40 academic members of staff with support from more than 80 postdoctoral and other technical support staff.

The School offers 4-year MChem and 3-year BSc degree programmes that are oriented towards modern fundamental and applied chemistry. In addition to the standard pathway, there is a well-established and popular Sandwich programme with an intercalated year in industry or a foreign academic institution. The undergraduate programmes reflect, and are fully embedded in, the research strengths of the School, with, for example, substantial final-year projects that are fully integrated into research groups. The School also offers varied MSc programmes that provide a focused transition from an undergraduate degree in chemistry or a related subject to postgraduate research in some of the School's key areas.

The Cardiff School of Chemistry has an excellent international reputation across the range of modern chemical science, and was ranked in the top 10 UK Chemistry departments in the last Research Assessment Exercise. Particular strengths lie in surface science, catalysis, chemical biology, solid-state/materials chemistry, physical organic chemistry, synthesis and theoretical chemistry. Developments in recent years have included the establishment of major new initiatives in Chemical Biology, Catalysis, Solid-State and Materials Chemistry, and Physical Organic Chemistry through external and internal investment in excess of £10M. The School also houses the Cardiff Catalysis Institute, a world leader in catalytic research and development.

The School has outstanding research facilities and equipment enabling research in all branches of core and interdisciplinary chemistry. State-of-the-art facilities are available for research in surface science, catalysis, magnetic resonance, X-ray diffraction, mass spectrometry, spectroscopy, calorimetry, high-performance computing and chemical biology.

This brochure provides an introduction to the Cardiff School of Chemistry and the undergraduate degree programmes that we offer. I hope you will find it a useful guide to help you in your choice of both degree programme and university.

The members of staff in the School of Chemistry are engaged in cutting-edge research. They possess experience covering all the main areas of chemistry and its interfaces with other scientific disciplines and technologies. All of this expertise is brought to bear on our degree programmes, which offer a learning experience that is fully embedded in modern molecular science. Our student body is drawn from the UK, Europe and further overseas. We offer our students the opportunity to gain a valuable and valued qualification, which will provide a sound basis for their future development.

There has never been a more exciting time to study chemistry. In this close-knit and friendly environment, you will find your university experience in the Cardiff School of Chemistry intellectually stimulating, enjoyable, informative and highly beneficial to your future career.

We look forward to receiving your application and for you to become a part of our community.

Professor Rudolf Allemann
Head of School

Contents

This brochure will provide you with more details of our programmes. We hope that they will give you more than just a flavour of what we have to offer you. However, we are always ready to answer any questions you may have, by telephone or email, or when you come to Cardiff to visit. You will find appropriate contacts at the end of this brochure.

Important information. Please read carefully.

The University offers the information contained in this brochure as a guide only. It does not constitute a contract and is not binding on prospective students, current students or the University. While the University makes every effort to check the accuracy of the factual content at the time of publication, some changes will inevitably occur in the interval between publication and the academic year to which the brochure relates (Entry 2016). For example, degree programmes may have changed in line with market and student demand, and research development. Applicants should not, therefore, rely solely on this brochure and should visit the website for up-to-date information concerning course content, accreditation, and entry requirements for the relevant academic year when considering applying to the University.

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International Students

Studying chemistry at Cardiff University will allow you to develop your core chemistry theory and practical laboratory skills whilst mixing with a diverse range of students from both your own country and others.

Our student body has a wide cross section of nationalities represented both within the School of Chemistry and the university as a whole. We have a thriving international community which integrates seamlessly with students from the UK.

Applications for both undergraduate and postgraduate courses within the school have risen steadily in recent years, so apply and become part of our diverse, dynamic and exciting School of Chemistry.

For more information on all aspects of our international student support, please visit:

www.cardiff.ac.uk/for/prospective/international

More online at:
www.cardiff.ac.uk/chemy

Undergraduate Schemes

Undergraduate schemes available in the School of Chemistry:

www.cardiff.ac.uk/chemy/degreeprogrammes/undergraduate

MChem Hons	Chemistry	4 years		F103
MChem Hons	Chemistry with a Year Abroad	4 years	Sandwich Programme	F102
MChem Hons	Chemistry with a Year in Industry	4 years	Sandwich Programme	F104
BSc Hons	Chemistry	3 years		F100
BSc Hons	Chemistry with Industrial Experience	4 years	Sandwich Programme	F101
BSc Hons	Chemistry with a Preliminary Year	4 years		F105

Masters Level Programmes (MChem)

The Master of Chemistry (MChem) programmes provide both a broad coverage of chemistry and in-depth study of selected key areas, and are designed for those who are considering a career in chemistry. A special feature of these programmes is the major research project in the final year, carried out in one of the many fields of research in which Cardiff has an active interest. Extensive details are available on the School's website.

All three MChem programmes have been accredited by the Royal Society of Chemistry. The courses provide suitable breadth and depth of study appropriate for the Chartered Chemist (CChem) designation, following the necessary further experience in a relevant position in the profession.

Our MChem degree programmes offer the opportunity to work in industry or an overseas university during the third year. The work consists of a substantial original research project and is supplemented by modules taken by distance learning to maintain contact with Cardiff University.

MChem in Chemistry (F103)

The MChem in Chemistry focuses in more depth on selected topics developing the understanding and knowledge to a higher level than is possible with the BSc in Chemistry. There is greater emphasis on analysis, synthesis and problem solving, and significant opportunities to develop transferable and professional skills needed for self-sufficient working as a professional chemist.

MChem in Chemistry with a Year Abroad (F102)

Students on the year abroad scheme undertake a novel research project under the supervision of a member of academic staff in an overseas university. These placements are with universities in Europe, North America and Australasia. The year abroad allows students to experience a different culture, sometimes a different language and a different research environment before returning to Cardiff for their final year of the MChem scheme.

MChem in Chemistry with a Year in Industry (F104)

Industrial placements are located all over the UK and are undertaken in the areas of pharmaceuticals, fuels, materials, food technology, agriculture and other varied chemical technology sectors. These paid placements give students a chance to experience a real working environment whereby they can apply their practical skills to real world problems. The experience gained allows students to bolster their skills base, enhance their CV and develop links that they will benefit from after graduating.

Bachelor Level Programmes (BSc)

The Bachelor of Science (BSc) programmes provide a broad coverage of chemistry suitable for those who want to progress to a career in chemistry or a related discipline e.g. teaching. It is also well suited to those who wish to use the framework of knowledge and skills obtained in a wider context, such as in business or in administration. All the BSc programmes achieve the Royal Society of Chemistry requirements for accreditation and provide a suitable basis of study appropriate for Associate Membership.

BSc Chemistry (F100)

The BSc Chemistry programme is a 3-year course, covering the essentials of the subject to allow further study, research or employment. It includes some opportunity for research, and provides a range of skills specific to chemistry and also general transferable skills essential to many other careers.

BSc in Chemistry with Industrial Experience (F101)

The BSc in Chemistry with Industrial Experience covers the same academic material as the BSc Chemistry, but includes an extra year in industry to give experience of work in the field. Students undertake paid work in a chemically-oriented organisation, to understand the chemical business, to develop chemical skills and also, importantly, to extend transferable skills. Placements are arranged in conjunction with the School and our industrial partners, and are chosen to ensure that each student gains a

valuable experience and professional development, assisted by continued pastoral support and academic guidance through the personal tutor.

BSc with a Preliminary Year (F105)

This foundation year precedes the BSc degree scheme and is ideal for applicants who do not have the required grades or qualifications to enrol onto the BSc scheme directly. International applicants are encouraged to apply for this course if they feel they do not have the UK equivalent grades or qualifications to apply for the BSc scheme initially. This course comprises modules covering Chemistry, Biological and Physical Sciences and Mathematics, all of which give students the strong science grounding needed to complete the BSc in Chemistry degree thereafter.

Programme Structure

The degree programmes are designed to provide the teaching, laboratory and other facilities, and pastoral care, to enable you to reach your full potential under each of the programme aims. You are expected to use this provision and the resources effectively, and to take responsibility for your own development through the 3 or 4 years of study. All programmes are modularised, and 120 credits are taken each year in the form of 10 or 20 credit modules. All modules contain an element of coursework assessment (practical work, workshops etc). Detailed module descriptions may be found on the School's website.

Teaching, Learning and Assessment

Teaching is undertaken through a series of lectures, tutorials, workshops and practical classes.

Lectures

A major part of the teaching provided by the academic staff is through lectures, typically 10-12 lectures weekly, each of 50 minutes duration. The subject matter is supported in various ways according to the nature of the topic, such as computer presentations, molecular models, computer graphics, handouts and course summaries. Much of this material is electronically available to students.

Laboratory Work

The second major part of the teaching consists of the practical classes, again typically averaging about 10-12 hours each week. In the first year, the emphasis is on basic techniques and simple but accurate recording of observations. In later years, this progresses towards substantial experiments requiring planning, analysis and interpretation of results, and reporting to a professional standard. Practical work is integrated into each core module in the first two years, and this provides experience in all the main laboratory procedures and techniques across Chemistry. The training through the various years is designed such that each student will develop their skills steadily, ultimately reaching a standard commensurate with that of the degree being followed.

Computers in Chemistry

Cardiff makes good use of computing in its Chemistry degree programmes. Undergraduates are taught how to use the latest software and molecular modelling packages and it is expected that all submitted work should be professionally presented. This method of teaching runs through all schemes and excellent facilities are provided in the form of well-equipped computer suites around the university.

Small-group Teaching

Tutorial classes in small groups are given in each programme for the first three years in Cardiff to allow practice of the material presented in lectures, discussion and analysis, as well as the development of communication skills.

Workshops

The final method of teaching is through workshops. These take various forms in different parts of the curriculum, but are essentially opportunities to develop chemically related skills such as practising the use of important principles, and key skills in communication, presentation and debate. Workshops are attached to many of the modules throughout the 3 or 4 years of study, and they are particularly significant in modules designed to promote critical analysis, judgement and skills of oral presentation and argument.

Assessment

You are assessed by a combination of end-of-semester examinations and coursework assessment which includes practical work, workshops, and the research project. In addition to the formal assessment, your practical reports and other coursework are marked and returned regularly with comments and advice, to assist you in making steady progress and improvement throughout the 3 or 4 years. Final degree classifications are based on the results of all years except the first year, weighted so that the final year makes the biggest contribution.

Personal Tutors

At the start of your programme you will be assigned a personal tutor, who is a member of the academic staff. Personal tutors are there to advise on academic, non-academic and personal matters in a confidential manner. This integrated personal and academic tutoring system provides better overall experience for our students. We aim to overcome any problems, however big or small, as quickly as possible. Some formal meetings between personal tutors and students are required and additional informal contact is encouraged. Where appropriate the personal tutor may direct you to a specialist advisor within the university.

Years One and Two

The first year ensures that you have a thorough basis for further study by consolidation and extension of previous experience in all aspects of the subject. The modules comprise core Chemistry and optional modules chosen from a range offered by Chemistry or other disciplines. The optional modules are reviewed annually and updated where necessary to ensure that you are exposed to the latest developments in the subject. Optional modules therefore allow you to exercise choice over your studies and extend your breadth of experience.

In the second year of all programmes, the main development of core material occurs. All modules are core and cover rigorously and in detail central material across all the main areas of Chemistry. The various degree programmes diverge at the end of Year 2.

BSc Chemistry Programmes:
Year 3

The final year of the BSc programmes continues the philosophy of the second year, covering key areas of the subject in depth. In each semester, students are again able to exercise choice by selecting optional modules from a number of special topics allied to the research expertise and facilities within the School. Before Christmas, students complete a series of laboratory exercises requiring a professional level of reporting and in the second semester they undertake a research project.

MChem Chemistry Programmes:
Years 3 and 4

The MChem programme focuses in more depth on selected areas, developing the understanding and knowledge to a higher level than in the BSc. There is a greater emphasis on analysis, synthesis and problem-solving and significant opportunities to develop transferable and professional skills needed for self-sufficient working as a professional chemist.
A substantial research project provides the opportunity to develop and demonstrate these higher skills in the form of research at the forefront of knowledge. In preparation for this project, the third year includes advanced experimental techniques and experience of critical analysis applied to chemical problems.

In some MChem programmes, the third year is spent in an industrial organisation, or in a university abroad, and thus provides an opportunity to experience the working practices and needs of industry or other cultural backgrounds. A research project forms a major part of the year away, and this is supplemented by 'distance learning'.

Research Projects

All our undergraduate degree programmes have a major element of independent, supervised research. In the MChem Chemistry programme, this takes the form of a 60 credit module in the fourth year, occupying about three days each week of both semesters and comprises half the credit available for that year. The project includes planning, carrying out experimental work, analysis of results and reporting in a thesis. This project module is used to give students an accurate experience of carrying out real research. Students often get a taste for research during this period and continue after their undergraduate degree to complete a PhD within the school.

Research activity is organised into a number of key areas; Biological and Organic; Inorganic; Physical; Theoretical and Computational Chemistry.

Particular emphasis is placed upon breaking across the traditional boundaries within the chemical sciences, in order to facilitate interdisciplinary research. This variation and diversity is reflected in our portfolio of taught postgraduate programmes. Staff within the School also collaborate extensively with colleagues in other Schools in Cardiff, in other academic institutions in the UK or abroad, and in industry.

Some particular instrumental strengths within the research school include techniques for surface science, X-ray crystallography, calorimetry, spin resonance spectroscopy and electroanalytical chemistry. Extensive utilisation is also made of national and international laboratories such as neutron and synchrotron sources. Hence, experience of a wide range of modern and sophisticated equipment is offered to undergraduates as part of the research project. Many undergraduate projects lead to more substantial research themes and publications in scientific journals.

Taught Masters Programmes

School of Chemistry offers a suite of specialist, research-led MSc programmes, which are available for full-time or part-time study.

Following over £14 million investment in Chemistry by Cardiff University in recent years, together with extensive support from Research Councils and industry, the research facilities and infrastructure within the School of Chemistry provide an environment in which internationally leading research is conducted. Our postgraduate students are exposed to the very latest thinking, working with leaders in the field, and have the most up-to-date technology and equipment available to support their studies. Our MSc programmes are designed to allow either full-time or part-time study by students who wish to learn while still undertaking employment.

MSc in Catalysis

Delivered from the Cardiff Catalysis Institute, this course develops students' understanding of the science underlying a range of problems in catalysis (heterogeneous, homogeneous and biological) and provides the opportunity for students to engage with a range of modern catalytic equipment and techniques. Catalysis is the centre-point of many chemical processes - from the academic research lab through living systems to the industrial large-scale reactor. Through a detailed understanding and careful use of catalysis, many processes can be made faster, cleaner, economical and more sustainable. This course allows students to undertake modules covering catalyst preparation, mechanism and design of catalysts, biocatalysts, molecular modelling, green chemistry and practical laboratory catalyst techniques.

MSc in Chemical Biology

The chemistry of biological processes lies at the heart of all life and a mastery over this field enables the harnessing of biology to tackle some of the major issues facing humanity in the coming years. This course will develop students' understanding of the fundamental chemistry underlying life and an appreciation of state-of-the-art techniques for biochemical discovery and tailoring biological systems to our advantage. The chemistry of biological processes is the basis of all life on the planet. By studying aspects such as biosynthesis, retrosynthetic analysis, molecular biology and the principles of drug development, this course will develop an understanding of the pathways that are core to chemical biology. Also, applications of biological catalysts in industrial processes, synthetic methods and spectroscopy will all be suitable for graduates wishing to develop their knowledge and to pursue a career in academia or industry.

More online at: **www.cardiff.ac.uk/chemistry/courses/postgraduate-taught**
www.cardiff.ac.uk/chemy/degreeprogrammes/postgraduate

Postgraduate Research Degrees

There are over 150 postgraduate and postdoctoral research staff in the School, supported by external funds. Research Councils, other government bodies and private industry provide funding for instrumentation and running costs, and for the financial support of postgraduate students and postdoctoral workers. Many postgraduate studentships are available each year for suitable candidates with a good degree in Chemistry or a related subject for supervised research leading to the degree of PhD (three or four years) or MPhil (one or two years).

Research at the School of Chemistry is world-leading in many fields. It is a vibrant and dynamic research environment, and provides excellent opportunities for research in a wide range of topics in modern Chemistry. Our commitment is towards tackling important scientific challenges of the 21st Century, and our current research priorities and facilities put us in a strong position to achieve this objective.

Catalysis & Interfacial Science Research Section

The Catalysis and Interfacial Science Section focuses on cutting edge topics, that are both of fundamental academic importance and of relevance and significance to the modern world. We have a strong focus on heterogeneous catalysis and we also have breadth, studying homogeneous and enzymatic catalysis. Catalysis is a key enabling technology that impacts widely on all of our lives at many levels. Enhancing our fundamental understanding of catalysis and processes at surfaces allows us to control and improve many essential chemical reactions. The research activities are supported by extensive state-of-the-art equipment and facilities, with expansive worlewide collaborations with industry, research institutes and other universities. Fully embedded in the School, the Cardiff Catalysis Institute is recognised internationally as a centre of excellence for catalysis research and it is one of a number of University Research Institutes.

Biological Chemistry Research Section

The Biological Chemistry Research Section focuses on a range of problems at the interface of chemistry, biology and medicine. These studies are both of fundamental interest and importance, such as studies of the coupling of enzyme motions to catalysis, and of more immediate societal relevance, such as the generation of new drugs (antimicrobial, anticancer, and anti-inflammatory agents), pest control agents and molecular tools, based on our growing knowledge of these systems and our key strengths in these fields. Research in biological chemistry at Cardiff covers a diverse range of themes including enzyme catalysis and synthetic biology, manipulating biomolecular interactions, biomolecular NMR spectroscopy and mass spectrometry, and organic synthesis and medicinal chemistry.

Materials & Energy Research Section

Research within the Materials and Energy Research Section is focused on understanding fundamental properties of materials, developing new experimental and computational techniques for investigating these properties, and advancing applications of materials particularly in relation to energy. Fundamental research is focused on understanding structure and dynamics of a range of crystalline materials, gaining fundamental insights on crystallization processes, investigating structural and dynamic properties of soft matter, and advancing new experimental techniques for materials characterization (particularly relating to powder X-ray diffraction, in situ solid-state NMR and X-ray birefringence). Applied research is focused on the development of materials for use in energy applications (including carbon capture, the design and synthesis of materials for hydrogen storage, fuel cells and catalysts for the enhanced production of biofuels) and on polymer therapeutics.

Molecular Synthesis Research Section

The Molecular Synthesis Research Section is one of the largest in the School. Consisting of ten independently active research groups, we focus on the development of new methods, molecules and materials that span a broad range of applications with importance to modern society. Our activities diversify across the traditional inorganic and organic chemistry boundaries, often within a multidisciplinary context. The research is underpinned through collaboration with other research interest groups and scientific disciplines (including biology, pharmacy, medicine, engineering and physics), as well as direct links with numerous industry partners.

Spectroscopy & Dynamics Research Section

The focus of our research interests lie in the development and application of advanced spectroscopic techniques, coupled with fundamental theoretical research into electronic and molecular structure. Key strengths include Electron Paramagnetic Resonance (EPR) and laser based cavity enhanced spectroscopy, which are used to elucidate the mechanisms and properties of transient species of relevance to a wide range of chemistry. Theoretical work includes development of new methods for improving the accuracy and reliability of first-principles calculations, applied to the prediction and understanding of molecular structure and reactivity, and inter- and intra-molecular non-covalent interactions. Much of our work is performed in collaboration with other research groupings, including Catalysis & Interfacial Science, Biological Chemistry, and Molecular synthesis.

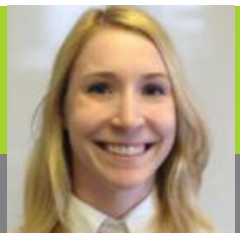
More online at:
www.cardiff.ac.uk/chemy

Meet Our Students

Apurva Chindarkar

India; **MSc in Physical Organic Chemistry**

Having undertaken a Bachelor of Technology, focusing on Organic Chemistry, I was looking for a Masters course which is specifically dedicated to the synthesis and mechanisms part of organic compounds, and Cardiff University offered the exact course I was looking for. The course has modules tailored towards my interests, which also enhances my Chemistry knowledge. I am really happy and satisfied that I chose Cardiff University for my post-graduate study.



Rima Trofimovaite

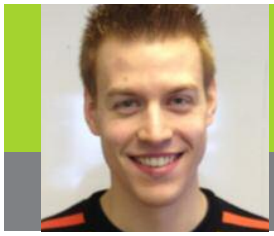
Lithuania; **BSc in Chemistry**

I have chosen Cardiff University because it is one of the top 20 universities in the United Kingdom and it is well known for its science disciplines. Not only it has a good reputation in chemistry; the helpfulness and friendliness of staff at the department encouraged me to choose Cardiff. Despite the fact that chemistry is a hard subject, my passion and full support from lecturers has made it very easy! The University is situated in the heart of the city centre, so you can reach everything within walking distance. Cardiff itself is a very compact, picturesque and safe town offering loads of entertainment for students.

Anna-Marina Gregoriou

Cyprus; **BSc in Chemistry**

I've chosen to study at Cardiff because it is a beautiful city and very student friendly. Everything is within walking distance; from the shopping centres and colourful parks, the cinemas and crazy Welsh pubs. I feel that this city has so much to offer to students and especially to me. I always feel that there is something different to do. Cardiff University is one of the top universities in the United Kingdom so I'm really proud of myself that I was accepted onto the challenging chemistry course. I'm sure that with my enthusiasm and the support of my classmates and the staff I will have a great career after graduating.



Jiri Kulhavy

Czech Republic; **MChem in Chemistry**

Cardiff University belongs to the top world universities rankings, as does its School of Chemistry. As I had always been very interested in nanoscale science, School of Chemistry and its Catalysis Institute affords very good opportunities to be involved with cutting edge research into the nanoscience field. The School gives the opportunity to learn, use the most innovative techniques, probing spectroscopic machines, and from this, there is no doubt the next step in my career is to undertake a PhD.

Yan Ma

China; **MSc in Catalysis**

I have loved chemistry since I was a little girl as the chemical world is magical to me. I previously studied in the University of Science and Technology Beijing and graduated with a degree in Applied Chemistry. When I decided to go abroad for further study, I found that there was an MSc in Catalysis course in Cardiff University and it is the major reason that I chose to study here. Catalysis widely exists in the natural world, and it is an important branch in chemical research. I am very happy studying here at Cardiff University. The professors are very erudite and patient, and the classmates are nice and friendly. The most exciting thing is that there are several libraries in the campus and I believe I can learn a great deal in this year. Cardiff is a peaceful and picturesque city, which has a great deal of art, history and rich Welsh culture. After I finish the course I plan to go back to China, find a job in the chemistry industry and maybe I will pursue a PhD degree afterwards. However, I will never forget the valuable experience in Cardiff.

Nakarain Subjalearndee

Thailand; **MSc in Catalysis**

After I graduated with a degree from the Faculty of Science, Mahidol University, Thailand, I wanted to undertake new experiences in both my academic and personal life. I felt that one way of combining both would be to study for a Master's degree abroad. I decided to search for universities that matched my lifestyle and interests in chemistry. Cardiff University was the best choice because of its School of Chemistry's research reputation. The MSc in Catalysis scheme has furthered my knowledge of chemistry, and also the environment around the university really suits my lifestyle as it's very quiet and peaceful. After I arrived at Cardiff, everything was even better than I had imagined! All of the staff in the university and people in the city are very generous to foreign students and I can guarantee that they never hesitate to help if they have any problems, no matter how big or small. The course really encourages and supports my development and allows my special interests in sustainable chemistry and real industrial processes to be investigated in more depth. In the future, if I have a chance to work in a chemical company in the United Kingdom, I definitely won't hesitate to take that opportunity.

Abdalla Elmugassabi

MSc in Chemical Biology

During studying this course, with the support of the university I have never felt homesick in lovely Cardiff. The level and depth of taught course material, practical sessions undertaken and the experience of the teaching staff have meant I have markedly improved my knowledge in this area. This course has allowed me to apply in-depth knowledge to chemistry problems in the world around us. I know this course will allow me to progress in my academic career.

Applications

Undergraduate Applications

Undergraduate Scheme Codes

MChem Chemistry	F103
MChem Chemistry with a Year Abroad	F102
MChem Chemistry with a Year in Industry	F104
BSc Chemistry	F100
BSc Chemistry with Industrial Experience	F101
BSc Chemistry with Preliminary Year	F105

To be considered for entry onto one of our undergraduate degree programmes you should apply online via the UCAS website using the 'UCAS Apply' facility. To use this facility you need to log onto: **www.ucas.ac.uk/apply**

The website will provide you with information on how to apply and explains the UCAS procedure.

Entry Requirements

Applications are considered from candidates offering a range of qualifications, the majority of applicants being A-level students. Typical offers will be within the range of AAA-ABB.

Those applicants with Chemistry plus two other sciences (from Biology, Physics, Mathematics or Further Mathematics) will be made a typical offer of ABB. Those with Chemistry, one science and another A-Level an offer of AAB and those with Chemistry plus two non-science subjects the highest offer of AAA. We will ask for a minimum of grade B in Chemistry in all offers. We also accept the Welsh Baccalaureate qualification but it must be in addition to two other science subjects, one of which must be Chemistry.

International Baccalaureate:

Applicants will be expected to achieve 32 points for the programme with 10 points in total or above at the Higher Level from Chemistry and another science or Mathematical subject. This is to include a minimum of 5 in Chemistry.

Other:

Applications from those offering alternative equivalent/overseas qualifications are welcome as are those who may have other relevant work/life experience.

Specific Subjects

A-level General Studies and Critical Thinking is excluded.

GCSE: No specific requirements other than normally at least a grade C in English Language and Mathematics.

Recognised English language qualifications

All applicants need to achieve a minimum level of English Language in the 4 areas of Writing, Speaking, Listening and Reading.

Below are the recognised English language qualifications required for standard Undergraduate and Postgraduate courses. Our preferred test of English language competence is IELTS but we accept any of the following:

Qualification	Minimum Score
GCSE/GCE 'O' level English language	C
IGCSE level English language	C
IELTS (Academic Test)	6.5
International Baccalaureate Diploma	Grade 5 at either SL or HL

More information on minimum levels of English language can be found here:

http://www.cardiff.ac.uk/for/prospective/international/english-language-requirements.html

Applications Information

Typical intake: **180**

Typical number of applications: **750**

Equal Opportunities

Cardiff University is committed to promoting equality and diversity in all of its practices and activities, including those relating to student recruitment, selection and admission. The University aims to establish an inclusive culture which welcomes and ensures equality of opportunity for applicants of all ages, ethnicities, disabilities, family structures, genders, nationalities, sexual orientations, races, religious or other beliefs, and socio-economic backgrounds. This commitment forms part of the Equality and Diversity Policy which is available at: **www.cardiff.ac.uk/cocom/equalityand diversity/index**

Applicants with Disabilities/Specific Needs

All offers to study at Cardiff University are made solely on the basis of academic merit. Where applicants have specific requirements that relate to a disability or medical condition, they are encouraged to discuss these with relevant staff in order that appropriate arrangements can be made to ensure the University provides an accessible environment. Specifically, applicants are invited to contact the Disability Adviser who can provide information about the applications procedure, course delivery and access to the physical environment. Where appropriate, informal visits can be arranged in which applicants can view accommodation and meet academic staff. The Disability Adviser can be contacted at:

Student Support Centre
50 Park Place, Cardiff CF10 3AT
Tel/Minicom: +**44 (0)29 2087 4844**
Email: **disability@cardiff.ac.uk**

International Foundation programme

The Health and Life Sciences International Foundation Programme (IFP) is a one year programme designed for students who wish to improve their academic English language skills while studying a broad range of science modules. The IFP allows automatic progression to the School of Chemistry undergraduate degree schemes. The IFP will prepare you for studying an academic course taught in English and for performing at your best in the UK education system. The IFP is supported by a dedicated Foundation Office and all courses are taught on campus by experienced University staff. IFP students are full members of the University and have access to the University libraries, computing and sport facilities, as well as the Students' Union and accommodation in Cardiff University halls of residence. The programme consists of 60 credits of language and study skills modules, which includes reading, writing and spoken English as well as British culture. Students also study 60 credits of subject specific modules, which includes four modules of fundamental organic, inorganic and physical chemistry and two foundation level biology and biochemistry modules. For more information and details of how to apply, please see the IFP web pages at:

http://www.cardiff.ac.uk/for/prospective/international/english-foundation-courses/international-foundation-programme.html

English Language entry requirements are as follows for the IFP course:

- IELTS 5.5
  (minimum subscores: 4.0 in all areas)

Other:

Applications from those offering alternative equivalent/overseas qualifications are welcome as are those who may have other relevant work/life experience. Please contact the admissions tutor directly for entry requirements specific to your country otherwise visit this link below for further information:
http://www.cardiff.ac.uk/for/prospective/international/countries.html

More online at:
www.cardiff.ac.uk
www.cardiff.ac.uk/for/prospective/undergraduate
www.cardiff.ac.uk/fees
www.cardiff.ac.uk/scholarships

Postgraduate Applications

Postgraduate entry

How do you apply for postgraduate study?

You can directly approach the School or Registry with a view to submitting an application for postgraduate study. In each case, you will be asked to complete a direct entry application form, which is passed to the Admissions Tutor.

After completing the online application form, you should upload proof of your highest qualification, English Language qualification (IELTS etc.), references from two referees and a transcript of your degree when you complete this online application. To apply for one of our postgraduate courses then please visit the link below:
http://www.cardiff.ac.uk/for/prospective/postgraduate/applying.html

Pre-sessional Courses

Cardiff University provides an excellent opportunity for pre-university students holding offers from or applying to Cardiff University to take short courses in English for Academic Purposes.

Students can apply for our summer "Pre-sessional" courses, which are highly intensive and designed specifically for students who are going to study at Cardiff University in the autumn.

The Pre-sessional English Course at Cardiff University is an 8 week or 10 week course undertaken in the summer months prior to September. It is a full-time, intensive English language programme specifically designed for international students with an offer to study at undergraduate or postgraduate level at Cardiff University.

These courses are ideal if you do not have the desired level of English and need to achieve an equivalent level to IELTS 6.5 before starting your postgraduate course.

http://www.cardiff.ac.uk/for/prospective/international/english-foundation-courses/english-language-programmes/pre-sessional-courses.html

Deferred Entry

The School has no objection to the possibility of deferred entry provided the intervening year is spent in a positive and worthwhile way. Application is made through UCAS in the usual way, although the UCAS application must show the deferred year of entry.

Admissions Contacts

For information on applying and enrolling on an undergraduate programme, please contact:

The Admissions Tutor
Cardiff School of Chemistry
Cardiff University, Main Building
Park Place, Cardiff CF10 3AT

Tel: **029 2087 4079** (Undergraduate)
Tel: **029 2087 0740** (Postgraduate)
Fax: **029 2087 4030**
www.cardiff.ac.uk/chemistry

Tuition Fees and Financial Assistance

The University charges an annual fee which covers all tuition fees, registration and examinations other than the re-taking of examinations by students not currently registered. Please note charges for accommodation in University Residences are additional.

Please see the following website for more information: **www.cardiff.ac.uk/fees**

Scholarships and Bursaries

For more information please visit the following website:
www.cardiff.ac.uk/scholarships

Useful websites for information about tuition fees and financial assistance:

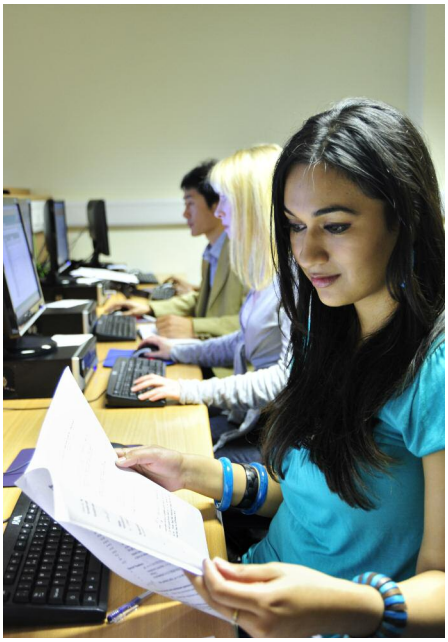
Cardiff University website:
www.cardiff.ac.uk/fees

Student Support Centre website:
www.cardiff.ac.uk/financialsupport/index.html

Student Finance Wales
www.studentfinancewales.co.uk

Student Finance England:
www.studentfinanceengland.co.uk

Student Loans Company:
www.slc.co.uk



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Tel: **029 2087 4455**
Email:
RobertsL9@cardiff.ac.uk

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To find out more about the School of Chemistry please visit our website **www.cardiff.ac.uk/chemy**

INSIDERS
meet our students

Got questions about student life?
Get them answered at:
www.cardiff.ac.uk/insiders

Some of our current students are sharing their experiences online through their Facebook pages, so if you want to know what life as a student at Cardiff is really like, then you can find out now. There is also lots of information about what is happening in Cardiff, including articles written by our students, videos, and much more.

Enquiries

Tel: **029 2087 4023**
Email: **chemistry-ug@cardiff.ac.uk**

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