

School of Chemistry Postgraduate

Handbook 2024-2025





Table of Contents

Table of Contents

| | |
|---|----|
| Welcome from the Director of Teaching and Learning (Postgraduate) | 2 |
| Where to find us | 3 |
| The Role of Your Supervisor | 5 |
| Your Thesis Committee | 6 |
| Important Contact Information..... | 6 |
| Registration | 7 |
| Modules and Credits..... | 12 |
| Progression | 14 |
| Demonstrating Undergraduate Chemistry labs..... | 16 |
| Getting Paid for Demonstrating/Outreach..... | 18 |
| Submitting your Thesis..... | 18 |
| The Werner Chemical Society | 19 |
| Support..... | 21 |
| School of Chemistry FAQs | 23 |
| Other Resources | 25 |



Welcome from the Director of Teaching and Learning (Postgraduate)

Welcome to the School of Chemistry, a partner School in the Dublin Chemistry Graduate Programme 2024/25

Chemistry is a pivotal discipline that lies at the crossroads of biological and physical sciences. Chemistry underpins our understanding of the world around us and in doing so helps shape a better future for everyone. As postgraduate students you are at the frontier, working with world-class staff and facilities, creating new knowledge, and making exciting discoveries. The modern PhD. student is much more than just a specialist in a very narrow area. Today's graduate must have a broad overview of the science, well-developed problem-solving skills, the confidence to tackle a range of projects outside their particular area of expertise and be able to communicate their results to both the scientific and lay communities.

With this in mind, the leading Schools of Chemistry in Ireland have come together to develop a new frontier in graduate education and training in chemistry. With over forty team leaders, Dublin Chemistry offers young scientists the opportunity to conduct wide-ranging high-level research in areas such as synthetic and computational chemistry, nanochemistry, advanced materials, biological and medicinal chemistry and much, much more. Importantly, this research is supported by advanced level chemistry graduate modules and training in instrumental techniques as well as modules in communication, presentation and how to carry out effective research.

The programme is organized through the Dublin Chemistry Management Committee, which meets regularly, is particularly receptive to student input, and is supported by the annual meeting of the Dublin Chemistry Steering Committee.

Combining innovative research and structured graduate modules, we seek to continue to nurture the next generation of scientists, who will bring new solutions to society by their enhanced understanding and control of new molecules and materials with novel physical and/or biological properties.

We hope your time with the School of Chemistry is both enjoyable and productive. Remember, the staff are here to help so don't be afraid to ask if you have questions. We look forward to working with you in the coming years.

Prof. Yurii Gun'Ko
Director of Teaching and Learning (Postgraduate),

School of Chemistry, Trinity College Dublin



Where to find us

There are 5 buildings in TCD that house School of Chemistry activities – The Chemistry Building (Main Building), SNIAMS, The Lloyd Building, CRANN and TBSI. The map on the next page shows the locations of these buildings.

Some of your classes for certain modules may also take place in UCD. The quickest way to get there is by Dublin Bus. The 39A bus, which stops at the Nassau Street stop (stop no. 404), stops inside UCD. Also from Nassau Street (stop no. 406), you can take the 46A (going to Dun Laoghaire), the 145 (going to Kilmacanogue), the 7B (going to Shankhill), or the 7D (going to Dalkey), all of which will bring you to the flyover just outside the UCD campus (stop no. 2007).

To get from UCD to TCD you can take the 32X (going to Malahide), 66X (going to Maynooth), 67X (going to Celbridge), 39A (going to Ongar) from the bus stop just outside the main entrance to the campus

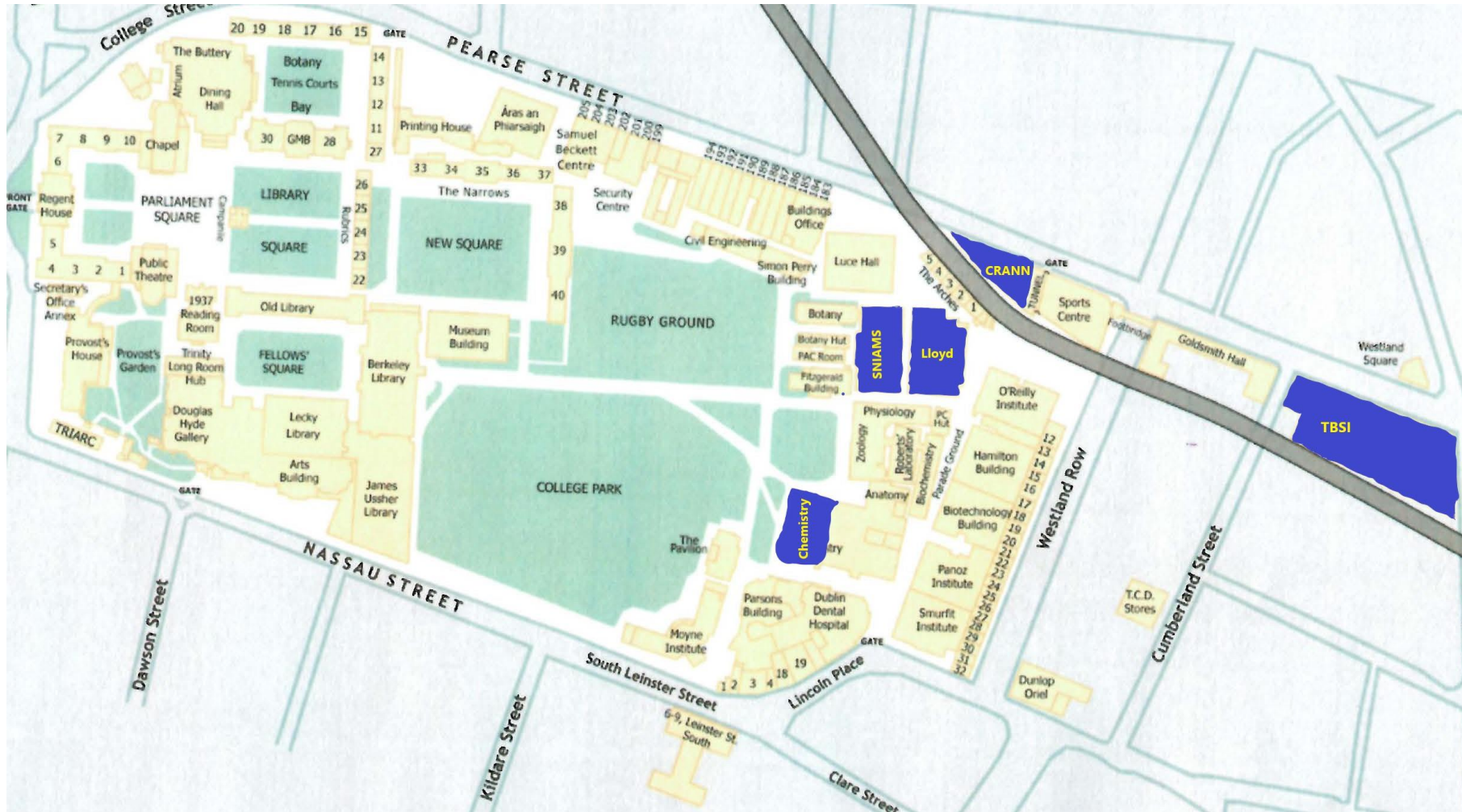




Trinity College Dublin

Coláiste na Tríonóide, Baile Átha Cliath

The University of Dublin





The Role of Your Supervisor

Supervisors of postgraduate students have a personal responsibility to (adapted from TCD good research practice document - <https://www.tcd.ie/graduatestudies/assets/pdf/TCD-good-research-practice.pdf>):

- Ensure the candidate is aware of regulations and legal issues including, but not limited to data protection, copyright, intellectual property and ethical considerations.
- Assist in the arrangement of necessary administrative steps such as approval of thesis title, registration, and transfer to the PhD register.
- Establish and maintain regular contact through meetings held at a frequency commensurate with the nature, stage, and level of research being undertaken. The frequency of such meetings is to be determined by you and your supervisor but should not be less than once per month.
- Request written work as appropriate and return such work with constructive feedback within an agreed period of time.
- Prepare students for the submission of a cogently written confirmation report.
- Receive and read the final draft of the confirmation report, confirm that it is largely free from errors and that it is fit for examination.
- Provide guidance and assistance to the candidate regarding presentation or publication of the research both internally and externally.
- If necessary, warn the student, in writing, of inadequate progress or of any unsatisfactory standard of work.
- Provide guidance on the writing and preparation of the thesis. This should include commenting on at least one draft.
- Ensure that the student is prepared for the viva and understands its role in the overall examination process.
- Advise the student subsequently of the implications of any recommendations from the examiners and assist in the preparation of any resubmission.
- Encourage independent thought and investigation, and to ensure the student is clearly aware of the requirements, and appreciates what they are expected to achieve, in the course of their degree.
- Assist the student after the completion of the research degree, in providing references or direction to postdoctoral opportunities.



Your Thesis Committee

The thesis committee consists of your supervisor and two additional members of academic staff. One of these members will have expertise in your field of research, the other will have out-of-field expertise. The out-of-field member of the committee will play a role in signing off your progress reports at the end of 1st and 3rd year and will be your examiners for your confirmation/transfer viva in 2nd year. The in-field member will serve as your internal examiner for your final PhD viva at the end of your studies.

The main role of the thesis committee is to provide an additional level of guidance, support and pastoral care as you complete your studies. You should check in with them as needed and at least once per semester.

[Thesis Committee Terms of Reference](#)

[Thesis Committee Guidelines](#)

Important Contact Information

There are a number of important people that you are likely to need as you complete your studies. Their contact details are listed below

| | | |
|--------------------|--|--------------------------------------|
| Prof. Yurii Gun'Ko | Director of Teaching and Learning- Postgraduate | igounko@tcd.ie |
| Ben Power | Executive Officer - Postgraduate Queries | powerbe@tcd.ie |
| Peter Brien | Safety Officer | pbrien@tcd.ie |
| Manuel Ruether | Senior Technical Officer | ruetherm@tcd.ie |
| John O'Brien | Senior Technical Officer | jeobrien@tcd.ie or nmrchem@tcd.ie |
| Chris Smith | College Laser Safety Officer | chsmith@tcd.ie |
| Sinéad Boyce | School Administrator | sboyce@tcd.ie |
| Noelle Scully | Freshman Coordinator | pnsully@tcd.ie |
| Niamh McGoldrick | Global Officer | nmgoldr@tcd.ie |
| Des Keany | CRANN | keanyd@tcd.ie |
| Demot Daly | CRANN Safety Officer | dermot.daly@tcd.ie |
| Nilki Weerawardana | GSU EMS Officer | emsofficer@tcdgsu.ie |

The school office is located in room 1.22 on the first floor of the Chemistry Building. Ben can be reached at ext. 2040 (on a TCD phone – if calling from outside dial 01 896 2040) and office hours are 9:00am-4pm Monday-Friday. Ben's days in the office are usually Tuesday, Thursday and Friday with AnneMarie being there on Mondays and Wednesdays.



Registration

Please Note: it is necessary to register at the beginning of every year of study. Failure to do so may result in your stipend or degree being cancelled. Please make absolutely sure the account codes on your form are correct before submitting as the school office has no way to check these and returned forms may delay your registration and stipend payment.

Registration takes place in August for September-entry students, December for January entry, and in February for March-entry. The deadline for registration is the last day of your month of entry each year (September 30th, January 31st, or March 31st as applicable). After accepting your offer or after you have been progressed to the next academic year, you will receive an invitation to register via your myTCD portal. Follow the instructions in the invitation to complete the online registration process. Print off your fees statement as this will need to be submitted to the school office with the rest of your paperwork.

Two forms are required by the School office in addition to your fee statement and information in order to complete your registration each year. These are all available to download from https://chemistry.tcd.ie/Study/current_students/postgraduate/current/policies_and_forms.php:

➤ **Fee information**

This informs the office where your fees are to be paid from. You should send the following information to Ben (Or Tracy, Carol or Mary if they are the people dealing with your registration)

- Screenshot or pdf of Fee statement (this should show the whole statement. Use multiple screenshots if necessary)
- Student ID number
- Name of funding body (SFI, IRC etc.)
- Project number/Award number and cost centre where grant is housed (e.g. 1461 for School of Chemistry; 1590 for CRANN etc.) or cost centre and school account number to be used for payment.

Where there is a shortfall between the fees covered by your funding body and the fees charged by the college, the college has agreed to waive the deficit (including your student levy) for you. This waiver will be processed automatically from the office, there is nothing extra that you need to do.

➤ **Graduate Student Proposal form**

This form is for setting up your monthly stipend so that you can be paid each month while you study. It informs HR where the money to pay your stipend comes from. You should fill in your details and include the amounts of your stipend and any fees covered by your funding source.

If your stipend comes from a grant managed by your supervisor, they should sign this form before you submit it to the school office for signature by the Head of School. If you are funded via a Trinity Postgraduate Research Studentship, these forms will be processed for you through Academic Registry and you should contact them with any queries making sure to include FAO: Student Finance in the subject line.

➤ **Scholarship Exemption Declaration Form**

This is a form required by revenue for tax purposes. It ensures you are taxed as a student in full time education rather than as an employee of the college. The amount of scholarship requested on this form is the amount of your stipend only. Do not include fees. You should sign and date this form yourself before submitting it to the office.

It is vital that all of these forms are filled out completely and accurately to ensure that there are no issues with your registration or payments so if in doubt, check with your supervisor or with the school office. We are always happy to help!



Course Structure

Dublin Chemistry is a joint-educational programme between Trinity College and University College Dublin (UCD). Lecturers from both universities teach classes on a variety of topics at a postgraduate level. All research postgraduate students in the School of Chemistry are enrolled in this programme. It is a credit-based system with each course worth 2.5 or 5.0 credits and students enrol in courses that are relevant to their research. The courses are assessed differently; some have an exam at the end of the course, others use assignments or practicals to assess your performance. The courses are usually lecture-based, which can take place in either TCD or UCD (or both). The courses are usually held during the undergraduate teaching term and can run for one or two semesters or intensively over one, two or more days.

PhD and MSc course structures in the school of Chemistry are very similar with the main difference being the duration of study and number of credits required to graduate. PhD. students are required to have 10 credits completed (CA7000 + 1 research relevant module) at the point of submission of their confirmation report and a further 5 credits completed in order to progress to year 3. For MSc students, 15 credits are required in order to either graduate or transfer to the PhD. register at the end of year 2.

➤ **Mandatory Modules (12.5 Credits)**

- **CA7000:** Research Ethics, Data Protection, IPR, and Research Data Management & Planning **(5 credits)**
- **CHEM40340:** Teaching in Higher Education as a Graduate Assistant. (Self-directed CAPSL Module or Workshop TBC* + in-lab Demonstrator Module w/induction on report format & grading) **(5 credits)**
- 3rd year Talk **(2.5 credits)**
- Chemical safety **(no credits)**
- Chemistry Seminar **(no credits – sign-in sheet, 50% attendance required)**

➤ **Research Relevant Modules (minimum 12.5 credits)**

- Characterisation techniques
- Modules provided by School of Chemistry/elsewhere (w/permission)
- **CHEM40860:** Chemistry Outreach: Development and Practice **(5 credits)**

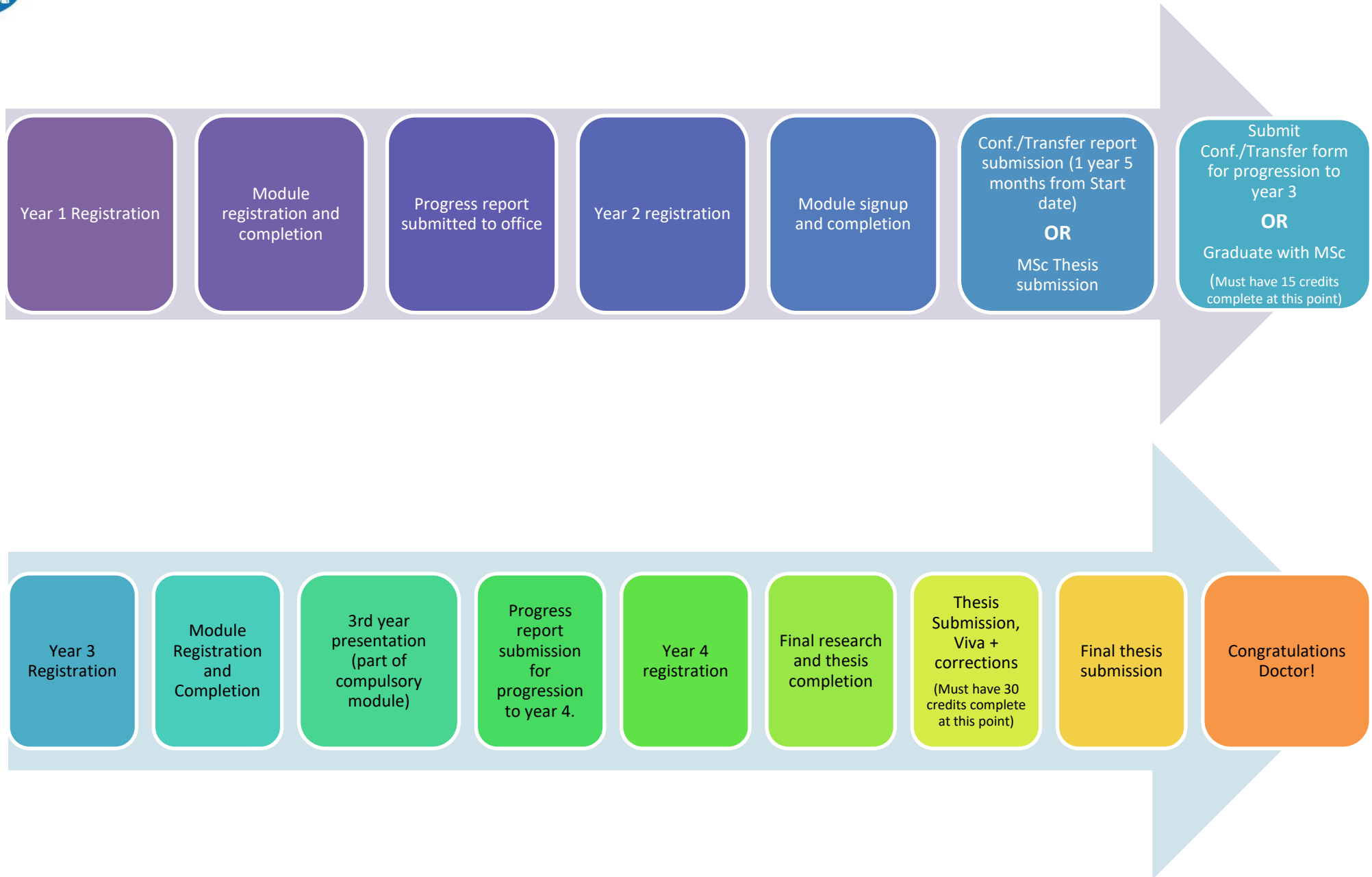
➤ **Translational skills Modules (capped – 5 credits)**

- CAPSL: Planning and Managing PhD
- Statistics (on-line modules will be available soon)
- Entrepreneurship

➤ **Other Resources (no credit)**

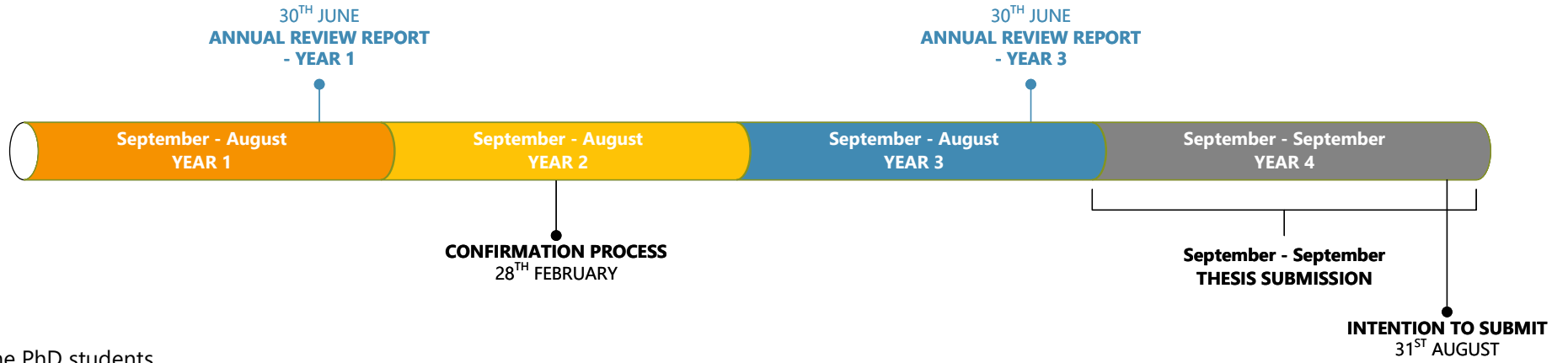
- Workshops & webinars related to PhD and career development
- LinkedIn Learning online tutorials (Python training, project management etc.)

** Module went offline last semester – we are working with CAPSL on alternative and will update soon*

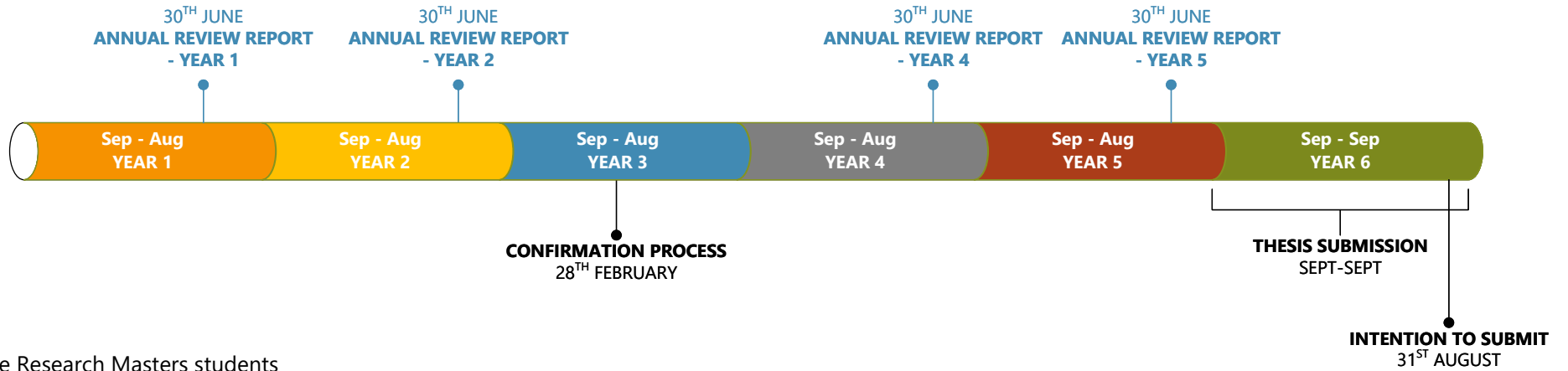


Postgraduate Research Progression Deadlines (Sept Intake)

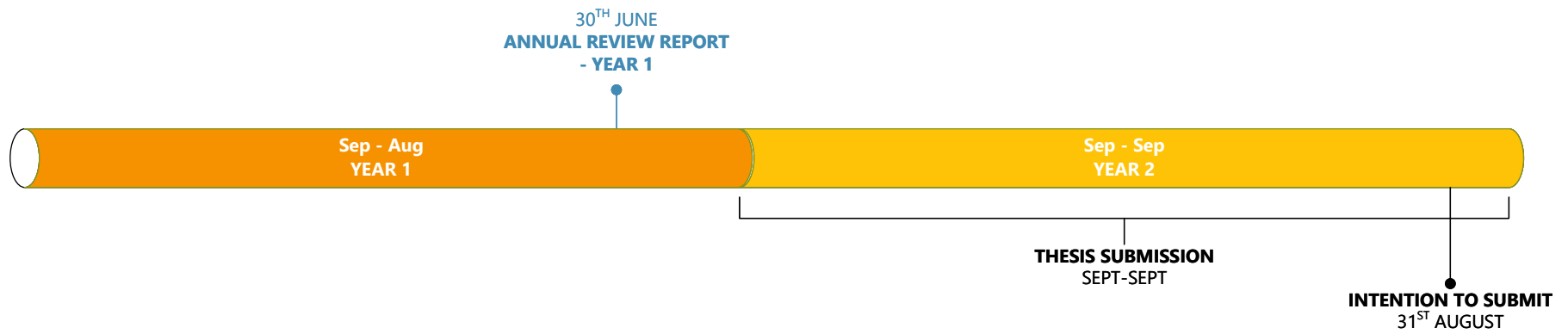
Full-time PhD students



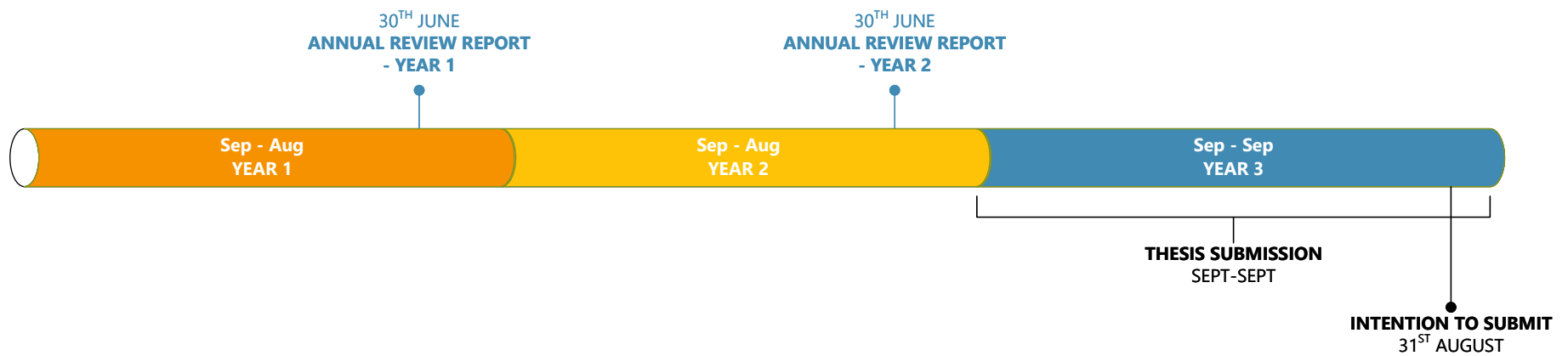
Part-time PhD students



Full-time Research Masters students

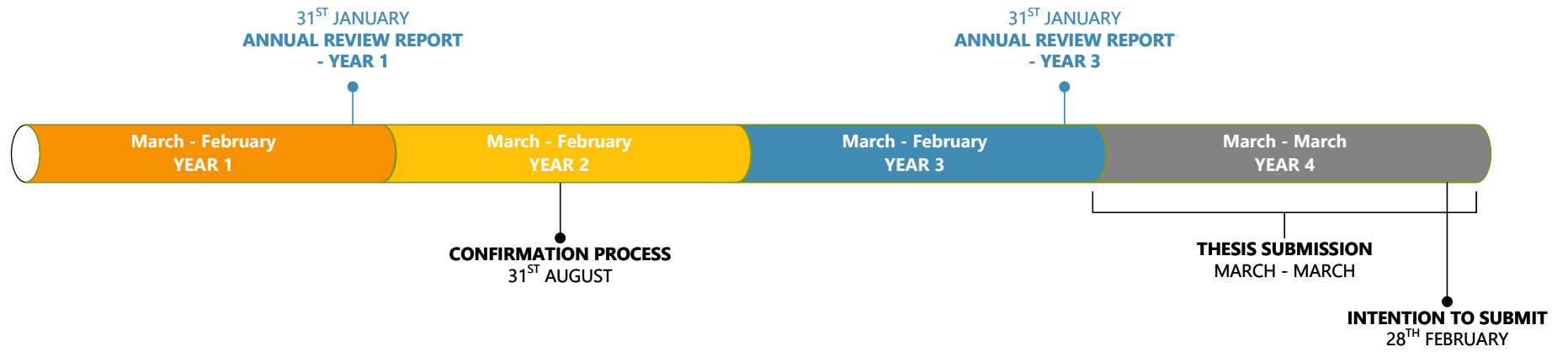


Part-time Research Masters students

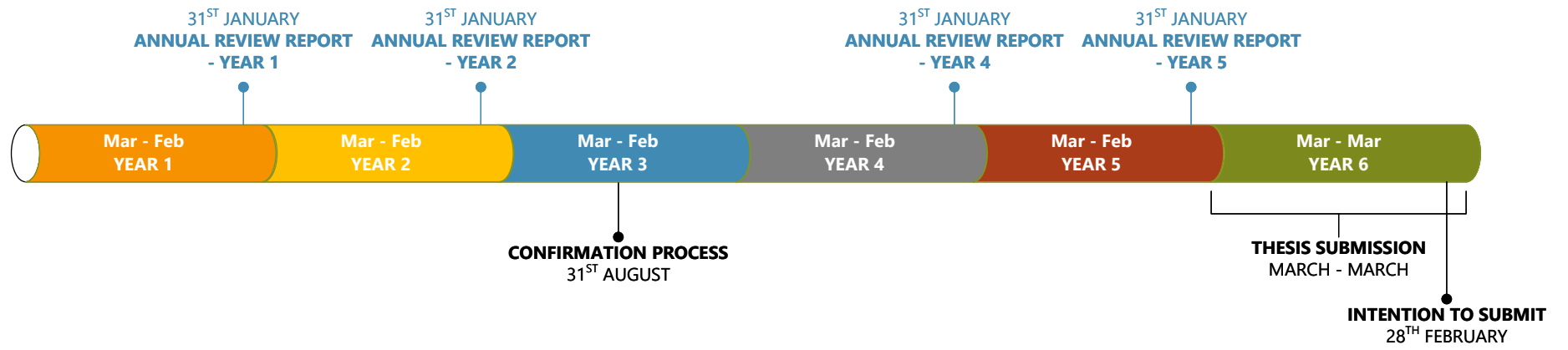


Postgraduate Research Progression Deadlines (March Intake)

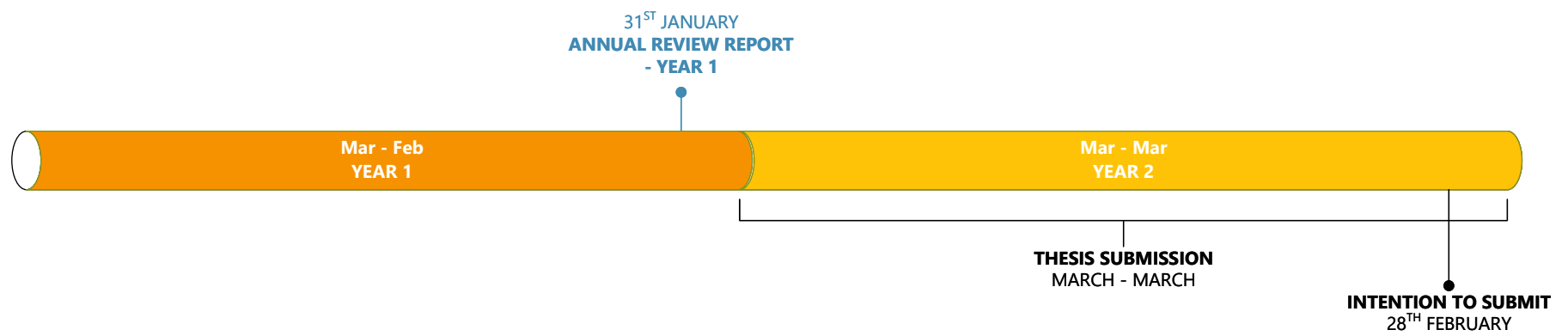
Full-time PhD students



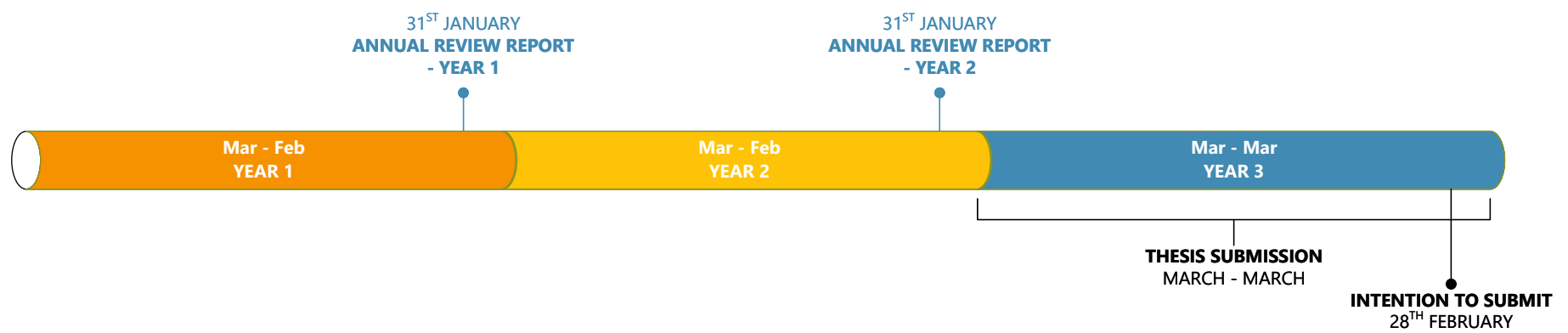
Part-time PhD students



Full-time Research Masters students



Part-time Research Masters students





Modules and Credits

Module signup is via MS Forms unless otherwise instructed. An email will be sent to all students when registration for a module opens. You should discuss with your supervisor before registering for any elective modules. Further modules may be announced as the year progresses. Keep an eye on the school website and your email account for further information.

Module descriptors can be found on the School of Chemistry website at <https://chemistry.tcd.ie/assets/pdf/DubChem/DubChemModuleDescriptors.pdf>.

Credits are recorded locally in the School of Chemistry. You should also keep your own record of modules completed so that any discrepancies can be rectified quickly.

A list of the modules on offer as of 04/09/2023 in 2024/25 can be found on the next page. Further modules may be offered in due course and information will be distributed as it becomes available.



| Dubchem Modules 2023/24 | | | | | | |
|-------------------------|--|--------------------|---------|-----------------------------------|---------|-----------|
| Module Code | Module Title | Module Coordinator | Credits | Trimester offering | UCD/TCD | Comments |
| CA7000 | Research Integrity and Impact in an Open Scholarship Era | Online Module | 5 | Complete within 18 months | TCD | Confirmed |
| CHEM40160 | Chemistry and Chemical Biology Seminar Programme | Online Seminars | 0 | Full Year | | Confirmed |
| CHEM40240 | Spectro Techniques (TCD) | Susan Quinn | 2.5 | Autumn | UCD/TCD | Confirmed |
| CHEM40340 | Teaching in Higher Education as a Graduate Assistant | Noelle Scully | 5 | 2 Semesters (6 consecutive weeks) | TCD | Confirmed |
| CHEM40370 | Advanced NMR Spectroscopy | Patrick Guiry | 5 | Spring | UCD | Confirmed |
| CHEM40860 | Chemistry Education and Public Engagement (EPE) | John O'Donoghue | 5 | 2 Semesters | TCD | Confirmed |
| CHEM40720 | Scientific Writing and Publishing | Mathias Senge | 2.5 | Semester 1 | TCD | TBC |
| CHEM40310 | Catalytic Asymmetric Synthesis | Patrick Guiry | 5 | Semester 3 (Summer) | UCD/TCD | Confirmed |



Progression

At the end of each academic year (Jan/Feb, Jun/Jul or Nov/Dec) depending on your starting month), You will be required to submit documentation to allow you to progress to your next year of study. 1st and 3rd years submit a progress report with input from their supervisors and thesis committee and 2nd years will submit a confirmation/transfer report.

➤ Progress Report

The progress report is a way of stopping to “take stock” of what you have achieved so far in your research, to identify things that have gone well and areas that may be causing some issues. It should be viewed as a checkpoint where you can identify whether your plan for your research is on track or if there are some adjustments needed. The form is very short (2-3 pages maximum). You should fill out the self-reflection section first and then submit to your supervisor and thesis committee for them to add their comments. Then you should meet to discuss, agree a rough direction for the coming year, all sign the form and submit to the school office for filing. It is important to note that this form is not an exam and is not marked or graded in any way so it should not be a hugely stressful endeavour. It should take no more than a few hours of your time to complete. The progress report form can be downloaded from <https://www.tcd.ie/graduatestudies/assets/doc/annual-review-23.docx> (PhD form) <https://www.tcd.ie/graduatestudies/assets/doc/annual-review-mres24.docx> (MSc form)

➤ Confirmation/Transfer Report

The confirmation/transfer process is lengthier and more substantial. It consists of a report no more than 35 pages in length defended in viva with two members of academic staff. A template for writing the report can be found at https://chemistry.tcd.ie/Study/current_students/postgraduate/policies_and_forms.php

The objective of the confirmation/transfer report is to determine if the student:

- Can write a coherent thesis in English
- Can complete and write up a PhD, and defend in viva
- Understands the objectives, results and conclusions of their project.

Following the confirmation viva, examiners can recommend one of four outcomes:

1. Progress without corrections
2. Progress with minor corrections (submitted for approval)
3. Re-write (and possibly re-viva)
4. Do not progress

The report is to be submitted in your second year. The deadline is the first Friday in February (for September registrants), the first Friday in June (for January registrants) and the first Friday in September (for March registrants)

Tips for a successful confirmation/transfer process

- Plan early and prepare – This causes less stress and gives you more time to correct if necessary. Stay on top of the literature and record data accurately and characterise/analyse as you go
- Plan with your supervisor – agree deadlines for submission of drafts so that your supervisor is available to review and offer feedback.
- Don't rely on your own error-checking – most people have trouble spotting errors in their own work. Especially if there is no gap between producing the work and proof reading. Ask your colleagues to proofread and offer feedback, check your experimental section carefully and make sure you read a copy of your work after it has been printed.



➤ **Confirmation/Transfer Form**

After your confirmation/Transfer viva is complete and any corrections have been submitted to your examiners and approved, you should submit a confirmation or transfer form as appropriate to the school office. These can be downloaded from:

<https://www.tcd.ie/graduatestudies/assets/doc/conf-rep-23.docx> if you began 1st year as a PhD candidate

<https://www.tcd.ie/graduatestudies/assets/doc/master-to-phd-transfer-jan22.docx> if you began 1st year as an MSc candidate and are now transferring to the PhD register.



Demonstrating Undergraduate Chemistry labs

As a demonstrator you will serve as a mentor and instructor to the students. You will receive an induction from the academic staff member that oversees the lab and if required, a chance to perform and familiarise yourself with experiment(s) you are overseeing. Guidelines on grading will also be discussed (see below).

You will also be required to complete the in-lab School of Chemistry Demonstrators Module, where the students assigned to you in lab will assess your effectiveness as a demonstrator and teacher. Through this module you will have a chance to refine your approach to demonstration and teaching in consultation with the academic staff member in charge of the lab.

Most of the students you will mentor will have had little or no experience in reducing theory to practice in laboratory classes and will be learning skills that they have not encountered before. This makes your help the most important contributing factor to their successful acquisition of the skills required to be a good experimental chemist. You should:

- Ensure that the students always wear their safety glasses properly in the lab and do not eat, as eating is prohibited in the lab. Report all accidents to the member of staff in charge.
- It is absolutely essential to be helpful and supportive. Students may be shy about asking for assistance or reassurance. It is essential that you go to the students rather than expecting them to approach you.
- Promote active thinking by asking questions that force the student to make the connection between what they observe and the chemistry behind the observation.
- The Staff Member in charge will give a pre-practical talk at the start of the class. It is nevertheless important that you make sure that your students are clear on what they must do and that they know how to set up the equipment correctly before they start the experiments. Also make sure that your students know the theory behind the experiments as just giving them the correct answer will not help them learn. To do this, you must have a good knowledge of the practical so you must be well prepared for the class.
- Attendance must be taken each week at the beginning of the lab class (make sure that you have filled in your name and the correct date on the top of the form). Make sure that the students are in the correct lab class – if a student is not in the right class, then send them to talk to the staff member immediately.
- You must take a copy of the sheet and give the original to the staff member in charge of the lab class.
- You must also provide the staff member with a list of the students who attended the practical class but did not hand in a report and/or results sheets.
- When marking lab reports use the marking scheme below. Also, please keep in mind the guidelines on awarding grades (See Table 1). You should clearly identify errors on the report/results sheets and indicate how the student can correct errors and how they can improve their reports.

General rules:

- You must be on time.
- If you need to swap your demonstrating, you must ask the staff member's permission by email in advance and provide the name and e-mail address of the person you intend to swap with. It is also your duty to ensure that the demonstrator you swap with is sufficiently familiar with the experiments.



- You must be proactive in teaching the students and encouraging them to continue their studies in chemistry.
- Coloured lab coats and name badges will be provided for you for the lab classes.
- You must lead by example in terms of safety in the chemistry lab.

| Schedule of Grades |
|--------------------|
| I = 70%+ |
| II-1 = 60-69% |
| II-2 = 50-59% |
| III = 40-49% |
| F-1 = 30-39% |
| F-2 = 0-29% |

Table 1: Guidelines on Awarding Grades

| Mark Range | Criteria |
|------------|---|
| 90-100 | IDEAL ANSWER; showing insight and originality and wide knowledge. Logical, accurate and concise presentation. Evidence of reading and thought beyond course content. Contains particularly apt examples. Links materials from lectures, practicals and seminars where appropriate. |
| 80-89 | OUTSTANDING ANSWER; falls short of the 'ideal' answer either on aspects of presentation or on evidence of reading and thought beyond the course. Examples, layout and details are all sound. |
| 70-79 | MAINLY OUTSTANDING ANSWER; falls short on presentation and reading or thought beyond the course, but retains insight and originality typical of first class work. |
| 65-69 | VERY COMPREHENSIVE ANSWER; good understanding of concepts supported by broad knowledge of subject. Notable for synthesis of information rather than originality. Sometimes with evidence of outside reading. Mostly accurate and logical with appropriate examples. Occasionally a lapse in detail. |
| 60-64 | LESS COMPREHENSIVE ANSWER; mostly confined to good recall of coursework. Some synthesis of information or ideas. Accurate and logical within a limited scope. Some lapses in detail tolerated. |
| 55-59 | SOUND BUT INCOMPLETE ANSWER; based on coursework alone but suffers from a significant omission, error or misunderstanding. Usually lacks synthesis of information or ideas. Mainly logical and accurate within its limited scope and with lapses in detail. |
| 50-54 | INCOMPLETE ANSWER; suffers from significant omissions, errors and misunderstandings, but still with understanding of main concepts and showing sound knowledge. Several lapses in detail. |
| 45-49 | WEAK ANSWER; limited understanding and knowledge of subject. Serious omissions, errors and misunderstandings, so that answer is no more than adequate. |
| 40-44 | VERY WEAK ANSWER; a poor answer, lacking substance but giving some relevant information. Information given may not be in context or well explained, but will contain passages and words, which indicate a marginally adequate understanding. |
| 35-39 | MARGINAL FAIL; inadequate answer, with no substance or understanding, but with a vague knowledge relevant to the question. |
| 30-34 | CLEAR FAILURE; some attempt made to write something relevant to the question. Errors serious but not absurd. Could also be a sound answer to the misinterpretation of a question. |
| 0-29 | UTTER FAILURE; with little hint of knowledge. Errors serious and absurd. Could also be a trivial response to the misinterpretation of a question. |



Getting Paid for Demonstrating/Outreach

An hourly rate of €21.02 is paid for demonstration and outreach and a rate of €47.50 is paid for Senior Demonstrating. A fixed amount of extra time is added for marking time depending on the class group (JF, SF or JS) and number of students you have demonstrated to. **You must submit your claims for work done no more than 2 months after the work has been completed – i.e. work done in September must be claimed no later than November etc.**

Payment for Demonstrating, Senior Demonstrating and Outreach is made via the monthly casual payroll and forms can be collected from the school office. All payments are in arrears and no claims can be made for hours not yet completed. Forms should be completed, signed and returned to the school office no later than the 19th of the month (or the next working day if the 19th falls on a weekend or bank holiday). A Monthly Casual Employee Set-up Form must also be completed at the beginning of each academic year.

Regular and Senior Demonstrators must also complete a demonstrating log to go along with their claim forms. This log serves to provide us with a breakdown of amounts claimed for demonstrating and marking (as these generally don't happen at the same time) and are used by the office to keep track of what has already been claimed by each demonstrator and catch any duplicate claims that may happen through oversight. You may also find it useful to keep your own running record of amounts claimed so that any queries can be resolved easily.

If you have made changes to the demonstrating timetable (i.e. swapped with someone or taken an extra session), please ensure that you attach a note to your claim form highlighting this to avoid any delays in payment.

Submitting your Thesis

Full guidelines for submitting your thesis (MSc and PhD by students) can be found at:
<https://www.tcd.ie/graduatestudies/students/research/thesis-submission/>

At the end of your fourth year of study (second for MSc), you will finalise your thesis ready for submission and examination. An electronic copy of your thesis should be submitted to the Academic Registry who then issue an external examiner nomination form to your supervisor.

PhD Students: Your supervisor will identify an external and an internal examiner and a viva chair for your viva voce and submit the relevant forms to the DTLPG for signature before approval by the Dean of Graduate studies. The copies of your thesis will then be sent to the relevant examiners and a viva date agreed.

Five outcomes are possible following the viva:

- 1) The degree should be awarded for the thesis as it stands**
- 2) The degree should be awarded, subject to minor corrections being made to the thesis:** You are allowed two months from the time of notification from the Graduate Studies Office to complete the corrections. The internal examiner must confirm to the Dean of Graduate Studies that the required corrections have been carried out satisfactorily.
- 3) The thesis should be referred back for revision:** In this case you are required to re-register and pay a revision fee and to submit the revised thesis for re-examination by both examiners within six months. The Calendar provides that revised theses may be submitted up to an absolute maximum of two years from the original date of submission in exceptional circumstances and with the prior permission of the Dean of Graduate Studies. No viva voce examination will be held during re-examination of the thesis. This option is not available if the thesis has already been referred back for revision.
- 4) A lower degree (M.Sc.) should be awarded:** A lower degree should be awarded if necessary following



minor corrections to the thesis. The typescript report must make clear to you the areas in which your thesis is deficient and why these deficiencies are not addressable by revision or re-submission.

5) The thesis should be failed (i.e. rejected): The typescript report must make clear to you the areas in which their thesis is deficient and why, in the examiner's view, the thesis is irredeemably flawed.

When corrections have been made and the examiners are satisfied the internal examiner will indicate to the Dean of Graduate Studies that the degree may be awarded, and you will be invited to submit your final hardbound thesis to the library. You may submit your thesis electronically at this point via the e-thesis system and will have the option to send your final copy to an external printer and binder or to use the internal college system. Full instructions for this process are available at:

<https://www.tcd.ie/library/support/submitting-theses.php>.

MSc Students: For MSc by research students the procedure outlined above is the same except that a viva voce is not compulsory. On examination of the thesis however, a viva may be requested by either the internal or external or both examiners if they feel it is necessary.

The Werner Chemical Society

The Werner Chemical Society was first established by the School of Chemistry in 1949.

Originally, the committee was made up of one academic staff member (president), and three chemistry postgraduate students (vice-president, treasurer and secretary). In recent years this has changed and now the committee is made up of PhD students. The society is named after former Head of School Professor Emil A Werner. Professor Werner was Head of School from 1928 until his retirement in 1946. More about his achievements can be read in an article published by Prof. Brian McMurry (R.I.P.) at:

<https://www.chemistryireland.org/docs/news/Irish-Chemical-News-2017-Issue-2.pdf>



EMIL ALPHONSE WERNER, ScD.
Professor of Applied Chemistry, 1904–1928
University Professor and Professor of General Chemistry, 1928–1946

One of the society's main activities is to organise local and international speakers for postgraduate seminars that are run in conjunction with the School of Chemistry's weekly seminar series. The School seminar series takes place at 12 noon every Thursday during the academic year. Some of the previous Werner-organised speakers included Prof. Dermot



Trinity College Dublin

Coláiste na Tríonóide, Baile Átha Cliath

The University of Dublin

Diamond (DCU), Prof. David Smith (University of York) and Prof. Dermot Brougham (DCU).

The society also organises different sports and social events throughout the year. Keep an eye out for emails from the society committee to see what events are upcoming.

If you have any questions about the Werner Chemical Society, you can send an email to werner@csc.tcd.ie.



Support

Pursuing a postgraduate course of study can be a difficult and stressful time so it is useful to know where support can be found if needed. Within the School of Chemistry, your supervisor or the staff in the school office are on hand to help with day-to-day issues and queries but if you find yourself needing a deeper level of support, the college provides a number of services for you:

1. **Postgraduate Advisory Service**

What?

The Postgraduate Advisory Service (PAS) is a free and confidential service available to all registered postgraduate students in Trinity College. PAS offers a comprehensive range of academic, pastoral and professional supports including one-to-one appointments, workshops and trainings, and emergency financial assistance.

Why?

PAS exists to ensure that all postgraduates students have a dedicated, specialist service independent of the School-system to whom they can turn for support and advice during their stay in College. Common concerns students present to PAS include stress; financial worries; queries about regulations or services available at Trinity; supervisor-relationship concerns; academic progression issues; academic appeals; and plagiarism hearings.

Who?

The Postgraduate Advisory Service is led by the Postgraduate Student Support Officers who provide frontline support for all Postgraduate students in Trinity. These Support Officers will act as your first point of contact and a source of support and guidance; they can also put you in touch with or recommend other services, depending on your needs.

How?

For an appointment, please e-mail postgrad.support@tcd.ie

Website: https://www.tcd.ie/Senior_Tutor/postgraduateadvisory/

To keep up to date with the supports and events for postgraduate please check out the monthly PAS newsletter sent to all postgraduates via email or follow PAS on Instagram or Twitter: @TCDPGAdvisory

2. **Graduate Student's Union**

The Graduate Students' Union (GSU) is the main representative body for postgrad students in TCD. They provide a range of helpful services including help and advice around accommodation issues, advice for international students and access to a number of postgraduate spaces around the college such as the Graduate Common Room and the 1937 Reading Room. The GSU also organise a number of social events throughout the year. See <https://www.tcdgsu.ie/> for more information



3. Student Counselling Services

Counselling gives you some time and space to explore any issue that is of concern to you. Counsellors are specially trained to listen attentively and provide a supportive, non-judgmental environment where you have the opportunity to engage in self-reflection, with a focus on your wellbeing and personal growth. You can also get advice on where to find additional support and how best to move forward. If you are interested in meeting with a counsellor in a confidential setting about the difficulties you are experiencing, the Student Counselling Service offers Online Support, One to One Counselling and Groups & Workshops. Your first appointment at the Student Counselling Service will be a brief consultation appointment to help you figure out what will work best for you. Contact them at student-counselling@tcd.ie.

In the event of an Emergency that cannot wait, the Student Counselling Service has emergency appointments available every day. Students are asked to use this time for Emergencies only. Call them on (01) 8961407 and the counsellor on duty will call you back.

For more information see https://www.tcd.ie/Student_Counselling/.

4. S2S Peer Support

Peer Support is all about one student listening to another student and providing information and support when necessary. Peer Supporters are TCD students (undergraduate and postgraduate) who volunteer their time to support other students. They are available for any student in the College and are there for anything you might want to talk through with them. You don't need to be in distress or crisis to talk to a Peer Supporter, but they can help with the larger problems as well as the smaller things. You can meet a Peer supporter for a one-off chat or arrange more regular meetups depending on what it is you need support with. See <https://student2student.tcd.ie/peer-support/index.php> for more information or to request a Peer Supporter.



School of Chemistry FAQs

Q. Where is the School of Chemistry located?

A. The School of Chemistry is not located in one building but is spread over six buildings. These buildings are known as the Old Chemistry Building, the SNIAM Building, the Lloyd Building, the CRANN Research Institute and the Trinity Biomedical Sciences Institute (TBSI; off-campus). The Cocker Lab, one of the two chemistry teaching labs, is located in a building called East-End 4-5.

Q. Where are the technical instruments located i.e. NMR and Mass Spec?

A. One 600 MHz and two 400 MHz NMR instruments are located on the ground floor of the Old Chemistry Building, one self-service 400 MHz instrument is located on the 7th floor of the TBSI and access to an 800 MHz instrument can be requested for biological samples from Dr. John O'Brien (nmrchem@tcd.ie). This instrument is located on Level -3 in the TBSI. Mass Spec is operated from the Old Chemistry Building and the TBSI. With the exception of the self-service NMR instrument in TBSI, all NMR and Mass Spec samples must be dropped off in the designated drop off zone beside the NMR instruments on the ground floor of the Old Chemistry Building.

Q. Is there a chemical store for general lab equipment and basic chemicals?

A. Yes, there is a general chemical store located on the ground floor of the SNIAM Building. The purchase arrangements for items in this store varies from group to group and you should consult a group member for your specific arrangement.

Q. I need to purchase chemicals from a supplier i.e. Sigma-Aldrich – can I order these myself?

A. Each group has a unique ordering system for suppliers of chemicals and lab equipment that can't be purchased in stores. Therefore, you must consult with a senior group member before any purchase is finalised about the group's process.

Q. I require liquid nitrogen for a reaction – does this need to be ordered through stores?

A. Liquid nitrogen is available in front of the SNIAM Building each weekday at approximately 11AM for group members located in the Old Chemistry Building, the SNIAM Building and the CRANN Institute and is operated by a drop off/collect system. Group members located in the TBSI can also avail of liquid nitrogen on weekdays using the drop off/collect system, but the designated time is shown daily on the building's information screen system.

Q. Is there access to other instruments such as IR and CD within the school?

A. The school is very well equipped with instrumentation. However, these are scattered throughout the numerous buildings under the school's control. The main locations include the Instrumentation Room located in the Cocker Teaching Lab, beside the NMR instruments in the Old Chemistry Building, the SNIAM Teaching Lab and the Instrumentation Rooms located on the 2nd and 3rd floors of the SNIAM Building. Access to the high precision instruments in the CRANN Institute usually have to be booked. Please consult members of your group for necessary login details and training. Please note that some groups have equipment that is only available to their group – access to this equipment is at the discretion of the group's PI.



Q. Can equipment be borrowed from other labs or the teaching labs?

A. One-off use of some equipment or glassware etc. is usually not a problem from the teaching labs or other group labs. However, this remains at the discretion of the group/technical staff and must be signed out and returned in prompt time. Some groups may have specific sharing agreements for chemicals but please consult a senior group member for information on any of these agreements.

Q. There is an upcoming conference that I would like to attend, as I believe it's relevant to my work – can I apply independently and request reimbursement from the school?

A. It is rare that you will apply for a conference without first consulting your PI or a senior group member as the timing may conflict with prior research or demonstration requirements. As your PI also has to authorise reimbursement for the conference, it is best practise to consult with them well in advance before applying. Most conferences require attendees to present work as a research talk or poster and this may also have to be authorised by your PI.

Q. How do I get access to research journals and databases such as REAXYS and Scifinder?

A. If you are connected to the internet via a wired or wireless connection on the TCD network, access to journals will be automatically available for journals TCD has subscribed to. If you are connected to the internet off-campus you may still access journals by inserting "elib.tcd.ie" between the final letter of the general website address and the search component of the website address. For example, if the web address is <http://pubs.acs.org/doi/abs/10.0000>, you will need to edit this to be <http://pubs.acs.org.elib.tcd.ie/doi/abs/10.0000> - this will send you to a redirect page hosted by TCD, which will allow you to access the journal. This is a standard over all publishers. Access to databases like REAXYS and Scifinder can be completed through the TCD library website, both on the TCD network or a different one. Clear instructions are shown on the library pages if registration is necessary.



Other Supports and Services

The College provides a wide range of supports and services to guide you through your time with us. Services fall into the below main categories and a full list can be found at <https://www.tcd.ie/students/supports-services/>.

- General & Administrative
- Academic Studies
- IT Support
- Health & Wellbeing
- Crisis Support
- Careers Advice
- Accommodation
- Financial Assistance
- Student Spaces
- Getting Involved
- Sports & Social Activities
- International Student Support
- Postgraduate Support
- Support for Student Parents
- University Policies