



INTRODUCTION

The *Pat McAdam Scholarship in Chemical & Bioprocess Engineering* was established in memory of Pat McAdam, at the request of Mr Martin McAdam, to celebrate and honour the life and work of his late wife, a much-loved teacher. The gift to establish this award was made possible through the kindness of Martin McAdam (donor), a UCD Chemical Engineering graduate (BE 1982), Martin's and Pat's daughter Kate and Pat's parents, Mr & Mrs Paddy & Kathleen O'Connor.

PURPOSE OF THE AWARD

The *Pat McAdam Scholarship* will be awarded annually to a UCD Stage 2 Chemical & Bioprocess Engineering Student. The purpose of the award is

- To celebrate Pat McAdam's life as a teacher and her talent with students - the talent that encouraged her students to strive for more, to learn more and to want to be more;
- To promote and support excellence in Chemical & Bioprocess Engineering education.

THE PAT McADAM SCHOLARSHIP

To the Scholarship recipient, the *Pat McAdam Scholarship*, worth €4,000.00, will provide:

- A Research Internship, during the Summer at the end of Stage 2. The location of the Internship will be confirmed at the time of the award, but potential arrangements include
 - a placement within a UCD-based research laboratory;
 - a placement at a USA-based research laboratory. Each year since Summer 2011, the *Pat McAdam Scholarship* has been used to fund the Pat McAdam Scholar's participation in a Research Experience for Undergraduates (REU) Program at the Colorado School of Mines, in Golden, Colorado (<http://remrsec.mines.edu/reu.htm>).
- The Scholarship recipient will be required to submit a written report on the placement and to make an oral presentation to UCD Chemical & Bioprocess Engineering students on his/her experience at the beginning of the following academic year.

SCHOLARSHIP APPLICATION

- Prospective candidates for the *Pat McAdam Scholarship* must have a GPA of at least 3.00/4.20 (based on 3 semesters (Stage 1: Semesters 1 & 2; Stage 2: Semester 1) in order to be eligible to apply.
- Scholarship applications must include,
 - a completed Scholarship application form;
 - a CV (no more than 2 pages in length);
 - a technically-focussed review (no more than 10,000 words) of one of a selection of specified topics of current Chemical and/or Bioprocess Engineering interest.
- The deadline for submission of applications is **10:00 on the Monday prior to the start of Semester 2.**
- Each candidate will also be required to make a 10-minute oral presentation (supported by PowerPoint slides) on his/her review paper, **during the week before the start of Semester 2.**
- The Scholarship recipient will be announced on the first day of Semester 2.



ADJUDICATION

Applications will be judged by a panel consisting of 1-2 academic staff members from the UCD School of Chemical & Bioprocess Engineering, a senior member of the Chemical Engineering profession and an individual nominated by Mr Martin McAdam; not all adjudicators will be required to attend the oral presentations.

ADDITIONAL DETAILS

- In the event that only one student applies, or the above method of determining the recipient of the award is inconclusive or tied, the Head of the UCD School of Chemical & Bioprocess Engineering will decide the outcome.
- In the event, that the award is not made in any given year, then two awards may be offered in the following year; however, it is likely that no more than one research position at the Colorado School of Mines would be available per annum.
- The successful candidate will officially receive the award at the Engineering Graduates' Association Annual Gold Medal Ceremony (held on the day of the Engineering Conferring).

CONDITIONS OF ACCEPTANCE

The recipient will be asked to:

- Participate in appropriate publicity arrangements to promote the award;
- Attend the EGA Gold Medal Ceremony;
- Submit an annual report to UCD Foundation at the end of each stage;
- Make an oral presentation to the UCD Chemical and Bioprocess Engineering students on the associated placement at the beginning of the following academic year.

CONTACT

Queries concerning the *Pat McAdam Scholarship* should be directed to Dr Patricia Kieran (email: patricia.kieran@ucd.ie).



APPLICATION SUBMISSION:

The application should include the following:

1. A completed Scholarship application form (2 pages)
2. A CV (no more than 2 pages)
3. A technical review paper (no more than 10,000 words) on one of the specified topics in Chemical & Bioprocess Engineering. The review paper should demonstrate the student's ability to
 - a. research a technical topic;
 - b. prepare a well-structured, technically-focussed, critical review of the relevant area, with reference to relevant material from the published literature;
 - c. assimilate and comment meaningfully on the work undertaken, in the context of the appropriate framework (i.e. Irish/European/global developments).

Three separately bound copies of the application, including each of the documents above, should be submitted to:

Assoc. Prof. Patricia Kieran
School Head of Teaching & Learning
UCD School of Chemical & Bioprocess Engineering
UCD Engineering Building
Belfield, Dublin 4

Phone: +353 (0)1 716 1956
Email: patricia.kieran@ucd.ie

Students are also required to submit a PDF of the technical review to patricia.kieran@ucd.ie to facilitate automatic review of the submission via SafeAssign.

Plagiarism

UCD students are expected to maintain the highest standards of academic integrity in all aspects of their work. All submissions will be submitted to SafeAssign through Blackboard.

“SafeAssign is a plagiarism prevention service that allows you to protect the originality of work and ensure a fair playing ground for all of your students. SafeAssign is integrated with the Blackboard Learning System™, and prevents plagiarism by detecting unoriginal content in student papers within your existing teaching and learning environment. SafeAssign can also further deter plagiarism by creating opportunities to educate students on proper attribution and citations while properly leveraging the wealth of information at their disposal.”

<https://www.ucd.ie/itservices/ourservices/educationtechnologies/virtualllearning-blackboard/safeassign/>

CLOSING DATE:

The closing date for receipt of completed applications is **10.00 on the Monday prior to the start of Semester 2.**



TECHNICAL REVIEW TOPICS

Following is a list of topics in Chemical & Bioprocess Engineering from which the review topic for the *Pat McAdam Scholarship in Chemical & Bioprocess Engineering 2017* may be chosen:

1. Solar Energy – Potential for Application in Diffuse Light
2. CO₂ Sequestration - A Solution to CO₂ Emissions?
3. A Future for Nuclear Energy?
4. Building Better Batteries
5. Clean Technology: Myth or Reality?

Applicants should adhere to the guides for technical reports (e.g. as provided for CHEN20080) and to the citation guidelines (Harvard style) provided by the UCD Library (<http://libguides.ucd.ie/chemicaleng/citing>)

Each applicant's submission (technical review and presentation) will be judged in accordance with the following marking scheme:

TECHNICAL REVIEW	80
Originality in approach to topic	10
Mastery of subject: technical content, including soundness of interpretation, conclusions, recommendations	30
Effectiveness of use of available reference material: range of source material (books, articles, reports, online sources, personal communication, etc.); summary and interpretation	20
Presentation (structure, technical writing, grammar, presentation style, uses of tables, graphs, illustrations, bibliography)	20
PRESENTATION	20
Technical content	5
Presentation Style	5
Presentation visuals	5
Mastery of subject, handling questions	5
	100



APPLICATION FORM

PERSONAL INFORMATION:

Applicant Surname:	
First Name(s):	
Date of Birth:	
UCD Student Number:	
Address:	
Phone:	
Mobile:	
Email:	

ACADEMIC RECORD:

GPA Stage 1	Semester 1	
	Semester 2	
GPA Stage 2	Semester 1	
Average (3 semester) GPA		



TECHNICAL REVIEW TITLE:

TECHNICAL REVIEW ABSTRACT (250 WORDS MAX) :

Applicant's Signature:

Date: