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 will provide:

• A bursary of €4000, to be use to support the student in undertaking a research-related 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://remserc.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; students may apply in anticipation of release of Stage 2 Semester 1 results.

• Scholarship applications must include,
  – a completed Pat McAdam Scholarship application form (3 pages);
  – a CV (no more than 2 pages in length);
  – a technically-focussed review (no more than 3,000 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 attend an interview, at which he/she will 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 results of the Pat McAdam Scholarship process will be announced in Week 1 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 interviews.

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, including provision of subsequent updates on his/her academic and professional progress, as requested by the UCD Foundation and/or the School of Chemical & Bioprocess Engineering, for sharing with Mr Martin McAdam and/or for the purposes of promoting the Scholarship.

• Attend the EGA Gold Medal Ceremony; where the Pat McAdam Scholar is unavailable to attend on that occasion, he/she may choose to be represented by a parent/guardian.

• Make an oral presentation to the UCD Chemical and Bioprocess Engineering students on the associated placement at the beginning of the following academic year.

• Submit a report to UCD Foundation before the end of the calendar year in which he/she receives the Scholarship.

Where a Research Internship at the Colorado School of Mines is offered to the Pat McAdam Scholar, he/she must be available to travel to the US to take up this position.

• Availability of a position at the Colorado School of Mines will be confirmed by the end of Semester 2 preceding submission of Pat McAdam Scholarship applications.

CONTACT

Queries concerning the Pat McAdam Scholarship should be directed to Assoc. Prof. Patricia Kieran (email: patricia.kieran@ucd.ie).
APPLICATION SUBMISSION:
The application should include the following:

1. A completed Scholarship application form (3 pages)
2. A CV (no more than 2 pages)
3. A technical review paper (no more than 3,000 words) on one of the specified topics in Chemical & Bioprocess Engineering.
   a. research a technical topic;
   b. prepare a well-structured, technically-focused, 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).

HARD COPY SUBMISSION
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

ELECTRONIC COPY SUBMISSION
Students are also required to submit a PDF of the complete submission 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/educationaltechnologies/virtuallearning-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 2018* may be chosen:

1. Materials for Solar Energy: Challenges & Solutions
2. Clean Technology: Myth or Reality?
3. Building Better Batteries
4. Waste-to-Energy Technologies: Solution or stop-gap?

Applicants should adhere to the guides for technical writing (e.g. as provided for CHEN2008) 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

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<tr>
<td>Originality in approach to topic</td>
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<tr>
<td>Mastery of subject: technical content, including soundness of interpretation, conclusions, recommendations.</td>
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<td>Effective of use of available reference material: range of source material (books, articles, reports, online sources, personal communication, etc.); summary and interpretation</td>
<td>15</td>
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<tr>
<td>Presentation (structure, technical writing, grammar, presentation style, uses of tables, graphs, illustrations, bibliography)</td>
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#### PRESENTATION

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<td>Presentation Style</td>
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<td>Presentation visuals</td>
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ACADEMIC RECORD:

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<th>Average (3-semester) GPA</th>
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* Where (provisional) Stage 2 Semester 1 results have not been released prior to submission of the application, these entries may be omitted.
PERSONAL STATEMENT: PLEASE INDICATE WHY YOU ARE APPLYING FOR THE PAT MCADAM SCHOLARSHIP AND WHY YOU BELIEVE YOU ARE A SUITABLE CANDIDATE.

(MAX 500 WORDS, SINGLE SPACING, 10 PT)
 TECHNICAL REVIEW TITLE:

 TECHNICAL REVIEW ABSTRACT (MAX 250 WORDS, SINGLE SPACING, 10 PT):

Applicant Signature:
Date:

PLEASE CONFIRM INCLUSION OF EACH OF THE FOLLOWING:

- Completed Scholarship application form (3 pages)
- CV (max 2 pages)
- Technical Review Paper (max 3000 words, excluding references) on one of the specified topics
- Completed UCD College of Engineering & Architecture Plagiarism Declaration