



Minnesota Chromatography Forum

2008 Official Rules Undergraduate Research Award

INTRODUCTION

The MCF Undergraduate Award is designed to encourage undergraduates to become involved in all aspects of a scientific research project, from the formulation of a research proposal through completion of the actual work and presentation of the results. The program is aimed at individuals not yet in graduate school, since they may have limited opportunities to conduct research. In order to be considered for the grant, an undergraduate, under the sponsorship of a faculty member from a recognized institution, must submit a research proposal for a project in which chromatography or some other form of separation science plays an important role.

A panel of at least three reviewers will choose what it feels is the best proposal, based on the criteria listed below, and a grant of no less than \$4,000.00 will be awarded to the undergraduate. The winner of the award will be notified by April 1, 2008 with a check presentation at the 2008 MCF Spring Symposium in May. The research must be completed by, and the results presented at, the 2008 MCF Spring Symposium. The research may be done as a summer project, as part of an undergraduate research course taken for credit, or in any other manner approved by the faculty sponsor.

WHO IS ELIGIBLE

Any undergraduate student, regardless of major, who is enrolled in a college, university or technical institute, is eligible. Any one who is not now enrolled but who plans to be while the research is being conducted is also eligible. Undergraduate students who are graduating this year but who plan to do their research this summer are eligible.

FACULTY SPONSOR

Any faculty member of a science, math, or engineering department at a college, university or technical institute can act as a sponsor.

RESEARCH PROJECT CRITERIA

The research project must be one in which chromatography or some other separation technique (electrophoresis, mass spectrometry, etc.) plays an important role. The proposed work should be brief enough to be completed in a relatively short time. For example, a project that can be completed during the time allowed for research in an "Introduction to Research" course.

Projects directly involved in separation science, as well as projects in which separation techniques are used to solve problems in chemistry, biology or some other area, are encouraged. Projects on the theory of separation science and on the use of computers in separation science are also encouraged. Although it is suggested that the topic is an original, short proposal, it may also be a short project that supports a long-term research project of an advisor or faculty sponsor.

Proposals will be judged on creativity, originality and the likelihood of success, but not on the sophistication of the equipment to be used. Hence, a project involving TLC has an equal chance of being selected as one involving mass spectrometry. While only one grant will be awarded, the same undergraduate may submit more than one proposal.

REVIEW PANEL

The review panel will consist of at least three judges who have had significant experience in chromatography or a related science. Panel members will be from academia and industry and are approved by the MCF Board of Directors. Panel members cannot serve as faculty sponsors. All decisions of the panel pertaining to the selection of the winning proposal are final.

RESEARCH PROPOSAL FORMAT

The research proposal should be brief and to the point. While no specific format is required, the following must be included in each submitted proposal:

- A cover page containing a descriptive title of the project and contact information for the undergraduate student (school mailing address, email address, and a permanent mailing address),
- An introduction, including a statement of what question(s) the proposed research will answer, and a brief description of related work with pertinent references,
- A description of the proposed work,
- A brief memo of support from the faculty sponsor that includes a description of when and where the research will be performed,
- A two-page resume of the faculty sponsor containing name, address, telephone number, email address, school and department,
- A cover letter stating that the written proposal is the work of the undergraduate (faculty guidance in formulating the proposal is allowed) and that the faculty member agrees to be the sponsor. Both the undergraduate and the faculty sponsor must sign the letter.

NUMBER OF COPIES

Four copies of the research proposal must be submitted (in its entirety, including the letter from the sponsor).

DEADLINE FOR SUBMISSION

All proposals must be received by March 21st, 2008 (postmarked by March 14th, 2008). This allows time for review of the proposals and to contact the winner by April 1st, 2008.

ANNOUNCEMENT OF AWARD

The winning proposal will be announced in the MCF Newsletter and presentation of the award will take place during the 2008 Minnesota Chromatography Forum Spring Symposium on Wednesday, May 7th, 2008.

AWARD DETAILS

The MCF will award at least \$4,000.00 to the undergraduate submitting the winning proposal, with the stipulation that the research is completed before the 2008 MCF Spring Symposium. Both the undergraduate and faculty sponsor receive complementary registration for the 2008 and 2009 spring symposia and a two-year membership in the MCF.

The MCF will reimburse the undergraduate submitting the winning proposal for mileage and one night's lodging in order to attend the award presentation at the 2008 MCF Spring Symposium.

The research results of the winning proposal will be presented in the regular session of the 2008 MCF Spring Symposium in May (approximately a 20 minute presentation). In the event that the awardee cannot attend the 2008 Spring Symposium, the faculty sponsor may present the results. The Minnesota Chromatography Forum makes no claims on the results of the research. Travel expenses related to the 2008 Spring Symposium presentation are the responsibility of the undergraduate's educational institution.

MAILING ADDRESS

All proposals should be sent to the following address:

MCF UNDERGRADUATE RESEARCH GRANT
Attn: DeWayne Townsend
Analytical Instruments Suite 50
1200 Mendelssohn Ave N Golden Valley, MN 55427-4366

Inquiries about this research grant should be directed to:

DeWayne Townsend, Chair MCF UGA Committee
952-929-1996 ext. 14 or e-mail at dewayne@aibltd.com

Inquiries about the Minnesota Chromatography Forum should be directed to:

<http://www.minnchrom.org>