



Canadian Society for Chemical Engineering  
Société canadienne de génie chimique

# CSChE Best Master's Thesis Award

## Terms of Reference

This award recognizes an outstanding Canadian Master's thesis that contributes to the advancement of the field of chemical engineering. The nominated thesis must be from the calendar year prior to when the award is given.

### Deadline

March 1st of every year

### Award

First and second prizes – plaques. The awardees will be invited to give a keynote presentation at the Canadian Chemical Engineering Conference.

### Eligibility

- The thesis work must have been completed in a graduate chemical engineering program of a Canadian university.
- The nominated thesis must be from the calendar year prior to when the award is given, i.e., the date printed on the thesis cover page must be from the prior year.
- The nominee must be a member of the CSChE.

### The nomination package must include:

- Nomination letter by the nominator (maximum 3 pages)

The nomination letter should include a concise statement describing the student's theoretical as well as practical contributions made in the work. This is particularly important for manuscript-based dissertations where multiple authors may have contributed to the work.

- Curriculum vitae, in which the nominee's research contributions are listed (maximum 2 pages)
- Dissertation synopsis – abstract (maximum 2 pages)

## Submission of Nomination

Nominations for CSChE Awards are submitted electronically through [ScholarOne](#).

- A thesis supervisor is limited to a single nomination per year. Self-nominations by students will not be accepted.
- Nominations for this award are valid for one year only.

## Evaluation Criteria

Nominations will be evaluated based on the following:

- i. Scientific and technical quality of the research;
- ii. Contributions to the advancement of chemical engineering;
- iii. Originality of the research; and

- iv. Clarity of presentation.

## Selection Committee

- CSChE Awards Director as Chair of the Committee
- Student Affairs Director
- Publications Director
- One other representative from the CSChE Board of Directors

*Note:* The award shall be presented annually unless the Selection Committee considers that no suitable candidate has been submitted.

# List of Recipients

## 2020 Winners

**First place:** Anya Filina, MCIC   
McGill University, Montreal, QC



Anya Filina received a Bachelor's degree in Materials Engineering and a Master in Chemical Engineering from McGill University. As an undergraduate researcher she studied hydrogel materials for biomedical and environmental applications at the Biointerfaces Laboratory and Biocolloids and Surfaces research group at McGill University. Anya's graduate research under the supervision of Nathalie Tufenkji focused on antimicrobial graphene oxide hydrogels for water treatment. Her past experience also includes two industrial internships involving surface treatment technologies and environmental design in the aerospace sector. Anya Filina is currently working as a materials scientist in the Bioproducts Innovation Centre of Excellence at

FPIInnovations.

**Second place:** Debaprasad Dutta, MCIC   
Ryerson University, Toronto, ON



Debaprasad Dutta is a second year PhD student in the department of chemical engineering at Ryerson University, Toronto. His doctoral research is focussed on the development and application of intelligent control technologies for chemical engineering processes. He holds his Master of Applied Science (MASC) degree from Ryerson University. During his MASC, Debaprasad obtained the highest achievable academic grade point average in all mathematical courses and co-authored the article "An optimal feedback control strategy for nonlinear, distributed-parameter processes" that demonstrates the developed controller's prowess in drastically subduing computational intensities/challenges in real-time application. Besides, he has enthusiastically participated in different conferences throughout Canada and presented his research novelty and proficiencies. With his academic excellencies, Debaprasad became the second place winner of the "2020 CSChE Best Master's Thesis Award". As a teaching assistant at Ryerson University, he prepared and delivered tutorial sessions, in addition to preparing and conducting laboratory practices for undergraduate chemical engineering courses. Before joining his master's in Canada, Debaprasad gained two years' industrial experience in process engineering and operations management in one of the largest manufacturing organizations in India.