



Guidelines for The Student Award Competition

Objective

The *NAMF Student Award Competition* was established to encourage, recognize and reward students for quality research in the area of mixing.

Eligibility

Any graduate or undergraduate student conducting research in the field of Fluid Mixing at an accredited University in North America is eligible.

A previous winner of this award may compete again with normal eligibility for travel expenses and conference registration fees if selected as a finalist.

Students who submit abstracts in response to the abstract request for the NAMF Biennial Conference are eligible to participate. Note that even if the student is not selected as a finalist for the Student Award, the abstract may still be selected for the conference by the NAMF Conference Committee.

Work that has been previously published in a refereed journal may be used as a basis for the paper submitted for the competition.

A Student who graduates in the year prior to the NAMF conference can enter the Student Award competition. For example, a student graduating in 2019 may enter the competition being adjudged at the MIXING XXVII conference in 2020.

Procedure

a) Format

The applicant must submit a paper as for a journal publication in electronic form, describing their work in the area of mixing.

Applicants should use the Instructions given for submitting papers to the AIChE Journal as guidance on the format, length, requirement for figures etc. In general, the body of the paper should contain an *Introduction*, followed by sections on *Theory and Model Development*, *Experimental Set-up/Procedures*, *Results and Discussions*, *Conclusions/Recommendations and References*.

Relevant video files of experiments and / or CFD animations may be included as references in the paper.

Replication of thesis chapters will lead to disqualification.

b) Submission

The applicant must submit the paper as a PDF by Email to the *Co-Chairs of the Education Committee* (henceforth called the Chairs). They are:

Sujit Bhattacharya: bhattacharya.sujit@syncrude.com

Richard Grenville: rkgrenville@philamixers.com

The deadline for submission is Friday 14th February 2020.

c) The Process of Competition

The submitted papers will be marked by a *Committee of Judges* consisting of industrial researchers working in the area of mixing. The Committee will normally consist of five or more judges and the Chairs. A list of potential Committee members is maintained by the Chairs. Judges will be invited by the Chairs at least a month before the deadline for submission as outlined in the NAMF website. In case the number of submissions is more than five, not all judges will mark every paper. The Chairs will select and send up to five papers to each judge. However, at least two judges and the Chairs will mark all submitted papers. The details of the marking procedure are detailed in the section on 'Marking Scheme'.

On completion of marking, the Chairs will compile a list of marks and call a meeting of the Committee. After discussions on the merits of each candidates, the Committee will decide upon the final marks and select, by consensus, *three candidates* with the highest marks *as the finalists*. It is the responsibility of the Chairs to send invitations by email to the three finalists to present their paper during the biennial NAMF Conference. The awards to the finalists will be discussed in the section on 'Awards'. The Chairs will also inform the Organizer of the biennial NAMF Conference the names of the finalists and the title of their papers. The Organizer will assist the finalists with documentation for applying for Visa, if required.

The Committee will also select the *candidates with the fourth and the fifth highest marks as Runners-Up*. These candidates may qualify to *present posters* during the biennial NAMF Conference. The remunerations of these candidates are discussed in the section on 'Awards' below.

In case less than three papers are submitted for the competition, the Chairs and select members of the Education Committee can decide at their discretion to invite all or none of the candidates to present their papers during the Conference.

During the Conference, the Presentations of the *finalists* are marked by another Committee consisting of at least five judges, selected by the Chairs, and the Chairs themselves. At least

three judges, apart from the Chairs, will consist of persons who have already marked the papers. The Chairs will select the candidate with the highest mark, as per the Marking Scheme, in consultation with the judges.

Marking Scheme

Papers submitted by the candidates will be marked on the basis of the following four criteria. The weightage for each criterion is shown below in brackets:

- Theory and Fundamentals (30%)
- Clarity of analysis and writing (30%)
- Industrial potential (20%)
- Novelty of work (20%)

The presentations of the three finalists will be marked on the basis of

- Quality of presentation
- Ability of the candidate to explain concepts
- Quality of answers provided to audience questions at the end of the presentation

25% weightage will be given to the marks obtained in the corresponding paper.

Awards

Awards will be given to winner of the competition, the candidates with the second and third highest marks and two additional runners-up as follows:

A) Awards for the Winner (1):

- Travel to and from the conference
- Conference registration fees
- \$500 cash award
- Plaque

B) Second and Third places (2):

- Travel to and from the conference
- Conference registration fees
- \$200 cash award

C) Runners Up (2):

- Conference registration fee
- Slot in Poster Sessions in the Conference

All finalists will receive copies of Advances in Industrial Mixing.

Registration includes shared accommodation and all meals.