



American Society for Composites

“Solvay Award for the Best Student Paper in Composites” for the American Society for Composites (ASC) Annual Conference

(January 2019)

Background

The American Society for Composites (ASC) Annual Technical Conference has for many years provided a communication forum for the engineering and scientific community in composite materials and promoted the growth of knowledge from interdisciplinary engineering and scientific research in composite materials. This conference provides excellent opportunities for younger researchers, in particular university students, to present their research. Student presentations of their research provide an opportunity to interact with students and researchers from other universities, researchers from government laboratories, private industry, ASC Members and Fellows, and other technical experts. It provides the students with a forum of knowledgeable technical critique and opens the door for productive social and technical dialogue. Such discussions are the foundation for the development of new ideas, new understanding, and knowledge. University students represent the next generation of practicing engineers, university professors, authorities in the technology areas of their graduate studies, and leaders of our country. The ASC encourages the professional development of university engineering students by their participation at technical conferences. To that end, the ASC supports a student paper award named the “Solvay Award for the Best Student Paper in Composites,” to be presented annually at the ASC Conference.

Award Specifics

The Award shall consist of \$500 cash, a certificate identifying the name of the award and the award winner, and date of the award. The award winner will be announced at the Conference Awards Banquet the year in which the paper is presented. The \$500 cash award will be contributed by Solvay on an annual basis.

Eligibility

1. Only papers on polymer composites manufacturing, materials development, adhesive bonding, and recycling are eligible for this competition, in particular
 - a. Innovative manufacturing and prototyping methods
 - b. Process design, modeling, and optimization
 - c. Process-induced defects and residual stresses
 - d. Out-of-autoclave methods, RTM, compression molding, stamping
 - e. Composite joining (focus on adhesive bonding), assembly, co-cure
 - f. New materials development and chemistries for composites
 - g. Cost and waste reduction, and reutilization, in the composite supply chain,
 - h. Recycling and re-purposing of composites
2. The first author and presenter has to be an undergraduate or graduate student in an engineering program at the time of the first abstract submission deadline. Post-doctoral researchers and other research staff will not be considered.
3. No extensions will be given for the submission of the paper beyond the final conference paper submission deadline.

4. A limit of two secondary authors (a total of three authors) will be allowed to insure that the student first author has contributed significantly to the research.

Selection of the Recipient of the Award

Selection of the award will be included as part of overall awards selection process administered by the ASC Awards Committee Chairperson. The highest ranking eligible student paper, based on the quality of the paper and the student's presentation, will be awarded the Solvay Award for the Best Student Paper in Composites.

The following procedure will be employed to determine the award recipient:

1. Student abstracts are to be submitted, reviewed, and accepted or rejected through the procedures identified in the Call for Abstracts that are used for all abstracts submitted for the conference.
2. Of the accepted abstracts, all abstracts submitted with a student first author and within eligible topics will be identified.
3. The ASC Awards Committee Chairperson in coordination with a Solvay representative and the conference chairperson will appoint a Student Paper Selection Committee. The Awards Committee Chairperson may appoint a chairperson for the Student Paper Selection Committee.
4. Before the conference, the Selection Committee will review and score the student paper manuscripts and select a manageable number of papers for oral presentations. Once the selection is completed, conference chairperson may organize a special session for the student papers and inform the students that they are being selected as the semifinalists for the Solvay award.
5. During the conference, the Selection Committee will attend, review and score the oral presentations.
6. The members of the Selection Committee will combine their evaluation of the manuscript and the oral presentations to select the recipient of the award before the conference award dinner.
7. If in the opinion of the Selection Committee there is no paper worthy of the award, the award does not have to be given.

Selection Guidelines

The papers should be judged on both the written manuscript and the oral presentation. Sample evaluation sheets for the oral presentation and written manuscript and their relative merits are included.

Paper

- 1 - The papers should be judged on the clarity and conciseness of the statement of the objectives of the work and the clarity and conciseness of the statement of the approaches, procedures, and methodologies for achieving these objectives.
- 2 - A summary of important conclusions should be included, and these should be substantiated. The significance of the findings, how they contribute to the state of the art, and how they relate to the work of other investigators should be easily determined from the writing.
- 3 - Effective use of tables and figures, and ease of understanding them, including units, dimensions, legends, labels, symbol and line types and colors, font sizes, etc., should be evaluated.
- 4 - Effective use of section and subsection titles can enhance a paper's organization and should be considered.
- 5 - The paper should clearly be in the area of polymeric composite materials and within set of topics listed under the "Eligibility" section.

Presentation

- 1 - The oral presentation should also be judged on points 1-3 above, but within the context of what the audience is looking at, i.e., are the presentation frames, movies, etc. clear, not too crowded, easy to read, and clearly relevant to the point of the paper, etc.
- 2 - The degree with which the presenter makes eye contact with the audience and speaks with sufficient volume should be judged.

3 – The response to questions from the audience or co-chairs should be appraised, i.e., did the presenter answer the question asked, was the answer clear, concise, and to the point?

Overall

The technical merit of the work is, of course, very important, and all of the above criteria should be considered in that context.

Call for Papers Announcement and Submission of Abstracts

The announcement for the Solvay Award for the Best Student Paper in Composites will be included in the ASC Annual Technical Conference Call for Papers and other avenues of communication. The announcement will include any specific instructions and identify key milestones and dates for consideration of the award. The papers to be considered for the award will be submitted just as any other papers for the conference is submitted. To be assured that the paper will be considered for the award, when the paper is submitted, just above the title of the paper the text “Student Paper” should be included in bold font.



ORAL PRESENTATION EVALUATION FORM
Solvay Award for the Best Student Paper in Composites

Name of the Speaker: _____

Paper Title: _____

INTRODUCTION:

The research question and specific objectives were clearly stated..... (low) 1 2 3 (high) _____

METHODS, RESULTS & TECHNICAL CONTENT

The methods were clearly outlined/explained.....(low) 1 2 3 (high) _____

The technical content of the research was adequately demonstrated(low) 1 2 3 (high) _____

The results were clearly explained and significant results were highlighted....(low) 1 2 3 (high) _____

CONCLUSIONS

A review/summary of the project was presented.....(low) 1 2 3 (high) _____

The significance of the results and applicability was discussed.....(low) 1 2 3 (high) _____

PRESENTATION STYLE

Presentation aids were clear and readable.....(low) 1 2 3 (high) _____

Presentation fit into the allotted time.....(low) 1 2 3 (high) _____

The student exhibited appropriate voice projection and eye contact(low) 1 2 3 (high) _____

The student responded well to questions from the audience.....(low) 1 2 3 (high) _____

Total Points Max. 30 _____

Evaluator's Name: _____

Comments:

WRITTEN PAPER EVALUATION FORM

Solvay Award for the Best Student Paper in Composites

Name of the Student: _____

Paper Title: _____

Evaluator's Name _____

(I) Numerical Score: Please write your evaluation score in Column (b) for each of the 4 criteria:

Evaluation Criteria (a)	Score (b)	Weight (c)
<i>1. Originality</i>	_____ (Max. 15)	25%
<i>2. Technical Content & Quality</i>	_____ (Max. 15)	25%
<i>3. Relevance of Contribution</i>	_____ (Max. 15)	25%
<i>4. Organization and Clarity</i>	_____ (Max. 15)	25%
TOTAL Points	_____ (Max. 60)	-----

(II) Written Comments: Please give your written comments on the above criteria based on your evaluation of the paper.