



Undergraduate Research Competition

PROCEDURES AND RULES

(Failure to comply with any of the rules of the competition may result in disqualification.)

Purpose

1. To encourage and stimulate interest in undergraduate research in the area of food science and technology.
2. To provide an opportunity for food science undergraduates to organize and present their original research both orally and via a poster.
3. To provide a venue for networking within IFTSA for undergraduate students as well as members of industry and academia.

Time and Place of Contest

The Undergraduate Research Competition is held during the Annual Meeting of the Institute of Food Technologists. Awards will be presented at IFT Annual Meeting & Food Expo.

Eligibility

Any student member of IFT, as of March 1 of the year of the competition, who is an undergraduate student or who has not graduated prior to July 1 of the year preceding the Annual Meeting is eligible to compete. Work must have been done individually by an undergraduate. A signed letter from the Department Head or a professor verifying the originality of the student's work will be required. The letter must be received by the Undergraduate Research Competition Chair no later than **March 1**. Letters should be emailed to the competition chair and **MUST** be sent by the Department Head or the professor.

Scope of the Competition

1. The research can be on any subject directly related to food science or technology.
2. The oral portion is limited to five minutes per speaker, PowerPoint optional, and must comply with the Oral Presentation Guidelines on IFT's website. Speakers will be alerted with one minute remaining.
3. The poster portion will be one hour and posters must comply with the Poster Presentation Guidelines on IFT's website.
4. Each presenter will present orally at the beginning of the competition. When they are finished, they will man their posters, during which time the judges can approach them with questions.

Awards

All finalists must attend the Annual Meeting and present their poster during the Competition Session to be eligible to receive the \$500.00 travel award. If a finalist cannot present their work at the IFT Annual Meeting & Food Expo, then the next contestant with the highest score in the preliminary round will replace them. Finalists must notify the competition chair by the date requested.

A certificate will be provided to each of the six finalists, as well as first, second and third place awards (\$1,000, \$750 & \$250 respectively) that will be presented to the top three finalists during the IFT Annual Meeting. All presenters will be judged by a committee of three judges.



Competition and Publicity

1. All food science and related departments will be informed of the contest and its rules and procedures each year early in the fall term by the Student Association.
2. The competition will include an oral and poster presentation from all 6 finalists.
3. The competition will take approximately 1.5 hours.
4. If the finalists are also presenting at the IFT Annual Meeting & Food Expo, they can present the same poster at the URC.
5. Updated Competition information is available on the IFTSA website at www.ift.org/iftsa.
6. Area representatives and the URC Chair should continue to publicize the competition and the rules as well as any rule changes throughout the year.

Competition Entry Procedures

1. To enter the competition, students must be student members of IFT by **March 1** of the year of the competition.
2. Students must email their abstract to the Chair of the URC by **March 1**. Abstracts received after March 1 will not be accepted. The abstract should be typed single-spaced. The title of the paper and the name and address of the author should be typed at the top of the first page. The name and address of the author should not be visible on the version intended for the judges and **therefore two versions should be sent**; one with name and address and one without. Abstracts must not be more than five-hundred (500) words in length, and must be organized as follows: Objective; Methodology; Results; Significance and implications of results; and at least five (5) pertinent references. (References are not included in the word count).
3. Students must arrange for the Department Head or professor to send their signed verification letter to the URC Chair by **March 1**. The verification letter should objectively set forth the extent to which the student exercised independence and originality and the part the advisor played. Letters should be sent via email by the Department Head or professor. If letter needs to be faxed in instead, contact the chair directly prior to the March 1st deadline for fax information.
4. No professors' names may appear on the paper as co-authors. They may be added later if the paper is submitted for publication.
5. IFT has the first right of refusal on all papers submitted for publication (i.e. Papers must first be submitted to IFT for publication, and may only be submitted elsewhere if IFT rejects the paper).

Judging of Abstracts

1. Finalists will be chosen by a jury of three IFT members representing both university and industry, and appointed by the URC Chair. On **March 3** the Chair of the URC will forward the abstracts to the jury (three judges).
2. Abstracts are to be judged based on the Abstract Judging Criteria enclosed.
3. A tie in abstract judging will be broken by re-tallying scores from categories five (5) through nine (9) [see Individual Judge Score Sheets]. The student with the highest score from this "sub-score" will win the last finalist spot. The URC Chair will e-mail a list of the six finalists to all contestants within six weeks after the abstract deadline.
4. The Chair will simultaneously e-mail the list to the IFTSA Staff Liaison for preparation of the award checks.
5. It is the responsibility of the URC Chair to ensure that programs are printed for the URC session.



Preparation of Posters

Presenters must follow standard IFT Poster Presentation Guidelines as outlined on the IFT website. The presenters must provide the content of their research and illustrations in a size and format suitable for poster display. Posters must be sized so that they can fit on the display board that IFT provides each poster presenter. Therefore, **your poster must be smaller than the dimensions of the provided board. Please check the IFT website for the poster guidelines which include board dimensions for the given year.**

It is also suggested that they prepare brief statements of the purpose of their work, their experimental methodology and design, and the major results of their findings and their implications. Abstracts and illustrations must be readable from distances of 3 ft. or more. Text should be printed from a laser printer, in a font size large enough to read from that distance. Illustrations must be simple. Limited use of color, however, can add emphasis. Any photograph should be a minimum of 8 in. x 10 in. Minimum size for all other illustrations is 9 in. x 12 in. Illustrations should not be mounted on heavy boards or backing, as they will not be supported by the Velcro "dots." For more suggestions on preparing effective posters, download the articles:

“Thinking Verbally: Communication Tips for Technical Presentations”
(<https://www.am-fe.ift.org/pdfs/ThinkingVisuallyFoodTech2001GraphicTips.pdf>)
and “Thinking Visually: Graphic Tips for Technical Presentations”
(<https://www.am-fe.ift.org/pdfs/ThinkingVerballyFoodTech2001CommunicationTips.pdf>).

Some poster presenters find it useful to provide handouts for interested scientists visiting their posters. These may include be a reduced photocopy of the poster, selected data/conclusions, or other relevant material.

Judging of the Oral Presentations

1. Oral judging using the enclosed Oral Presentation Criteria will be done by a jury of three IFT members.
2. Grading by the judges will be done immediately following the oral presentations.
3. No member of the jury may vote on research presented by a student from their institution, adjustment being made for this factor.
4. In the event of a tie, the judges, in consultation and with the moderator present, shall make a decision so that no ties result.

Judging of the Poster Presentations

1. Poster judging using the enclosed Poster Presentation Criteria will be done by a jury of three IFT members.
2. Grading by the judges will be done following the poster session.
3. No member of the jury may vote on a poster presented by a student from their institution, adjustment being made for this factor.
4. In the event of a tie, the judges, in consultation and with the moderator present, shall make a decision so that no ties result.



Announcement of Winners and Presentation of Awards

Announcement of the finalists will be made at the Student Welcome Assembly and the Phi Tau Sigma Awards Reception. Winners will be announced at the IFTSA Welcome Assembly.

URC Entry Deadlines

- March 1** **Students must be a Student Member of IFT.** Membership applications are available from IFT, your IFTSA area representative, or any member of the IFTSA Board. Allow at least two weeks for processing of application and dues. (<http://www.ift.org/cms/?pid=1000037>)
- March 1** **Student must e-mail** two (2) versions of the abstract to URC Chair (original copies of the abstracts must be received by the Chair by March 1 by 11:59 PM CST. Abstracts received after March 1 will not be accepted.) On the first document, the abstract should be typed, single-spaced 12-point Times New Roman font. The title of the paper and the name and address of the author should be typed at the top of the first page. On the second document, the name and address of the author should not appear. Abstracts must not be more than five hundred (500) words in length, and should be organized as follows: Objective; Methodology; Results; Significance and implications of results; and at least five (5) pertinent references using ***Journal of Food Science*** style of referencing. **References are NOT counted in the word count.**
- March 1** Student must arrange for the Department Head or a professor to send their verification letters to the URC Chair. The verification letter should objectively set forth the extent to which the student exercised independence and originality and the part the advisor played.
- Note:** **No professors' names may appear on the paper as co-authors.** They may be added later if the paper is submitted for publication. IFT has the first right of refusal on all papers submitted for publication (i.e. papers must first be submitted to IFT for publication, and may only be submitted elsewhere for publication if IFT rejects the papers.)



RANKING PROCEDURES TO BE USED IN FINAL ROUND OF UNDERGRADUATE RESEARCH COMPETITION

1. The competition shall have the final round judged by three (3) qualified judges.
2. Judges will score finalists **independently** and submit their scores for all contestants following the conclusion of the competition to the competition chair.
3. Competition chair will convert all individual scores to ranks (i.e. 1, 2, 3...up to total number of contestants with rank 1 being for highest score from a given judge).
4. Placing will be determined by the competition chair per the following guidelines:
 - a. First place must be determined first based on the following rules:
 - i. Any contestant with a majority (two of three judges) of 1s will be first (regardless of the ranking by their judge).
 - ii. If no majority of 1 rank exists, first place will be awarded to the contestant with the **lowest** sum total of ranks.
 - iii. If a tie still exists at this point, the use of judges' preference of the tied contestants determines first place (i.e. 2 or more out of 3 judges preferred one contestant over all others tied).
 - iv. If a tie still remains which is unbreakable by judges' preference, individual ranks (only for the tied contestants) will be converted to decimal numbers as follows:
 - 1 = 1.00
 - 2 = 0.50
 - 3 = 0.33
 - 4 = 0.25
 - 5 = 0.20
 - 6 = 0.17The decimal equivalents are summed, and the **highest** total receives first place.
 - v. If any tie still exists between only two contestants, it shall be resolved by judges' preference. If a tie still exists between three or more contestants, a blind draw will be used or a tie is called for placing purposes.
 - b. Second place must be determined next. Any contestants originally tied for first place that lost the tie breaker, are automatically awarded the successive places before consideration of contestants not involved in the preceding tie.
 - i. If no tie existed for first place, a contestant who receives a majority (two of three) of 2 or better ranks will receive second place (if not previously assigned a placing per first place tie).
 - ii. If no contestant (no previously assigned a placing) receives a majority of 2 or better or if two contestants both receive a majority 2 or better ranks, the lowest sum total of ranks receives second place as in step 4.a.ii.
 - iii. If a tie still exists judges' preference is used to determine rank as in 4.a.iii and 4.a.iv.
 - c. Again, all tied contestants are awarded the next available placing before any more consideration is given to untied contestants. Successive placings are determined in a similar



manner as far as deemed appropriate (most SA competitions only award placing first, second, and third so determining rank beyond third may be unnecessary).

Example #1

Contestant	Judge A	Judge B	Judge C	Total	Placing
One	3	2	2	7	Third
Two	2	1	3	6	Second
Three	1	5	1	irrel.	First

Contestant three got a majority of 1s and received first place. Contestants one and two both received a majority of 2 or better ranks, so their placing was determined by low total rank.

Example #2

Contestant	Judge A	Judge B	Judge C	Total	Placing
One	2	5	3	10	Second*
Two	4	2	4	10	Third*
Three	1	1	5	irrel.	First

Contestant three received first place based on a majority of 1s. Neither contestant one nor contestant two received a majority of 2 or better ranks **and** they tied on rank total. *Based on judges preference (Both Judge A and Judge C preferred contestant one over contestant two), contestant one is awarded second place. Contestant two gets third automatically before moving on to lower placing two for untied contestants.

Example #3

Contestant	Judge A	Judge B	Judge C	Total	Placing
One	1	4	4	9	Third
Two	4	3	2	9	First
Three	5	1	3	9	Second
Four	3	5	5	13	Fifth
Five	2	2	6	10	Fourth
Six	6	6	1	13	Sixth

No contestant received a majority of 1s so total ranks were summed, leaving three contestants tied for first. By judges' preference, contestant two gets first place (Judges B & C preferred contestant two over one and Judges A & C preferred contestant two over three), contestant three gets second place (preferred over contestant one by Judges B & C), and contestant one gets third place before considering remaining untied contestants. Contestant five receives fourth place with a majority of 4 or better ranks (**note: this contestant does not receive second place because the placing of all of the tied contestants with lower rank totals must be resolved before consideration of this contestant**). Fifth place goes to contestant four with a majority of ranks 5 or better.



Example #4

Contestant	Judge A	Judge B	Judge C	Total	Placing
One	1	6	4	11	Second
Two	2	1	1	irrel.	First
Three	3	2	6	11	Third
Four	6	3	5	14	Sixth
Five	4	5	2	11	Fourth
Six	5	4	3	12	Fifth

Contestant two got a majority of 1s so is awarded first place. No other contestant received a majority of 2 or better ranks and three contestants tied for low rank total. Of these three, no contestant is preferred by a majority of judges over both of the other tied contestants, so decimal equivalents are calculated for the three tied contestants per 1d and places second through fourth are awarded. Contestants four and six both have a majority of ranks 5 or better to compete for fifth place, so placing is determined by lowest rank total of these two. Following conversion to decimal equivalents for the contestants in places second through fourth, if a tie had still existed between two contestants it would have been broken on judges' preference.



Undergraduate Research Competition JUDGING CRITERIA

Abstract Judging Criteria	Points
1. Adherence to URC regulations <i>*The URC Chair will deduct 5 points for one rule infraction and all 10 points for more than one rule infraction.</i>	10
2. Title of abstract	5
3. Content and organization	5
4. Style, semantics, clarity of expression, punctuation, etc.	13
5. Importance of research to associated research areas	13
6. Apparent quality of research done	12
7. Presentation and explanation of materials and methods	12
8. Presentation and explanation of results	15
9. Conclusions	<u>15</u>
Total Points	100

Oral Presentation Criteria

1. Organization of paper with respect to clarity, logical sequence, proportion, use of visual aids, knowledge, and employment of principles of communication skills, grammar, and diction	25
2. Scholarly presentation	15
3. Soundness of conclusions	<u>10</u>
Total Points	50

Poster Presentation Criteria

1. Organization of content with respect to effectiveness of product presentation, neatness, and organization	25
2. Scholarly presentation	15
3. Soundness of conclusions	<u>10</u>
Total Points	50