

## **IFT STUDENT FOOD PACKAGING DEVELOPMENT COMPETITION ENTRY KIT**

This is an annual international competition that honors advancements in student food packaging development. Impacts of participating in and/or winning this competition include:

- Participants will solve real-life food problems (e.g., food waste reduction).
- Participants will enhance their knowledge about specific food packaging technologies (e.g., active packaging).
- Students will practically apply the knowledge they have gained within the classroom.
- Participants will improve their teamwork skills.
- Participants will improve presentation skills.
- Participants will gain exposure and prestige.

### **PARTICIPANTS**

#### **Eligibility**

- Both undergraduate students and graduate students.
- Students enrolled in food and packaging programs.
- Must be an IFT member.

#### **Type**

No limitation on team composition:

- Individuals and teams
- Undergraduate students, graduate students, or both
- With or without mentor (e.g., professor, industry expert, etc.).

### **TOPIC**

Pick one of the challenges listed below:

- Intelligent packaging to monitor food shelf life.
- Packaging materials that align with the concept of circular economy.
- Packaging structural designs that align with the concept of circular economy.
- Discuss the progress a specific packaging application has made to advance the science of packaging in relation to consumer trends.
- Alternatively, you can suggest your own challenge.

Regardless of your selection, you need to study the system and its entirety in terms of functionality of the selected packaging application. Consider the whole food packaging supply chain from raw material to consumers including but not limited to packaging producers (e.g., machinery), food packers (e.g., barrier needs), storage and transportation.

You can ask individuals from the industry or academia, including the members of the Food Packaging Division, for advice on appropriate sources of information (books or videos). Show us your innovation and creativity based on current or future packaging needs.

### ENTRY FORM

All the required information is listed below:

- a. Participant information (name(s), phone number(s), and email address(es); contact person)
- b. Food package concept and its prototype if any. Participants should write a structural, conceptual, theoretical, or practical concept that addresses the selected food packaging issue. The concept should include:
  - i. A title
  - ii. A current food packaging issue (define the issue and explain why this is a current issue that relates to food packaging)
  - iii. Past solutions and their results
  - iv. An alternative solution (think outside the box!). This should be supported by evidence.
  - v. References
  - vi. Illustrations, encouraged
  - vii. Package prototype, optional

### Guidelines

- a. Enter your name and other personal information on the designated fields in the Entry Form.
- b. Enter your essay title in the Entry Form box called “Title of Essay.”
- c. Write a concept that is created exclusively for the IFT food packaging development competition. See **ENTRY FORM** for specific concept content. Only clear and well-organized concepts that cover all the requested fields will be judged.
- d. 1,000 to 1,500 word-essay written in English. Citations are excluded from word account.
- e. Write your essay using a word processor and then paste this into the “Essay Box” of the Entry Form.
- f. Place quotes (e.g., any ideas that are not your own) within the body of the essay. Do not use footnotes or endnotes.
- g. Paste your citations into the “References” of the Entry Form. Reference style: MLA.
- h. Your essay will be judged not only on the science, but also on creativity, innovation, (avoid plagiarism and think outside the box!), ability to address the challenge, feasibility, implementation, and how well you express yourself (spelling, punctuation, and grammar). Specifically, the following points should be clearly addressed in your essay:
  - i. Under “A current food packaging issue”:
    - (a) Scientific background
    - (b) Why is this innovation necessary?
    - (c) Consideration of the entire food packaging supply chain
  - ii. Under “Past solutions and their results”
    - (a) Scientific background
  - iii. Under “An alternative solution”:
    - (a) Propose challenge in a scientific manner with any market data that

support the challenge and its importance for the actual food packaging sector

- (b) Consideration of the entire food packaging supply chain
- (c) Is this an original food packaging idea, or is the idea a refinement of an existing one?
- (d) Scientific background
- (e) Feasibility of the idea in context of the current food supply chain
- (f) Thinking outside of the box
- (g) Possible implementation of the idea
- (h) Possible value created by the idea
- (i) Targeted consumers

## **ENTRY PROCESS**

Entry forms will be accepted until May 1, 2022, via the entry form. Winners will be notified via email prior to FIRST 2022.

## **AWARDS**

A general certificate along with monetary prizes of \$1,000, \$750, \$500 will be awarded to the 1st, 2nd, and 3rd place winners, respectively. All winners will be invited to pick up their awards at the FIRST 2022 annual conference. Winners will be recognized at the FIRST 2022 Food Packaging, Food Engineering, and Nonthermal Processing Divisions joint social activity during FIRST 2022. Students will be invited to give a very brief overview (3 minutes) of their concepts.

## **JUDGES**

A panel of experts in food packaging including academic and industry experts will judge the entries. Judges should be IFT Food Packaging Division members.