

**2021**

# AOCs Annual Meeting & Expo

*Advancing the science and technology of oils, fats, proteins, surfactants and related materials, enriching the lives of people everywhere.*

## Abstract Submission Guidelines

*Updated 1/28/2021*

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## OVERVIEW

AOCS invites you to submit an abstract and take advantage of the opportunity to have your work peer reviewed by experts in the field. If accepted, your abstract will be published in an online supplement of the *Journal of the American Oil Chemists' Society (JAOCS)* and displayed in the distinguished international venue of the 2021 AOCS Annual Meeting & Expo.

Thank you for your interest in submitting quality and original research for presentation at the 2021 AOCS Annual Meeting & Expo!

### Technical Program Goals

The AOCS Annual Meeting brings together the global community of chemists, nutritionists, engineers and business leaders who are advancing the science of fats, oils, proteins, surfactants and related materials.

For the 2021 AOCS Annual Meeting & Expo, AOCS will continue and expand upon its tradition of program quality by:

1. Providing cutting-edge, top quality scientific research and programming by leading professionals and researchers in the fats and oils industry.
2. Offering relevant research and programming on key focus areas facing professionals from industry, academia and government working in all areas of the fats and oils supply chain.
3. Presenting both basic and transformative research and applied science.
4. Offering virtual abstract presentation options so research can still be shared industry-wide since COVID-19 prevents convening the meeting in person.
5. Creating a digital library of on-demand content for Annual Meeting attendees to access from the comfort of their home or office for up to 12 months.
6. Providing the entire library of presentation abstracts within an online supplement of *the Journal of the American Oil Chemists' Society (JAOCS)*.

Each year, hundreds of abstracts are submitted to AOCS for consideration. The AOCS Program Committee and session chairpersons are charged with reviewing all abstracts and selecting the premier submissions to be included in the Annual Meeting program. An accepted abstract honors the scientific and scholarly achievements of the presenters and contributes to the growth of the fats and oils industry.

AOCS welcomes and appreciates all who submit abstracts and looks forward to another successful AOCS Annual Meeting & Expo!

### Submission System

**All authors** wishing to contribute papers to the AOCS Annual Meeting & Expo must *submit an **online** abstract* for review by the Program Committee and session chairpersons. The CadmiumCD Abstract Scorecard is the online meeting programming system used by AOCS presenters, Program Committee members, and session chairpersons to submit, view, review, and edit abstracts for the AOCS Annual Meeting. Instructions for navigating the abstract system begin on page 13.

### Submission Deadline

Abstracts will be collected via the CadmiumCD Abstract Scorecard from September 1, 2020 to January 15, 2021. Abstracts received after the submission deadline will be placed on a waiting list and reviewed by the Program Committee and session chairpersons only if time and space allow.

## Registration Requirements

**All presenters** are required to register and pay the appropriate registration fees to present and attend the AOCS Annual Meeting & Expo. Registration will be available at [annualmeeting.aocs.org](http://annualmeeting.aocs.org) beginning in January 2021. AOCS does not reimburse presenters for registration fees or other expenses incurred during the Annual Meeting. Invited speakers should contact their Division Vice Chairperson or session chairperson to clarify terms of their invitation.

Failure to register for the meeting by April 19, 2021 will result in the automatic withdrawal of your abstract from the official meeting program.

## Available Travel Grants and Funding

AOCS offers more than 40 opportunities for presenters at the AOCS annual meeting to gain recognition for their hard work and achievements in the form of professional and student awards as well as travel grants.

Don't delay, apply today:

- October 1 is the submission deadline for [Student Awards](#).
- February 1 is the submission deadline for junior researcher and student [Travel Grants](#).

Each award has its own specific and unique nomination requirements. [Learn more about AOCS awards.](#)

## Contact Information

If you have questions about the AOCS Annual Meeting, please contact AOCS staff:

Email: [meetings@aocs.org](mailto:meetings@aocs.org)

Telephone: +1 217-693-4831

If you have any technical issues with the CadmiumCD Abstract Scorecard, please contact Cadmium technical support:

Email: [support@cadmiumcd.com](mailto:support@cadmiumcd.com)

Telephone: +1 410-638-9239

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## PROGRAM CONTENT

The AOCS Annual Meeting & Expo is a premier international science and business forum on fats, oils, proteins, surfactants and related materials. Over 3,000 professionals from more than 80 countries attend the Annual Meeting, representing the industry's most prestigious corporate, government and academic institutions. Known for its extensive technical program, the Annual Meeting features more than 650 oral and poster presentations within 10 interest areas, as well as select featured sessions.

### Program Committee

The AOCS Program Committee, chaired by Eric (Rick) Theiner, Evonik, USA ([eric.theiner@evonik.com](mailto:eric.theiner@evonik.com)), oversees development of the meeting's Technical Program.

Type	Interest Area	Type	Submission Type	Organizer
Technical Program	Analytical	Oral Poster	Invited Volunteer	Francesca Giuffrida, Nestle Research, Switzerland <a href="mailto:francesca.giuffrida@rdls.nestle.com">francesca.giuffrida@rdls.nestle.com</a>
	Biotechnology	Oral Poster	Invited Volunteer	Todd Underiner, Procter & Gamble, USA <a href="mailto:underiner.tl@pg.com">underiner.tl@pg.com</a>
	Edible Applications Technology	Oral Poster	Invited Volunteer	Kaustuv Bhattacharya, DuPont Nutrition & Health, Denmark <a href="mailto:kaustuv.bhattacharya@dupont.com">kaustuv.bhattacharya@dupont.com</a>
	Health and Nutrition	Oral Poster	Invited Volunteer	Matthew (Matt) Miller, Cawthron Institute Nelson, New Zealand <a href="mailto:matt.miller@cawthron.org.nz">matt.miller@cawthron.org.nz</a>
	Industrial Oil Products	Oral Poster	Invited Volunteer	Brajendra (BK) Sharma, University of Illinois, USA <a href="mailto:bksharma@illinois.edu">bksharma@illinois.edu</a>
	Lipid Oxidation and Quality	Oral Poster	Invited Volunteer	Karen Schaich, Rutgers University, USA <a href="mailto:schaich@sebs.rutgers.edu">schaich@sebs.rutgers.edu</a>
	Phospholipid	Oral Poster	Invited Volunteer	Ozan Ciftci, University of Nebraska-Lincoln, USA <a href="mailto:ciftci@unl.edu">ciftci@unl.edu</a>
	Processing	Oral Poster	Invited Volunteer	Alan Paine, Consultant, UK <a href="mailto:alanrp@yahoo.com">alanrp@yahoo.com</a>
	Protein and Co-Products	Oral Poster	Invited Volunteer	Lamia L'Hocine, Agriculture & Agri-Food Canada (AAFC), Canada <a href="mailto:lamia.lhocine@canada.ca">lamia.lhocine@canada.ca</a>
	Surfactants and Detergents	Oral Poster	Invited Volunteer	Michael Williams, Evonik Corporation, USA <a href="mailto:michael.williams@evonik.com">michael.williams@evonik.com</a>
Hot Topic Symposia		Oral	Volunteer	Julie May, AOCS <a href="mailto:julie.may@aocs.org">julie.may@aocs.org</a>

<b>Fast Track (Commercial Presentations)</b>		Oral	Volunteer	Tisha Sarver, AOCS <a href="mailto:tisha.sarver@aocs.org">tisha.sarver@aocs.org</a>
<b>Research Pitch Competition</b>	<i>Journal of the American Oil Chemists' Society (JAOCS)</i>	Oral	Volunteer	Pam Landman, AOCS <a href="mailto:plandman@aocs.org">plandman@aocs.org</a>
	<i>Journal of Surfactants and Detergents (JSD)</i>	Oral	Volunteer	Pam Landman, AOCS <a href="mailto:plandman@aocs.org">plandman@aocs.org</a>
	<i>Lipids</i>	Oral	Volunteer	Pam Landman, AOCS <a href="mailto:plandman@aocs.org">plandman@aocs.org</a>

## Technical Program

The Annual Meeting's technical program will feature invited presentations by leading industry experts, as well as volunteer oral and poster presentations. Submit your abstract via CadmiumCD for consideration. Instructions for navigating the abstract system begin on page 13.

## Hot Topic Symposia

With the constant evolution of emerging technologies, innovative research and updated regulations, the fats and oils industry must keep up. The Hot Topic Symposia is a chance for us to come together to address how critical shifts and related transformations, both current and on the horizon, will impact the business of fats and oils.

The Hot Topic Symposia is populated by session ideas submitted by volunteer organizers. Submit your session proposal abstract via CadmiumCD for consideration. Instructions for navigating the abstract system begin on page 13. *Please be sure to select "Hot Topic Session Proposal" during the Submission Type step so your session proposal is routed to the correct reviewers.*

## Commercial Presentation (Fast Track)

Industry partners are encouraged to join the Annual Meeting program. Presentations within the Fast Track sessions can be as commercial as necessary; overviews of your company or dedicated to a specific product.

Submit your commercial presentation abstract via CadmiumCD for consideration. Instructions for navigating the abstract system begin on page 13. Please include an intriguing title for your presentation and *be sure to select "Commercial Presentation Abstract Submission" during the Submission Type step so your abstract is routed to the correct reviewers.*

If you have questions related to a commercial presentation, exhibiting or sponsorship, please contact Tisha Sarver at [tisha.sarver@aocs.org](mailto:tisha.sarver@aocs.org).

## AOCS Journals' Research Pitch Competition

The American Oil Chemists' Society (AOCS) Journals' Research Pitch Competition is a challenge for researchers working in the area of fats, oils, proteins, surfactants and related materials. Each AOCS journal is hosting its own Research Pitch Competition. Here is your opportunity to tell us the problem you intend to solve and how you plan to do it. The AOCS journals invite all researchers to submit their biggest and brightest ideas based on the AOCS journals' subject areas:

### ***Journal of the American Oil Chemists' Society (JAOCS)***

- Analytical and physical chemistry
- Biotechnology and biocatalysis
- Edible applications and physiochemistry
- Genetics, genomics and biological mechanisms
- Lipid oxidation and antioxidants
- Nonfood or industrial applications
- Processing and engineering technology

### ***Journal of Surfactants and Detergents (JSD)***

- Surfactant development and formulation
- Detergent development, manufacturing and formulation
- Performance, test method development and analysis of surfactants and detergents
- Environmental fate of these same products

### ***Lipids***

- Biochemistry
- Chemistry
- Clinical nutrition
- Metabolism
- Methodology in lipid research
- Plant, mammalian and invertebrate lipids

### **Eligibility**

Any researcher can participate: students, postdocs, group leaders, university faculty, industry representatives. Participants may submit their pitch as an individual or as a team.

### **Awards (per journal):**

- First place: \$750
- Audience favorite: \$250

All finalists' videos will be posted on the AOCS YouTube channel.

### **Selection Criteria**

- Comprehension and Content
  - Solid understanding of the issue(s) being addressed
  - Relevance of the research question
  - Impact of the research (results, conclusions and outcomes)
- Engagement and communication
  - Audience engagement
  - Enthusiasm for the research
  - Delivery in a clear, concise and understandable manner

## Competition Format

The competition consists of two rounds.

- Round One: participants submit a research synopsis (abstract) of no more than 300 words or 2,500 characters. Using the “Comprehension and Content” selection criteria noted above, the judges will identify five finalists for each journal.
- Round Two: finalists will submit a three-minute, pre-recorded presentation for judging. All presentations will be shown live during the finals round. A ten-minute question and answer session will follow each presentation. The finals round for each journal’s research pitch competition will occur during the 2021 AOCS Annual Meeting & Expo.

Finalists must register for the 2021 AOCS Annual Meeting & Expo by April 19, 2021. Failure to register will result in an automatic withdrawal from the competition.

## Selection Process

The judges for each pitch competition will be composed of respective journals’ Editor-in-Chief (or his designee), two members of the journal’s Editorial Board, one representative from the AOCS Journal Advisory Board and one representative from Wiley, AOCS’ journals publishing partner.

At the conclusion of Round Two, the viewing audience will be encouraged to vote for their favorite pitch.

## Key Dates

September 1, 2020	abstract collection site opens
January 15, 2021	deadline for abstract submissions
March 1, 2021	finalists announced
April 15, 2021	deadline to upload pre-recorded presentation
April 19, 2021	deadline for finalists to register for the AOCS annual meeting
May 3-7, 2021	competition finals round

## Getting Started

Submit your research synopsis (abstract) via CadmiumCD for consideration. Instructions for navigating the abstract system begin on page 13. *Please be sure to select “AOCS Journals’ Research Pitch Competition Submission” during the Submission Type step.* Additionally, during the “Add the abstract to this submission” step, you’ll need to select the specific competition to which you are applying: *Journal of the American Oil Chemists’ Society (JAOCS), Journal of Surfactants and Detergents (JSD), or Lipids.* This selection ensures your abstract is routed to the correct reviewers.

## AOCS Student e-Poster Pitch Competition

*Sponsored by the AOCS Foundation*

*Supported by the AOCS Divisions*

The AOCS community is a unique mix of professionals from industry, academia and government working in all areas of the fats and oils supply chain, from field to product. Supporting students in the lipid science and oil technology fields has always been an important mission to AOCS.

The Student e-Poster Pitch Competition was designed to give student researchers an opportunity to highlight their achievements, demonstrate their ability in scientific presentations, and receive important feedback and mentoring from industry leaders.

AOCS invites all student researchers to submit their e-poster presentation within any one of ten interest areas (Divisions):

- Analytical
- Biotechnology
- Edible Applications Technology
- Health and Nutrition
- Industrial Oil Products
- Lipid Oxidation and Quality
- Phospholipid
- Processing
- Protein and Co-Products
- Surfactants and Detergents

E-posters will be presented as a single page PDF with static text and images. Up to five finalists will be selected from each interest area to give a 5-minute oral presentation during the AOCS Annual Meeting & Expo. At the conclusion of each Division's oral competition session, the viewing audience will be encouraged to vote for their favorite pitch!

All accepted poster abstracts, PDFs and live presentations will be available to all 2021 AOCS Annual Meeting & Expo attendees and the general public on the AOCS website(s).

### Eligibility

The competition is open to individuals who are full-time students at the time of submission for work recently performed while enrolled in an undergraduate, graduate or doctoral degree program.

All presenters – including those participating in the Student e-Poster Pitch Competition – are required to register and pay the appropriate registration fees to attend the AOCS Annual Meeting & Expo. Registration will be available at [annualmeeting.aocs.org](https://annualmeeting.aocs.org) beginning in January 2021. Discounted registration rates will be available for [AOCS student members](#).

Failure to register for the meeting by April 19, 2021 will result in the automatic withdrawal of participation from the Student e-Poster Pitch Competition.



## Judging Panels

Leadership of AOCS' ten Divisions (interest areas) will hand-select the judging panel for their competition. Judging panels may include Poster Chairpersons, AOCS Division members, and members of AOCS' Professional Educators Common Interest Group.

## Awards (per Division):

First place winners receive:

- US \$200 cash prize
- recognition certificate
- 2022 AOCS student membership
- Recognition in the AOCS Newsletter
- Recognition in the applicable Division Newsletter

Second place winners receive:

- US \$100 cash prize
- recognition certificate
- Recognition in the applicable Division Newsletter

## Judging Criteria

- Scientific quality
  - Rationale, hypothesis, justification
  - Relevance, pertinence, impact
  - Materials and methods
  - Results and interpretation
  - Conclusions
- Presentation and engagement
  - Clarity of presentation
  - Graphic/visual quality
  - Enthusiasm for the research
  - Audience engagement
  - Results of live audience voting

## Key Dates

- September 1, 2020 abstract collection site opens
- January 15, 2021 deadline for abstract submissions
- February 19, 2021 e-poster uploads begin
- March 12, 2021 deadline to upload e-poster presentations
- April 12, 2021 competition finalists announced
- April 19, 2021 deadline for meeting registration
- May 2021 live oral presentations by finalists

## Competition Format

The competition is broken down into three stages.

### Stage 1: Submission

Participants submit a poster abstract *and* single page PDF e-poster. The deadline for abstract submission is January 15, 2021. E-poster uploads will occur between February 19 and March 12, 2021.

### Stage 2: Selection of finalists

Between March 13 and April 11, each judging panel will review all submitted abstracts and e-posters. Using the “Scientific quality” selection criteria noted above, each judging panel will identify a maximum of five finalists from their interest area.

Finalists will be announced on April 12, 2021.

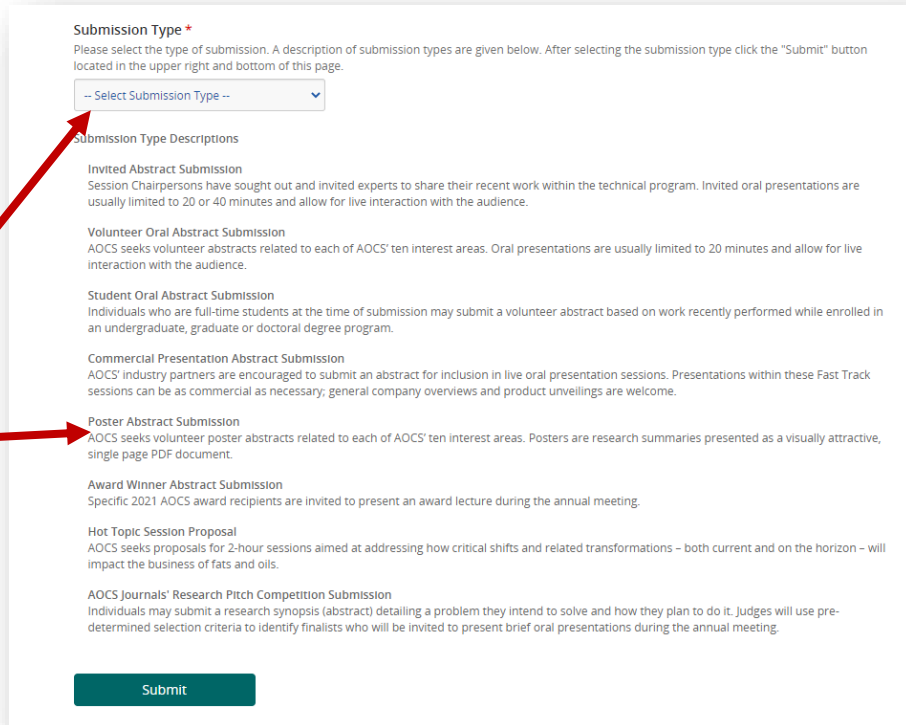
### Stage 3: Oral presentations by finalists

Each finalist will present a 5-minute live oral presentation during the 2021 AOCS Annual Meeting & Expo in May 2021. A question and answer period will follow each presentation.

Using the “Scientific quality” and “Presentation and engagement” judging criteria noted above, the judging panel will identify a first and second place winner for each interest area.

## Getting Started

During the abstract submission process, be sure to select “Poster Abstract Submission” from the drop-down menu.



**Submission Type \***

Please select the type of submission. A description of submission types are given below. After selecting the submission type click the “Submit” button located in the upper right and bottom of this page.

~ Select Submission Type ~

**Submission Type Descriptions**

**Invited Abstract Submission**  
Session Chairpersons have sought out and invited experts to share their recent work within the technical program. Invited oral presentations are usually limited to 20 or 40 minutes and allow for live interaction with the audience.

**Volunteer Oral Abstract Submission**  
AOCS seeks volunteer abstracts related to each of AOCS’ ten interest areas. Oral presentations are usually limited to 20 minutes and allow for live interaction with the audience.

**Student Oral Abstract Submission**  
Individuals who are full-time students at the time of submission may submit a volunteer abstract based on work recently performed while enrolled in an undergraduate, graduate or doctoral degree program.

**Commercial Presentation Abstract Submission**  
AOCS’ industry partners are encouraged to submit an abstract for inclusion in live oral presentation sessions. Presentations within these Fast Track sessions can be as commercial as necessary; general company overviews and product unveilings are welcome.

**Poster Abstract Submission**  
AOCS seeks volunteer poster abstracts related to each of AOCS’ ten interest areas. Posters are research summaries presented as a visually attractive, single page PDF document.

**Award Winner Abstract Submission**  
Specific 2021 AOCS award recipients are invited to present an award lecture during the annual meeting.

**Hot Topic Session Proposal**  
AOCS seeks proposals for 2-hour sessions aimed at addressing how critical shifts and related transformations – both current and on the horizon – will impact the business of fats and oils.

**AOCS Journals’ Research Pitch Competition Submission**  
Individuals may submit a research synopsis (abstract) detailing a problem they intend to solve and how they plan to do it. Judges will use pre-determined selection criteria to identify finalists who will be invited to present brief oral presentations during the annual meeting.

**Submit**

Once you click “Submit” you will see this screen:

Home / Proposal / Task List for 'Julie Test poster abstract.'

**TASK LIST** Save Submission

Please click on each task below to enter the requested information.  
Once completed, the task will then appear with a large green check mark.  
After you have completed all of the tasks below, select "Save Submission".

[Edit Julie Test poster abstract.](#)  
Proposal ID: 942506  
Submission Type: Poster Abstract Submission  
Proposal Status: Active

- 1. AOCs Speaker Agreement**  
Completed Monday, September 21, 2020, 12:35 PM  
Review and agree to the AOCs Speaker Agreement. *This must be completed before submitting your proposal.*
- 2. Add the Abstract to this Submission**  
Carefully proofread and check your abstract for accuracy; abstracts will be published as submitted.
- 3. Provide Author and Co-Author Information**  
Add author and co-author information to this submission.

Save Submission

You must complete the speaker agreement to proceed.

Complete step 1, the AOCs Speaker Agreement, then in step 2, select “yes” for the question, “Is this a student poster submission?” and continue with the other questions required to submit your abstract.

Home / Proposal / Tasks / Edit Add the Abstract to this Submission Task for 'JU...

**EDIT ADD THE ABSTRACT TO THIS SUBMISSION TASK FOR 'JU...** Continue

**Abstract Submission Guidelines**  
The data presented must be substantive. AOCs discourages the submission of incomplete research at the time of submission. Recent results may be added at the time of presenting. However, the results shown in the abstract must be substantive.  
▶ Click the arrow to expand  
Review the comprehensive Abstract Submission Guidelines (.pdf) for additional information.  
\* Indicates a required field

**Proposal (Abstract) Title \***  
Clearly identify the focus of the abstract in 200 characters or less.  
Julie Test poster abstract.  
24 characters (Max 200 characters)  
4 words (Max 0 words)

**Interest Area \***  
Please select the interest area related to your proposal.  
-- Select an Interest Area --

**Is this a student poster submission? \***  
Yes

You must select “yes” for “Is this a student poster submission?” to be considered for the Student e-Poster Pitch Competition.

Instructions will be provided for creating the e-poster. E-posters must be uploaded between February 19 and March 12, 2021.

On April 12, finalists will be announced and will receive guidelines on how to prepare for the live presentation.

**Questions?**

If you have questions about the AOCS Student e-Poster Pitch Competition, please contact AOCS staff at [meetings@aoacs.org](mailto:meetings@aoacs.org) or +1 217-693-4831.

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## ABSTRACT SUBMISSION: GUIDELINES

### General Guidelines

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- The data presented must be substantive. AOCS discourages the submission of incomplete research at the time of submission. Recent results may be added at the time of presenting. However, the results shown in the abstract must be substantive.
- Abstracts should address the following:
  1. Justification
  2. Objective
  3. Methods
  4. Results
  5. Significance of your research to the AOCS membership
- Authors should not split data to create several abstracts from one study. If two or more abstracts on related topics with minimal information are submitted, priority of related abstracts will be reduced.
- Data must represent new findings obtained using the scientific approach.
- Data similar to previous presentations should not be submitted. Findings should be stated in sufficient detail to support conclusions. Updated research related to a previous presentation needs to be indicated in the abstract.
- The abstract must cite quantitative data from representative experiments. Do not simply state that the results will be discussed.
- Abstracts submitted for the Technical Program that deal with commercial products or services must have a scientific emphasis and should not be submitted for promotion purposes. The ONLY exception to this is a specific session where the following disclaimer is noted:

*Note: Normal restrictions on the use of product trade names and logos are suspended, so that presenters can freely discuss commercial aspects and opportunities of their products.*

**Individuals interested in promoting a particular commercial product or service are encouraged to present within the Fast Track. Presentations within these sessions may be commercial in nature.**

- All abstracts must use correct grammar and punctuation. Proofread very carefully for formatting, spelling and grammar to avoid errors before submission. *Abstracts will not be edited prior to publication.*
- Incomplete abstracts and session proposals will not be reviewed.
- Presentation time allotted for oral presentations are dependent upon where in the program they are slotted. Presentation date and times will be announced by February 19, 2021.

A checklist of information requested at the time of abstract submission can be found in [Appendix A](#). This checklist enables submitters to prepare their submissions prior to submitting online if they prefer.

## Permissions

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You will be required to complete the permissions page before you can submit your abstract.

A preview of the permissions required at the time of abstract submission can be found in [Appendix B](#).

## Title

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Clearly identify the focus of the abstract in 200 characters or less. The title should be entered in sentence case. Capitalize only the first letter of the title, any proper nouns or acronyms, and the first word following a colon (:). Do not begin abstract titles with "The", "A", or "And" and do not end titles with a period (.).

## Abstract Body

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The abstract word limit (total characters) is 300 words or 2,500 characters (including: abstract body, images and tables (in image format); each image counts as 560 characters). You are allowed a maximum of two (2) tables and/or images.

Standard abbreviations may be used without definition. Nonstandard abbreviations must be kept to a minimum and must be placed in parentheses after the first use of the word or phrase abbreviated.

Do not include self-citations, references, keywords, bibliographies, acknowledgments, support/grants, or disclaimers in your abstract. Any references found in the abstract will be removed before publication.

Abstracts and presentations within the Technical Program that deal with commercial products or services must have a scientific emphasis and should not be submitted for promotion purposes. Presentations within the Hot Topic Symposia and Fast Track may be commercial in nature.

Carefully proofread and check your submission for accuracy; abstracts will be published as submitted. If your abstract does not comply with these requirements, you will be asked to adjust the text before a final decision can be made by the Session Chairs.

## Description

---

Please provide a description of your presentation. This description should grab the attention of attendees and provide enough information for an attendee to have an overview of the content of your presentation.

## Submission Type

---

Select from one of the submission types:

- Invited Abstract– Select if you were approached by a session chair to present specifically within their session.
- Volunteer Oral Abstract
- Student Oral Abstract
- Commercial Presentation Abstract (Fast Track)
- Poster Abstract
- Award Winner Abstract
- Hot Topic Session Proposal
- AOCS Journals' Research Pitch Competition

*Selecting a preference for an oral or poster presentation does not guarantee placement. Final presentation type*

*will be determined by the Program Committee based on quality and subject matter that best fits the meeting program.* During the submission process for a Volunteer Oral submission, you will be asked, “If not selected for an oral presentation, would you consider presenting a poster?”.

## Interest Area

---

Select from one of the session interest areas:

- Analytical
- Biotechnology
- Edible Applications Technology
- Health and Nutrition
- Industrial Oil Products
- Lipid Oxidation and Quality
- Phospholipid
- Processing
- Protein and Co-Products
- Surfactants and Detergents

You will also be asked to select the specific session to which you are submitting. A complete list of session descriptions can be found in [Appendix C](#).

## Authors

---

Provide the following information for *each* author:

- Name – First, Middle Initial, Last
- Organization/Affiliation
- Country
- Valid email address

## Review and Submit

---

Before you submit your abstract, you can preview and edit all the information entered in each step of the submission process. Please take the time to review what you have entered.

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## ABSTRACT SUBMISSION: GETTING STARTED

### CadmiumCD Abstract Scorecard

CadmiumCD is AOCS' online abstract management system. The CadmiumCD Abstract Scorecard system will allow you to view, edit, and prepare abstracts seamlessly in a central location. The CadmiumCD Abstract Scorecard can be accessed using your AOCS username and password.

More than likely you already have an AOCS username and password, which are used to login to many AOCS services like inform|connect.

**2021 AOCS Annual Meeting & Expo**  
*Advancing the science and technology of oils, fats, proteins, surfactants and related materials, enriching the lives of people everywhere.*

Conference Details | Technical Support

Select Language  
Powered by Google Translate

Welcome to the AOCS Submission Portal

To begin the proposal process, click the 'Login' button below. If you have an AOCS account, please login using your AOCS credentials. Should you not have an account with AOCS, please [create an account](#)\* then return to this site to login.

**Need help logging in?**  
If you need your AOCS credentials, please contact Karen Kesler, AOCS Data Management Specialist, by email at [karen.kesler@aocs.org](mailto:karen.kesler@aocs.org) or by phone at +1 217-693-4813.

*\*After creating an account or resetting your credentials please return to the AOCS Submission Portal, refresh the page (Control +F5), and then enter your login credentials for access.*

**New User?**  
Create an Account with AOCS to begin your first submission.

**Log in to the AOCS Presenter Portal**

Already have an account?  
Click 'Login' to begin your submission.

Login

Questions? Contact Us : Julie May - [julie.may@aocs.org](mailto:julie.may@aocs.org) / (217) 693-4815

To access the CadmiumCD Abstract Scorecard:

1. Visit <https://www.abstractscorecard.com/cfp/submit/LoginSSO.asp?EventKey=JFCSWRAG>.
2. Click "Login."
3. You will be redirected to aocs.org. Enter your AOCS username and password.
4. You will be redirected back to the CadmiumCD Abstract Scorecard. Verify your contact information. If incorrect, follow the steps on the screen before proceeding. If correct, proceed to step 5.
5. Click "Proceed."
6. Review the privacy notice, check the box to consent and enter your full name on the line. Click "Continue."



## Creating an ID

If you do not have an AOCS username and password, you may create one for free; AOCS Membership is not required.

To create an AOCS username and password:

1. Visit <https://myaccount.aocs.org/PersonifyEbusiness/Account-Registration>.
2. Enter your email address in the box provided and click "Continue."
3. Provide all required information marked with an asterisk (\*).
4. Complete the checkboxes for "Consent Capture" and click "Next."
5. Congratulations, you now have an account with AOCS!
6. Return to the CadmiumCD Abstract Scorecard with your new AOCS username and password.

**AOCS** Since 1909  
Your Global Fats and Oils Connection

Network and Connect    Attain Lab Services    Attend Meetings    Stay Informed

Welcome! We are glad you are here.

If you already have an account with AOCS or inform|connect\* please login. If not, please create an account by telling us a little about yourself so that we may serve you better.

**AOCS Member and Returning Customer Login**

Username:

Password:

☐ Remember Login.

[Forgot Password](#)  
[Forgot Username](#)

**Are you a new Customer?**

Please create an account\*\* to access inform|connect, register for meetings, enjoy a faster checkout and view your purchase history.

**If you need assistance, we are here to help.**

For help with logging in or creating an account please contact Karen Kesler ([karen.kesler@aocs.org](mailto:karen.kesler@aocs.org) | +1 217-693-4811)

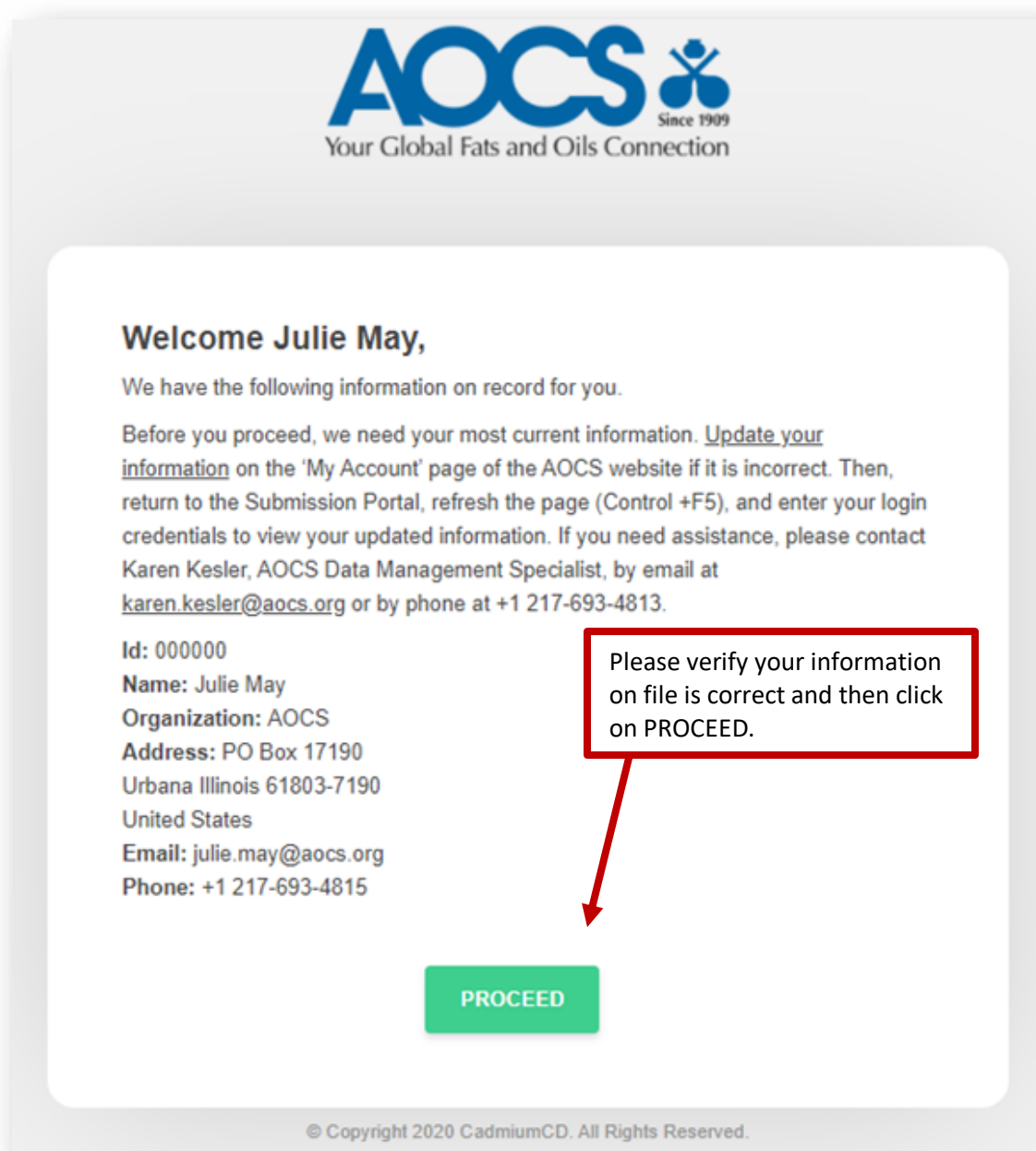
\*Your affiliation with AOCS provides easy access to inform|connect. Simply login with your AOCS credentials.

\*\*When you create an account, we will ask you for personal information which is kept and used to provide our services. By clicking Create Account, you acknowledge you have read and agreed to our [Terms of Use](#) and [Privacy Policy](#).

Already an AOCS Member or have an AOCS account? Login here and you will be directed to confirm your information and then be logged in to the abstract submission system.

If you are new to AOCS and need to create an account, click here. Once you create your AOCS account you can return to the login page for the abstract submission system.

Once logged in you will see this page. Verify your information is correct and then click on “PROCEED” to begin the Abstract Submission process.



The screenshot shows a user account verification page for AOCs. At the top is the AOCs logo with the tagline "Your Global Fats and Oils Connection" and "Since 1909". Below the logo, the user is greeted with "Welcome Julie May,". A message states: "We have the following information on record for you." This is followed by instructions to update information if incorrect and to contact Karen Kesler for assistance. A list of user details is provided: Id: 000000, Name: Julie May, Organization: AOCs, Address: PO Box 17190, Urbana Illinois 61803-7190, United States, Email: julie.may@aocs.org, and Phone: +1 217-693-4815. A red-bordered box with an arrow points to a green "PROCEED" button, containing the text: "Please verify your information on file is correct and then click on PROCEED." At the bottom, a copyright notice reads: "© Copyright 2020 CadmiumCD. All Rights Reserved."

**AOCs** Since 1909  
Your Global Fats and Oils Connection

**Welcome Julie May,**

We have the following information on record for you.

Before you proceed, we need your most current information. [Update your information](#) on the 'My Account' page of the AOCs website if it is incorrect. Then, return to the Submission Portal, refresh the page (Control +F5), and enter your login credentials to view your updated information. If you need assistance, please contact Karen Kesler, AOCs Data Management Specialist, by email at [karen.kesler@aocs.org](mailto:karen.kesler@aocs.org) or by phone at +1 217-693-4813.

**Id:** 000000  
**Name:** Julie May  
**Organization:** AOCs  
**Address:** PO Box 17190  
Urbana Illinois 61803-7190  
United States  
**Email:** [julie.may@aocs.org](mailto:julie.may@aocs.org)  
**Phone:** +1 217-693-4815

Please verify your information on file is correct and then click on PROCEED.

**PROCEED**

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## ABSTRACT SUBMISSION: CREATING A NEW ABSTRACT

From the **Welcome Screen**, locate the PROPOSALS section and click “Click here to begin a new abstract.”

The screenshot shows the 'Welcome Screen' of the abstract submission portal. At the top, there are links for 'Home' and 'Log Out', and a 'Select Language' dropdown. Below this, there are three main sections: 'EVENT INFORMATION' (2021 AOCs Annual Meeting & Expo, May 2-5, 2021, Oregon Convention Center), 'YOUR PROFILE' (Julie May, Company / Institution / Orga..., Logins: 2, Log Out, View / Edit Your Profile), and 'SUBMIT FEEDBACK' (We always welcome feedback, and we want to hear what you like and what can be improved. Feedback Form). Below these is the 'PROPOSALS' section, which states: '(You have 0 complete proposals, 1 incomplete proposal, and 2 withdrawn proposals)'. A light blue box contains instructions: 'Thank you for your interest in submitting quality and original research for presentation at the 2021 AOCs Annual Meeting & Expo! Please carefully review the Abstract Submission Guidelines (.pdf) and submit your abstract or session proposal by January 15, 2021.' It lists three actions: 'To begin a new submission please click \'Click here to begin a new proposal\'', 'To edit a previous submission select the submission title.', and 'To preview a submission click the \'Preview Proposal\' button.' Below this, it says 'Need assistance? Please contact Julie May. Julie May, Meetings Content Manager. Phone: +1 217-693-4815 | Email: julie.may@aocs.org'. At the bottom of the light blue box is a green plus icon and the text 'Click here to begin a new proposal'. A red arrow points to this link.

Start your submission with **Title** and **Submission Type**.

**TITLE:** Clearly identify the focus of the abstract in 200 characters or less. The title should be entered in sentence case. Capitalize only the first letter of the title, any proper nouns or acronyms, and the first word following a colon (:). Do not begin abstract titles with "The", "A", or "And" and do not end titles with a period (.).

The screenshot shows the 'START YOUR SUBMISSION' page. At the top, there are links for 'Home' and 'New Proposal', and a 'Submit' button. Below this is a light blue box with the text: 'All abstracts and session proposals must be submitted by January 15, 2021. If you have questions about the submission process, please refer to the comprehensive Abstract Submission Guidelines.' Below this is the 'Proposal (Abstract) Title' section, which states: 'Clearly identify the focus of the abstract in 200 characters or less. The title should be entered in sentence case. Capitalize only the first letter of the title, any proper nouns or acronyms, and the first word following a colon (:). Do not begin abstract titles with "The", "A", or "And" and do not end titles with a period (.). Example Abstract Titles: Evolution of 1H NMR profiling database of EVOOs blends with specific geographical origin; Improving on perfection: Multifaceted approach to improve soybean protein quality; Liquid lipase mediated production of marine based lyso-phosphatidylcholine with enriched ω-3 long chain polyunsaturated fatty acids; Increased android body fat is associated with lower serum β-carotene in U.S. adults'. Below the text is a text input field with a red arrow pointing to it. The input field has a toolbar with icons for bold (B), italic (I), underline (U), strikethrough (x), subscript (x²), superscript (Ω), and a help icon. Below the input field is a character count: '0 characters (200 max)' and '0 words (0 max)'.

**SUBMISSION TYPE:** select the type of submission and then click on “Submit”

**Submission Type \***

Please select the type of submission. A description of submission types are given below. After selecting the submission type click the blue "Submit" button located in the upper right and bottom of this page.

-- Select Submission Type --

**Submission Type Descriptions**

**Invited Abstract Submission**  
Session Chairpersons have sought out and invited experts to share their recent work within the technical program. Invited oral presentations are usually limited to 20 or 40 minutes and allow for live interaction with the audience.

**Volunteer Oral Abstract Submission**  
AOCS seeks volunteer abstracts related to each of AOCS' ten interest areas. Oral presentations are usually limited to 20 minutes and allow for live interaction with the audience.

**Student Oral Abstract Submission**  
Individuals who are full-time students at the time of submission may submit a volunteer abstract based on work recently performed while enrolled in an undergraduate, graduate or doctoral degree program.

**Commercial Presentation Abstract Submission**  
AOCS' Industry partners are encouraged to submit an abstract for inclusion in live oral presentation sessions. Presentations within these Fast Track sessions can be as commercial as necessary; general company overviews and product unveilings are welcome.

**Poster Abstract Submission**  
AOCS seeks volunteer poster abstracts related to each of AOCS' ten interest areas. Posters are research summaries presented as a visually attractive, single page PDF document.

**Award Winner Abstract Submission**  
Specific 2021 AOCS award recipients are invited to present an award lecture during the annual meeting.

**Hot Topic Session Proposal**  
AOCS seeks proposals for 2-hour sessions aimed at addressing how critical shifts and related transformations – both current and on the horizon – will impact the business of fats and oils.

**Hot Topic Abstract Submission**  
Session organizers have sought out and invited experts to share their recent work within a Hot Topic session.

**AOCS Journals' Research Pitch Competition Submission**  
Individuals may submit a research synopsis (abstract) detailing a problem they intend to solve and how they plan to do it. Judges will use pre-determined selection criteria to identify finalists who will be invited to present brief oral presentations during the annual meeting.

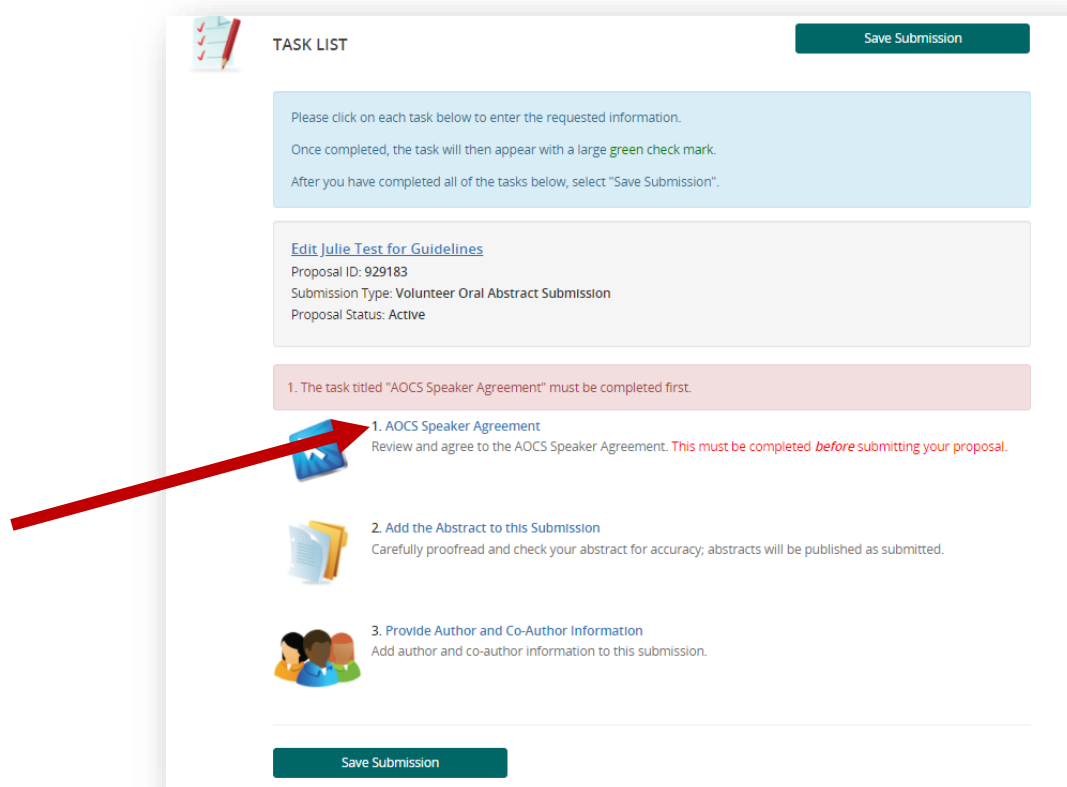
**Submit**

Select the type of abstract you are submitting from the drop-down menu. Then click on “Submit”. Submission type descriptions are listed on this page for your reference.

You will now see the Task List page. **You must read and sign the AOCS Speaker Agreement before you can complete additional tasks.** The speaker agreement is available in [Appendix B](#).

There are **three sections** to complete to finalize your abstract submission.

1. Complete the **AOCS Speaker Agreement**.





**TASK LIST** Save Submission


Please click on each task below to enter the requested information.  
Once completed, the task will then appear with a large **green check mark**.  
After you have completed all of the tasks below, select "Save Submission".

[Edit Julie Test for Guidelines](#)  
Proposal ID: 929183  
Submission Type: Volunteer Oral Abstract Submission  
Proposal Status: Active

1. The task titled "AOCS Speaker Agreement" must be completed first.

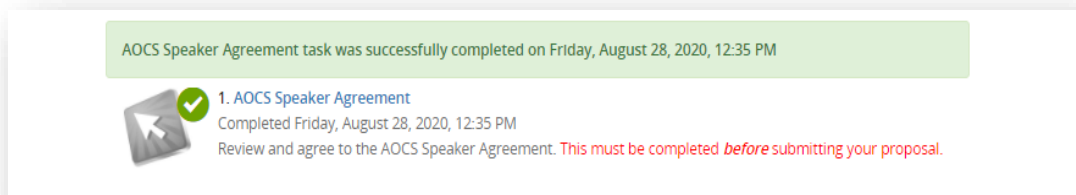
 **1. AOCS Speaker Agreement**  
Review and agree to the AOCS Speaker Agreement. **This must be completed *before* submitting your proposal.**

 **2. Add the Abstract to this Submission**  
Carefully proofread and check your abstract for accuracy; abstracts will be published as submitted.


 **3. Provide Author and Co-Author Information**  
Add author and co-author information to this submission.

Save Submission

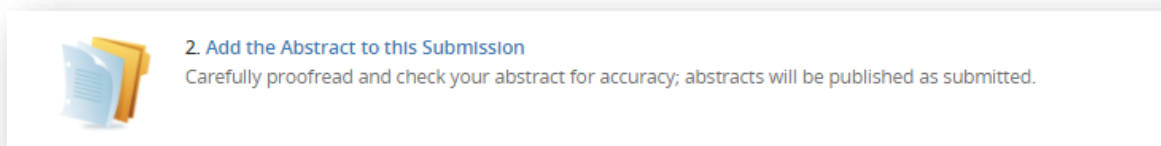
Once you have completed the Speaker Agreement, you will see the green check mark next to the task and the notification tells you the agreement was successfully completed.




AOCS Speaker Agreement task was successfully completed on Friday, August 28, 2020, 12:35 PM

 **1. AOCS Speaker Agreement**  
Completed Friday, August 28, 2020, 12:35 PM  
Review and agree to the AOCS Speaker Agreement. **This must be completed *before* submitting your proposal.**

2. **Add the Abstract to this Submission** task is next.



 **2. Add the Abstract to this Submission**  
Carefully proofread and check your abstract for accuracy; abstracts will be published as submitted.

Guidelines are available at the top of this screen. (See the “click arrow to expand” section noted below.)

Review  
your title  
previously  
entered.

Abstract Submission Guidelines

The data presented must be substantive. AOCs discourages the submission of incomplete research at the time of submission. Recent results may be added at the time of presenting. However, the results shown in the abstract must be substantive.

[Click the arrow to expand](#)

Review the comprehensive Abstract Submission Guidelines for additional information. \* Indicates a required field

Proposal (Abstract) Title \*

Clearly identify the focus of the abstract in 200 characters or less.

**B** *I* U  $\times_2$   $\times^2$   $\Omega$  ↶ ↷ ? Help

Julie Test for Guidelines

22 characters (Max 200 characters)  
4 words (Max 0 words)

Interest Area \*

Please select the interest area related to your proposal.

Select an Interest Area --

Select General [Interest Area] should your proposal not apply to any of the pre-defined session topics.

Select your Interest Area:

- Analytical
- Biotechnology
- Edible Applications Technology
- Health and Nutrition
- Industrial Oil Products
- Lipid Oxidation and Quality
- Phospholipid
- Processing
- Protein and Co-Products
- Surfactants and Detergents

Once you have selected the primary interest area, you will see the list of session topics for that interest area. Review the list and select the topic with the best fit to the topic of your abstract. Session descriptions are available in [Appendix C](#). ***You should select “General” should your proposal not apply to any of the pre-defined session topics.***

Here is an example of what you will see if you select “Analytical” as the Interest Area:

Interest Area \*

Please select the interest area related to your proposal.


Analytical

Select the session topic most applicable to your proposal. Select General [Interest Area] should your proposal not apply to any of the pre-defined session topics. \*

- ☐ Advanced Methods of Analysis, including Lipidomics
- ☐ Analysis of Less Abundant Lipids
- ☐ Authentication of High Value Oils, including Olive Oil
- ☐ Contemporary Analysis of Lipid Oxidation Products: More Products At Lower Levels
- ☐ Continuing the Debate – Shelf Life vs. Accelerated Storage for Evaluating Antioxidant Effectiveness
- ☐ General Analytics with Focus on Rapid and High-throughput Screening Methods
- ☐ Proposed Updates to AOCs Official Methods
- ☐ Recent Advances in Assessing Quality of Protein Products
- ☐ Trace Contaminants
- ☐ General Analytical


These are the sessions/session topics you should select from. Pick “General” if your proposal does not fit into a pre-defined topic or if you are unsure. The Division Program Chairs will review submissions within their Interest Area and suggest moving an abstract to a different topic if applicable.

Each Submission Type does not have the exact same tasks or questions. You will see additional questions or tasks based on your submission type.



EDIT ADD THE ABSTRACT TO THIS SUBMISSION TASK FOR 'JU...

Continue



Form Completed

This form is complete, but you can continue to update it.  
If you make changes, don't forget to re-submit by clicking the "Continue" button.

Abstract Submission Guidelines

Page

**Description \***

In a few sentences, describe the type of information to be presented and why it is important to the AOCs audience. This might include learning objectives or the challenge/opportunity that makes the presentation relevant. The description should generate the attendee's interest and encourage them to attend the presentation to learn more.

File Edit Insert View Format Table Tools


**B** *I* U  $\times_2$   $\times^2$  Help


Test

4 characters (Max 2,500 characters)  
1 word (Max 300 words)

Continue

Add the Abstract to this Submission task was successfully completed on Monday, September 21, 2020, 3:45 PM  
Thank you for your interest in submitting quality and original research for presentation at the 2021 AOCs Annual Meeting & Expo!

 **1. AOCs Speaker Agreement**  
Completed Monday, September 21, 2020, 3:45 PM  
Review and agree to the AOCs Speaker Agreement. **This must be completed *before* submitting your proposal.**

 **2. Add the Abstract to this Submission**  
Completed Monday, September 21, 2020, 3:45 PM  
Carefully proofread and check your abstract for accuracy; abstracts will be published as submitted.

3. **Provide Author and Co-Author Information** task is the final task in submitting the abstract.

**EDIT PROVIDE AUTHOR AND CO-AUTHOR INFORMATION TA...** Save Authors

Please create the list of authors for this submission.

To add an author:

- Type the author's first name, last name, and email address.
- Select Author Type\*
- Click 'Add Author.'

To complete an author's profile:

- Click on the 'Edit Author' button to complete the profile yourself.
- Click the 'Invite [Author Name]' button to send an email to the author to complete their Profile.
- A **green check mark** indicates a complete profile.
- Once the profile is complete, click 'Save Authors' to complete the task.

To order author names in the citation:

- Use the arrows to the right of the author name(s) in the Author List section to arrange the authors in the order in which they should appear in the citation.

\*The submitter will default as the presenting author. This may be changed at any time in the speaker profile section.

Note: The form will show an error 'Profile for [Author Name]' is incomplete' if the author profile is incomplete when you click 'Save Authors'. However, the author information is saved. You must fully complete all author information before the proposal can be submitted.

\* Indicates a required field

Jane Doe was successfully removed from this proposal on Monday, September 21, 2020, 1:35 PM

**Add New Author**

First Name *	Last Name *	Email *	Author Type *
<input type="text" value="Jane"/>	<input type="text" value="Doe"/>	<input type="text" value="Jane.Doe@123.com"/>	<input type="text" value="Co-Author"/>

Add Author

**Author List**

You must add at least 1 author and no more than 15.  
You must have 1 presenting author for this proposal.  
You can add a maximum of 15 co-authors for this proposal.

1 Julie May  
Program Content Manager, AOCS  
Profile completed ✓  
Author Type: Presenting Author  
Edit Julie May's Profile Remove Julie May

Save Authors

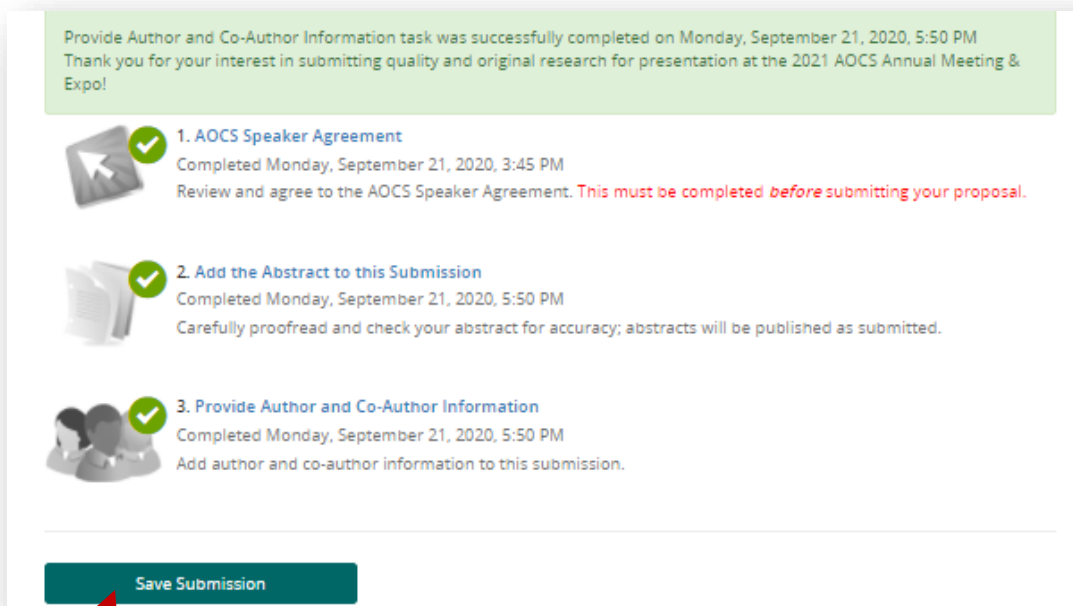
As the submitter, you will automatically be listed as the "Presenting Author" on the submission. Follow the instructions in the blue box for adding co-authors, completing an author's profile, changing an author's role and ordering author names in the citation.

Be sure to click on "Save Authors" to complete this task.



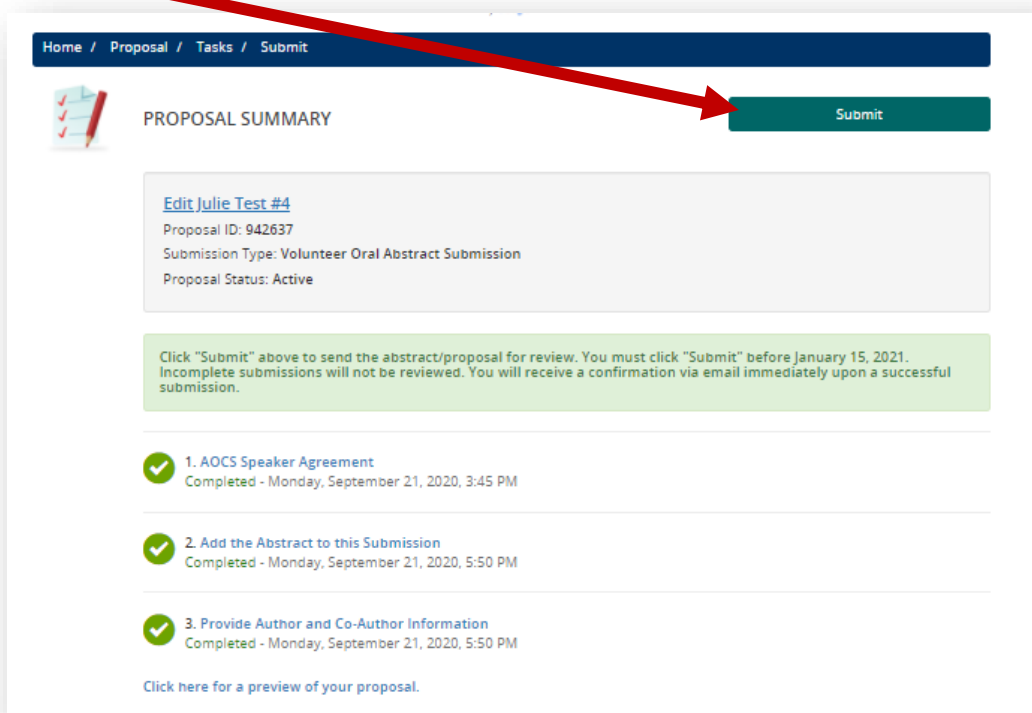
## Submit your Abstract

Once you have completed all tasks for your submission, you will see a green checkmark for each task.



Click on **Save Submission**


Click on **Submit** (before January 15, 2021 or your abstract will not be reviewed)



**You will receive a confirmation email once your abstract has been submitted.**

## Helpful Hints

- If you save your submission after any one of the tasks, you can log back into the submission system before January 15, 2021 to complete and submit.
- You can click on the task bar to go back to another section of the submission. For example:
  - Home will take you back to the main landing page.
  - Proposal will take you back to your list of proposals by title
  - Tasks will take you back to the task list



Home / Proposal / Tasks / Submit

- Contact Program Content Manager, Julie May, [julie.may@aoacs.org](mailto:julie.may@aoacs.org), with any abstract submission questions.

## ABSTRACT SUBMISSION: EDITING AN ABSTRACT

You can edit your abstract any time before the submission system closes on January 15, 2021.

When you edit your abstract, it is returned to draft and is no longer submitted for review. ***You must resubmit your abstract for it to be include for review.***

To edit an abstract, login to the abstract submission system and select the title of the abstract you need to edit.  
Login at:

<https://www.abstractscorecard.com/cfp/submit/LoginSSO.asp?EventKey=JFCSWRAG>.

## ABSTRACT SUBMISSION: WITHDRAWING AN ABSTRACT

You may withdraw your abstract if you no longer wish to present your abstract at the meeting. However, except under extraordinary circumstances, AOCS does not allow withdrawal of a paper less than two weeks before the Annual Meeting. If an author cannot attend the meeting, one of the remaining co-authors is responsible for the presentation. This will avoid discontinuity in the session.

### Prior to Review

Reviews begin November 15, 2020. Prior to that date, login to your abstract submission account. After you click on the proposal title, you can then click on Edit. Scroll to the bottom of the page to select “Withdrawn” as the Proposal Status in the drop-down menu. Then click on “Update Proposal”.

<https://www.abstractscorecard.com/cfp/submit/LoginSSO.asp?EventKey=JFCSWRAG>.

### After Reviews Begin

To withdraw an abstract on or after November 15, 2020, please contact Julie May, Program Content Manager, at [julie.may@aocs.org](mailto:julie.may@aocs.org).

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## SELECTION CRITERIA & REVIEWS

Abstract reviews will begin by the Program Committee and session chairpersons on November 15, 2020.

Abstracts will be evaluated separately using the following criteria:

- Relevance to session topic,
- Creativity and originality of content, and
- Tangible message, solutions, and best practice(s).

The AOCS Program Committee and session chairs reserve the ultimate right to select abstracts for presentation based on quality factors including, but not limited to:

- Scientific merit,
- Relevancy to the session focus,
- Innovation,
- Practical application of content,
- Pertinence to division and tracks, and
- Pertinence to target audience(s).

Abstracts submitted for the Technical Program that deal with commercial products or services must have a scientific emphasis and should not be submitted for promotion purposes. Abstracts should minimize use of proprietary nomenclature or company name as well. The ONLY exception to this is a specific session where the following disclaimer is noted:

***Note: Normal restrictions on the use of product trade names and logos are suspended, so that presenters can freely discuss commercial aspects and opportunities of their products.***

Individuals interested in promoting a particular commercial product or service are encouraged to present within the Hot Topic Symposia or Fast Track. Presentations within these sessions may be commercial in nature.

Abstracts failing to meet one or more quality factors will not be selected.

Selection criteria for Research Competition Finalists is detailed beginning on Page 7.

Selection criteria for Students' e-Poster Pitch Competition is detailed beginning on Page 9.

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## ACCEPTANCE & SCHEDULING NOTICES

Authors will be notified by February 19, 2021, via email, as to the status of their abstract(s) and will be given detailed instructions regarding their presentations. Only the presenting author will receive e-mail notification of abstract status. *It is the responsibility of the presenting author to ensure that they have a valid and current email address in the CadmiumCD system.*

If accepted, *it is the responsibility of the presenting author* to inform all coauthors and faculty advisors of disposition status and abstract scheduling information. Please check with all authors regarding acceptance before contacting AOCS.

Once acceptance and scheduling notices have been sent, you may also view them in CadmiumCD.

## VISA LETTERS

Personalized visa letters are available for presenting authors *once your abstract has been accepted for presentation* during the AOCS Annual Meeting.

If you require a VISA letter, please contact Julie May, [julie.may@aoacs.org](mailto:julie.may@aoacs.org).

Please provide the following information for your VISA letter:

- Legal Name
- Passport Number (if your country requires it)
- Address
- Company or University (Affiliation)
- Presentation Title (for admin verification)

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## APPENDIX

### Appendix A: Abstract submission checklist

#### Basic Abstract Submission Checklist

1. Read and accepted the permissions.
2. Abstract Title (*200 characters max*)
3. Type of submission.
4. Session Interest Area
5. Session Topic
6. Review or Original Research?
7. Abstract Body (300 words max)
8. Presentation Description
9. Author and Co-author information, including: First, Middle Initial, Last name, country, affiliation and valid email address.

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## Appendix B: Permissions

### AOCS Speaker Agreement

**By uploading my abstract and any additional presentation materials here, I am agreeing to:**

Allowing the American Oil Chemists' Society to share my abstract, presentation and supporting materials on the Cadmium virtual meeting platform during the 2021 AOCS Annual Meeting & Expo. My abstract, presentation and supporting materials will be added to the AOCS permanent meeting record and may be made available on April 19, 2021. My abstract will be published in its entirety as part of the 2021 AOCS Annual Meeting & Expo collection of abstracts and as part of the permanent meeting record. Presenters on the AOCS Virtual Meeting platform will receive a citable DOI.

I represent and warrant that, to the best of my knowledge:

My presentation whether oral or poster does not include anything defamatory, libelous, or otherwise unlawful, violates any right of privacy, or infringes any duty of confidentiality owed to another party or violates any contract, express or implied. Further, I also represent:

- (a) the content of the abstract and of the presentation is accurate;
- (b) the presentation is my original work and any contributors who have been involved in such research or preparation have been appropriately identified;
- (c) the abstract and presentation do not violate any copyright, proprietary, confidentiality, or personal rights of others;
- (d) the presentation will be educational in nature, will not promote any product or service, and will not contain any false or misleading statements regarding any products or services or include materials that are slanderous, libelous, or otherwise illegal; and
- (e) I am authorized to make these representations and to agree to the terms of the AOCS Abstract Submission Guidelines on behalf of my company or institution.

I hereby indemnify and hold harmless the American Oil Chemists' Society, its officers, directors, staff, agents, and representatives from and against any and all claims, actions, losses, demands, costs, reasonable attorneys' fees, and other expenses arising from the inaccuracy or breach of any of the foregoing representations and warranties.

I have read and accept the terms of the AOCS Speaker Agreement.\*

Electronic Signature\*

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## Appendix C: Session Descriptions

Session descriptions are noted by Interest Area. Joint sessions between two Interest Areas are noted. In the submission system, a joint session will be listed in the topics listing for selection under each Interest Area.

### ANALYTICAL

Program organizer: Francesca Giuffrida, Nestle Research, Switzerland

#### Advanced Methods of Analysis, including Lipidomics

**Session Chairs:** Craig Byrdwell, Research Chemist, USDA, USA; Arun S. Moorthy, Research Scientist, NIST, USA

This session focuses on the developments of advanced and emerging technologies to characterize and quantify lipids in oils, fats, biological and food matrices.

#### Analysis of Less Abundant Lipids

**Session Chairs:** Kim Ekroos, Chief Technology Officer, Zora Biosciences, Finland; Francesca Giuffrida, Group leader of Lipid Analytics, Nestlé Research Center, Switzerland

This session focuses on the analysis of low abundant lipid classes such as glycolipids, sphingolipids in edible oils, fats and matrices containing these fats. Presentations will include topics related to analytical methodologies and sample preparation.

#### Authentication of High Value Oils, including Olive and Avocado Oils

**Session Chairs:** Selina C Wang, Research Director, UC Davis Olive Center, USA; Luisito Cercaci, VP of Quality and Research Development, Pompeian, Inc., USA

This session focuses on developments of advanced, novel and rapid chemical methods to detect authenticity of high-value oils as for example olive and avocado oils. Identification of new markers of oil adulteration will also be discussed.

#### Contemporary Analysis of Lipid Oxidation Products: Detecting and Quantitating More Products at Lower Levels

**Session Chairs:** Marc Pignitter, Professor, University of Vienna, Austria; Fernanda Furlan Goncalves Dias, Postdoctoral Scholar, UC Davis, USA

*Joint session with Lipid Oxidation and Quality*

Recent evidence about lipid oxidation mechanisms, reactions with other molecules and potential toxicity present new challenges in analyzing more oxidation products in greater detail and with greater sensitivity. This session presents information about class analyses of lipid oxidation products micromolar or lower levels; analyses of individual non-volatile and volatile epoxides, carbonyls, alcohols and other products; lipidomic approaches to tracking product distributions; and methods for tracking co-oxidation reactions that remove lipid oxidation products.

#### Continuing the Debate – Shelf Life vs. Accelerated Storage for Evaluating Antioxidant Effectiveness

**Session Chairs:** Natalie Oswell, Senior Scientist, Kalsec Inc., USA; David Pinkston, Technical Services Manager, ADM, USA

*Joint session with Lipid Oxidation and Quality*

Developing improved formulations and processing for food stability requires methods that accurately report lipid oxidation in the shortest time possible but these two goals are not always compatible. Accelerated storage



methods at elevated temperatures provide rapid answers but reflect different chemistry than that which occurs over long times at room temperature. This session will address conflicts between the two methods; debate accuracies, inconsistencies and appropriate uses of each method; and potentially introduce alternative approaches.

#### **Dutton Award Session**

**Session Chairs:** J. Thomas Brenna, Professor, University of Texas at Austin, USA; Pierluigi Delmonte, Research Chemist, FDA, USA

The Herbert J. Dutton Award is assigned by the Analytical Division of AOCS based on significant contributions in the analysis of oils, fats and lipids. Submissions for this session are expected to meet the highest standard of excellence in the analytical chemistry of lipids.

#### **Proposed Updates to AOCS Official Methods**

**Session Chairs:** Susan Seegers, Manager, Technical Operations, Bunge, USA

This session focuses on procedural and technological updates to current AOCS methods that reflect the changing scientific landscape. Updates from the Technical Committee may also be discussed.

#### **Rapid and High-throughput Screening Methods**

**Session Chairs:** David Barr, Product Manager, Bruker BioSpin Corp., Bruker BioSpin Corporation, USA; Walter Vetter, Professor, University of Hohenheim, Germany

The use of traditional targeted quantitative methodologies, particularly chromatographic methods, is often times consuming and inappropriate for the high-throughput screening needed today in many areas such as authentication or regulatory verification of quality and purity of fat and oil matrices. This session addresses the urgent demand for rapid, screening analytical tools to accelerate data acquisition and decision making.

#### **Trace Contaminants**

**Session Chairs:** Jan Kuhlmann, Team Leader, SGS Group, Germany; Jessica Beekman, Research Chemist, FDA, USA

This session centers on the analysis of trace contaminants (including processing contaminants) in edible oils/fats and foods containing these fats. Presentations will range in scope and may include topics related to analytical methodologies, occurrence and/or potential impacts of oil/food processing on contaminants such as MCPD/glycidyl esters, MOSH/MOAH, phthalates and others.

#### **General Analytical Methods**

**Session Chairs:** Francesca Giuffrida, Group leader of Lipid Analytics, Nestlé Research Center, Switzerland; Lisa Clement, Senior Director, Cargill, USA

Papers that go beyond the topic-specific sessions or cover new areas of research or new analytical approaches should be submitted to this category.

#### **Analytical Poster Session**

**Session Chair:** Fardin Kia Ali Reza, Analytical Chemist, FDA, USA

## BIOTECHNOLOGY

**Program organizer: Todd Underiner, Procter & Gamble, USA**

### **Biorenewable Polymers**

**Session Chairs:** Eric Cochran, Professor, Iowa State University, USA; Rick Ashby, Research Microbiologist, USDA, USA

*Joint session with Industrial Oil Products*

Plastic waste disposal is quickly becoming a worldwide issue because of the recalcitrant nature of petroleum-based plastics towards degradation. This session focuses on the synthesis and characterization of unique biopolymers derived from renewable and/or lipid-based precursors that mimic, if not improve, the mechanical properties demonstrated by petroleum-based polymers, thus making these biopolymers more appealing in widespread applications.

### **Biobased Surfactants**

**Session Chairs:** George A. Smith, Research Associate, Sasol, USA; Douglas G. Hayes, Professor of Biosystems Engineering, University of Tennessee, USA

*Joint session with Surfactants & Detergents*

Interest in biobased surfactants continues to increase yearly. This session focuses on research and development of biobased surfactants in detergents, personal care products, cosmetics, pharmaceuticals, foods, environmental remediation and other applications.

### **Breeding and Biotechnology for Improving Content, Nutritional Quality and Functionality of Plant Proteins**

**Session Chairs:** Phil Kerr, Chief Technology Officer, PRAIRIE AQUATECH, USA; Long Zou, Senior Project Leader, Bunge, USA; Rouf Mian, Research Leader and Geneticist, USDA-ARS, USA

*Joint session with Protein and Co-Products*

Plant-based proteins are trending in the food industry to meet consumers' dietary preference and sustainability pursuit. To address the opportunities, this session discusses research efforts in improving the yield, nutritional quality, flavor and functionality of proteins by conventional breeding and advanced biotechnological tools.

### **Emerging Biotechnological Developments in Lipids**

**Session Chairs:** Nuanyi Liang, Postdoctoral Researcher at University of California, Davis, UC Davis, USA; Yomi Watanabe, Head of the Food Technology Lab, Osaka Institute of Technology, Japan  
Anything to do with the yield, processing and isolation of oils from seed crops, plants, or fermentation.

### **Emerging Edible Applications of Plant Proteins**

**Session Chairs:** Serpil Metin, Principal Product Development, Cargill Global Edible Oil Solutions, USA; Long Zou, Senior Project Leader, Bunge, USA; Navam N. Hettiarachchy, Professor, University of Arkansas

*Joint session with Edible Applications Technology and Protein and Co-Products*

This session addresses the opportunities and challenges associated with the emerging edible applications of plants including plant-based meat, dairy alternatives, films and coatings and edible packaging materials.

### **Functional Lipids - Biocatalysis I**

**Session Chairs:** In-Hwan Kim, Professor, Korea University, Korea; Aki Tsunehiro, Professor, Hiroshima University, Japan

If you are working in enzyme or microbial transformations useful to make functional lipids or alter the composition of lipids in your oil production, this session is for you!

### **Oleochemicals - Biocatalysis II**

**Session Chairs:** Jun Ogawa, Professor, Kyoto University, Japan; Lu-Kwang Ju (Luke), Professor, The University of Akron, USA

The place to go for everything related to enzymatic and microbial conversion of plant-based oils into industrial chemicals.

### **Plant and Algae Lipid Biotechnology and Genomics**

**Session Chairs:** Jay Shockey, Research Geneticist, USDA, USA; Timothy Durrett, Associate Professor, Kansas State University, USA

Synthetic biology techniques allow one to redesign oil biosynthetic pathways in plants and algae. These technologies can be employed to improve the oil content and fatty acid composition in plants and algae to provide the food, feed and oleochemical precursors for a growing global population.

### **General Biotechnology**

**Session Chairs:** Todd Underiner, Director, Procter & Gamble, USA

Papers that go beyond the topic-specific sessions or cover new areas of research in biotechnology and sustainable materials should be submitted to this category.

### **Biotechnology Poster Session**

**Session Chairs:** Sarah A. Willett, University of Georgia, USA; Todd Underiner, Procter & Gamble, USA

## **EDIBLE APPLICATIONS TECHNOLOGY**

**Program organizer:** Kaustuv Bhattacharya, Dupont Nutrition & Health, Denmark

### **Emerging Edible Applications of Plant Proteins**

**Session Chairs:** Serpil Metin, Principal Product Development, Cargill Global Edible Oil Solutions, USA; Long Zou, Senior Project Leader, Bunge, USA; Navam N. Hettiarachchy, Professor, University of Arkansas

*Joint session with Biotechnology and Protein and Co-Products*

This session addresses the opportunities and challenges associated with the emerging edible applications of plants including plant-based meat, dairy alternatives, films and coatings and edible packaging materials.

### **Fundamentals of Fat Crystallization**

**Session Chairs:** Eckhard Flöter, Professor, Berlin Institute of Technology, Germany; Alejandro Marangoni, Canada Research Chair, University of Guelph, Canada

Crystallization is one of the cornerstones of lipid chemistry. This session discusses the fundamentals of fat crystallization through basic principles, recent findings, latest analytical tools, modelling systems, etc.

### **Implication of Lipid Structuring and Fat Crystallization in Food Application**

**Session Chairs:** Nuria C. Acevedo, Associate Professor, Iowa State University, USA; Brad Forrest, Group Innovations Manager, DuPont Nutrition & Health, Australia

Application of fat crystallization can be seen in all segments of the food industry. This session discusses the implication and utilization of fat crystallization in food applications for textural and organoleptic attributes. It includes the role of fat selection, the role of food ingredients and the effect of food processing on product structuring for confections, baking, margarines, ice cream and other applications.

### **Lipid Oxidation in Frying – Updates and New Perspectives**

**Session Chairs:** Hong-Sik Hwang, Research Chemist, USDA, USA; Kaustuv Bhattacharya, Principal Application Specialist, DuPont Nutrition & Health, Denmark

*Joint session with Lipid Oxidation and Quality*

Frying remains a key commercial and industrial cooking process yet the fundamental chemistry underlying degradation in different stages is still incompletely understood. This session will cover the different stages and types of frying and how the chemistry varies in each, analyses best for monitoring each stage (or determining extent of degradation and end of useful fry life), behaviors of new oils (either new sources or new syntheses via interesterification) in frying and new, more effective protection approaches.

### **Manipulating Fat for Plant Based Product Development**

**Session Chairs:** Karel Hrnčíř, Global Lead Ingredients, Upfield, Netherlands; Farnaz Maleky, Associate Professor, The Ohio State University, USA

Use of non-dairy and non-animal based proteins including substitution of animal/dairy fats in food products are on the rise globally. This session focuses on application of plant-based fats and oils with or without modification in various food applications to impart optimal functionality with respect to taste and texture.

### **Phase Transition and Interfacial Phenomena in Complex Food System**

**Session Chairs:** Filip Van Bockstaele, Professor, Ghent University, Belgium; Andrew J. Gravelle, Research Assistant, University of Guelph, Canada

This session will focus on the multi-scale structuring of multicomponent foods and its influence on functionality, with particular focus on the role of surfaces and interfaces on relevant phenomena such as phase transitions, rheology and structure formation. Examples discussed will include gels, emulsions and foams. Industry-relevant topics such as clean label formulations, natural ingredients and optimized structure formulation will be discussed.

### **General Edible Applications Technology**

Papers that go beyond the topic-specific sessions or cover new areas of research in food materials and food technology should be submitted to this category.

### **Edible Applications Technology Poster Session**

**Session Chairs:** Supratim Ghosh, Associate Professor, University of Saskatchewan, Canada

## **HEALTH AND NUTRITION**

**Program organizer: Matt Miller, Cawthron Institute, New Zealand**

### **Cannabinoid ABCs: The 411 on CBC, CBD, CBG, and THC**

**Session Chairs:** Holiday Durham Zanetti, Senior Research Scientist, Nutrilite Health Institute, USA; Rinat Ran Ressler, Principal Scientist, Nestlé Health Science, USA

This session will critically examine up-to-date research relevant to the broad field of cannabinoids and terpenes, including the metabolism, suggested mechanisms of action and evidence for the health benefits of cannabinoids. In addition to the frequently discussed effects of Cannabidiol (CBD) and Delta-9 Tetrahydrocannabinol (D-9-THC), the sessions will cover emerging science on other cannabinoids, such as Cannabichromene (CBC), Cannabigerol (CBG), Cannabinoid acids and terpenes.

## **COVID-19 and Lipids**

**Session Chairs:** Philip Calder, Professor, University of Southampton, UK; Martin Hewison, Professor, University of Birmingham, UK

This session is dedicated to research looking at lipid products including lipid soluble vitamins in aiding and treatment for COVID-19. The immune-modulatory properties of eicosapentaenoic (EPA) and docosahexaenoic (DHA) acids, rapidly provided in high amounts by fish-oil emulsions, may be important to change the course of COVID-19's death pathway. This has led to a series of clinical trials. Further there is growing interest in Vitamin D and E, which might also reduce the impact of COVID-19 in populations where deficiency is prevalent.

## **Emerging Sources of Protein**

**Session Chairs:** Rotimi Aluko, Professor, University of Manitoba, Canada; James D. House, Professor, University of Manitoba, Canada; Lamia L'Hocine, Research Scientist, Agriculture and Agri-Food Canada

*Joint session with Protein and Co-Products*

This session addresses the opportunities and challenges associated with emerging protein sources, including plant and non-plant proteins, particularly in regard to their nutritional, bioactive and techno-functional properties, applications, safety and allergenicity.

## **Essential Fatty Acids: Evidence Suggests that We Re-evaluate the Need for an RDA to Replace the Adequate Intake?**

**Session Chairs:** Martha Belury, Professor, The Ohio State University, USA; David Knowles, Trifuse Consulting, USA

The two fatty acids, linoleic acid (LA) and alpha-linolenic acid (ALA), are essential fatty acids for mammals. In this session, we will: 1) review the brief history of the role of essential fatty acids in the human diet for deficiency prevention; 2) present the emerging evidence for newly identified mechanistic roles of essential fatty acids in a variety of conditions including lipoprotein metabolism, neuronal development and function, fatty liver diseases, energy metabolism and insulin sensitivity; 3) discuss what is needed to determine whether RDAs for essential fatty acids are needed; and 4) if so, what criteria should be used to develop the RDAs for LA and ALA.

## **Protein Biofunctions**

**Session Chairs:** Hitomi Kumagai, Professor, Nihon University, Japan; Apollinaire Tsopmo, Associate Professor, Carleton University, Canada; Kaustav Majumder, Assistant Professor, University of Nebraska–Lincoln, USA

*Joint session with Protein and Co-Products*

Proteins and derived peptides can exhibit biological activities above and beyond their known nutritional value. This session discusses protein and peptides allergenic, bioactive, antibacterial and antiviral functions. Insights into mechanisms of action will be also addressed.

## **General Health and Nutrition & Awards Session**

**Session Chairs:** Kacie Ho, Assistant Professor, University of Hawaii at Manoa, USA; Ignacio Vieitez, Professor, UdelaR, Uruguay

This session is dedicated to up-to-date, high-quality research relevant to the broad field of lipid metabolism, biochemistry and physiology related to all aspects of dietary fats and health. Studies of interest cover all aspects of experimental nutrition, physiology and biochemistry in humans and animals, as well as in vitro and in silico studies unveiling the mechanisms of lipid physiology in human health. The Ralph Holman Lifetime Achievement, New Investigator and student awards will also be presented in this session.

## **Lipid Oxidation Consequences to Health, Nutrition and Toxicity**

**Session Chairs:** Teruo Miyazawa, Professor, Tohoku University, Japan; Karen Schaich, Professor, Rutgers, The State University of New Jersey, USA

*Joint session with Lipid Oxidation and Quality*

Consequences of lipid oxidation in oils and foods go far beyond rancid odors and flavors to include co-oxidation of food nutrients, decrease in essential fatty acids, impairment with nutrient absorption, interference with the microbiome and function of the gastrointestinal tract, formation of toxic lipids and non-lipid products such as acrylamide and more. This session will introduce less familiar deleterious aspects of lipid oxidation that impact health in various ways.

### **Health and Nutrition Poster Session**

**Session Chairs:** Hongbing Fan, Graduate Research Assistant, University of Alberta, Canada

This poster session is dedicated to up-to-date, high-quality research relevant to the broad field of lipid metabolism and health. Studies of interest cover all aspects of experimental nutrition, physiology and biochemistry in humans and animals, as well as in vitro and in silico studies unveiling the mechanisms of lipid physiology in human health.

## **INDUSTRIAL OIL PRODUCTS**

**Program organizer: Brajendra (BK) Sharma, University of Illinois, USA**

### **Biofuels**

**Session Chairs:** Bob Dunn, Research Chemical Engineer, USDA, USA; Bruce Patsey, General Manager, Oil-Dri Corporation of America

*Joint session with Processing*

Biofuels produced from oils, fats or by-products of the oil plants value chain can offer sustainable alternatives to fossil fuels. Presentations investigate recent advances in biofuels production. Potential topics include, but are not limited to, biomass pre-treatment, enzymatic and catalytic processing, thermochemistry, carbon footprint analysis, optimization of biofuels, new feedstocks, chemical structure-property relationships and fuel properties.

### **Biorenewable Polymers**

**Session Chairs:** Eric Cochran, Professor, Iowa State University, USA; Rick Ashby, REsearch microbiologist, USDA, USA

*Joint session with Biotechnology*

Plastic waste disposal is quickly becoming a worldwide issue because of the recalcitrant nature of petroleum-based plastics towards degradation. This session focuses on the synthesis and characterization of unique biopolymers derived from renewable and/or lipid-based precursors that mimic, if not improve, the mechanical properties demonstrated by petroleum-based polymers, thus making these biopolymers more appealing in widespread applications.

### **Green Chemistry and Oleochemicals**

**Session Chairs:** Helen Ngo, Lead Scientist, USDA, USA; Majher Sarker, Research Scientist, USDA, USA

The session covers catalytic processes and novel green chemistry concepts for chemical modifications of fats and oils to create value-added, sustainable or renewable products. It also includes other processes like novel chemical/biological synthesis, replacement/reduction of environmentally harsh reagents or wastes or use of new feedstocks that promote the sustainability of existing technologies.

### **New Uses of Glycerine**

**Session Chairs:** Dharma Kodali, Adjunct Professor, University of Minnesota, USA; Frank Dumeignil, Professor, Lille University, France

This session will deal with current progress in the value-added processing and valorization of glycerin. The addressed topics comprise chemical, biochemical, thermochemical and catalytic upgrading of purified and raw glycerin. Papers dealing with economical, LCA and process design dimensions of glycerin upgrading technologies are also welcome.

### **General Industrial Oil Products**

**Session Chairs:** Darrell Sparks, Associate Professor, Mississippi State, USA; Brajendra K. (BK) Sharma, Sr. Research Scientist, UIUC, USA

Papers that go beyond the topic-specific sessions or cover new areas of research in industrial oil products should be submitted to this category.

### **Industrial Oil Products Poster Session**

**Session Chair:** Jerry King, Adjunct Professor, University of Arkansas, USA

## **LIPID OXIDATION AND QUALITY**

**Program organizer:** Karen Schaich, Rutgers University, USA

### **Contemporary Analysis of Lipid Oxidation Products: Detecting and Quantitating More Products at Lower Levels**

**Session Chairs:** Marc Pignitter, Professor, University of Vienna, Austria; Fernanda Furlan Goncalves Dias, Postdoctoral Scholar, UC Davis, USA

*Joint session with Analytical*

Recent evidence about lipid oxidation mechanisms, reactions with other molecules and potential toxicity present new challenges in analyzing more oxidation products in greater detail and with greater sensitivity. This session presents information about class analyses of lipid oxidation products micromolar or lower levels; analyses of individual non-volatile and volatile epoxides, carbonyls, alcohols and other products; lipidomic approaches to tracking product distributions; and methods for tracking co-oxidation reactions that remove lipid oxidation products.

### **Continuing the Debate – Shelf Life vs. Accelerated Storage for Evaluating Antioxidant Effectiveness**

**Session Chairs:** Natalie Oswell, Senior Scientist, Kalsec Inc., USA; David Pinkston, Technical Services Manager, ADM, USA

*Joint session with Analytical*

Developing improved formulations and processing for food stability requires methods that accurately report lipid oxidation in the shortest time possible but these two goals are not always compatible. Accelerated storage methods at elevated temperatures provide rapid answers but reflect different chemistry than that which occurs over long times at room temperature. This session will address conflicts between the two methods; debate accuracies, inconsistencies and appropriate uses of each method; and potentially introduce alternative approaches.

### **Lipid Oxidation Consequences to Health, Nutrition and Toxicity**

**Session Chairs:** Teruo Miyazawa, Professor, Tohoku University, Japan; Jake Olson, Manager, Processing and Products, Terviva, USA; Karen Schaich, Professor, Rutgers, The State University of New Jersey, USA

*Joint session with Health and Nutrition*

Consequences of lipid oxidation in oils and foods go far beyond rancid odors and flavors to include co-oxidation of food nutrients, decrease in essential fatty acids, impairment with nutrient absorption, interference with the microbiome and function of the gastrointestinal tract, formation of toxic lipids and non-lipid products such as acrylamide and more. This session will introduce less familiar deleterious aspects of lipid oxidation that impact health in various ways.

### **Lipid Oxidation in Frying – Updates and New Perspectives**

**Session Chairs:** Hong-Sik Hwang, Research Chemist, USDA, USA; Kaustuv Bhattacharya, Principal Application Specialist, DuPont Nutrition & Health, Denmark

*Joint session with Edible Applications and Technology*

Frying remains a key commercial and industrial cooking process yet the fundamental chemistry underlying degradation in different stages is still incompletely understood. This session will cover the different stages and types of frying and how the chemistry varies in each, analyses best for monitoring each stage (or determining extent of degradation and end of useful fry life), behaviors of new oils (either new sources or new syntheses via interesterification) in frying and new, more effective protection approaches.

### **Lipid Oxidation in Interesterified Fats and Oils and New Oil Products**

**Session Chairs:** Ignacio Vieitez, Professor, UdelaR, Uruguay; Dilip K Nakhasi, Senior Director - Research, Development & Innovation, Stratas Foods, USA

*Joint session with Processing*

With the demonization of trans fats, oil hydrogenation has largely been replaced by interesterification of oils with natural (semi)solid fats or saturated fatty acids, changing oil mixtures to generate materials with different solid properties. As experience with these new solid fats accumulates, questions have been raised regarding stability vs source fats (yes, even saturated fats), fatty acid positions on triacylglycerols and the presence of natural catalysts and antioxidants. This session will look at patterns of stability in engineered (semi)solid fats in the context of fatty acid composition and engineering of fats over a range of solid properties and seek to derive some guidelines for developing stable fats for both food and non-food applications.

### **Lipid Oxidation Mechanisms, Catalysis and Inhibition**

**Session Chairs:** Karen Schaich, Associate Professor, Rutgers, The State University of New Jersey, USA; Morgan Kandrac, Graduate Research Assistant, Rutgers, The State University of New Jersey, USA; Lan Ban, Director, R&D, Kemin, USA

It has become increasingly clear that lipid oxidation is much more complex than radical chain reactions, and its controls are correspondingly more complicated than just complexing metals or quenching radicals. This session examines new information and how these are modified by metal and other catalyses, and by blocking or rerouting of oxidation reactions.

### **Lipid Oxidation and Quality in Novel Alternative Protein Products**

**Session Chairs:** Liyun Ye, Research Fellow, Dalhousie University, Canada; Karen Schaich, Professor, Rutgers, The State University of New Jersey, USA

As vegan diets become increasingly popular and environmentalists argue against animal meats, commercial development of plant-based and cell-based meat alternatives has become “hot”. These products incorporate



lipids that approximate natural meats to generate the desired textures, flavors and nutrients. As initial challenges with protein structuring are being overcome, unique advantages and challenges regarding lipid oxidation are being introduced by their novel matrices and processes. This session is dedicated to exploring the potential advantages, challenges and solutions regarding oxidative stability in the novel alternative protein space.

#### **Lipid Oxidation Variation with Specific Food Matrices**

**Session Chairs:** Charlotte Jacobsen, Professor, Technical University of Denmark; Xin Tian, Lead Scientist, Kalsec, USA

Lipid oxidation is a “one size does not fit all” reaction – its reactions, catalysts, inhibitors and outcome change with the specific food or cell matrix, and this alters observed kinetics, analytical methods required for monitoring and effects on product qualities. This session will compare patterns of lipid oxidation, co-oxidation and inhibition in different food and material matrices with different lipid composition and organization (e.g. meat, vs dairy vs complex dry vs complex extruded vs emulsions), then consider how these differences alter analyses required to accurately detect and quantitate lipid oxidation, as well as modify antioxidant strategies.

#### **General Lipid Oxidation and Quality**

**Session Chairs:** David Johnson, Product Manager, Kalsec Inc., USA; Liyun Ye, Research Fellow, Dalhousie University, Canada

#### **Lipid Oxidation and Quality Poster Session**

### **PHOSPHOLIPID**

**Program organizer:** Ozan Ciftci, University of Nebraska-Lincoln, USA

#### **Novel Phospholipids: Pharmaceutical, Functional and Edible Applications**

**Session Chairs:** Ernesto Hernandez, Principal Consultant, Advanced Lipid Consultants, USA; Mabel C. Tomás, Researcher, National Scientific and Technical Research Council, Argentina

This session aims to include papers on novel phospholipids and applications such as natural emulsifiers, wetting, and dispersing agents in food applications. Also on the use of phospholipids as excipients and carriers in pharmaceutical and cosmetic formulations as well on the developments of new pharmaceutical products such drug delivery systems and specialty phospholipids supplements with bioactive properties.

#### **Polar Lipids and Phospholipids – New Products and Developments**

**Session Chairs:** Tao Fei, Research Assistant Professor, University of Tennessee, Knoxville, USA; Swapnil Jadhav, Research Manager, ADM, USA

This session will include papers on the latest development of applications of polar lipids and other amphiphilic lipids, in conjunctions with phospholipids and sphingolipids. Session will also include presentations on the supporting roles of polar lipids in brain and cognitive development, with a focus on the nutritional impact during pregnancy, lactation, and infancy. Also included, papers on the food sources of polar lipids, their bioavailability, and the effects on cognitive measures via dietary supplementation.

#### **Sustainable Processing and Fractionation for Novel Phospholipids – Including Milkfat, Marine and Plant-Based Phospholipids**

**Session Chairs:** Ozan Ciftci, Associate Professor, University of Nebraska-Lincoln, USA; Laurent Bazinet, Professeur Titulaire, Université Laval, Canada

This session will include papers that include novel processing techniques for phospholipids, including solvent extraction and precipitation processes, supercritical processing and chemical derivatization to produce fractions enriched in phospholipids with functional and bioactive properties. Also will include presentation on enzymatic processes with phospholipases and lipases including esterification reactions with other bioactive polar compounds.

### **General Aspects of Phospholipids**

**Session Chairs:** Junsu Yang, Graduate Research Assistant, University of Nebraska-Lincoln, USA

Papers that go beyond the topic-specific sessions or cover new areas of phospholipid science and technology should be submitted to this category.

### **Phospholipid Poster Session**

**Session Chairs:** Zachary Cooper, Utah State University, USA

## **PROCESSING**

**Program organizer: Alan Paine, Consultant, UK**

### **Best Practices and Guidelines for Plant and Product Personnel – Including Public and Customer Communication**

**Session Chairs:** Stan Pala, Global Sales Director, Solex Thermal Science, Czechia; Bryan Yeh, President and CEO, American Biodiesel, inc., USA

The development and implementation of best practices are critical for the success of an operation. Regardless of the type of operation, these principles ensure an entity's safety, quality and value. This session will feature thought leaders around this subject and highlight examples including encouraging adoption of best practices, management of change, value engineering, and managing communication.

### **Biofuels**

**Session Chairs:** Bob Dunn, Research Chemical Engineer, USDA, USA; Bruce Patsey, General Manager, Oil-Dri Corporation of America

*Joint session with Industrial Oil Products*

Biofuels produced from oils, fats or by-products of the oil plants value chain can offer sustainable alternatives to fossil fuels. Presentations investigate recent advances in biofuels production. Potential topics include, but are not limited to, biomass pre-treatment, enzymatic and catalytic processing, thermochemistry, carbon footprint analysis, optimization of biofuels, new feedstocks, chemical structure-property relationships and fuel properties.

### **Cannabis and Hemp Processing – New Trends and Applications**

**Session Chairs:** Jerry King, Adjunct Professor, University of Arkansas, USA; Mike Martinez, Chief Executive Officer, TrimXperts, USA

This session will focus on a “holistic” approach to processing all cannabis- and hemp-derived products, including medicinal active “oil” extracts, hemp seed oil and protein isolation, as well as chemical and energy applications of cannabis/hemp biomass. Suitable contributions would consist of extraction and purification technologies, removal of contaminants, and end uses of the resultant processed products. Contributions are also welcomed on regulatory control of the manufacturing processes and products derived from the constituent parts of the cannabis and hemp biomass.

### **Co-Stream to Mainstream -- Plant-based Products, Dairy and Protein Quality**

**Session Chairs:** Lingyun Chen, Professor, University of Alberta, USA

This session will focus on openings for by-product and co-streams to main products in plant-based protein and dairy processing. We will highlight protein quality innovations and integration of developing technologies with current practices.

### **Food Safety and Security – Contaminants, Sustainability, Environment**

**Session Chairs:** Veronique Barthet, Research Scientist and Program Manager, Canadian Grain Commission, Canada; Nurhan Dunford, Professor, Oklahoma State University, USA

This session focuses on contaminants relevant to current process practices, mitigation strategies and regulatory aspects. Contaminants comprise environmental pollutants such as heavy metals, pesticides, PCBs, dioxins or PAHs, and process contaminants such as 3-MCPD- and glycidol esters, mineral oil hydrocarbons, and phthalates. Examples of current and new practices applied to seed conditioning, seed preparation, extraction, degumming, physical refining, alkali refining, bleaching, short-path evaporation, deodorization, interesterification, fractionation and fractional distillation will be presented in this session.

### **Lipid Oxidation in Interesterified Fats and Oils and New Oil Products**

**Session Chairs:** Ignacio Vieitez, Professor, UdelaR, Uruguay; Dilip K Nakhasi, Senior Director - Research, Development & Innovation, Stratas Foods, USA

*Joint session with Lipid Oxidation and Quality*

With the demonization of trans fats, oil hydrogenation has largely been replaced by interesterification of oils with natural (semi)solid fats or saturated fatty acids, changing oil mixtures to generate materials with different solid properties. As experience with these new solid fats accumulates, questions have been raised regarding stability vs source fats (yes, even saturated fats), fatty acid positions on triacylglycerols and the presence of natural catalysts and antioxidants. This session will look at patterns of stability in engineered (semi)solid fats in the context of fatty acid composition and engineering of fats over a range of solid properties and seek to derive some guidelines for developing stable fats for both food and non-food applications.

### **New and Emerging Technology**

**Session Chairs:** Jonathan Speed, Product and Applications Manager, Keit Spectrometers, UK; Richard Ozer, Product Sales Manager, Crown Iron Works, USA

New and recent technologies relevant to both plant operators and academia will be presented. In this session, key speakers from industry and academia will present on new technological breakthroughs (equipment and software), with topics covering the entire oil processing-chain.

### **Processing Basics – Current and Future Scope**

**Session Chairs:** Christopher Knight, Operations Manager, Montana Specialty Mills, USA; Darren Litle, Director of Sales & Business Development, Arisdyn Systems, Inc., USA

General processing topics- on how oilseeds are processed and on technical information that will help those interested to learn about plant operation and practices. Processing to Enhance Bioactive Ingredients for Health-Promoting Foods Bioactivity of food ingredients is strongly influenced by food processing. Strategies are sought to preserve valuable constituents but also to enhance health-promoting ingredients by applying innovative techniques. New insights into the fate of biologically active ingredients during food processing and solutions to

improve their bioactivity by processing will be provided.

### **Processing to Enhance Bioactive Ingredients for Health-Promoting Foods**

**Session Chairs:** Marc Pignitter, Assistant Professor, University of Vienna, Austria; Karin Schwarz, Head of Department of Food Technology, University of Kiel, Germany

Bioactivity of food ingredients is strongly influenced by food processing. Strategies are sought to preserve valuable constituents but also to enhance health-promoting ingredients by applying innovative techniques. New insights into the fate of biologically active ingredients during food processing and solutions to improve their bioactivity by processing will be provided.

### **Renewable Fuels – Technology and Market Considerations**

**Session Chairs:** Alan Paine, Consultant, UK; Bill Younggreen, Market Unit Manager, Alfa Laval, USA

This session investigates recent advances in renewable fuels production. Topics will range from the value chain-sustainable alternatives to fossil fuels, carbon footprint analysis, optimization, and fuel properties.

### **General Processing**

**Session Chairs:** Rich Barton, President, N Hunt Moore & Associates, USA; Richard Clough, Head, Extraction & Protein Technologies Program, Texas A&M University, USA

Papers that go beyond the topic-specific sessions or cover new areas of processing science and technology be submitted to this category.

### **Processing Poster Session**

**Session Chairs:** Alan Paine, Consultant, UK

## **PROTEIN AND CO-PRODUCTS**

**Program organizer:** Lami L'Hocine, Agriculture & Agri-Food Canada (AAFC), Canada

### **Application of Advanced, Novel, and Clean-Tech Processing for the Preparation and Utilization of Plant Proteins for Foods**

**Session Chairs:** Mehmet Tulbek, Director R&D, AGT Food and Ingredients Inc., Canada; Mahfuzur Rahman, Graduate Research Assistant, Iowa State University, USA

This session focuses on sustainable clean technologies for protein extraction and their effect on protein techno-functionalities such as solubility, dispersability, texturization, etc. Technologies covered in this session include dry milling, membrane separation, enzyme modification and traditional wet processing. In addition, this session includes the trend of green technologies, less processing and clean labelling in vegetable protein processing and applications.

### **Breeding and Biotechnology for Improving Content, Nutritional Quality and Functionality of Plant Proteins**

**Session Chairs:** Phil Kerr, Chief Technology Officer, PRAIRIE AQUATECH, USA; Long Zou, Senior Project Leader, Bunge, USA; Rouf Mian, Research Leader and Geneticist, USDA, USA

*Joint session with Biotechnology*

Plant-based proteins are trending in the food industry to meet consumers' dietary preference and sustainability pursuit. To address the opportunities, this session discusses research efforts in improving the yield, nutritional quality, flavor and functionality of proteins by conventional breeding and advanced biotechnological tools.

### **Emerging Edible Applications of Plant Proteins**

**Session Chairs:** Serpil Metin, Principal Product Development, Cargill Global Edible Oil Solutions, USA; Long Zou, Senior Project Leader, Bunge, USA; Navam N. Hettiarachchy, Professor, University of Arkansas

*Joint session with Edible Applications Technology and Biotechnology*

This session addresses the opportunities and challenges associated with the emerging edible applications of plants including plant-based meat, dairy alternatives, films and coatings and edible packaging materials.

### **Emerging Sources of Protein**

**Session Chairs:** Rotimi Aluko, Professor, University of Manitoba, Canada; James D. House, Professor, University of Manitoba, Canada; Lamia L'Hocine, Research Scientist, Agriculture and Agri-Food Canada

*Joint session with Health and Nutrition*

This session addresses the opportunities and challenges associated with emerging protein sources, including plant and non-plant proteins, particularly in regard to their nutritional, bioactive and techno-functional properties, applications, safety and allergenicity.

### **Protein Biofunctions**

**Session Chairs:** Hitomi Kumagai, Professor, Nihon University, Japan; Apollinaire Tsopmo, Associate Professor, Carleton University, Canada; Kaustav Majumder, Assistant Professor, University of Nebraska–Lincoln, USA

*Joint session with Health and Nutrition*

Proteins and derived peptides can exhibit biological activities above and beyond their known nutritional value. This session discusses protein and peptides allergenic, bioactive, antibacterial and antiviral functions. Insights into mechanisms of action will be also addressed.

### **Functionality of Proteins in Food and Interaction with Other Food Components**

**Session Chairs:** Chibuike Udenigwe, Associate Professor, University of Ottawa, Canada; Jiajia Rao, Assistant Professor, North Dakota State University, USA; Hongbing Fan, Graduate Research Assistant, University of Alberta, Canada

This session aims to advance our understanding of protein and peptide functionality in foods and interactions with other food components such as polysaccharides, lipids, phytochemicals, etc. This may include changes in protein and peptide structures, textures, functionality, bioactivity and bioavailability.

### **Lifetime Achievement Award and Lecture / Graduate Student Oral Competition**

**Session Chairs:** Janitha Wanasundara, Research Scientist, Agriculture and Agri-Food Canada; Buddhi Lamsal, Associate Professor, Iowa State University, USA

This special session is featuring an award lecture in honor of the winner of the new PCP Lifetime Achievement Award, it will further include presentations by finalists of the Graduate Student Oral Competition.

### **Non-Food Applications of Proteins**

**Session Chairs:** Nandika Bandara, Assistant Professor & Canada Research Chair in Food Proteins and Bioproducts, University of Manitoba, Canada; Bishnu Karki, Assistant Professor, South Dakota State University

This session covers current research on the utilization of proteins of different origins in non-food applications including but not limited to pet foods, aquafeed, animal feed and in industrial polymeric applications.

### **Protein-based Hydrocolloids for Food and Biomaterial Applications**

**Session Chairs:** Lingyun Chen, Canada Research Chair , University of Alberta, Canada; Dario Cabezas, Researcher, Universidad Nacional Agraria La Molina, Argentina

This session focuses on current techniques to develop novel protein-based hydrocolloids for improved food stability, texture and quality. Their applications such as novel delivery systems and biomedical materials will be presented as well.

### **General Protein and Co-Products**

**Session Chairs:** Lamia L'Hocine, Research Scientist - Food Proteins, Agriculture and Agri-Food Canada

Papers that go beyond the topic-specific sessions or cover new areas of protein and co-products science and technology be submitted to this category.

### **Protein and Co-Products Poster Session**

**Session Chairs:** Mila P. Hojilla-Evangelista, Research Chemist, USDA, USA; Yixiang Wang, Assistant Professor, McGill University

## **SURFACTANTS AND DETERGENTS**

**Program organizer: Michael Williams, Evonik Corporation, USA**

### **Biobased Surfactants**

**Session Chairs:** George A. Smith, Research Associate, Sasol, USA; Douglas G. Hayes, Professor of Biosystems Engineering, University of Tennessee, USA

*Joint session with Biotechnology*

Interest in biobased surfactants continues to increase yearly. This session focuses on research and development of biobased surfactants in detergents, personal care products, cosmetics, pharmaceuticals, foods, environmental remediation and other applications.

### **Surfactant Mixtures and Trace Components**

**Session Chairs:** Sukhwan Soontravanich, Staff Scientist, Ecolab, USA; Ronald Marquez, Postdoctoral Researcher, North Carolina State University, USA

Surfactant mixtures, residual surfactants, and other trace components can generate complex behaviors in surfactant formulations. This session focuses on studying the physicochemical behavior of these complex systems and its relationship with formulation properties. It also includes methods to analyze complex surfactant mixtures and analytical techniques for quantifying residual surfactants and other trace components, as well as strategies to minimize residual surfactants and chemicals.

### **HLD/NAC**

**Session Chairs:** Edgar Acosta, Professor, University of Toronto, Canada; Sanja Natali, Global CI Customer and Application Development , ExxonMobil, USA

The hydrophilic lipophilic deviation (HLD) and the net-average curvature (NAC) are becoming common tools in the arsenal of the surfactant formulator. These sessions will include invited talks from individuals in industry and academia presenting an introductory overview of these concepts and their application in a wide range of fields, including, oilfield chemistry, agrochemical, cleaning, detergents, cosmetics and pharmaceutical formulations.

### **Next Generation Ingredients (with Tradenames\*)**

*\*Normal restrictions on the use of product trade names and logos are suspended, so that presenters can freely discuss commercial aspects and opportunities of their products.*

**Session Chairs:** Nancy Falk, Research Fellow, Clorox Services Company, USA; Scott Backer, Research Scientist, The Dow Chemical Company, USA

New discoveries and advances in chemistry are guiding the development of new consumer product ingredients that yield better performance, are more sustainable and are safer to handle. As the regulatory landscape changes and consumers become more knowledgeable about what they use, these next generation ingredients will play a key role in future manufacturing processes, product formulations, delivery mechanisms and product forms. This technical session will highlight some of these ingredients and how they will impact future consumer products.

### **Performance Additives**

**Session Chairs:** David S. Stott, Research & Development Manager, Mary Kay Inc., USA; Robert Nolles, Director of Marketing, Cosun Beet Company - Biobased Experts, USA

To create higher performing detergents and cleaners, the use of functional additives is crucial. This session covers the role of additives in different categories and their impact on performance.

### **Additives 2 - Interactions of Surfactants at Solid Surfaces**

**Session Chairs:** Geoff Pasciak, Chemist III - R&D, Evonik, USA; Phil Vinson, Research Fellow, The Procter & Gamble Company, USA

This session covers dispersants and the core properties that drive formulation and processing improvements in a variety of applications. Topics include functional chemistry, mode of action and real-world applications of dispersants.

### **Personal Care**

**Session Chairs:** Tony O'Lenick, Principal Consultant at, Nascent Technologies, USA; Hongwei Shen, Manager of Technology, Colgate Palmolive, USA

This session features two keynote speakers who will describe hair and skin and explain the needs for consumer acceptable cosmetic formulations. Each keynote will be followed by presentations that describe novel products that provide mild conditioning or cleansing of either hair or skin. Natural and biodegradable materials are preferred.

### **Regulatory**

**Session Chairs:** Yvon G. Durant, Chief Technology Officer, Itaconix, USA; Kathleen Stanton, Associate Vice President, Technical & International Affairs, American Cleaning Institute, USA

This session focuses on regulatory challenges created by changes to the Toxic Substances Control Act (TSCA) in the United States and the reliance of the European Union's Registration, Evaluation, Authorization and Restriction of Chemicals (REACH) regulation on non-animal safety testing and consumers' social network influences. Attendees will learn how to respond to new demands for increased transparency in raw material sourcing and product labeling.

### **General Surfactants and Detergents**

**Session Chairs:** Brian P. Grady, Professor, University of Oklahoma, USA; Julian Barnes, Principal Science Expert Surfactants, Shell Global Solutions International, The Netherlands

These sessions cover recent progress in the research and development of surfactants and detergents, including their preparation, purification, characterization and application.

### **Surfactants and Detergents Poster Session**

**Session Chair:** Julian Barnes, Principal Scientist Expert, Surfactants, Shell Global Solutions International, The Netherlands

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