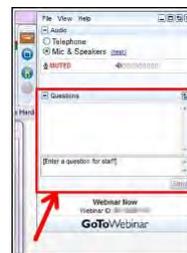




Have Questions?



Type them into questions box!

**“Why am I muted?”**

Don't worry. Everyone is muted except the presenter and host. Thank you and enjoy the show.

Contact ACS Webinars® at [acswebinars@acs.org](mailto:acswebinars@acs.org)

1



@AmericanChemicalSociety



@AmerChemSociety



@AmerChemSociety



<https://www.linkedin.com/company/american-chemical-society>

Contact ACS Webinars® at [acswebinars@acs.org](mailto:acswebinars@acs.org)

2

## Check out the Edited Recordings!



Hundreds of presentations from the best and brightest minds that chemistry has to offer are available to you on-demand. The edited recordings are divided into 6 different sections to help you more easily find what you are searching.

### Professional Development

▶ View the Collection

Learn how to write better abstracts, deliver more engaging presentations, and network to your next dream job. Brush up on your soft skills and set a new career path by mastering what can not be taught in the lab.

### Technology & Innovation

▶ View the Collection

From renewable fuels to creating the materials for the technology of tomorrow, chemistry plays a pivotal role in advancing our world. Meet the chemists that are building a better world and see how their science is making it happen.

### Drug Design and Delivery

▶ View the Collection

The Drug Design Delivery Series has built a collection of the top minds in the field to explain the mechanics of drug discovery. Discover the latest research, receive an overview on different fields of study, and gain insight on how to possibly overcome your own med chem roadblocks.

### Culinary Chemistry

▶ View the Collection

Why does food taste better when it is grilled or what molecular compounds make a great wine? Discover the delectable science of your favorite food and drink and don't forget to come back for a second helping.

### Popular Chemistry

▶ View the Collection

Feeling burdened by all that molecular weight? Listen to experts expound on the amazing side of current hot science topics. Discover the chemistry of rockets, how viruses have affected human history, or the molecular breakdown of a hangover.

### Business & Entrepreneurship

▶ View the Collection

How do ideas make it from the lab to the real world? Discover the ins and outs of the chemical industry whether you are looking to start a business or desire a priceless industry-wide perspective.

<https://www.acs.org/content/acs/en/acs-webinars/videos.html>

3



# ACS Webinars®

CLICK • WATCH • LEARN • DISCUSS



**Learn from the best and brightest minds in chemistry!** Hundreds of webinars on diverse topics presented by experts in the chemical sciences and enterprise.

**Edited Recordings** are an exclusive ACS member benefit and are made available once the recording has been edited and posted.

**Live Broadcasts** of ACS Webinars® continue to be available to the general public on most Wednesdays and Thursdays from 2-3pm ET!

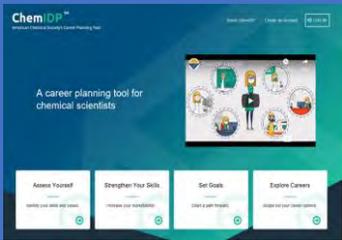
**A collection of the best edited recordings** from past ACS Webinars will be broadcast on Fridays from 2-3pm ET!

[www.acs.org/acswebinars](http://www.acs.org/acswebinars)

4

# Advance YOUR CAREER

**ChemIDP™**



**ChemIDP.org**

# Discover

ACS PUBLICATIONS

**Publishing Resources**



**publish.acs.org**

# Connect

WITH CHEMISTS AND  
OTHER SCIENCE  
PROFESSIONALS

**CAS SciFinder Future Leaders**



**171 alumni, 35 countries  
and over 120 institutions**

[acsncampus.acs.org/resources](https://acsncampus.acs.org/resources)



## From ACS Industry Member Programs

### ◆ Industry Matters Newsletter

Exclusive interviews with industry leaders and insights to advance your career

Preview & Subscribe: [acs.org/indnews](https://acs.org/indnews)



Connect, collaborate, and stay informed about the trends leading chemical innovation

Join: [bit.ly/ACSinnovationhub](https://bit.ly/ACSinnovationhub)

## ACS Department of Diversity Programs

Advancing ACS's Core Value of Diversity, Inclusion & Respect



We believe in the strength of diversity in all its forms, because inclusion of and respect for diverse people, experiences, and ideas lead to superior solutions to world challenges and advances chemistry as a global, multidisciplinary science.

**Contact Us:**  
[Diversity@acs.org](mailto:Diversity@acs.org)

 @ACSDiversity

 ACS Diversity



[acsvoices.podbean.com/](http://acsvoices.podbean.com/)



[www.acs.org/diversity](http://www.acs.org/diversity)

7

## ACS Efforts and Resources on COVID-19



Browse **ACS Resources** and **Initiatives!**

- **YOU MAY RECEIVE A ONE-YEAR WAIVER ON YOUR NATIONAL DUES** If your membership is up for renewal, but you're experiencing a special hardship, such as unemployment, furlough, reduced wages or illness.
- **RECEIVE ACCESS TO LINKEDIN LEARNING THROUGH THE END OF THIS YEAR** This powerful resource includes over 15,000 on-demand courses to support your continued learning and career advancement for active ACS members.
- **INOVA EAP/WORK-LIFE ASSISTANCE PROGRAM** 24/7 assistance on a wide range of issues, such as emotional, relationship, major life, health, wellness, educational and more for ACS members based in the United States. Confidential services are provided via telephone or comprehensive online resources.

[www.acs.org/covid-19](http://www.acs.org/covid-19)

8

## ACS Career Navigator: Your Home for Career Services



Whether you are just starting your journey, transitioning jobs, or looking to brush up or learn new skills, the **ACS Career Navigator** has the resources to point you in the right direction.

We have a collection of career resources to support you during this global pandemic:



Professional Education



Virtual Career Consultants



ACS Leadership Development System



Career Navigator LIVE!



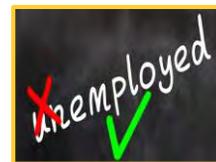
ChemIDP



College to Career



ACS Webinars



Virtual Classrooms

Visit [www.ACS.org/COVID19-Network](http://www.ACS.org/COVID19-Network) to learn more!

9

## What is ACS on Campus?



ACS visits campuses across the world offering FREE seminars on how to be published, find a job, network and use essential tools like SciFinder. ACS on Campus presents seminars and workshops focused on how to:



- Publish in top journals
- Find a job
- Effectively use research tools like SciFinder® and ACS ChemWorx
- Communicate your science
- Write grant proposals
- Build industry partnerships
- Prepare for a changing employment landscape

**RESOURCES:** <https://acsoncampus.acs.org/resources>

**EVENTS:** <https://acsoncampus.acs.org/events>

<http://acsoncampus.acs.org>

10

## Free Upcoming ACS Webinars!



Friday, July 10, 2020 at 2-3pm ET

Speaker: Richard Blackburn, University of Leeds

Moderator: Nidia Trejo, Ithaca Waste Water Treatment Facility

[Register for Free!](#)

## What You Will Learn

- Extraction, isolation and characterization of actives from plant materials
- Considerations of how natural ingredients are developed into cosmetic formulations
- Examples using applications of naturally-derived actives in cosmetic products



Wednesday, July 15, 2020 at 2-3pm ET

Speakers: Mark Jones, Dow Chemical and Matt Grandbois, Dupont

[Register for Free!](#)

## What You Will Learn (or atleast be reminded of)

- Why chemistry both explains and shapes our world
- How chemistry provides the path to newer and better tests, materials, drugs, and more
- Why chemistry is more important than ever in our rapidly changing world

Co-produced with: ACS Industry Member Programs and ACS Division of Professional Relations



Thursday, July 16, 2020 at 2-3pm ET

Speaker: Lawrence Silverman, University of Virginia

[Register for Free!](#)

## What You Will Learn

- What are the common devices and what metrics do they provide
- What is the science behind these metrics
- What does the scientific literature report regarding these claims

Co-produced with: Partnership for Clean Competition and ACS Sensors

[www.acs.org/acswebinars](http://www.acs.org/acswebinars)

11

# PEER REVIEW



Co-produced with:

Why,

How-to,

and What Not to Do

THIS ACS WEBINAR WILL BEGIN SHORTLY...

12



## Peer-Review: Why, How-To and What Not To Do



**Pamela Tadross**  
Associate Editor,  
*Organic Process Research & Development*



**Kali Miller**  
Assistant Managing Editor,  
ACS Publications

*Presentation slides are available now! Edited recordings are an exclusive ACS member benefit.*

[www.acs.org/acswebinars](http://www.acs.org/acswebinars)

*This ACS Webinar is co-produced with ACS on Campus.*

13

## Audience Survey Question

ANSWER THE QUESTION ON BLUE SCREEN IN ONE MOMENT



### What is your current role?

- Undergraduate
- Graduate Student
- Postdoctoral Scholar
- Staff or Industry Scientist
- Other



*\* If your answer differs greatly from the choices above tell us in the chat!*

14



## Peer-Review: Why, How-To and What Not To Do



**Pamela Tadross**  
Associate Editor,  
*Organic Process Research & Development*



**Kali Miller**  
Assistant Managing Editor,  
ACS Publications

*Presentation slides are available now! Edited recordings are an exclusive ACS member benefit.*

[www.acs.org/acswebinars](http://www.acs.org/acswebinars)

*This ACS Webinar is co-produced with ACS on Campus.*

15

# Peer Review: Why, How-To, and What Not To Do



## What is Peer Review?



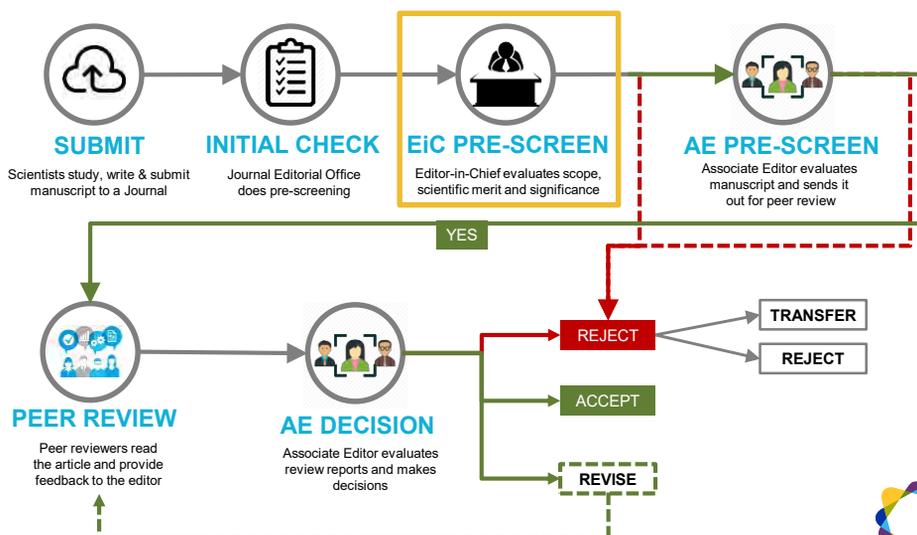
## Why is Peer Review Necessary?



Most scientists regarded the new streamlined peer-review process as 'quite an improvement.'

- Determines relevance and suitability
- Upholds scientific integrity
- Maintains a high standard for published research.
- **Pay it forward**

## The Major Steps in Peer-Review



19

## Audience Survey Question

ANSWER THE QUESTION ON BLUE SCREEN IN ONE MOMENT



### What has been your role in the peer review process?

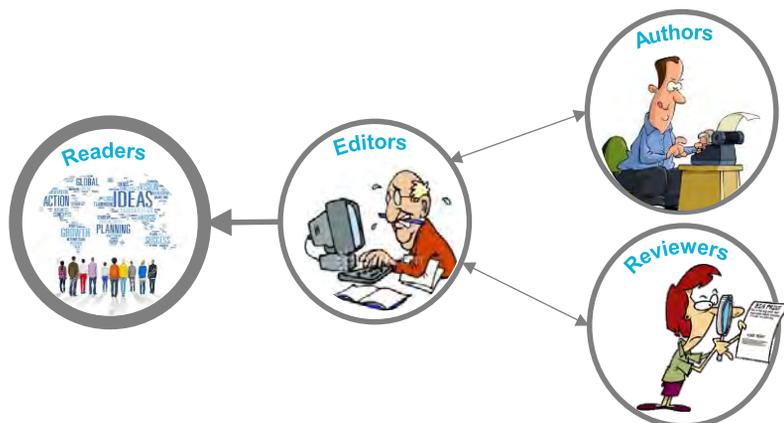
- I have been an author
- I have been a reviewer
- Both
- Neither



*\* If your answer differs greatly from the choices above tell us in the chat!*

20

# Editorial Review, or “Pre-Screening”



*“Editors are interested in considering papers that are within their Journal’s Scope and will be well appreciated by their Readership”*

\*J. Phys. Chem. Lett. 2014, 5, 2443–2443



21

## What Are the Editors Looking For?

### Journal Scope

The journal *Organic Process Research & Development* serves as a communication tool between industrial chemists and chemists working in universities and research institutes. As such, it reports original work from the broad field of industrial process chemistry but also presents academic results that are relevant, or potentially relevant, to industrial applications. Process chemistry is the science that enables the safe, environmentally benign and ultimately economical manufacturing of organic compounds that are required in larger amounts to help address the needs of society. Consequently, the Journal encompasses every aspect of organic chemistry, including all aspects of catalysis, synthetic methodology development and synthetic strategy exploration, but also includes aspects from analytical and solid state chemistry and chemical engineering, such as work-up tools, process safety, or flow-chemistry. The goal of development and optimization of chemical reactions and processes is their transfer to a larger scale; original work describing such highly relevant to the journal. However, studies on new developments from either industry or academia that have not been demonstrated on scale, but where an industrial utility can be expected and where a scale-up and has given confidence into the reliability and practicality of the chemistry, are also included. The Journal is a communication tool between the different contributors to the field.

The Journal aims to cover R&D from and for the fine organic chemicals and specialty agrochemicals, electronic chemicals, flavors and fragrances, intermediates, food additive commodity chemicals, petrochemicals, and polymers being appropriate as well.

Several types of manuscripts are admissible: Full Papers describe original work that has not been published elsewhere. The experimental section of a Full Paper describes the synthesis and should be included whenever possible. A Communication is a short report, e.g. by presenting a new reaction and its development to a preparative usefulness. Any manuscript, in print or electronic format, and that contains a significant amount of the information necessary for the reproduction of the work and may thus preclude publication. Manuscript topics for which an exception to this rule, as patents serve primarily legal and business purposes in the Journal.



1. Appropriate Scope
2. Novelty/Urgency
3. Technical Validity
4. High Quality



22

## Why Do Journals Pre-Screen?

### Reject after editorial review:

- Avoid over-burdening reviewers
- Shorten decision times

### What if your manuscript is rejected and you believe the editors or reviewers overlooked critical details in your work?

- Contact the editorial office and ask for an explanation
- Appeal is uncommon, so be judicious!



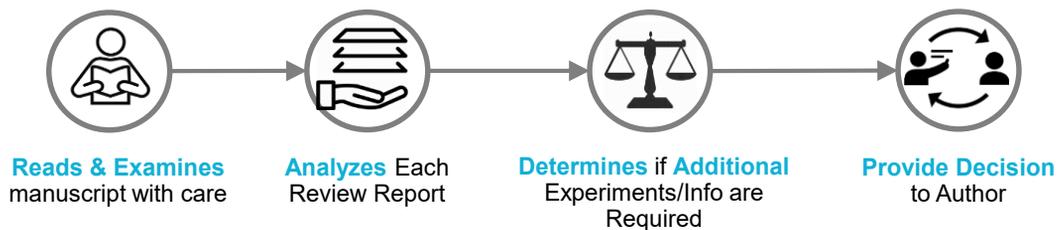
23

## How Are Peer-Reviewers Selected?



24

## How Do Editors Make a Decision?



### Possible decisions:

- **Accept**
- **Revise**
- **Reject**



25

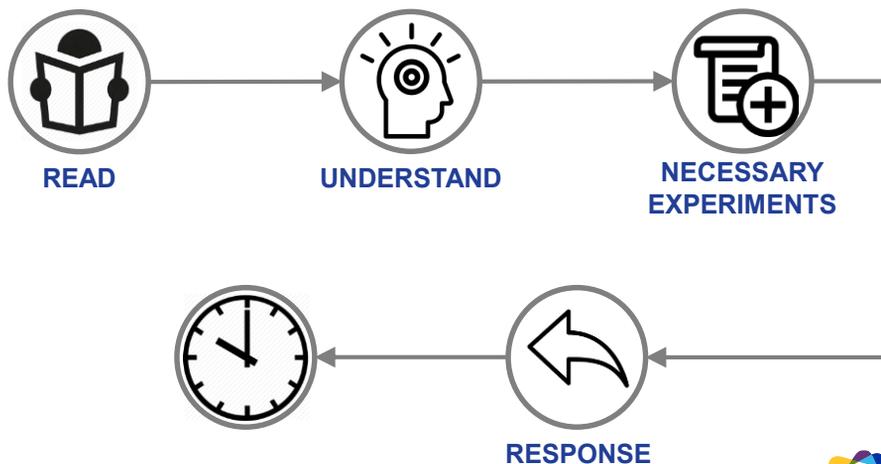
## What Should I Do if My Manuscript is Rejected?

- Step back
- Refocus
- Keep it constructive
- Resubmit



26

## Responding to Reviewer Comments



ACS Nano 2012, 6 (5), 3643–3645  
 Pictures from [https://www.iconfinder.com/icons/110341/read\\_icon](https://www.iconfinder.com/icons/110341/read_icon)  
<https://thenounproject.com/term/understand/>  
<https://icons8.com/icon/50317/add-rule>



27

## Responding to Reviewer Comments

**Mindset tip:** Think about what you want the reader experience and understanding to be of your work. The reviewer feedback represents *the gap between your goal and the actual reader experience*. In revising your manuscript and responding to feedback, *your objective is to close that gap*.

- Be professional
- Be respectful
- Respond to each comment
- If you disagree with a comment, explain why
- Don't be a detective



28

You Might Say	Editor's Response
"The reviewer is not an expert in my field"	<i>The reviewer is likely someone you suggested.</i>
"The reviewer misunderstood the point of the manuscript (or a specific result)"	<i>If the reviewer did not understand the results or significance, you need to clarify the text or figures to present the work more clearly.</i>
"The reviewer is wrong and does not deserve a response."	<i>This response does not explain how or why the reviewer is wrong. Even a comment with which you do not agree needs to be backed up by science.</i>



29

You Might Say	Editor's Response
"Similar papers have been published in this journal recently – why is my manuscript being picked apart?"	<i>If your manuscript is similar to other recent work, it likely lacks novelty and may not meet the journal's standards.</i>
"We can't provide additional experimental results since the postdoc/student has left our lab."	<i>Another researcher will need to be placed on the project. Incomplete studies should not and can't be published.</i>



30

## How Do I Become a Reviewer?

Establish Expertise	Training & Practice	Other Recommendations
<p><b>Publish</b> high quality work in reputable journals</p> <p>Attend <b>conferences</b> and <b>network</b> to enhance your standing within the scientific community</p> <p>Build online presence</p>	<p><b>ACS Reviewer Lab</b>, a free training certificate course</p> <p>When you are invited to review, provide timely, thoughtful and thorough responses</p>	<p>Tell colleagues and advisors, who may suggest you as a reviewer</p> <p>Tell journals – provide your CV and publication record to the editorial office</p>



31

## Hands On Training For Reviewers



MASTER PEER REVIEW WITH 6 INTERACTIVE MODULES



1. INTRODUCTION TO PEER REVIEW



2. ETHICS IN PEER REVIEW



3. PREPARING FOR REVIEW



4. ASSESSING SIGNIFICANCE AND TECHNICAL QUALITY



5. ASSESSING PRESENTATION AND READINESS FOR PUBLICATION



6. WRITING YOUR REVIEW

ACSreviewerLab.org



32

## Anatomy of a Good Review

<b>Manuscript Summary</b>	Show you understand the work by providing a short summary.
<b>Contextualize</b>	Put the work in context relative to other research – compare and cite literature.
<b>Impact/Broad Appeal</b>	Discuss the possible impact of the work and its interest to a broad readership.
<b>Scientific Merit</b>	Is the research well thought-out and completed at a high level?
<b>Data Quality</b>	Were the data obtained correctly? Are any (control) experiments missing?
<b>Presentation</b>	Are there problems with the grammar or the quality of the writing? Are necessary references included?
<b>Recommendation</b>	Give your overall recommendation. If you have major concerns, let the editor know!



33

## What Reviewer Comments Should Be Shared Only with the Editor?

- Conflict of interest
- You reviewed the manuscript for another journal.
- Additional references needed
- Scientific misconduct

Comments
Comments to the Editorial Office (optional)
<b>req</b> Comments to the Author
Type your review directly into the text box or type "Review attached" (and attach file below), as appropriate.



34

## Audience Survey Question

ANSWER THE QUESTION ON BLUE SCREEN IN ONE MOMENT



### What do you think is the greatest benefit of peer review?

- Constructive criticism to improve manuscript impact with target audience
- Blinded review maintains scientific integrity and standards
- Ensures journal content is aligned with target audience
- Development opportunity for reviewers



*\* If your answer differs greatly from the choices above tell us in the chat!*

35

## In Summary – As an Author

- Reviews are not meant to be personal.
- Everyone has had a manuscript rejected, even the editors!
- If you become angry after reading a review, cool off before responding.
- Your response should be professional and scientifically-based.
- Approach revision from the perspective of your audience to ensure impact of your work



36

## In Summary – As a Reviewer

- Respond quickly!
- If you are unable to review, suggest alternate reviewers
- Substantiate your review with science, do not just provide an opinion
- You are not expected to review work that is poorly written or incomprehensible. Include these remarks in your review as needed
- Provide citation information when relevant to the review



37

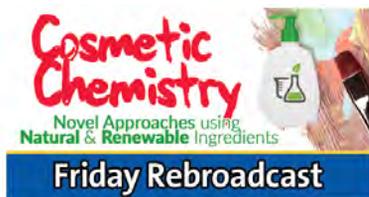
## Benefits of Reviewing – As a Reviewer

- Further establish your expertise in a field
- Get an early look at potentially groundbreaking research
- Develop critical thinking skills
- Gain experience writing and responding to constructive criticism



38

## Free Upcoming ACS Webinars!



Friday, July 10, 2020 at 2-3pm ET

Speaker: Richard Blackburn, University of Leeds

Moderator: Nidia Trejo, Ithaca Waste Water Treatment Facility

Register for Free!

### What You Will Learn

- Extraction, isolation and characterization of actives from plant materials
- Considerations of how natural ingredients are developed into cosmetic formulations
- Examples using applications of naturally-derived actives in cosmetic products



Wednesday, July 15, 2020 at 2-3pm ET

Speakers: Mark Jones, Dow Chemical and Matt Grandbois, Dupont

Register for Free!

### What You Will Learn (or atleast be reminded of)

- Why chemistry both explains and shapes our world
- How chemistry provides the path to newer and better tests, materials, drugs and more
- Why chemistry is more important than ever in our rapidly changing world

Co-produced with: ACS Industry Member Programs and ACS Division of Professional Relations



Thursday, July 16, 2020 at 2-3pm ET

Speaker: Lawrence Silverman, University of Virginia

Register for Free!

### What You Will Learn

- What are the common devices and what metrics do they provide
- What is the science behind these metrics
- What does the scientific literature report regarding these claims

Co-produced with: Partnership for Clean Competition and ACS Sensors

[www.acs.org/acswebinars](http://www.acs.org/acswebinars)

39

## What is ACS on Campus?



ACS visits campuses across the world offering FREE seminars on how to be published, find a job, network and use essential tools like SciFinder. ACS on Campus presents seminars and workshops focused on how to:



- Publish in top journals
- Find a job
- Effectively use research tools like SciFinder® and ACS ChemWorx
- Communicate your science
- Write grant proposals
- Build industry partnerships
- Prepare for a changing employment landscape

RESOURCES: <https://acsoncampus.acs.org/resources>

EVENTS: <https://acsoncampus.acs.org/events>

<http://acsoncampus.acs.org>

40



## Peer-Review: Why, How-To and What Not To Do



**Pamela Tadross**  
Associate Editor,  
Organic Process Research & Development



**Kali Miller**  
Assistant Managing Editor,  
ACS Publications

*Presentation slides are available now! Edited recordings are an exclusive ACS member benefit.*

[www.acs.org/acswebinars](http://www.acs.org/acswebinars)

*This ACS Webinar is co-produced with ACS on Campus.*

41

## ACS Efforts and Resources on COVID-19



Browse **ACS Resources** and **Initiatives!**

- **YOU MAY RECEIVE A ONE-YEAR WAIVER ON YOUR NATIONAL DUES** If your membership is up for renewal, but you're experiencing a special hardship, such as unemployment, furlough, reduced wages or illness.
- **RECEIVE ACCESS TO LINKEDIN LEARNING THROUGH THE END OF THIS YEAR** This powerful resource includes over 15,000 on-demand courses to support your continued learning and career advancement for active ACS members.
- **INOVA EAP/WORK-LIFE ASSISTANCE PROGRAM** 24/7 assistance on a wide range of issues, such as emotional, relationship, major life, health, wellness, educational and more for ACS members based in the United States. Confidential services are provided via telephone or comprehensive online resources.

[www.acs.org/covid-19](http://www.acs.org/covid-19)

42



# ACS Webinars®

CLICK • WATCH • LEARN • DISCUSS



**Learn from the best and brightest minds in chemistry!** Hundreds of webinars on diverse topics presented by experts in the chemical sciences and enterprise.

**Edited Recordings** are an exclusive ACS member benefit and are made available once the recording has been edited and posted.

**Live Broadcasts** of ACS Webinars® continue to be available to the general public on most Wednesdays and Thursdays from 2-3pm ET!

A **collection of the best edited recordings** from past ACS Webinars will be broadcast on Fridays from 2-3pm ET!

[www.acs.org/acswebinars](http://www.acs.org/acswebinars)

43



ACS Webinars®  
CLICK • WATCH • LEARN • DISCUSS



ACS Webinars® does not endorse any products or services. The views expressed in this presentation are those of the presenter and do not necessarily reflect the views or policies of the American Chemical Society.

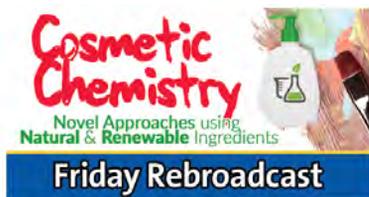


Mike Russell Erik

Contact ACS Webinars® at [acswebinars@acs.org](mailto:acswebinars@acs.org)

44

## Free Upcoming ACS Webinars!



Friday, July 10, 2020 at 2-3pm ET

Speaker: Richard Blackburn, University of Leeds

Moderator: Nidia Trejo, Ithaca Waste Water Treatment Facility

[Register for Free!](#)

### What You Will Learn

- Extraction, isolation and characterization of actives from plant materials
- Considerations of how natural ingredients are developed into cosmetic formulations
- Examples using applications of naturally-derived actives in cosmetic products



Wednesday, July 15, 2020 at 2-3pm ET

Speakers: Mark Jones, Dow Chemical and Matt Grandbois, Dupont

[Register for Free!](#)

### What You Will Learn (or atleast be reminded of)

- Why chemistry both explains and shapes our world
- How chemistry provides the path to newer and better tests, materials, drugs and more
- Why chemistry is more important than ever in our rapidly changing world

Co-produced with: ACS Industry Member Programs and ACS Division of Professional Relations



Thursday, July 16, 2020 at 2-3pm ET

Speaker: Lawrence Silverman, University of Virginia

[Register for Free!](#)

### What You Will Learn

- What are the common devices and what metrics do they provide
- What is the science behind these metrics
- What does the scientific literature report regarding these claims

Co-produced with: Partnership for Clean Competition and ACS Sensors

[www.acs.org/acswebinars](http://www.acs.org/acswebinars)