



Sustainable Chemicals through Contemporary Toxicology

Specialty Section

Summer 2021

President's Letter

The 2021 year is passing quickly and while the promise of the new vaccines has not yielded the return to normal we had hoped for, we remain optimistic that we will be able to meet in person at the Annual Meeting in San Diego next year!



To that end, the SCCT received and endorsed four proposals for the 2022 Annual Meeting. I am pleased to communicate that all four proposals were accepted and will be part of the annual meeting program! This speaks to the growing importance of sustainability related content to the larger SOT membership. Details of the sessions are highlighted in this newsletter.

SCCT was founded on the premise that addressing critical sustainability challenges can only be accomplished through collaborative, cross-disciplinary engagement. Thus, a major charge for our specialty section is to forage and build those relationships. We are making good progress here. SCCT recently collaborated with SETAC members to host a joint session on advancement of cross species extrapolation to inform a 21st century regulatory non-animal testing agenda for assessing human and environmental health. In October, SCCT will join forces with the RASS Specialty Section and the Association for the Advancement of Alternatives Assessment (A4) to host two sessions as part of the International Symposium on Alternatives Assessment. One, a webinar (keynote) with world-renowned expert toxicologist Dr. Joseph Rodricks, architect William McDonough, and green chemist Dr. John Warner, will collectively speak on how we can accelerate the launch of safer, sustainable chemistries. The second is a short course on US EPA tools used to support assessments of alternatives. I encourage you to check out the symposium program as it offers excellent and relevant content for our SCCT membership.

Finally, if you didn't see the April SOT Communiqué Blog on Perspectives from a New SCCT member, we've included it in the newsletter!

I am looking forward to building on the successes lead by our Past President, Jennifer Tanir. We accomplished many firsts under her leadership! Please keep the communications open by sharing any ideas/suggestion to help advance our specialty section goals with myself or any of the SCCT EC officers.

Stay safe, be sustainable!

Pamela J. Spencer, PhD DABT, SCCT President

2020-2021 Accomplishments

In the first year as an active Specialty section with members, SCCT had many first-time accomplishments. Some of the highlights include:

- Instituting an Executive Committee with defined roles and responsibilities, committees, and monthly meetings following the first election of officers in June 2020
- Creating and distributing the newsletter in Winter 2020 and Spring 2021 (available: <https://www.toxicology.org/groups/ss/SCCT/newsletters.asp>)
- Establishing a process for Annual Meeting proposal reviews with endorsement of two proposals that were selected for sessions at SOT 2021, followed by endorsement of four sessions for SOT 2022
- Launching a webinar series with the first held in February 2021 (recording available: <https://www.toxicology.org/groups/ss/SCCT/events.asp>)
- Founding two awards for best abstract by graduate student and postdoctoral fellow (details available: <https://www.toxicology.org/groups/ss/SCCT/awards.asp>)
- Establishing keywords for research topics within scope of SCCT for the SOT abstract submission system and for the SCCT awards (available: <https://www.toxicology.org/groups/ss/SCCT/what-are.asp>)
- Holding an annual Specialty Section meeting at SOT 2021 and poster presentation (described below)
- Initiating collaborations with external organizations, resulting in a webinar with the Association for the Advancement of Alternatives Assessment (A4) and a special session at SETAC Europe 2021 in collaboration with SETAC North America (described below)

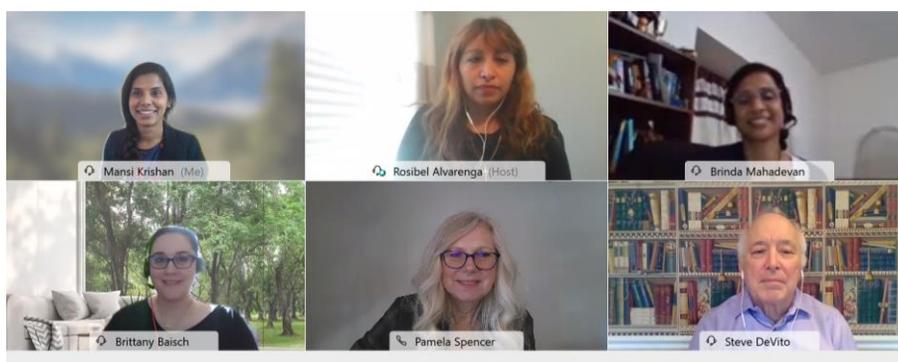
During this time, the membership of SCCT also grew to 76 members, since becoming established in late 2019 and accepting members in 2020.

Thank you to the Executive Committee and all SCCT members who made this first year a great success!

2021 SCCT PAST EVENTS

2021 SOT Annual Meeting

SCCT sponsored a CE course, *Less Is More: Sustainable Product Development Requires More Toxicological Considerations*, and an Informational Session, *The Informational Session Toxicology for Chemists: Preparing Chemists to Design Safer Products through Smarter Molecular Design at SOT*. Both events were well attended and positive feedback was received.



The first Annual Meeting of SCCT was held virtually on March 15, 2021. The 43 participants, many of whom were not already members of SCCT, came from diverse backgrounds of academic and research experience and interests spanning topics and expertise outside the “usual” toxicology-centered disciplines (including sustainability, climate change, chemicals and products, business, and finance, etc.). Following the business presentation, participants had the opportunity to network and contribute ideas to furthering the efforts of SCCT through breakout rooms. The Annual Meeting slides and poster are available on the SCCT website: <https://www.toxicology.org/groups/ss/SCCT/events.asp>.

SCCT Collaboration with SETAC

SCCT collaborated with SETAC members to host a session at the SETAC Europe annual meeting, which was held virtually May 3-6, 2021. The session, titled “Cross Species Extrapolation: opportunities in a 21st century regulatory non-animal testing world”, focused on the advancement of cross species extrapolation to inform a 21st century regulatory non-animal testing agenda for assessing human and environmental health. The special session aimed at stimulating valuable discussion on the understanding of shared approaches across human health and environmental safety areas in support of the paradigm shift in regulatory safety assessment in a future non-animal testing world. A summary of the session is being prepared for publication in the SETAC Globe and a proposal to continue this dialogue was tentatively approved as a roundtable session for SOT 2022.



2021 SCCT UPCOMING EVENTS

International Symposium on Alternatives Assessment: Accelerating Safer and Sustainable Alternatives October 25-29, 2021 (virtual)



Monday, October 25

- A4 Short Course – Tour de Force of Tools from the US Environmental Protection Agency to Support Assessments of Alternatives

Please register for this free training here: [Registration](#)

SCCT is co-sponsoring a free virtual half-day course on October 25th (11:00 am to 3 pm ET) in conjunction with the Association of the Advancement of Alternatives Assessment’s annual symposium. The course is titled a *Tour de Force of Tools from the U.S. Environmental Protection Agency to Support Assessments of Alternatives*. As part of this course, you’ll learn about:

- Tools to assist with the comparison of alternatives based on their hazard profiles and functionality
- Resources to help estimate physicochemical properties, fate and transport, toxicological endpoints and exposure potential
- And dive into tools and applications accessible through the Chemicals Dashboard, including New Approach Methodology (NAMs) data including the ToxCast/Tox21 Programs

Tuesday, October 26

- Session 1 - SCCT and the Risk Assessment Specialty Section (RASS) are excited to co-sponsor an October 26th keynote panel from 11:00 am to 12:30 pm ET titled “*How Do We Get to Safer and Sustainable: Insight from Risk Assessment, Safer Design, and Green Chemistry Leaders*”. Well-known toxicologist Dr. Joseph Rodricks, architect William McDonough, and green chemist Dr. John Warner will engage in a lively discussion about approaches that contribute to a safer and sustainable world using risk assessment, circular design, and green chemistry principles. This keynote panel is part of Association of the Advancement of Alternatives Assessment’s annual symposium, and SOT members receive a discount on registration. Please register at: <https://saferalternatives.org/2021-a4-symposium>
- Session 2 – Safe and Sustainable Alternatives

Wednesday, October 27

- Session 3 – Alternatives Assessment and Informed Substitution in Policy Part I: Lessons Learned and Insights for Future Policy Provisions
- Session 4 – Alternatives Assessment and Informed Substitution in Policy Part II: Lessons Learned for More Effective Implementation

Thursday, October 28

- Session 5 – Safer and More Sustainable Alternatives: Tools and Strategies being Used by the Business Community
- Session 6 – Future Needs of Alternatives Assessments and the A4

Friday, October 29

- Session 7 – A4 Poster Session and Symposium Closing Remarks

Learn more: <https://saferalternatives.org/2021-a4-symposium>

SOT 2022

SCCT endorsed 4 proposals for SOT 2022, and all 4 have been tentatively accepted. The sessions include:

- Continuing Education Course: PM12: Principles and Applications of Read-Across in Human Health Risk Assessment
- Symposium Session: Safe and Sustainable Plastics: Navigating Health Impacts with Innovations
- Roundtable Session: Cross-Species Extrapolation: Opportunities in a 21st-Century Regulatory Nonanimal Testing World
- Informational Session: Safer Chemical Tools and Practices: Successes in Advancing Safer Chemical Selection on a Global Scale



PERSPECTIVE FROM A NEW SCCT MEMBER

By Lauren Brown, April 29, 2021, SOT Communiqué Blog:

<https://toxchange.toxicology.org/blogs/lauren-brown1/2021/04/29/perspectives-from-a-new-sustainable-chemicals-thro>

For the past decade, I have used my training in toxicology to inform analyses on various aspects of risk assessment for hazardous chemicals. My work revolves around defining problems: What adverse health effects are associated with chemical X? How much exposure to chemical X triggers a cause for concern? Analyzing these problems often leads me to ask what I can do to contribute to a solution before the risk arises. And at a broader scale, how can SOT contribute to decreasing exposure to hazardous chemicals and ensuring new chemicals brought to the market do not increase the risk of adverse human health outcomes?



My desire to be a part of this solution is why I opted to join the newest SOT Specialty Section, [Sustainable Chemistry through Contemporary Toxicology](#) (SCCT). SCCT has several objectives,

one of which is “to develop, propose, and conduct a variety of cutting-edge programs and educational activities that emphasize the latest developments and issues related to sustainable chemical design, alternatives assessment, and informed substitution.” Seeing that SOT has a Specialty Section dedicated to these objectives excited me as a first-year member of the Society.

As a member of SCCT, I can develop relationships with the leaders in the fields of alternatives assessment and informed substitution. In addition, SCCT is providing me access to resources to grow my knowledge base in this topic area. As my current position is still very much focused on risk assessment, being a part of this specialty group allows me to stay current on the practices in this area and keeps me up-to-date on a field of research I am truly passionate about.

I find the methods I learn from participating in SCCT webinars and discussions with group members are transferrable to my day-to-day research as well—for example, when tasked with summarizing the hazards of multiple chemicals in a similar functional class (e.g., solvents, insecticides). There are tools (e.g., [Pharos](#), [ToxNot](#)) and methods (e.g., [GreenScreen](#), [OECD Key Considerations for the Identification and Selection of Safer Chemical Alternatives](#)) that provide frameworks that make comparing chemicals’ toxicological profiles straightforward. Therefore, even in these instances, where I am not conducting a true alternatives assessment, the tools and methods I learn about from participating in SCCT are still relevant.

During the Annual Meeting this year, I attended the SCCT Specialty Section meeting and was immediately motivated to be an active participant. SCCT Executive Committee members discussed the work they had done in their first year, such as co-hosting a webinar with the Association for the Advancement of Alternatives Assessment on the “EU’s Chemicals Strategy for Sustainability Towards a Toxic-Free Environment.” They also discussed the work they are planning to do in 2021, including collaborating with the Society for Environmental Toxicology and Chemistry on a special session related to cross-species extrapolation, specifically considering the movement away from animal testing.

After the meeting, I reached out to SCCT leadership, who quickly engaged me to become an active member. I look forward to this opportunity, not only because I am excited to collaborate and work with some of the pioneering researchers in this field, but also because I want to help spread the word about the field of sustainable chemistry, alternatives assessments, and informed substitution. My hope is that these concepts and ideas become commonplace within SOT and the broader field of toxicology.

[Call for Volunteers](#)

If you are interested in getting more involved with SCCT, please reach out to President Pam Spencer (PJSpencer@ANGUS.com). Upcoming opportunities include furthering communications (social media, blogs, etc.), award judging, running for an officer position (described below)!

2021-2022 Executive Committee



Jennifer Y.
Tanir
Past-
President

Pamela J.
Spencer
President

Margaret H.
Whittaker
Vice
President

Brittany
Baisch
Vice
President-
Elect

Mansi
Krishan
Secretary/
Treasurer

Britt
McAtee
Councilor

Marie
Bourgeois
Councilor

Zheng
Zhou
Student
Repre-
sentative

Please consider nominating yourself or someone else for office this fall, for the 2022-2023 Executive Committee. Open positions will be Postdoctoral Representative (which is also currently open), Vice President-Elect, Secretary/Treasurer, Councilor, and Student Representative. Contact Past President Jennifer Tanir (jentanir@gmail.com) if you are interested in running for a position in the next election!

