

# NANO360°

TAPPI Nano Student Committee Newsletter

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## MISSION STATEMENT

The Nano Division Student Committee is dedicated to providing a global network that connects students and young professionals around the world, facilitating knowledge exchange, providing useful tools, advice, and encouragement, so that students pursue careers that advance the use of renewable and sustainable nanomaterials.

## VISION

The Student Committee works to:

- Provide an active, global network to connect students and young professionals working in the area of renewable and sustainable nanomaterials;
- Share knowledge and information to support student success in academia, through both their technical work and as well as preparing for their careers;
- Support students as they transition to industry professionals by providing knowledge of the industry and career paths, as well as facilitating connections with industry leaders;
- Offer students a variety of opportunities and activities at the annual TAPPI Nano conference to maximize the value of their participation

## INTRODUCTION TO NANOCELLULOSE RESEARCH

Driven by remarkable advancements in technology and the generation of products in

multiple areas of the common life wellbeing, the field of nanocellulose materials is an appealing

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and bright playground into which a novel and inspiring future can be envisioned. Just consider the breadth of research areas nanocellulose is being investigated in: concrete, construction, pharmaceuticals, disease prevention and burn recovery, and high-value industries like packaging, functional nanocomposites, emulsions stabilizers, as additive in drilling fluids, and that's not all.

The aim of this newsletter is to expose young researchers to the variety of nanocellulose research being performed, provide updates on advances in the general field of nanocellulose, and provide specialized programming for students working with nanocellulose.

## 2019 STUDENT COMMITTEE BOARD



**Priya Venkatraman**  
Co-Chair 2019  
Graduate Student | Virginia Tech



**Caitlyn Clarkson**  
Co-Chair 2019  
Graduate Student | Purdue University



**Diego Gomez Maldonado**  
Co-Vice Chair  
Graduate Student | Auburn University



**Maria Celeste Iglesias**  
Co-Vice Chair  
Graduate Student | Auburn University



**Endrina Forti**  
Secretary  
Graduate Student | Purdue University



**Yu-Ju Lin**  
Engagement Subcommittee Chair  
Graduate Student | University of Georgia

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## DIVISION ACTIVITIES

### ANNUAL CONFERENCE

The next annual TAPPI Nano conference will be held **June 3 - 7, 2019 in Chiba, Japan**. The deadline for abstract submission is **December 17, 2018**. The conference is co-located with the **Nanocellulose Forum**. The 2019 conference will be following up another [record-breaking year!](#)

### UPDATES TO NANOCELLULOSE COMMERCIALIZATION

[Health and safety update – Nov 2018](#)

[Production summary update – Oct 2018](#)

[Standards update – Oct 2018](#)

### WEBINARS

There are currently no upcoming webinars. Still, look out for webinars in early 2019! Past webinars and webinars updates are [available here](#).

## NEW REPORTS AND PEER REVIEWED PUBLICATIONS

[Ford Goes Further with Renewable Nanomaterials](#): Ford Automotive Company has and is continuing to invest its resources in sustainable, renewable materials research- that include nanocellulose.

[Large-scale and sustainable 3D printing](#): Recent advances in 3D printing of cellulose using fungal-like adhesives is overcoming challenges previously associated with 3D printing...

[Nanocellulose Fibers Block Fat Uptake by Half](#) : Nanocellulose imparts many benefits on materials systems, but what about living systems?

[Current Characterization Methods for Cellulose Nanomaterials](#): Standardization in nanocellulose production and its characterization are a continued effort. Read up on the latest best practices for characterization in this review...



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## TAPPI NANO 2018 STUDENT EXPERIENCE

Considering attending TAPPI Nano 2019 in Chiba, Japan, but are uncertain what this conference can offer you as a student? Hear from other students about their experiences and what they found most valuable in past conferences:

“I attended TAPPI Nano 2018 by myself and turned out it was the most wonderful conference experience for me as a Ph.D. student. **The conference was a perfect size so that you could meet with different people yet get deeply involved with all the events even as a first timer.** I joined the mentor/mentee program and it helped to build connections. The student mixer held by the TAPPI Nano student committee was a great chance to meet with students. In the talk and poster session, I learned new knowledge and techniques that can be applied to my study as well as the current trend of versatile nanocellulose research. I would recommend students to attend this conference if they have a chance.”

*Yu-Ju Lin | Univ. of Georgia, USA*

“As a graduate student I believe that going to TAPPI was well worth it as you get to see cutting edge research in the cellulose field which helps guide your own thinking and ultimate research goals. Additionally, **you get to meet people from all over the world and make valuable connections with respected researchers both**

**from academia and industry.** If given the chance I will definitely be attending future TAPPI conferences. “

*Sami El Awad Azrak | Purdue Univ., USA*

“As a PhD student, I felt well integrated within **the huge researcher network during TAPPI Nano 2018.** Indeed several initiatives from the Tappi Nano student committee really helped the students feel comfortable and at ease during the conference. The mentor/mentee program is interesting to benefit from the experience and advices of senior researchers in a relaxed atmosphere. The poster session was also great to share our work and discover the research activities of the other students. The event I preferred was the student session the last afternoon. **The different people selected in the panel all had different and peculiar career paths and to be able to discuss with them about it was fascinating and helpful to have some insights about how to build up our future career.**”

*Huge Spieser | Univ. Grenoble Alpes, France*



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## AWARDS, FELLOWSHIPS, JOB OPPORTUNITIES

Congratulations to the TAPPI Nano 2018 Student Poster Winners.



**1st Place Gus Lang | Georgia Institute of Technology, USA** | “Paper-based electrochromic devices enabled by nanocellulose-coated paper and spray-processible oxygen barrier layers”

**2nd Place Sami El Awad Azrak | Purdue University, USA** | “Large scale production and mechanical properties of mechanically fibrillated nanocellulose films”

**3rd Place Anurodh Tripathi | North Carolina State University, USA** | “Recipe to synthesize aerogels with tunable properties”

Congratulations to Nathan Ellebracht for winning the TAPPI 2018 Student Award.



INTERESTED IN ONE OF THESE COMPETITIVE OPPORTUNITIES?

TAPPI 2019 Student Poster Competition

- Poster Deadline Dec. 17, 2018
- More information available [HERE](#)

TAPPI 2019 Student Award

- Submission open Feb 1, 2019
- Deadline is April 15, 2019
- More information available [HERE](#)

## HOW TO GET INVOLVED WITH TAPPI

### JOIN THE STUDENT COMMITTEE

Committee membership is open to any student, whether an undergrad, or pursuing an advanced degree. Not a student anymore? You are still welcome to join. [Learn more](#). Join the email list [HERE](#).



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## SUBMISSION INFO FOR FUTURE NEWSLETTERS

If you would like to submit information to be considered for inclusion in future newsletters, please complete the submission form accessible below. Content can be announcements, student spotlights, op-eds regarding the nanocellulose industry, research reviews, and TAPPI experiences. Please keep submissions within 2 pages, double spaced.

[Form to submit content](#)

## FOLLOW US AND JOIN THE CONVERSATION



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