

Cellulose Nanomaterials Researchers Forum

August 28-29, 2019

Buchanan Alumni House, The University of Maine, Orono, Maine

PROGRAM

| Wednesday, August 28, 2019 | |
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| 8:00 – 8:30 | Coffee & Poster Preview <i>Browse posters on display to (students are not expected to be at posters)</i> |
| 8:30 – 8:40 | Welcome, Forum Overview |
| 8:40 – 9:15 | Keynote Presentation: “Beyond Nano: Why Tiny Bits of Trees Make a Big Difference for Forests” Michael Goergen, VP, Innovation and Director, P3Nano <i>U.S. Endowment for Forestry and Communities</i> <i>Innovation is challenging, with disruptions increasing that challenge. Research is vital and markets matter for forests. Collaborations are critical to success, and efforts to date on mass timber code work, CNMs and concrete projects will be shared.</i> |
| 9:15 – 10:00 | Keynote Presentation: “Cellulose Nanomaterials: New Materials Enabling New Product Platforms” Robert Moon, Materials Research Engineer <i>U.S. Forest Service, Forest Products Lab</i> <i>Amazing advances in research and development have been made in Cellulose Nanomaterials (CNMs) over the past 25years. As with any new materials development, it takes time before commercialization happens. For CNMs it is an exciting time as the “fruits” of dedicated work are starting to be seen with products entering the market place. This overview will summarize CNM research from the perspective of CNM performance characteristics and how these link to various application areas that have enabled new commercial products.</i> |
| 10:00 – 10:30 | Break |
| 10:30 – 11:00 | The “Outside The Box” is inside: The Story of Cellulose Nanomaterials Dr. Mehdi Tajvidi , Associate Professor of Renewable Nanomaterials, School of Forest Resources, University of Maine |
| 11:00 – 11:45 | Dr. Habib Dagher , Director, Advanced Structures and Composites Center, Bath Iron Works Professor of Structural Engineering |
| 11:45 – 1:00 | Lunch, Poster Preview |
| 1:00 – 1:30 | Towards a Cellulose-Based Packaging System Dr. Doug Bousfield , Calder Professor, Director of the Paper Surface Science Program, Chemical and Biomedical Engineering, University of Maine |

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| 1:30 – 2:00 | Potential Roles for Cellulose Nanofibrils as a Concrete Additive Dr. Eric Landis , Frank M. Taylor Professor of Civil Engineering, University of Maine |
| 2:00 – 2:30 | Flexible Multilayer Films Containing Cellulose Nanomaterials with High Gas Barrier Properties for Food Packaging Dr. Lu Wang , Post Doctoral Research Associate, School of Forest Resources, University of Maine |
| 2:30 – 3:00 | tbd |
| 3:00 – 3:15 | Break |
| 3:15 – 4:00 | Dr. You-Lo Hsieh , Distinguished Professor & Chair, Textiles and Clothing, University of California, Davis |
| 4:00 – 4:30 | Dr. Balunkeswar Nayak , Associate Professor of Food Processing, School of Food and Agriculture, University of Maine |
| 4:30 – 5:00 | Cellulose Nanofibers Resist Biodegradation Dr. Caitlin Howell , Assistant Professor, Chemical and Biomedical Engineering, University of Maine |
| 5:00 – 6:30 | Reception & Poster Session |

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| Thursday, August 29, 2019 | |
| 8:00 – 8:30 | Coffee |
| 8:30 – 9:15 | Dr. Alper Kiziltas , Research Scientist, Ford Motor Company |
| 9:15 – 9:45 | Ongoing Research Exploring the Production of Dried Nanoscale Cellulose Nanomaterial Powders Dr. Doug Gardner , Professor of Forest Operations and Bioenergy, School of Forest Resources, University of Maine |
| 9:45 – 10:15 | Break |
| 10:15 – 10:45 | Waterborne Modifications to CNF Dr. Will Gramlich , Associate Professor, Department of Chemistry, University of Maine |
| 10:45 – 11:20 | Dr. Nathalie Lavoine , Assistant Professor, North Carolina State University |
| 11:20 – 12:00 | Dr. Chris Luetzgen , Professor and Director, Renewable Bioproducts Institute, Georgia Institute of Technology |
| 12:00 – 1:00 | Lunch |
| 1:00 – 2:00 | Tour of the PDC (optional) |