MAINE

Keynote & Guest Speaker Biographies

KEYNOTE SPEAKERS



Dr. Qi Wang R&D Director Sappi North America

Qi Wang is a R&D Director at Sappi North America. He leads its early-stage R&D work as well as development work in pulping, fiber and base paper areas. Qi is an experienced chemist with expertise in product, project and system development and management. Prior to Sappi, He was a Technical Director at Houghton International and has previous experience at Occidental Chemical Corporation (OxyChem) and Diagnostic Products Corporation (DPC). Qi has a Ph.D. in Organic Chemistry from the University of Southern

California under supervision of Professor George A. Olah, the Nobel Laureate in Chemistry 1994. Qi commercialized a number of new products and processes in different industries. He published 1 book, coauthored more than 50 scientific papers, and holds more than a dozen US patents.



Dr. Jo Anne Shatkin President Vireo Advisors

Dr. Jo Anne Shatkin, Ph.D. is President and founder of Vireo Advisors, LLC. Vireo Advisors advise public and private organizations on market and regulatory requirements toward advancing adoption of safer and more sustainable bio-based product development through risk management strategies and state of the art analyses. Dr. Shatkin is an environmental health scientist and recognized expert in environmental aspects of novel and emerging ingredients, bio-based and nanoscale technologies, health risk

assessment, emerging substance policy and environmental science and policy. Areas of expertise include food safety, composites, public/private models of cooperation and 21st century testing strategies.

Since 2005, Jo Anne has provided leadership on the responsible development of nanotechnology. She served as an expert to several international committees on nanotechnology safety, including the National Academy of Sciences, Canadian Council of Academies and others. Her book, Nanotechnology Health and Environmental Risks Second Edition (CRC Press 2012) describes the use of LCRA - life cycle thinking in risk analysis for nanomaterials. Jo Anne is a fellow of the Society for Risk Analysis and serves on the boards of the Center for Environmental Policy at American University and the University of Maine Forest Bioproducts Research Institute. She and the team at Vireo Advisors work internationally on the safety and sustainability of nanotechnologies and bio-based products.



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INVITED GUEST SPEAKERS



Dr. Kenneth J Zwick Assistant Director USDA Forest Products Laboratory, Madison, WI.

Ken Zwick joined the Forest Products Laboratory (FPL) in 2021 as Assistant Director for the Wood, Fibers and Composites Research (WFCR) Division. WFCR explores ways to efficiently break wood down into smaller parts, and then transform those parts into higher value products. Ken joined the FPL

after 22 years at Kimberly Clark Corporation where he most recently led product technology strategy for the tissue and towel business. Ken holds over forty US utility patents in tissue mechanics, structures, absorbency, and drying, as well as several patents in gasoline fuel injection. He holds a BA and BSME from the University of Michigan, and an MSE and PhD from the University of Pennsylvania.



Dr. Robert Moon Materials Research Engineer USDA Forest Service – Forest Products Laboratory

Dr. Robert J. Moon is a Materials Research Engineer at the USDA Forest Service -Forest Products Laboratory, and is an Adjunct Professor in both the School of Materials Engineering (at Purdue University), and in the School of Materials Science and Engineering (at Georgia Institute of Technology). Dr. Moon received a B.S. in Metallurgy from the University of Wisconsin (1994), a M.S. (1996) and PhD (2000) in Materials Engineering from Purdue University. He is currently stationed at the Renewable Bioproducts Institute at Georgia Institute of Technology in Atlanta,

Georgia. Since 2007 Dr. Moon has worked in the area of cellulose nanomaterials, developing processingstructure-property relationships as they apply to various aspects of research, characterization, modeling and nanocomposites. He is an internationally recognized researcher in cellulose nanomaterials having 55+ peer reviewed journal publications, 3 critical reviews, 2 patents, an editor of 1 book, and 60+ invited talks all in cellulose nanomaterials. View full publication record at <u>Google Citations</u>, <u>ResearchGate</u>. Dr Moon is active in the broader international research efforts of cellulose nanomaterials: Chair of TAPPI's NanoDivision (2014-2020), a member of ISO standards development TC6 & TC229, and active in many workshops and roadmap development activities.

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Keynote & Guest Speaker Biographies



Dr. Carson Meredith Executive Director, *Renewable Bioproducts Institute* Professor and James Harris Faculty Fellow *School of Chemical & Biomolecular Engineering (ChBE)* Georgia Institute of Technology Atlanta, GA

Dr. Carson Meredith received a BS degree in Chemical Engineering from Georgia Tech (1993) and a PhD in Chemical Engineering from the University of Texas, Austin (1998). He was a postdoc at the National Institute of Standards

and Technology (NIST) from 1998 to 2000, and joined the faculty in the School of Chemical & Biomolecular Engineering at Georgia Tech in 2000. His research interests are the application of colloid and polymer science principles to biomass-derived renewable and sustainable materials and efficient processing of biomass. His group has pioneered in the area of using chitin and cellulose to derive alternative packaging materials as substitutes for plastics. He is the Executive Director of Georgia Tech's *Renewable Bioproducts Institute*, one of eleven interdisciplinary research institutes on the campus. In this role, he is catalyzing an interdisciplinary innovation community engaged in translational research in pulp, paper and packaging, circular materials from biomass, and bioindustrial manufacturing and biorefining. Dr. Meredith was Chief Editor for the journal *Emergent Materials* (Springer, 2018-2021).



Dr. Caitlyn Clarkson Associate R&D Staff Sustainable Manufacturing Technologies Group Manufacturing Demonstration Facility Oak Ridge National Laboratory

Dr. Caitlyn Clarkson is currently an associate staff R&D scientist in the Sustainable Manufacturing Technologies group at the Manufacturing

Demonstration Facility at Oak Ridge National Laboratory. She focuses on the development of novel biobased materials and processes thereof in order to identify high-value application spaces and facilitate their adoption.



Keynote & Guest Speaker Biographies



Dr. Juha-Pekka Huhtanen Process Technology Manager for MFC Production Valmet Technologies, Inc.

Dr. Huhtanen received his training and worked as Post-doctoral researcher from Tampere University of Technology. He served as Process Technology Manager at Metso Paper Company. Since then, he has been with Valmet Technologies as Process Technology Manager for Stock Preparation where he was deeply involved in development of Valmet's Conical Refiner PRO and,

more recently for their MFC Production Team.

INTRODUCING UMAINE'S NEW J. LARCOM OBER CHAIR AND PROFESSOR OF CHEMICAL ENGINEERING



Dr. Yonghao Ni Ober Chair and Professor Chemical Engineering University of Maine

Dr. Yonghao Ni received his Ph.D. in Chemical Engineering from McGill University in 1992. Since then, he has been a faculty member at the University of New Brunswick, (jointly appointed in the chemical engineering and chemistry deparments where he earned tenure in 1998 and was promoted to full professor 2000. He has served as the Director for UNB's Limerick Pulp and Paper Centre since 1998. From 2002 thorough present, Dr. Ni has been a Tier 1 Canada research Chair (CRC) in Pulp and Paper Science and Engineering. He also served as Chair of the UNB's Department of Chemical Engineering from

2014-2019. Dr. Ni is a Fellow of the Canadian Academy of Engineering. He has a strong record of teaching, mentoring graduate students and research that spans 30 years.