

Black Liquor Evaporation

Author Biographies

Editors



William J. (Jim) Frederick, Jr., Ph.D. is Principal for Table Mountain Consulting, LLC in Golden, CO. His research and industrial experience over the past 40 years have focused on chemicals and energy from biomass-containing industrial residues, mainly kraft black liquor, with emphasis on pyrolysis and gasification research and technology development.

From 2003 to 2008, he was Professor of Chemical and Biomolecular Engineering at the Georgia Institute of Technology and Director of the Institute of Paper Science and Technology, one of the five major research institutes at Georgia Tech. Earlier he held the CEI Professorship in Green Chemistry at Chalmers University of Technology (Sweden), was Professor and Head of Chemical Engineering at Oregon State University, Visiting Professor of Chemical Engineering at Åbo Akademi University (Finland) and held industrial positions with Weyerhaeuser Company and General Motors. From 2006 to 2008, he served as Thermochemical Platform Program Manager for the National Bioenergy Center at NREL.

He is author or co-author of four books and more than 140 technical papers. Jim was elected TAPPI Fellow in 2007. He received his B.S., M.S., and Ph.D. degrees in Chemical Engineering from the University of Maine.



Nikolai De Martini, Ph.D. joined the University of Toronto as an Assistant Professor in 2017 focusing on research relevant to chemical recovery and renewable energy.

Prior to joining U of T, he worked as a senior researcher at Åbo Akademi University at the Laboratory of Inorganic Chemistry and at the Institute of Paper Science and Technology (IPST) at Georgia Tech. He received his B.S. from Oregon State University and his M.S. and Ph.D. in Chemical Engineering from Åbo Akademi University (ÅAU).

He enjoys working closely with the pulp and paper industry to apply a knowledge of process chemistry to solve industrial challenges. At IPST his research focused on scaling in black liquor evaporators where he worked directly with mills on controlling mill chemistry to minimize evaporator fouling. At ÅAU he worked with the chemistry of black liquor combustion among other topics. In addition to his work in chemical engineering, for the past 20 years, he has been active in rowing both as an athlete and coach.

Contributing Authors

- **David T. Clay, Ph.D.**, Retired, Jacobs Engineering
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