

Presentations

The links access PDF versions ([8a. olmanson nasa presentation.pdf](#) and [8b. brezonik acs presentation.pdf](#)) of two recent presentations by members of our group that provide detailed information on our general approaches and recent activities. Our group makes oral and poster presentations at a variety of venues, including scientific conferences, seminars and citizen forums. Other recent presentations are listed below the links. In some cases, pdfs of presentation slides may be available from the first author.

Other Recent Presentations:

Chen, Yiling, Raymond Hozalski, Leif Olmanson, Claire G. Griffin, Patrick Brezonik, Jacques Finlay, and William Arnold. Prediction of photochemically produced reactive intermediates in surface waters via satellite remote sensing. Association of Environmental Engineering and Science Professors conference. May 14-16, 2019, Arizona State University, Tempe, AZ.

Page, Ben, Leif Olmanson, David Porter, Chris Crawford, Jeff Peterson, Marvin Bauer, and Patrick Brezonik. Advancing water quality monitoring capabilities across optically variable lake systems using S2/MSI and L8/OLI imagery in an automated high performance computing environment. Living Plant Symposium, May 13-17, 2019, Milan, Italy.

Olmanson, Leif, Ben Page, and Ben Allen. Evaluation of Atmospheric Correction Methods for Inland Water Quality Mapping Using a Large Database of In situ Water Quality Data from Minnesota U.S.A.'s Lakes. Living Plant Symposium, May 13-17, 2019, Milan, Italy.

Olmanson, Leif and **Ben Page**. Advanced remote sensing methods for automated lake water quality and ice phenology mapping. Living Plant Symposium, May 13-17, 2019, Milan, Italy.

Chen, Yiling, William Arnold, Leif Olmanson, Claire G. Griffin, and Raymond Hozalski. Prediction of photochemically produced reactive intermediates in surface waters via satellite remote sensing. 257th ACS National Meeting, March 31-April 4, 2019, Orlando, FL.

Arnold, William. Photolysis across scales: From molecules to space. National Meeting & Exposition. American Chemical Society, March 31-April 4, 2019, Orlando, FL. (Invited presentation in ACS Creative Advances Symposium)

Arnold, William. Photolysis across scales: From molecules to space. Invited Seminar, The Johns Hopkins University, Baltimore, MD, February 2019.

Griffin, Claire G., Kerry Holmberg, Chelsea Delaney, Leif G. Olmanson, Patrick L. Brezonik, Jacques C. Finlay, and John L. Nieber. Remote sensing of dissolved organic matter pools in lakes at regional scales. American Geophysical Union, fall meeting, Dec. 10-14, 2018, Washington, D.C.

Brezonik, Patrick, **Claire G. Griffin,** Jacques Finlay, Leif Olmanson, and Raymond Hozalski. Measurement of dissolved colored organic matter (CDOM) in lakes using smartphone cameras: development of an app for citizen monitoring programs. Amer. Geophys. Union, fall meeting, Dec. 10-14, 2018, Washington, D.C.

Chen, Yiling, William Arnold, Leif Olmanson, Claire Griffin, and Raymond Hozalski. Assessment of the chlorine demand and disinfection byproduct formation potential of surface waters via satellite remote sensing. Minnesota Water Resources Conference, Oct. 16-17, 2018, St. Paul, MN.

Finlay, Jacques, Patrick Brezonik, **Leif Olmanson,** Claire G. Griffin, Marvin Bauer, Raymond Hozalski, and William Arnold. Spatial distribution and interrelationships among optical water quality properties (chlorophyll a, suspended solids, CDOM, and Secchi depth) in Minnesota lakes. Minnesota Water Resources Conference, Oct. 16-17, 2018, St. Paul, MN.

Griffin, Claire G., Jacques Finlay, Patrick Brezonik, Leif Olmanson, Raymond Hozalski. Landscape controls on colored dissolved organic matter distribution in 10,000 Minnesota lakes. Minnesota Water Resources Conference, Oct. 16-17, 2018, St. Paul, MN.

Page, Benjamin and Leif Olmanson. Advancing satellite-based remote sensing methods for lake water quality and ice phenology. Minnesota Water Resources Conference, Oct. 16-17, 2018, St. Paul, MN

Patrick Brezonik, **Raymond Hozalski,** Leif Olmanson, Claire G. Griffin, Jacques Finlay, and Marvin Bauer. Colored dissolved organic matter (CDOM) in two northern ecoregions: measurement by satellite imagery. IHSS 19th Internat. Conf., Sept. 16-21, 2018, Albena, Bulgaria.

Olmanson, Leif, and Ben Page. Remote Sensing for the characterization of HAB phenology in inland waters, 2018 MN HAB Workshop II, March 29, 2018, Minneapolis, MN.

Olmanson, Leif, Patrick Brezonik, Jacques Finlay, Marvin Bauer, and Ben Page. Water quality measurements in optically complex St. Louis River Estuary using Landsat 8 and Sentinel 2 imagery, 8th Annual St. Louis River Summit, March 13-14, 2018, Superior, WI.

Olmanson, Leif, and Marvin Bauer. Land cover classification of the Lake of the Woods/Rainy River Basin by object-based image analysis of Landsat and lidar data. Observing a Changing Earth, Pecora 20 Conference, Nov. 13-16, 2017, Sioux Falls, SD.

Olmanson, Leif, Patrick Brezonik, Marvin Bauer, and Jacques Finlay. Regional Water Quality Measurements of Optically Complex Inland Waters Using New Enhanced Landsat 8 and Sentinel 2 Imagery. Pecora 20 Conference, November 13-16, 2017, Sioux Falls, SD.

Chen, Yiling, Raymond M. Hozalski, William A. Arnold, Patrick L. Brezonik, Jacques Finlay, Claire G. Griffin, and Noah Germolus. Impact of Colored Dissolved Organic Matter (CDOM) on Water Treatment: Formation of disinfection byproducts (DBPs). Water Quality Technology Conference, Nov. 13, 2017, Portland, OR.

Chen, Yiling, William Arnold, Leif Olmanson, Claire G. Griffin, and Raymond Hozalski. Relate colored dissolved organic matter (CDOM) to pollutant fate and drinking water quality. 2017 Water Quality Technology Conference, November 12-16, 2017, Portland, OR.

Olmanson, Leif, Marvin Bauer, Patrick Brezonik, Jacques Finlay, Claire G. Griffin, Ben Allen and Raymond Hozalski. Moving toward near real-time water quality measurements in Minnesota using new Landsat and Sentinel satellite data. Minnesota Water Resources Conference, Oct. 17-18, 2017, St. Paul, MN.

Hozalski, Raymond. Remote sensing for source water characterization. Gordon Conference on Drinking Water Disinfection Byproducts. July 31-August 4, 2017, Mount Holyoke College, South Hadley, MA.

Chen, Yiling, Raymond Hozalski, William Arnold, Patrick Brezonik, Jacques Finlay, Claire Griffin, and Noah Germolus. Impact of Colored Dissolved Organic Matter (CDOM) on water treatment: Formation of disinfection byproducts (DBPs). Gordon Research Seminar: Drinking Water Disinfection By-Products, July 29-30, 2017, South Hadley, MA.

Chen, Yiling, William Arnold, Leif Olmanson, Claire Griffin, Raymond Hozalski. Impact of colored dissolved organic matter (CDOM) on water treatment. Gordon Research Seminar (GRS): Drinking Water Disinfection By-Products, July 29-30, 2017, South Hadley, MA.

Brezonik, Patrick, Claire Griffin, Raymond Hozalski, Jacques Finlay, Leif Olmanson, Benjamin Allen, Marvin Bauer, and Yiling Chen. Cross-scale advances in CDOM biogeochemistry: From molecular to eco-regional perspectives. Presented at Environmental Chemistry Division Symposium in honor of George Aiken, 253rd national meeting, American Chemical Society, April 2-6, 2017, San Francisco, CA.

Olmanson, Leif, Patrick Brezonik, Jacques Finlay, Marvin Bauer, Claire Griffin, Benjamin Allen, and Raymond Hozalski, Using Landsat 8 and Sentinel 2 data for regional water quality measurements in optically complex inland waters. Mountains to the Sea, ASLO 2017 Aquatic Sciences Meeting, February 26-March 3, 2017, Honolulu, HI.

Olmanson, Leif, Patrick Brezonik, Marvin Bauer, and Jacques Finlay, Using new enhanced satellite remote sensing systems for regional water quality measurements in optically complex inland waters. Terrestrial Water Cycle Seminar. Earth Sciences Division. National Aeronautics and Space Administration, Goddard Space Flight Center. August 16, 2016, Greenbelt, MD.

Olmanson, Leif, Patrick Brezonik, Jacques Finlay, and Marvin Bauer, Regional-scale measurement of colored dissolved organic matter in freshwater lakes by satellite imagery. European Space Agency, Living Planet Symposium 2016, Prague, Czech Republic. May 9-13, 2016. http://lps16.esa.int/posterfiles/paper2319/Olmanson_CDOM_poster_ESA_LPS_final.pdf. Accessed March 10, 2016.

Olmanson, Leif. Regional lake water quality measurements using legacy and new enhanced satellite remote sensing systems for tracking climate-related trends in lakes. EPA webinar on inland lakes climate change monitoring. November 5, 2015.

Brezonik, Patrick, Leif Olmanson, Jacques Finlay, Ray Hozalski, and Evelyn Boardman. Regional-scale measurement of dissolved organic matter in freshwaters: CDOM-DOC relationships, effects of iron, and applicability of satellite imagery. NOM 6, Int. Water Assoc. Specialist conference on Natural Organic Matter in Water, Malmö, Sweden, Sept. 7-10, 2015.

Olmanson, Leif, Patrick Brezonik, Jacques Finlay, and Marvin Bauer, Capabilities and limitations of current and upcoming satellite systems for comprehensive regional lake water quality measurements. Mapping Water Bodies from Space 2015. European Space Agency, ESRIN, Frascati, Italy. March 18-19, 2015.

Olmanson, Leif, Patrick Brezonik, Jacques Finlay, and Marvin Bauer, Regional lake water quality measurements by satellite remote sensing: big data – getting bigger and better. Bridging Genes to Ecosystems: Aquatic Science at a Time of Rapid Change, ASLO Joint Aquatic Sciences Meeting, May 18-23, 2014, Portland, OR.

Olmanson, Leif, Patrick Brezonik, Jacques Finlay, and Marvin Bauer, Comprehensive regional lake water quality measurements by satellite remote Sensing: Capabilities and limitations with current and upcoming satellite systems. Pecora 19 Conference, November 17-20, 2014, Denver, CO.