Materials Seminar

Professor Michael J. Aziz

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and Applied Sciences

"Organic Aqueous Flow Batteries for Massive Electrical Energy Storage"

The ability to store large amounts of electrical energy is of increasing importance with the growing fraction of electricity generation from intermittent renewable sources such as wind and solar. Flow batteries show promise because the designer can independently scale the power (electrode area) and energy (arbitrarily large storage volume) components of the system by maintaining all electro-active species in fluids. Wide-scale utilization of flow batteries is limited by the abundance and cost of these materials. We have developed an approach to electricity storage in flow batteries using the aqueous redox chemistry of small, inexpensive organic and organometallic molecules. This new approach may enable massive electrical energy storage at greatly reduced cost.

Thursday
March 28, 2019

12:15 p.m.
1315 Chemistry

Coffee & cookies
at 12 p.m.

DEPARTMENT OF
Chemistry
UNIVERSITY OF WISCONSIN-MADISON