## Prof. DONALD SADOWAY



Leading Battery and Storage Expert Professor of Materials Chemistry at Massachusetts Institute of Technology (MIT)

When it comes to alternate power sources and batteries, Donald R. Sadoway is the man to turn to. Voted one of "Times" magazine's 100 most influential people in the world in 2012, he is widely recognized as a leading battery and energy storage expert. As a professor at MIT he is known for his packed classes.

Born in Toronto in 1950 he did both his undergraduate and graduate studies at the University of Toronto, focusing his studies on chemical metallurgy and receiving his PhD in 1977. He then received a NATO postdoctoral fellowship from the National Research Council of Canada and came to MIT in 1978 to conduct his postdoctoral research. As a researcher Sadoway has focused on environmental ways to extract metals from their ores as well as producing more efficient batteries. His research has often been driven by the desire to reduce the carbon pollution output by various industries. Donald is the co-inventor of a solid polymer electrolyte.

Donald R. Sadoway is the John F. Elliott Professor of Materials Chemistry in the Department of Materials Science and Engineering at the Massachusetts Institute of Technology. The popularity of his course "Introduction to Solid State Chemistry" has been steadily increasing during the past years, last but not least due to Donald's interactive teaching style which for example includes playing music at the beginning of the lecture, which has some connection with the lecture's material.

In addition to his teaching responsibilities he also currently manages GroupSadoway: Extreme Electrochemistry, which is a research group consisting of about 20 people including postdoctoral associates, visiting scientists, technical staff, graduate students, and undergraduate students. Research interests of GroupSadoway include liquid metal batteries, metals production by molten oxide electrolysis, rechargeable solid polymer batteries, and aluminum-ion batteries. Donald is a co-founder of two companies: Ambri, Inc. (formerly Liquid Metal Battery Corporation), which is developing new battery technology for grid-scale electricity storage, and Boston Electrometallurgical Corp., which is developing molten oxide electrolysis for the production of metals.

The author of over 150 scientific papers and holder of 18 U.S. patents, was named one of the 100 most influential people in the world by Time magazine in April of 2012. And in June 2013 Donald Sadoway was presented with an honorary Doctor of Engineering by the University of Toronto in recognition for his contributions to higher education and sustainable energy.

Donald R. Sadoway not only is an exceptionally gifted professor but also a highly gifted speaker, being able to explain complex interrelations to his audience in an understandable and entertaining way.

## **Topics (Selection):**

- The Missing Link to Renewable Energy
- Liquid Metal Battery: Can We Invent our Way out of Climate Trouble?
- The Importance of Grid-Level Storage

