Will lecture on:

*Sustainable energy concepts for closing circular economy loops*

The coming decade will be an exciting time for sustainable energy. All over the world, people are waking up to the idea that sustainable development is more than just a buzzword, and that society can move towards the long-term goals of CO₂-neutral processes and a circular economy. Many people talk about this, but we chemists can actually do something about it. In the lecture, I will present three projects that show the impact and possibilities of using green chemistry for closing circular economy loops: a chemical design of simple and cheap materials for fuel-cell electrodes, a techno-economic approach converting the ultimate waste into clean electricity, and a possibility for reacting CO₂ with a lower thermodynamic penalty.

Gadi Rothenberg received his BSc in Chemistry magna cum laude from the Hebrew University of Jerusalem in Israel in 1993, and his PhD in Applied Chemistry summa cum laude from the same university in 1999. He then worked as a Marie Curie Fellow at the University of York before moving to the University of Amsterdam in 2001. Since 2008 he is Professor and Chair of Heterogeneous Catalysis & Sustainable Chemistry. Rothenberg teaches courses on catalysis, thermodynamics and scientific writing. He has published two books and over 180 papers in peer-reviewed journals. His textbook “Catalysis: Concepts & Green Applications” is a Wiley-VCH bestseller. He has also invented 16 patents and co-founded three companies. Recently, he was appointed as Senior Visiting Fellow at Fudan University in Shanghai.