

JILLIAN BURIAK

# THE TRANSITION TO A LOW-CARBON WORLD:

It's here, and it's ok

OCTOBER 17, 7:00 P.M.  
100 SMITH HALL

FREE admission with registration:  
<https://csp.umn.edu/covestro/>

The most conservative estimates for energy usage by humanity predict that energy consumption will double by 2050, and triple by 2100, and thus it is the next generation who is facing this challenge head-on. Young people are acutely aware of this challenge — according to the World Economic Forum, the top concern of Millennials is climate change. We need to ensure the safety, security and stability of our planet to have a hopeful future for the next generations. Energy underpins all aspects of society, and thus highly scalable, low-carbon energy sources are needed. If you look closely, the transition to a low-carbon world is upon us, and yet it is scarcely noticeable. Historically, when the world has been on the cusp of a major technological transformation, there have inevitably been very loud naysayers, crowing loudly about how the internet, telephones, and the automobile, for instance, will fail, and low-carbon energy is no different. I will discuss the various sources of energy available to humanity, and their scalability to respond to a doubling of energy usage, and will touch upon the psychology of humans when responding to technological change to show that this transition is something to look forward to. The transition is here, and it's OK.



JILLIAN BURIAK

JILLIAN BURIAK is a professor of Chemistry at the University of Alberta, Canada. She joined the University of Alberta and the National Institute for Nanotechnology as a full professor, Canada Research Chair, and Senior Research Officer in 2003. Buriak's research has resulted in over 9000 citations, and her interests range from materials for energy applications (solar energy conversion, water splitting), self-assembly on technologically relevant semiconductor surfaces, and mechanistic surface chemistry and functionalization on surfaces such as silicon and other semiconductors. She was on the Board of Reviewing Editors (BoRE) at Science from 2003 to 2008, was an Associate Editor at ACS Nano from 2009 to 2013, and in 2014, became the Editor-in-Chief of the American Chemical Society journal Chemistry of Materials. When she's not in the office you can find her road racing or climbing mountains.

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