

# *Transformation & Global Technology in Design*

*A Special Joint Seminar*



## *Andy Dong*

Warren Centre Chair for Engineering Innovation  
Faculty of Engineering and Information Technologies  
The University of Sydney



## *Amos Winter*

Ratan N. Tata Career Development Assistant Professor  
Director, Global Engineering and Research (GEAR) Laboratory  
Massachusetts Institute of Technology

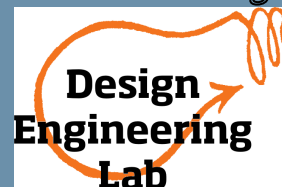
Advances in mechanical design theory are innovating the way we solve global engineering problems. In these two talks, **Andy Dong** and **Amos Winter** will present their research on the future of transformation and global technologies in design. In “**Functional Lock-In and the Problem of Design Transformation**”, Dr. Dong will discuss how functional architectures lock in a design by influencing the cost of transformation, and will introduce new ways to quantify the changeability of products. In “**Engineering Global Development: Using Emerging Markets Constraints to Drive the Innovation of Global Technologies**”, Dr. Winter will demonstrate his research approach to understanding the unique technical and socioeconomic challenges imposed by emerging markets, including the design of photovoltaic-powered electro dialysis desalination; off-grid, low-power and low-pressure drip irrigation; and passive, purely mechanical assistive devices with tuned dynamics.

**FRIDAY, SEPTEMBER 23, 2016**

**1:30P.M.**

**ROGERS HALL 226**

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