



DEPARTMENT OF  
**Chemical and  
Biological Engineering**  
UNIVERSITY OF WISCONSIN-MADISON

# 2017 W. Marshall Founders' Lecture

*presented by:*



**MR. JOHN CHURCH**

Executive Vice President - Global Supply Chain  
General Mills, Inc.

**Reflections of A UW-Chemical Engineer:  
The Real World Is A Lot Like "Summer Lab"**

An undergraduate Chemical Engineering program teaches the theory and principles that govern chemical processes and their applications. Real world situations are simplified into model systems and problem-sets where "steady-state" or "assumed constants" make the problems easy enough to solve. Laboratory sections, however, provide practical examples of how the equations and principles apply. It's here that the student learns that the observed results usually differ from what one might expect by straight calculation. The lab experience gives the student an understanding that engineering calculations need to be verified and complemented with real world application. Usually, factors that we assumed negligible in the calculations color the outcome in a real system. Most solutions to the world's problems include people with various motivations, different skill levels, and inherent biases. Sometimes you just need to know which way to "turn the valve" to increase or lower pressure or whether you need to add more "catalyst" to get the desired reaction. Whether extruding Cheerios™ through an annular die or improving the sustainability of our global food system, the answers can't always be calculated. The experiment is where the learning happens.

**Tuesday, Jan. 31, 2017**

Seminar Reception

3:30-4:00 pm

Cheney Room/1413 Engineering Hall (1415 Engineering Drive)

Lecture

4:00-5:00 pm

Room 1800, Engineering Hall