## New Material Needs in the Semiconductor Industry

## **Dr. Reuben Chacko**

Scientist/Team Lead in ELECTRO program Brewer Science's Corporate R&D



Chemistry Colloquium on Need for New Semiconductor Materials

## 3:15 p.m. Friday April 28 in 303 Schrenk Hall

Please contact Dr. Amitava Choudhury at choudhurya@mst.edu for more information



Corporate R&D scientists of Brewer Science Inc, a globally well-known industry in Microelectronic Materials Manufacturing located in Rolla, will deliver three colloquia in Chemistry on 04/14, 04/21 and 04/28 at 3:15 pm in 303 Schrenk. **Undergraduate and graduate students across disciplines are invited to attend.** *1/3: Introduction to Photolithography by* **Joyce Lowes** *2/3: Extending Moore's Law Through Advanced Packaging by Andrea Chacko 3/3: New Material Needs in the Semiconductor Industry by Reuben Chacko* 

Abstract: Big data is driving huge transformations across every industry. It's talked about as the new currency of the economy. More advanced technologies, including smaller-feature devices and new technology approaches, are needed to meet the growing demands of big data. New materials with advanced performance are needed to enable these technologies. This presentation will provide an introduction into new material needs driven by technology trends in the semiconductor industry.

**About the speaker:** Reuben Chacko earned his PhD in Chemistry from the University of Massachusetts, Amherst. He began his career at Brewer Science in 2013. He is currently serving Brewer Science's Corporate R&D group, leading the ELECTRO team as a Scientist/Team Lead. His group's research spans several projects including the development of low RI/low k materials for advanced semiconductor and optical applications, thermally conductive materials, and other electronic materials.