

# *Chemistry In Emerging Technologies Lectures*

Peckham Hall, Rm. 12 - Nazareth College, 4245 East Ave., Pittsford, NY

**Monday, April 21, 2014**

## *Applying Nanotechnology to New Printing and Patterning Processes*

**Dr. Robert Cournoyer, CEO**

**Intrinsiq Materials, Inc. ([www.intrinsiqmaterials.com](http://www.intrinsiqmaterials.com))**

### **7:00 pm: Lecture**

Intrinsiq Materials, formed in 2007, is a nanomaterials company built on core technology developed at the UK Ministry of Defense. In December, 2010 company headquarters was established at Eastman Business Park in Rochester, NY, with facilities also in Farnborough, England. Its focus is on air-handleable electronic inks and pastes for the printed electronics industry. These customized, highly functionalized nano-material based inks are greener, lower-cost alternatives to conventional electronic metallization materials. The Rochester facility houses formulation, printing and sintering capabilities, and allows for scaling production. Current products include nano copper inks and pastes for screen-printing and inkjet printing. Photo sintering is accomplished with xenon flash lamp and IR laser systems. Laser sintering extends application to metal traces requiring very fine lines ( $< 5 \mu$ ), significant penetration depth, or sintering on metal substrates. NiSi, FeNi and n and p doped Si inks are also currently in development.

**Dr. Robert Cournoyer**, CEO of Intrinsiq Materials, received a Ph.D. in Analytical Chemistry from the Univ. of Massachusetts and then joined Eastman Kodak Company. During his 30+ years at Kodak his management responsibilities spanned areas from R&D to manufacturing, primarily in areas involving film base for photographic products and optical films. He also spent 2 years at Kodak Australia managing photographic film and paper manufacturing. Subsequently he spent 5 years as Manager of Optical Display Films leaving the Electronic Materials Division of Dow Chemical Company for a position as VP of R&D at Switch Materials Inc., a British Columbia high tech startup company. In 2010 he joined Intrinsiq Materials where he oversees the development and manufacture of nanophase materials for use in inks for applications in solution coated electronics.

**8:15 – 9:30 p.m.: Reception – Peckham Hall Lobby**

**Further information on these lectures and other Rochester ACS Section events is available at [www.Rochester.sites.ACS.org](http://www.Rochester.sites.ACS.org)**