Date: 8/31/2018 Friday, 1:00pm
Location: Goodwyn Hall, room 201

Title:
Teaching General Chemistry through Private Interactive Learning (PILs)

Abstract:
Poor proficiency in basic chemistry operations poses challenges for student success for the rest of the chemistry curriculum. Large classroom sizes may hinder individual interaction of a student with a course instructor while most traditional online sources do not offer step-by-step feedback. The developed software, PILS, can provide individual guidance to students in the format of modules - algorithms for training routine math and chemistry operations. Test results of the pilot study, module on dimensional analysis in the General Chemistry course, demonstrates a positive impact of this approach on students' class performance.

Bio (short version):
Dr. Anton Dubrovskiy received Ph.D. from Iowa State University in organic chemistry. Following postdoctoral work at Caltech in total synthesis, he joined UHCL in 2014. While at ISU, Dr. Dubrovskiy initiated collaboration with the UK NIH Center of Excellence in Chemical Methodologies and Library Development. Currently, he is collaborating with Dr. Krivoshein (UHCL) on the development of antiepileptic compounds, with Dr. Lei Wu (Auburn University at Montgomery) on development of educational software, and with Dr. Diana Mason (UNT), investigating causes of weak math preparation among Texas students. Dr. Dubrovskiy is also a coauthor for the chemistry reference "Larock's Comprehensive Organic Transformations."