



2015-2016 POCC Lecture Series

January 28, 2016, 8:00 PM

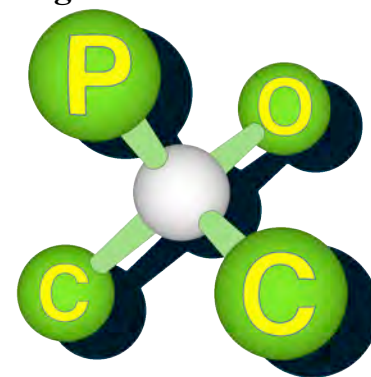
Professor Rodrigo B. Andrade

Temple University

Synthesis of Complex, Bioactive Indole Alkaloids

Carolyn Hoff Lynch Lecture Hall
Chemistry Building, University of Pennsylvania

The Philadelphia
Organic Chemists' Club



POCClub.org

To join us for dinner before the lecture please contact POCC's secretary Thomas Razler (thomas.razler@bms.com) at least one week ahead of time.

Rodrigo B. Andrade was born in Rio de Janeiro, Brazil in 1974 and received his primary and secondary education in the United States. He obtained a B.A. degree in biophysics in 1996 from The Johns Hopkins University in Baltimore, MD. In 2001, he obtained his Ph.D. in organic chemistry from MIT in Cambridge, Massachusetts under the supervision of Prof. Peter Seeberger. He was an NIH Postdoctoral Fellow in the laboratory of Prof. Stephen Martin at the University of Texas at Austin from 2003-2006. He began his independent career at Temple University where he is currently Associate Professor of Chemistry. His research areas include natural products synthesis, synthetic methodology development, medicinal/bioorganic chemistry, and chemical biology.

Abstract: Indole alkaloids possess a unique combination of architectural complexity and biological activity that have made them irresistible targets to chemists working in the areas of synthetic methodology, natural products synthesis, medicinal chemistry, and chemical biology. We were drawn into this area with the goal of developing a step-efficient synthesis of strychnine, which was accomplished in 2010. Methodology directed at this target was subsequently applied to other members of the *Strychnos* class. Recently, we reported a novel Domino Michael/Mannich method to access the related *Aspidosperma* class represented by tabersonine. Modification of this method has enabled access to the *Aspidospermatan* class, typified by the classic target tubotaiwine. Finally, we recently completed the first chemical synthesis of the bis-*Strychnos* alkaloid sungucine from strychnine..

