



## PHILADELPHIA ORGANIC CHEMISTS' CLUB

- DATE:** Thursday, May 26<sup>th</sup>, 2005; 6:00 pm dinner, 8:00 pm seminar
- PLACE:** Carolyn Hoff Lynch Room, located on the 1st floor (around the corner from the business office), New Chemistry Building, University of Pennsylvania, 34th and Spruce Streets, Philadelphia, PA
- SPEAKER:** **Professor Scott McN. Sieburth, Temple University**
- BIOGRAPHY:** Scott Sieburth obtained his B.S. in Chemistry from Worcester Polytechnic Institute in 1977 and his Ph.D. from Harvard University in 1983. After seven years at FMC Corporation, he joined the faculty of the State University of New York at Stony Brook in 1989 as an Assistant Professor and moved to Temple University in 2001. His research interests include the application of [4+4] photocycloaddition to complex molecule synthesis and organosilicon chemistry, as it relates to synthetic methods and the design of bioactive substances.
- TITLE:** **Silicon-Based Protease Inhibitors: Chemistry and Efficacy.**
- ABSTRACT:** Silicon is the second most abundant element, and the element most similar to carbon in its properties. Despite more than a century of organosilane research only two silanes are produced commercially because of their biological activity, with silicon replacing a quaternary carbon. Unlike carbondiols, silanediols do not dehydrate to give silanones and we have employed this property to design protease inhibitors where the silanediol mimics a hydrated amide carbonyl. These are more complex than any silanediol previously prepared and they have stimulated a broad investigation of organosilane chemistry. Silanediols have been found to be reliable protease inhibitor design components, leading to low nanomolar inhibitors of aspartic and metalloproteases.
- DINNER:** The meeting will be preceded by cocktails (cash bar) at 5:30 pm followed by a dinner at 6:00 pm at **New Deck Tavern, 3408 Sansom Street**. Reservations should be made by email: [emichelotti@locuspharma.com](mailto:emichelotti@locuspharma.com) or phone: (215)-358-2026 to Enriquer Michelotti **before 5:00 pm, Monday, May 23<sup>rd</sup>**. **Please pay the \$27.00 for dinner when you attend.** Thank you.