

Chemistry In Emerging Technologies Lectures

Nazareth College - Peckham Hall, Room 10, 4245 East Ave., Pittsford, NY

Monday, November 7, 2016

Advances in Immunoassays for Clinical Diagnostics

Philip Hosimer, Senior Principal Scientist
Ortho Clinical Diagnostics (www.orthoclinical.com)

7 p.m.: Lecture

Diagnostic assays are central for the diagnosis, treatment and management of many diseases. These assays are expected to give a fast and reliable result, while being easy to use and inexpensive to manufacture. Immunoassay technology provides the capability to accurately detect complex biomolecules down to sub-picomolar concentrations. This technology has progressed immensely over the last several decades, moving from radioimmunoassay to colorimetric ELISA, to today's automated random-access analyzers utilizing highly-sensitive chemiluminescent detection. Some of the key elements of immunoassay design will be discussed, including characterization of antibodies, bound-free separation, signal generation and control of assay interference.

Philip Hosimer holds a B.S. in Chemical Engineering from Virginia Tech. He began his career at the Kodak Research Laboratories in 1981, when Kodak launched its first clinical analyzer, the Ektachem 400. Phil has subsequently held R&D positions at Genencor International, Johnson & Johnson, and is currently a Senior Principal Scientist at Ortho Clinical Diagnostics. His work at Ortho has centered on the development of biomaterials for new assays, primarily immunoassays. Phil is a three-time winner of the Philip Levine Award for Outstanding Research, and received the Johnson Medal for his work in developing a test for Chagas Disease used in screening US blood donors.

8:15 – 9:30 p.m.: Poster Session & Reception – Peckham Hall Lobby

Further information on these lectures and other Rochester ACS Section events is available at www.Rochester.sites.ACS.org