

Henry W. Oviatt, Ph.D.
Professional Biography
hankoviatt@yahoo.com 951.526.6696

Dr. Oviatt is a chemist with experience in organic and polymer synthesis, and physical characterization of both small molecules, polymers, and hybrid inorganic-organic materials, and has over twenty years experience in the biomedical field, biomaterials, and applied polymer research.

He is currently a Distinguished Engineer at Edwards Lifesciences in Irvine, CA, focusing on critical care monitoring devices. He has consulted since graduate school and continues to do so on a part time basis. He was previously involved in an NIH funded joint project at UC Irvine and the University of Texas San Antonio Health Science Center (UTSA-HSC) department of radiology on improved MRI contrast agents for blood pool imaging.

At Southwest Research Institute Dr. Oviatt led and managed projects in the development of new dental impression resin compositions, research on anti-calcification of tissue heart valves, molecular imprinting, wound care and infant delivery devices, and other healthcare related projects. He additionally has been instrumental in the development of failure analysis methods and test equipment for US Military organizations, and failure analysis of petroleum hose materials.

At Alcon Laboratories Dr. Oviatt was a Principal Scientist in the Process Development group, implementing research results into manufacturing processes for medical devices and pharmaceuticals in a global sales environment. He was instrumental in managing the technology transfer team of the Perfluoron[®] perfluorocarbon product (used for retinal reattachment surgery) to the Fort Worth facility. He led the technical team implementing product changes to achieve a sterile exterior to this product and associated regulatory approvals for the US, Europe, and Japan. He was a key contributor in resolving technical hurdles to the silicone oil intravitreal tamponade product FDA approval, received in February of 2001. Dr. Oviatt's expertise in carbohydrate polymers was also key in achieving the Cellugel[®] viscoelastic product approval in 1999, in addition to technical contributions on viscoelastic products based hyaluronic acid with respect to shelf-life predictive models.

In his work with CSIRO Molecular Science in Australia Dr. Oviatt utilized plasma polymerization, wet chemical, and surface analytical methods to modify short and long term blood contacting interactions with synthetic materials. He developed methods of making porous polyurethane materials with potential use in blood contact applications and worked with the Elasteon Polyurethane now owned by Aortech, UK.

At Chiron Vision (now Bausch & Lomb), he developed protocols, test methods, and raw material specifications for the Gancyclovir controlled release drug delivery device in support of the Vitrasert[™] product for treatment of cytomegalovirus-induced vitreoretinopathy. For the New Drug Application required by FDA and throughout product launch for this product, he evaluated test methods used in various product applications and provided technical support for manufacturing and QA departments, including troubleshooting of existing processes and analytical methods. Dr. Oviatt was instrumental in the successful launch of the Passport[™] silicone lens delivery device and is a joint author on two patents for this device. He also developed improved processes for intraocular lens (IOL) silicone formulation, developed and implemented standardized test methods for determining the lubricity of IOL delivery cartridge surfaces, and developed new HPLC methods for determining unbound UV chromophore in silicone IOLs.

Dr. Oviatt has experience in synthesizing multi-functional organosilicon monomers used to form highly porous materials by sol gel methods, and has developed and investigated the conditions for condensation and effects of catalyst on porosity and degree of condensation of novel bifunctional trialkoxysilane monomers. Dr. Oviatt synthesized novel multifunctional organosilicon containing chromophores with known nonlinear optical susceptibility and developed methods for forming thin films for second order nonlinear optical properties. He also discovered and investigated the unusual rheological properties of concentrated *Xanthan* solutions induced by thermal treatment of such solutions. His peer reviewed publications and patents are cited in over 70 other patents and publications.

Dr. Oviatt has worked at many levels of technical organizations, from technician to Principal Scientist and Project Manager during his career. He worked his way through college as a grocery clerk and as a bench chemist technician at American Hospital Supply's west coast Research Laboratories in Irvine California. He left that position to complete a Ph.D. with an emphasis in polymer and materials characterization and synthesis. Dr. Oviatt possesses excellent interpersonal, leadership, and team skills.

AFFILIATIONS: Materials Research Society

PROFESSIONAL CHRONOLOGY: Distinguished Engineer, Edwards Lifesciences, 2007 to present; Consultant, UC Irvine Department of Chemistry, 2006- Present, Principal Scientist, Southwest Research Institute, March 2001 to Jan. 2005; Principal Scientist, Alcon Laboratories, May 1998 to March 2001; Research Chemist, CSIRO Molecular Science,

March 1997 to April, 1998; Scientific consultant & contract research, Radical Designs, August 1996 to March 1997; Staff Scientist, Chiron Vision, August 1995 to August 1996; Scientist, Chiron Vision, March 1994 to August 1995; Staff Scientist, Biomaterials Technology, 1982 to 1988, Baxter Healthcare/American Hospital Supply Corp.