

SCIENTIFIC ADVISORY BOARD

Our Scientific Board comes together to solve the biggest problems facing our customers, patients, and regulators. Each of the members of the scientific board have chosen to work with SiO2 and are actively involved in our scientific affairs.

Robert Pangborn, Chairman

FORMER HEAD OF R&D AT DOW CHEMICAL

Member of the Board of Directors of SiO2 Materials Sciences and the former head of Dow Chemical's central R&D department, Dr. Pangborn is responsible for assembling the R&D project team. He assesses R&D skill sets needed and staffs the project with the best people in their relevant fields. He meets regularly with the principal scientists and provides technical guidance to the project. Dr. Pangborn holds a PhD in Physics from Dartmouth University, as well as, a PMD from Harvard University.

Robert Langer

PROFESSOR, MIT

Dr. Langer is the David H. Koch Institute Professor at MIT. He served as a member of the United States Food and Drug Administration's SCIENCE Board, the FDA's highest advisory board, from 1995-2002 and as its Chairman from 1999-2002. Dr. Langer consults with SiO2 Medical Products, Inc. on the requirements of emerging injectable drug compounds and ensures the compatibility of SiO2 Materials Science's plasma-coated, pre-filled syringe products. He also reviews SiO2 Materials Science's key patent filings on the plasma coating system. Dr. Langer is a former Professor of Chemical and Biomedical Engineering at MIT Department of Chemical Engineering, Whitaker College of Health Sciences, Technology, and Management, and the Harvard MIT Division of Health Sciences and Technology. He holds a BS in Chemical Engineering from Cornell University and a PhD in Chemical Engineering from MIT.

Alexander Klibanov

PROFESSOR, MIT

Dr. Klibanov is a Novartis Professor of Chemistry and Bioengineering at the Massachusetts Institute of Technology (MIT). Dr. Klibanov works closely with pharmaceutical companies on the chemical stability of new drug compounds. Dr. Klibanov consults with SiO2 Materials Science on the chemical composition and chemical compatibility of SiO2 Materials Science's plasma coated, pre-filled syringes. He also reviews SiO2 Materials Science's key patent filings on the plasma coating system. He holds an MS in Chemistry from Moscow University and a PhD in Chemical Enzymology from Moscow University.

Glenn Fredrickson

PROFESSOR, UNIVERSITY OF CALIFORNIA, SANTA BARBARA

Dr. Fredrickson is the Mitsubishi Professor of Chemical Engineering and Materials at the University of California, Santa Barbara. Dr. Fredrickson's expertise is in the analysis and modeling of complex, multi-phase polymer systems. He reviews SiO2 Materials Science's key patent filings on the plasma coating system. Dr. Fredrickson holds a BS in Chemical Engineering from the University of Florida, an MS in Chemical Engineering from Stanford University, and a PhD in Chemical Engineering from Stanford University.

Carlo Pantano

retired PROFESSOR, PENNSYLVANIA STATE UNIVERSITY

Dr. Pantano holds the titles of Distinguished Professor of Materials Science and Engineering and Director of the Materials Research Institute at the Pennsylvania State University. Dr. Pantano is a leading expert in glass research and materials characterization, with over 30 years' experience in the field. Dr. Pantano holds a B.S. degree in Engineering Science from New Jersey Institute of Technology, as well as both ME and PhD degrees from the University of Florida. Dr. Pantano advises SiO₂ Materials Science with respect to glass research associated with PECVD coatings.

Steven J. Martin

FORMER CHIEF SCIENTIST, DOW CHEMICAL

Dr. Martin previously served as Chief Scientist of The Dow Chemical Company. In his thirty-two year tenure at Dow, Dr. Martin also led the invention and development of a new dielectric material used to fabricate ultra-high performance microprocessors, the development of the high-modulus and high-strength PBO fiber, and the development of the mullite-based diesel soot particulate exhaust filter. During his early years at Dow, Dr. Martin developed and applied analytical methods for the characterization of polymer systems and the elucidation of polymer structure-property relationships. Dr. Martin holds a PhD in Chemistry from the University of Illinois at Urbana-Champaign.

Matt Tirrell

PROFESSOR, UNIVERSITY OF CHICAGO

Dr. Tirrell is the founding Pritzker Director of the University of Chicago's new Institute for Molecular Engineering. Dr. Tirrell's expertise is in the measurement of surface properties of polymers, bringing microscopic measurements of intermolecular forces to bear on polymer surface problems. Dr. Tirrell assists SiO₂ Materials Science in understanding the plasma coating/plastic substrate interface. Dr. Tirrell was previously on the faculty of Chemical Engineering and Materials Science at the University of Minnesota, where he served as head of the department from 1995 to 1999. He holds a BS Chemical Engineering from Northwestern University and a PhD in Polymer Science from the University of Massachusetts.

David Henton

FORMER SENIOR SCIENTIST, DESIGNATED THERMOPLASTICS LABORATORY, DOW CHEMICAL

Dr. Henton is the former Senior Scientist in the Designated Thermoplastics Laboratory for Dow Chemical. Dr. Henton assists SiO₂ Materials Science with preparation test protocols for long-term aging studies of SiO₂ coated tubes, vials, and syringes. Dr. Henton holds a B.S. in Chemistry from University of Missouri, an M.S. in Organic Chemistry from University of Kansas, and a PhD in Organic Chemistry from the University of Kansas.