

SPEAKERS

Bill Moggridge



Bill Moggridge is the director of the Smithsonian's Cooper-Hewitt, National Design Museum, the only museum in the United States devoted exclusively to historic and contemporary design. Bill designed the first laptop computer, the Grid Compass, launched in 1982. A Royal Designer for Industry, Bill pioneered interaction design and is one of the first people to integrate human factors into the design of software and hardware. He has been a trustee of the Design Museum in London, Visiting Professor in Interaction Design at the Royal College of Art and Consulting Associate Professor in the design program at Stanford University. He served as Congress Chair for CONNECTING'07, the Icsid/IDSA World Design Congress held in San Francisco in October 2007. He was honored with the Lifetime Achievement Award at Cooper-Hewitt's National Design Awards in 2009, and the Prince Philip Designers Prize in 2010.

Odile Madden



Odile Madden is a materials scientist and head of the modern materials research program at the Smithsonian's Museum Conservation Institute. She is the Principal Investigator of "The Age of Plastic" program of which this symposium is a part. The program is a collaboration of scientists, curators, conservators, artists, and scholars that explores the phenomenon of polymer composites and their impacts on 19th-21st century life, culture, and the environment. Odile's current research involves the role of polymer-plasticizer interaction in material degradation, characterization and reverse engineering of historic "plastic" artifacts, and technical study of the National Air and Space Museum collection. Odile earned her PhD in Materials Science and Engineering with a minor in Classics at the University of Arizona. She also holds degrees in the History of Art and Archaeology, Art Conservation, and Italian from New York University and UCLA.

Susan Freinkel



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Susan Freinkel is a San Francisco-based journalist and author of the books *Plastic: A Toxic Love Story* and *American Chestnut: The Life, Death and Rebirth of the American Chestnut Tree*. Her work has appeared in national publications including *Discover*, *Reader's Digest*, *Smithsonian*, *The New York Times*, *OnEarth*, *Health*, and *Real Simple*. Susan began her career as a reporter at the *Wichita Eagle-Beacon* in Wichita, Kansas. In 1989, she moved to San Francisco and began covering legal affairs and the business of law for *The Recorder* newspaper and *American Lawyer* magazine. Since 2000, Susan has been a freelance writer and covered subjects ranging from adoption to weight control, coyote hunts to mad cow disease, new psychiatric treatments to the quest to develop a blue rose -- not to mention trees and plastic. Susan is a graduate of Wesleyan University and the Columbia University Graduate School of Journalism,

Bill Ayrey



Bill Ayrey is the historian and manager of the Test Lab at ILC Dover, a Delaware based company that has designed and manufactured spacesuits from the Apollo mission, shuttle program, and current Space Station missions. Bill also has a long standing relationship with the Smithsonian's National Air and Space Museum where he has consulted on space suit design and preservation.

Deborah Mielewski



Deborah Mielewski is the Technical Leader of the Plastics Research group at Ford Motor Company's Research and Innovation Center in Dearborn, Michigan. She initiated the biomaterials program at Ford Research in 2001, and the team was the first to demonstrate soy-based foam that met all the requirements for automotive seating. The group continues to pioneer the development of sustainable plastic materials that meet stringent automotive requirements, including natural fiber reinforced plastics and polymer resins made from renewable feedstocks. Debbie is passionate about the work she does to improve Ford's environmental footprint and believes that these new materials will dominate the market in the future. She received her BSE ('86), MSE ('93) and PhD ('98) degrees in Chemical Engineering, from the University of Michigan in Ann Arbor.

Mary Brooks



Mary Brooks is an independent consultant, scholar, conservator and teacher, with unique expertise in the history of regenerated protein fibers of the early to mid 20th century. She has worked as a conservator and curator at museums in USA, Europe and England, including the Fine Arts Museums of San Francisco and York Castle Museum. Exhibitions curated include the award-winning *Stop the Rot* at York Castle Museum, which aimed to raise public awareness of heritage conservation. Mary has been Head of Studies and Research at the Textile Conservation Centre and subsequently Reader and Programme Leader for their graduate program in Museums & Galleries. Mary developed her interest in textiles with a post-graduate Diploma in Textile Conservation at the Textile Conservation Centre. Mary also read English at Cambridge University,

Thea Van Oosten



Thea van Oosten is senior conservation scientist at the Cultural Heritage Agency (RCE), in movable heritage. In 1989 she initiated a research programme focused on modern materials, which she continues to develop. She is currently engaged in Fourier Transform Infrared Spectroscopy (FTIR) and Raman spectroscopy of plastics in modern and contemporary art and design objects of cultural heritage. She has contributed to several publications and books, including *Modern Art, Who Cares; Plastics, Collecting and Conserving; Plastics in Art; and PUR Facts*. She teaches in the Netherlands and abroad and has been involved in several International research projects, supported by both the private and public sectors, dealing with modern, contemporary art and design conservation topics. Thea recently retired from the RCE and continues to promote and advise on research into plastics and the conservation of modern and contemporary art on a freelance basis.

L.H. (Hugh) Shockey



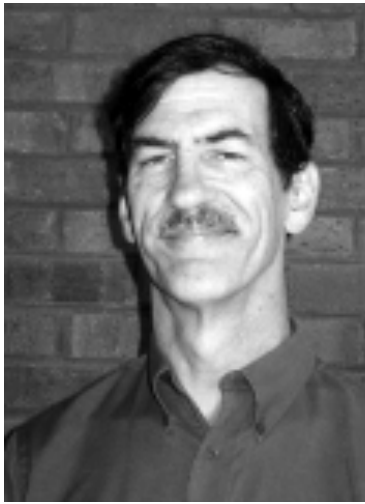
Hugh Shockey is an objects conservator at the Smithsonian American Art Museum, an internationally recognized collection with an active loan and exhibit programs. He has provided counsel on the care and treatment of a diverse range of cultural artifacts including modern and contemporary art, and collaborated with professional, lay and community members regarding care, storage and use of cultural materials. His research into treatment methods includes emerging technologies such as carbon dioxide (CO₂) snow, adhesive system design, and cleaning of sensitive surfaces. Hugh also contributes expertise in collections care, registration, and conservation to the foundation of the Smithsonian Haitian Cultural Recovery Center. Hugh holds a MS in Art Conservation from the University of Delaware/ Winterthur Program in Art Conservation.

Molly McGath



Molly McGath is a post-graduate research fellow at the Smithsonian's Museum Conservation Institute (MCI) and PhD candidate in the Materials Science and Engineering Department at the University of Arizona. She currently is writing her dissertation at MCI on mechanisms of degradation induced by triphenyl phosphate plasticizer in cellulose acetate plastics. Her work focuses on the intersection of understanding the mechanisms of degradation from chemical-molecular and structural-materials science viewpoints. Molly holds a Master's degree in Organic Chemistry from University of Arizona and a Bachelor's degree in Chemistry from University of Nebraska.

Robert Friedel



Robert Friedel is a renowned historian and Professor of History at the University of Maryland. He has published several engaging monographs in the history of technology, focusing largely on the nature of invention: *Pioneer Plastic*, *Edison's Electric Light*, and *Zipper: an Exploration in Novelty*. His latest book is an ambitious, wide ranging survey of Western Technology since the Middle Ages entitled *A Culture of Improvement: Technology and the Western Millennium*. His published articles and shorter works include studies of material culture and the history of technology and range from the history of materials to changes in the engineering profession. Previously, Robert was a historian at the Smithsonian Institution and at the Institute of Electrical and Electronics Engineers. He continues to consult and collaborate for museums and agencies in Washington DC and internationally. Robert holds a PhD in History of Technology, Science, and Environmental History from Johns Hopkins University.

Cory Bernat



Cory Bernat is a food historian, curator, and graphic designer who lives in Washington, DC. She is an eclectic scholar who has worked with a diverse range of public institutions including the National Park Service, The San Francisco Art Institute and the disguise branch of the Central Intelligence Agency. Cory's recent exhibit of food posters at the National Agricultural Library led to her current position as a member of the "Food & Wine History Project" at the Smithsonian Institution's National Museum of American History, where she is helping to create a new food-themed exhibition. Master's degrees in History and Library Science complement Cory's graphic design and fine arts background.

Jan Vozenilek



Jan Vozenilek, a cinematographer based in Kelowna, British Columbia, began his current cinematic journey with a surprising invitation that turned into a lifetime project and reels of stunning film footage. As part of a film crew working on the remote island of Midway Atoll in the North Pacific, Jan documents an ongoing, horrifically symbolic environmental tragedy effected by humans who live thousands of miles away. Midway, a tiny island only three kilometers long, is home to millions of Laysan albatrosses who cannot distinguish our plastic trash from their traditional seafood fare. In his presentation, Jan paints a vivid picture of the devastation caused by discarded toothbrushes, cigarette lighters, combs and other swirling garbage. In this process, he poses greater questions about what this tragedy means to society as a whole, and what can be done about it.

Pierre Comizzoli



Pierre Comizzoli is a gamete biologist at the Smithsonian Conservation Biology Institute and National Zoological Park, where he studies fertility and assisted reproduction for rare and endangered species. His comparative research of various wild and domestic animal species creates interesting bridges with human reproductive medicine. Pierre coordinates the Smithsonian's initiative to improve the management and use of biomaterial repositories. He also is in charge of conservation projects on wild carnivores and ungulates in Northern Africa and South-East Asia. In 2010 Pierre was recognized with a prestigious Presidential Early Career Award for Scientists and Engineers (PECASE). Pierre completed a doctorate in Veterinary Medicine at the National Veterinary School of Maisons-Alfort, a Master of Science degree in Reproductive Physiology from the University of Paris VI, as well as a PhD in Life Science at the University of Tours, all in France.

Mike Biddle



Mike Biddle is the founder of MBA Polymers, the world's leading multinational company dedicated to recovering plastics from complex wastes streams including end-of-life durable goods. MBA has more than 300 million pounds of annual processing capacity in the US, Europe and China. Some of the world's largest manufacturers use MBA's recycled material to replace virgin plastics in their new products. Mike and MBA have received numerous international awards, including the prestigious 2010 *Economist's* Innovation Award for Energy & Environment, a World Economic Forum Tech Pioneer, the first Thomas Alva Edison Award for Innovation and the first Ascent Award for Entrepreneurship. Mike received a BS in Chemical Engineering from the University of Louisville and a PhD in Polymer Science and Engineering from Case Western Reserve University, both with high honours, and was a Sloan Fellow at Stanford University's Business School Executive MBA program.