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**Plasma Medicine: Scientific Challenges and Technological Opportunities**

**Wednesday, December 8, 2010**

**Speaker Biographies**

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**Nadja Dahlhaus** received a masters degree in history, communication science and geography in 2006 from University of Greifswald. During her studies from 2002 to 2004 she was responsible for the project support “Campus Europae” in Greifswald which seeks to strengthen and accelerate the development of the sphere of European education by establishing examples of concrete cooperation. From 2006 to 2007 she worked as a freelance writer for several leading companies in the tourist industry. In 2007 Nadja Dahlhaus became the assistant to the director of the Leibniz Institute for Plasma Science and Technology e.V. (INP Greifswald). Besides office management, she is also responsible for press releases, speech writing and preparation of national and international talks. She attended the Project Management Professional training. She has been also responsible for project coordination and management since the beginning of the project “Campus PlasmaMed.”



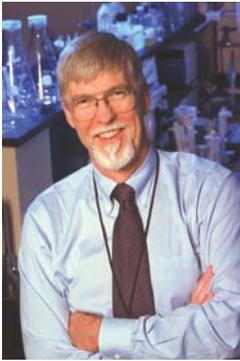
processes in plasma.

**Alexander Fridman** is Nyheim Chair Professor of Drexel University, director of the A.J. Drexel Plasma Institute, the founding President of the International Society for Plasma Medicine, and co-editor of the “Plasma Medicine” journal. His research focuses on plasma approaches to material treatment, fuel conversion, plasma assisted combustion, water treatment, environmental control, biology and medicine. Prof. Fridman has been conducting plasma research for over 35 years in universities and national laboratories in the USA, Russia and France. He has published 6 books, more than 500 papers, and received numerous awards, including Kaplan Distinguished Professorship in Chemical Kinetics, Soros Distinguished Professorship in Physics, and the State Prize of the USSR for discovery of selective stimulation of chemical



**Gary Friedman** received his PhD in Electrophysics from the University of Maryland. He was a member of the faculty of Electrical Engineering and Bioengineering at the University of Illinois at Chicago between 1991 and 2001. In 2001 he joined Drexel University as a Professor of Electrical Engineering and, since 2005, he has also been an Affiliated Professor of Surgery.

At Drexel, Prof. Gary Friedman directs the Plasma Medicine and Medical Engineering lab at the Drexel Plasma Institute. His research focuses on medical applications of plasma, electrostatic and magnetic phenomena. He is the outgoing Secretary of the International Society for Plasma Medicine and co-chaired the first two International Conferences on Plasma Medicine.



**Van P. Thompson** currently holds the position of Chair of Biomaterials and Biomimetics at New York University College of Dentistry. He earned his undergraduate and graduate degrees at Rensselaer Polytechnic Institute and later his dental training while a faculty member at the University of Maryland. Known for his work on bonded bridges, he has published many articles and made numerous presentations on dental biomaterials in the U.S. and internationally. He has chaired the ADA Council on Scientific Affairs and the 1997 Gordon Conference on The Science of Adhesion. His current research areas include practice-based research on post-operative hypersensitivity, deep caries and endodontic treatment outcomes, and laboratory research on new ceramics for layer crowns and their fatigue

behaviors, tissue engineering for alveolar ridge augmentation and enamel morphology and mechanics.



**Klaus-Dieter Weltmann** received his diploma degree in electronics and his doctorate (Dr. rer. Nat.) in applied physics from the University of Greifswald, Germany in 1989 and 1993, respectively. His work focused on nonlinear dynamics in low temperature plasmas and plasma diagnostics. In 1994 he was a visiting scientist in the Plasma Physics Laboratory at West Virginia University. In 1995 he joined ABB Corporate Research Ltd., Baden-Dättwil, Switzerland, where he worked on the development of high voltage (HV) and medium voltage (MV) switchgear. In 1998 he became the head of High Voltage Systems Group, ABB Corporate Research Ltd. In 2000 he was appointed to lead R&D of Gas Insulated Switchgear (GIS, PASS) at ABB High Voltage Technologies Ltd., Zurich, Switzerland, where in 2002 he became Business Unit R&D Manager GIS. Since 2003 he has been in charge of the Leibniz Institute

for Plasma Science and Technology e.V. (INP Greifswald). His present research interests include MV and HV switchgear, gas discharges at atmospheric pressure, nonlinear dynamics, and plasma medicine.



**Kurt H. Becker** is the Associate Provost for Research and Technology Initiatives and a Professor of Physics at Polytechnic Institute of NYU (NYU-Poly). He received his MS (Dipl. Phys.) and PhD (Dr. rer. nat.) degrees from the Universität des Saarlandes in Saarbrücken, Germany, in 1978 and 1981, respectively. Prior to joining NYU-Poly in 2007, he was on the faculty of Lehigh University (1984-1988), the City College of CUNY (1988-1997), and Stevens Institute of Technology (1997-2007). He is a Fellow of the American Physical Society, a recipient of the Thomas A. Edison Patent Award of the Research and Development

Council of New Jersey (2001), and he holds an Honorary Professorship from the Leopold Franzens Universität Innsbruck, Austria. He has published more than 200 peer-reviewed articles, edited or co-edited 10 books and Special Issues of professional journals. He was part of a successful commercialization of plasma technology for medical sterilization applications through a university spin-out company, PlasmaSol, which was acquired in 2005 by Stryker Instruments.