Exponent and Balazs Joint Seminar
Thin Films and Coatings

Chemical Analytical Methods, Materials Characterization and Testing Techniques

June 25th 2010
12:00 pm - 3:30 pm

Silicon Valley Conference Room
Exponent, Inc.
149 Commonwealth Dr.
Menlo Park, CA 94025

Register Today – Space is Limited

There is no charge to attend the symposium, but space is limited, so please register as soon as possible.

To register, please provide your name, title, company name, company email, special meal request if you have one and send to info@balazs.com

Questions?
Please send an email to info@balazs.com and we'll get back to you promptly.

The development of thin film science goes hand-in-hand with the explosion of technological breakthroughs in microelectronics, optics, biomedical engineering, energy and nanotechnology. Choosing appropriate thin film testing and characterization technique is the key to evaluate the property of thin films and to improve the relevant product performance. For over 40 years, Exponent's multidisciplinary team of scientists, physicians, engineers and regulatory consultants has dedicated to helping our clients solving complex technical problems in myriad areas, including surface and thin film science. On June 25th, we will be holding a joint seminar with Air Liquide – Balazs NanoAnalysis at our Menlo Park office. Attendees will increase their knowledge of chemical analytical methods, materials characterization and testing techniques for thin films and coatings. Audience will also achieve better understanding of how these techniques can be applied most effectively on different materials systems, thin film structures, or to different technologies and R&D areas.

Seminar Agenda

12:00 - 12:20 pm	Registration and Lunch for all Attendees
12:25 - 12:30 pm	Welcome and Introduction
12:30 - 1:10 pm	Chemical, Structural, and Surface Analysis of Various Coatings and Thin Films by Dr. Hugh Gotts, Balazs
1:10 - 1:30 pm	Mechanical Testing on Thin films and Coatings by Dr. Eric Guyer, Exponent
1:30 - 2:00 pm	Seeing the Invisible - Microstructural Characterization of Thin Films by Dr. Zixiao Pan, Exponent
2:00 - 2:30 pm	Exponent Laboratory Tour
2:30 - 3:30 pm	General Discussion, Questions and Answers

Exponent Failure Analysis Associates (Exponent, Inc.) is a leading engineering and scientific consulting firm providing solutions to complex technical problems. Exponent offers more than 90 different disciplines through a network of 20 U.S. and 5 international locations. Our staff totals over 850 and includes more than 350 Ph.D.s and M.D.s. Our team performs either in-depth scientific research and analysis, or very rapid-response evaluations, to provide our clients with the critical information that both day-to-day and strategic decisions can require. The joint effort of our experimental testing and analytical modeling specialists encourages a constant cross-fertilization of productive ideas, provides a unique insight into our clients' concerns, and differentiates us from other consultants. This comprehensive approach enables us to offer high-quality, cost-effective services.

Balazs NanoAnalysis, a division of Air Liquide Electronics, operates ISO 17025 accredited laboratories that specialize in chemical, structural, and surface analysis of various high-tech materials. Balazs' expertise covers solids, liquids and gases used in semiconductor, disk drive, aerospace, metallurgical, nano-tech, optoelectronic, pharmaceutical, power, solar, and other industries. With every analysis, Balazs brings over 35 years of experience to help engineers control and develop their processes. Balazs laboratories are located in Dallas, TX, Fremont, CA and Paris, France. As a part of the Air Liquide Group, our global presence (130 subsidiaries in more than 70 countries) allows us to combine the resources and expertise of a global enterprise with a powerful local presence based on independent customer-focused teams.

BALAZS nanoanalysis

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Engineering and Scientific Consulting

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Registration Information and Speakers

Register Today - Please register as soon as possible by providing the information below in your email to info@balazs.com or by fax: 510-657-2292

Name:_____

Company Name:_____

Address:_____

City:_____

State:_____ Zip/Postal Code:_____

Country:_____

Additional Attendees:

1._____

2._____

3._____

Speakers

Dr. Eric Guyer is a Senior Managing Engineer in Exponent's Mechanical Engineering and Materials/ Metallurgy practice. Eric received a B.S. in Chemical Engineering from Iowa State University, a M.S. and a Ph.D. in Materials Science and Engineering from Stanford University. His areas of expertise include the fracture mechanics and fatigue of bulk materials as well as thin-films, paints and protective coatings, and more generally, materials science (metallurgy, polymers, ceramics, and glass). Prior to joining Exponent, he was employed as a Senior Materials Engineer at Lockheed Martin's Advanced Technology Center in Palo Alto (2000–2005). There he examined the oxidation kinetics of advanced high temperature ceramics and investigated the fracture, mechanical and optical properties of polymer thin-films.

Dr. Zixiao Pan works as a Senior Engineer at Mechanical Engineering and Materials Science Practice at Exponent. Zixiao is a California Licensed Professional Metallurgical Engineer. She received a B.S. and a M.S. in Materials Science and Engineering from Tsinghua University in Beijing and a Ph.D. in Materials Science and Engineering from Northwestern University. Her areas of expertise include synthesis and mechanical property measurement of ceramics, sol-gel synthesis of thin films and ultra-fine powders, and micro-fabrication of semiconductors and functional oxides. She has extensive hands-on experience in advanced microstructural characterization and microfabrication techiniques. Prior to joining Exponent, Dr. Pan worked at Northwestern University Atomic and Nanoscale Characterization Experimental Center (NUANCE) for 3 years, where she managed laboratory equipments and provided user support and training on various electron microscopes and atomic force microscopes.

Dr. Hugh Gotts is the Director of Research and Development at Air Liquide – Balazs NanoAnalysis in Fremont, CA. Hugh received a B.A. in Anthropology from UCLA, a B.S. in Radiochemistry and M.S. in Analytical Chemistry from San Jose State University, and a Ph.D. in Physical Chemistry from University of California at Santa Cruz. Dr. Gotts has over 30 years experience in the application of analytical chemistry to problem solving and process monitoring in the semiconductor and disk drive industries. Hugh is a member of the SEMI North American Photovoltaic Standards Committee, Analytical Test Methods Task Force, among other activities.

We're looking forward to seeing you at Balazs and Exponent Joint Seminar!

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