



ADVANCED STUDY INSTITUTE
OPTICAL WAVEGUIDE SENSING & IMAGING
in Medicine, Environment, Security and Defence

October 12-21, 2006, Holiday Inn Plaza la Chaudière, Gatineau, Québec

Organized By: Université du Québec en Outaouais, Gatineau, Québec, Canada
Tel Aviv University, Tel Aviv, Israel
Vitesse Re-Skilling™ Canada Inc. , Kanata, Ontario, Canada

Objectives

The objective of the ASI is to build a creative advanced research and learning environment by bringing together world experts, researchers, Ph.D. students and postdoctoral fellows from industry, university and government research organizations. The ASI will explore various aspects of both applied research and commercialization of existing and emerging optical waveguide, fiber, micro and nanophotonics imaging and sensing technologies as well as their current and potential applications in the biomedical sciences, environment, security and defence.

Scientific Directors:

Dr. Wojtek J. Bock, Professor
Département d'informatique et d'ingénierie
Université du Québec en Outaouais
Québec, Canada

Dr. Israel Gannot, Professor
Tel Aviv University, Tel Aviv, Israel
School of Eng. & Applied Sciences
George Washington University, DC, USA

Scientific Secretary: Dr. Stoyan Tanev, Innovation Development Officer, Ottawa-Gatineau Innovation Alliance

The Advanced Study Institute will be held in conjunction with the:
ADVANCED TECHNOLOGY COMMERCIALIZATION WORKSHOP
OPTICAL IMAGING AND SENSING

October 16, 2006, Holiday Inn Plaza la Chaudière, Gatineau, Québec

Organized By: **Ottawa-Gatineau University-College Innovation Alliance**
and the Ottawa Photonics Cluster

The objective of the Advanced Technology Commercialization Workshop is to provide an efficient mechanism for the commercialization of advanced technologies developed by regional, national and international academic and government research organizations. Its main focus will be on establishing commercialization partnerships and business venture development activities by matching the interests of industrial, academic and government research groups, commercialization funding agencies, VCs and angel investors. The morning session will be in the form of a series of invited talks discussing technology commercialization best practices and issues in Canada, USA, Europe, Asia and Japan. The afternoon session and evening reception will merge into a *technology showcase forum*.

INNOVATION ALLIANCE

Dr. Stoyan Tanev, T: (613) 562-5800 x1681, M: (613) 220-2995
E-mail: stanev@uottawa.ca



ADVANCED STUDY INSTITUTE - INVITED SPEAKERS

Rick Claus

Virginia Tech, Blacksburg, VA, USA

Self-assembled nanostructured fibers and sensors

Karl Fridrich Klein

Friedberg Gissen University, Germany

UV fibers: materials, properties and applications

Jim Harrington

Rutgers University, NJ, USA

Infrared fiber optic sensors

Laser power delivery using infrared fiber optics

Anders Bjarklev

Research Center COM, Technical University of Denmark

Sensors and active devices based on hybrid photonic crystal fiber structures

Ilko Ilev

Food and Drug Administration – CDRH, MD, USA

Fiber optics nanobiosensors for biomedical applications

Julian Jones

Heriot-Watt University, UK

Optical fiber interferometric sensing systems

Tinko Eftimov

Plovdiv University, Sofia, Bulgaria

Applications of traditional and long period fiber Bragg gratings

Jacques Albert

Carleton University, Ottawa, ON, Canada

Novel sensing mechanisms using tilted fiber Bragg gratings

Brian MacCraith

Biomedical Diagnostics Institute, NCSR, Ireland

Enhanced fluorescence-based sensors

Xiaoyi Bao

University of Ottawa, ON, Canada

Fiber sensor development for health monitoring of civil structures

Siegfried Janz

Institute for Microstructural Sciences-NRC, Canada

Francis Berghmans

Belgium Nuclear Research Centre (SCK-CEN), Belgium

Ionising radiation effects and reliability of optical fiber components

Ulrich Krull

University of Toronto at Mississauga, ON, Canada

Optical waveguides as a platform for detection of DNA hybridization

Leonid Butvina

Prohorov GPI RAS, Moscow, Russia

FTIR ATR infrared fiber sensors for field environmental and bio-chemical reactor monitoring

Wojtek Bock

Univeristé du Québec en Outaouais, Gatineau, QC, Canada

Optical fiber sensing technologies for explosive detection

Israel Gannot

George Washington University, USA and Tel Aviv

University, Israel

Sensors for the smart medical home

Yuji Matsuura

Tohoku University, Sendai, Japan

Deep UV, x-ray laser and Raman waveguides for medical treatments

Stoyan Tanev

Innovation Alliance, Ottawa, ON, Canada

Simulation tools for light wave scattering and propagation modeling – implications for biomedical research

Jessica Ramella Roman

The Catholic University of America, DC, USA

Polarized light imaging of skin- surface and subsurface effects

Tomasz R. Wolinski

Warsaw University of Technology, Poland

Photonic Liquid Crystal Fibers - new sensing opportunities

****detailed program available at www.vitesse.ca**

Advanced Study Institute Participation Cost: \$2,000 CAD (US\$ 1,700 or EURO 1,380) + 7% tax

Cost includes shared accommodation, breakfast, lunch, coffee breaks, receptions, course materials, an excursion and your participation in the one-day advanced technology commercialization workshop

To Apply Contact: Annalisa Garbe, Vitesse Program Coordinator, T: (613) 254-9880 x221, E: annalisa.garbe@vitesse.ca

ADVANCED TECHNOLOGY COMMERCIALIZATION WORKSHOP PROGRAM

October 16, 2006, Holiday Inn Plaza la Chaudière, Gatineau, Québec

8:30am - 12:30pm: Invited talks and panel discussion

2:00pm - 6:00pm: Technology Showcase Forum

6:30pm - 9:00pm: Reception

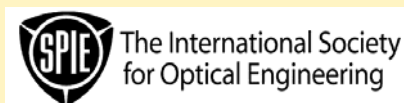
****detailed program available at www.vitesse.ca**

Workshop Cost (in CAD\$): Participants: Regular: \$125, Student: \$95
Exhibitors: Academic: \$295, Corporate: \$395

For More Information Contact:

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Cooperating Organization



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