

Advanced Study Institute on Optical Waveguide Sensing and Imaging
October 12-21, 2006, Holiday Inn Plaza la Chaudière, Gatineau



DETAILED PROGRAM

Wednesday, October 11 Arrival of participants

Thursday, October 12

07:30am - 08:30am	Breakfast	
08:30am - 08:40am	Official opening – Bock, Gannot, Tanev	
08:40am - 09:30am	<i>Introduction of participants</i>	
09:30am - 10:30am	<i>Reliability of optical components</i>	F. Berghmans
10:30am - 11:00am	Coffee break	
11:00am - 12:00pm	<i>Fiber-optic biosensors and nanobiosensors - fundamentals</i>	I. Ilev
12:00pm - 01:00pm	Lunch	
02:45pm - 03:00pm	Coffee break	
03:00pm - 04:00pm	<i>Novel sensing mechanisms using tilted fiber Bragg gratings-I</i>	J. Albert
04:00pm - 05:00pm	<i>Silicon-based microphotonics for biosensing applications</i>	S. Janz

Friday, October 13

07:30am - 08:30am	Breakfast	
08:30am - 09:30am	<i>Ionising Radiation Effects on Optical Components</i>	F. Berghmans
09:30am - 10:30am	<i>Fiber-optic biosensors and nanobiosensors - applications</i>	I. Ilev
10:30am - 11:00am	Coffee break	
11:00am - 12:00pm	<i>Photonics simulation tools and biomedical imaging</i>	S. Tanev
12:00pm - 01:00pm	Lunch	
02:45pm - 03:00pm	Coffee break	
03:00pm - 04:00pm	<i>Novel sensing mechanisms using tilted fiber Bragg gratings-II</i>	J. Albert
04:00pm - 05:00pm	<i>Enhanced fluorescence-based sensors-I</i>	B. MacCraith

Saturday, October 14

08:00am - 09:00am	Breakfast	
09:00am - 10:00am	<i>Enhanced fluorescence-based sensors-II</i>	B. MacCraith
10:00am - 11:00am	<i>Fiber sensor for health monitoring of civil structures-I</i>	X. Bao
11:00am - 11:15am	Coffee break	
11:15am - 12:15pm	<i>Applications of traditional and long period fiber Bragg gratings</i>	T. Eftimov
12:15pm - 01:30pm	Lunch	
02:45pm - 03:00pm	Coffee break	
03:00pm - 05:00pm	Interest groups meetings	

Sunday, October 15

08:00am - 09:00am	Breakfast	
09:00am - 12:00am	Excursion	
12:00am - 01:00pm	Lunch	
02:45pm - 03:00pm	Coffee break	
03:00pm - 04:00pm	<i>Waveguide platforms for detection of DNA hybridization</i>	U. Krull
04:00pm - 05:00pm	<i>Fiber sensor for health monitoring of civil structures-II</i>	X. Bao
05:00pm - 06:00pm	<i>Biosensing configurations using guided wave resonant structures</i>	I. Abdulhalim

Monday, October 16

ADVANCED TECHNOLOGY COMMERCIALIZATION WORKSHOP

07:45am-08:25am Breakfast

Morning session: Academic Research Commercialization Best Practices

08:25am-08:35am Welcoming remarks
08:35am-09:00am Bill Mantel, Director, Commercialization Branch, Ontario Ministry of Research & Innovation
Academic Research Commercialization within a Global Economy Context
09:00am-09:25am Karl-Friedrich Klein, University of Applied Sciences, Friedberg, Germany
Photonics Commercialization Experiences in Germany
09:25am-09:50am Yuji Matsuura, Tohoku University, Japan
Biomedical Photonics Commercialization in Japan
09:50am-10:15am Frank Shepherd, Group Leader, Canadian Photonics Fabrication Centre
Institute for Microstructural Sciences, NRC Canada
The Commercialization Strategy of CPFC
10:15am-10:30am Coffee break
10:30am-10:55am Rick Claus, Virginia Tech and NanoSonic, Inc, USA
Commercialization of Nanotechnologies
10:55am-11:20pm Tony Bailetti, Carleton University & Talent First Initiative
Competing in open environments – the case of open source
11:20am-11:45pm Joe Irvine, TTBE, University of Ottawa
The Ottawa Technology Transfer Network
11:45am-11:55pm Rana Pudifin, Global Partnership Program,
Foreign Affairs and International Trade Canada
*The Global Partnership Program – an International Technology
Commercialization Vehicle*
11:55am-12:20pm Julian Jones, Heriot-Watt University, Edinburgh, UK
Knowledge Transfer and Universities: a UK Perspective
12:20pm-12:30pm Q&As
12:30pm-02:00pm Lunch and networking

Afternoon session: **International Advanced Technology Showcase
Optical Sensing and Imaging**

02:00pm-02:25pm Sean Caulfeild, Perley-Robertson, Hill & McDougall LLP
Technological entrepreneurship options for Universities
02:25pm-02:50pm Brian Wilson, Ontario Cancer Institute and University of Toronto
*Laboratory for Applied Biophotonics: A Model for Interactions between
Research Institutions and Industry*
02:50pm-03:15pm Coffee break

Company presentations

03:15pm-03:45pm FISO Technologies Inc.
03:45pm-04:10pm ART Advanced Research Technologies Inc.
04:10pm-04:35pm LxSix Photonics Inc.
04:35pm-05:00pm Peleton Inc.
05:30pm-08:30pm Reception, networking and closing

Tuesday, October 17

07:30am - 08:30am	Breakfast	
08:30am - 09:30am	<i>Self-assembled nanostructured fibers and sensors</i>	Rick Claus
09:30am - 10:30am	<i>UV, x-ray laser and Raman waveguides for medical treatments-I</i>	Y. Matsuura
10:30am - 11:00am	Coffee break	
11:00am - 12:00pm	<i>Microfluidics for waveguide-based DNA biosensors</i>	U. Krull
12:00pm - 01:00pm	Lunch	
02:00pm - 02:45pm	<i>Optical Bio-imaging from single molecule to the patient</i>	B. Wilson
02:45pm - 03:00pm	Coffee break	
03:00pm - 04:00pm	<i>New analytical applications of UV-waveguides</i>	K.-F. Klein
04:00pm - 05:00pm	<i>UV, x-ray laser and Raman waveguides for medical treatments-II</i>	Y. Matsuura
06:00pm - 07:00pm	Poster presentations	

Wednesday, October 18

07:30am - 08:30am	Breakfast	
08:30am - 09:30am	<i>Polarized light imaging of skin surface effects</i>	J. C. Ramella-Roman
09:30am - 10:30am	<i>Optical fiber interferometric sensing systems-II</i>	Julian Jones
10:30am - 11:00am	Coffee break	
11:00am - 12:00pm	<i>Optical fiber interferometric sensing systems-I</i>	Julian Jones
12:00pm - 01:00pm	Lunch	
02:45pm - 03:00pm	Coffee break	
03:00pm - 04:00pm	<i>Gas-sensing with hollow-core-waveguides</i>	K.-F. Klein
04:00pm - 05:00pm	<i>Modeling of polarized light transport into scattering media: Polarized light Monte Carlo</i>	J. C. Ramella-Roman

Thursday, October 19

07:30am - 08:30am	Breakfast	
08:30am - 09:30am	<i>Sensors for the smart medical home</i>	Israel Gannot
09:30am - 10:30am	<i>Infrared fiber optic sensors</i>	J. Harrington
10:30am - 11:00am	Coffee break	
11:00am - 12:00pm	<i>FTIR ATR infrared fiber sensors for environmental and bio-chemical reactor monitoring-I</i>	L. Butvina
12:00pm - 01:00pm	Lunch	
02:45pm - 03:00pm	Coffee break	
03:00pm - 04:00pm	<i>Optical fiber nanoparticle bioimaging</i>	Israel Gannot
04:00pm - 05:00pm	<i>Photonic liquid crystal fibers - new sensing opportunities-I</i>	T. Wolinski

Friday, October 20

07:30am - 08:30am	Breakfast	
08:30am - 09:30am	<i>Laser power delivery using infrared fiber optics</i>	J. Harrington
09:30am - 10:30am	<i>Scientific misconduct</i>	J. Harrington
10:30am - 11:00am	Coffee break	
11:00am - 12:00pm	<i>Optical fiber sensing technologies for explosive detection</i>	W. Bock
12:00pm - 01:00pm	Lunch	
02:45pm - 03:00pm	Coffee break	
03:00pm - 04:00pm	<i>Photonic liquid crystal fibers - new sensing opportunities-II</i>	T. Wolinski
04:00pm - 05:00pm	<i>FTIR ATR infrared fiber sensors for environmental and bio-chemical reactor monitoring-II</i>	L. Butvina

Saturday, October 21

08:30am - 10:30am	Breakfast and closing	
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