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	*Introduction of participants*	
09:30am - 10:30am	*Reliability of optical components*	F. Berghmans
10:30am - 11:00am	Coffee break	
11:00am - 12:00pm	*Fiber-optic biosensors and nanobiosensors - fundamentals*	I. Ilev
12:00pm - 01:00pm	Lunch	
02:45pm - 03:00pm	Coffee break	
03:00pm - 04:00pm	*Novel sensing mechanisms using tilted fiber Bragg gratings-I*	J. Albert
04:00pm - 05:00pm	*Silicon-based microphotonics for biosensing applications*	S. Janz

Friday, October 13

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

Saturday, October 14

08:00am - 09:00am	Breakfast	
09:00am - 10:00am	*Enhanced fluorescence-based sensors-II*	B. MacCraith
10:00am - 11:00am	*Fiber sensor for health monitoring of civil structures-I*	X. Bao
11:00am - 11:15am	Coffee break	
11:15am - 12:15pm	*Sensor applications of FBGs and LPGs*	T. Eftimov
12:15pm - 01:30pm	Lunch	

Sunday, October 15

07:30am - 08:30am	Breakfast	
09:00am - 12:00am	Visit to the Canadian Museum of Civilization	
12:30am - 01:30pm	Lunch	
02:45pm - 03:00pm	Coffee break	
03:00pm - 04:00pm	*Waveguide platforms for detection of DNA hybridization*	U. Krull
04:00pm - 05:00pm	*Fiber sensor for health monitoring of civil structures-II*	X. Bao
05:00pm - 06:00pm	*Biosensing configurations using guided wave resonant structures*	I. Abdulhalim

Monday, October 16

ADVANCED TECHNOLOGY COMMERCIALIZATION WORKSHOP

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

Wednesday, October 18

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

Thursday, October 19

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

Friday, October 20

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

Saturday, October 21

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