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IARP Executive Committee

President	<i>N. Caplan</i>
Vice-President	<i>G. Pegman</i>
Executive Secretary	<i>E. Dombre</i>
JCF 2011 Chair	<i>M.-S. Kim</i>

Time Schedule for Paper Submission

The contribution should focus on theories, principles and developments which have been explicitly developed for (terrestrial, aerial, underwater) robots , and carried sensor systems for environmental surveillance, risky interventions (safety, rescue, humanitarian de-mining , a.o.) An abstract (approximately 300 words in English) should be received not later than **30. May 2012**. Electronic submissions of the abstracts (Word, PS-format, PDF-files) should be mailed to:

a.maslowski@imm.org.pl
yvan.baudoin@rma.ac.be
geert.de.cubber@rma.ac.be

- ⌚ Deadline for abstracts: 30. May 2012
- ⌚ Selection of abstracts: 15. June 2012
- ⌚ Receipt of full papers: 15. July 2012

Local Organization Committee

Workshop inquiries to:

IARP Workshop *Risky Interventions and Environmental Surveillance RISE 2012*
Andrzej Maslowski
Institute of Mathematical Machines
ul. Krzywickiego 34
02-078 Warsaw,
Poland

Venue

The workshop will take place in Warsaw. Presentation will be held at the conference centre of the Institute of Mathematical Machines (11 - 13.09.) and the technical visit will be held at various anti-crisis centers, located near Warsaw (13.09.).

INSTYTUT MASZYN MATEMATYCZNYCH
02-078 Warszawa, ul. Ludwika Krzywickiego 34, tel. 0 22 621 84 41, fax 0 22 629 92 70, www.imm.org.pl



INTERNATIONAL ADVANCED ROBOTICS PROGRAMME

Sixth International Workshop on

Robotics for Risky Interventions and Environmental Surveillance-Maintenance

6th IARP RISE'2012

11-13 September 2012

Warsaw, Poland

Call for Papers



MINISTERSTWO
GOSPODARKI



POLSPAR

POLSKIE STOWZRODZENIE
POMIAROW, AUTOMATYKI I ROBOTYKI
POLISH SOCIETY FOR MEASUREMENT,
AUTOMATIC CONTROL AND ROBOTICS
Członek 39
00-000 WARSZAWA



POLITECHNIKA WARSZAWSKA

Background

The general objective of the International Advanced Robotics Programme (IARP) is to encourage development of advanced robotic systems that can dispense with human work for difficult activities in harsh, demanding, or dangerous environments, and to contribute to the revitalization and growth of the world economy.

Through this sixth workshop, the IARP working group **RISE** (Risky Intervention and Surveillance /Maintenance of the Environment) and the FP7 - ICARUS and TIRAMISU Consortia focusing on Robotics for Search and Rescue Operations or Humanitarian Demining organize dedicated sessions on next topics: Toolbox Implementation for Removal of Anti-personnel Mines, Submunitions and UXO as well as Integrated Components for Assisted Rescue and Unmanned Search Operations.

Scope and Topics

Robotics solutions properly sized with suitable modularized mechanized structure and well adapted to local conditions of un-structured, sometimes unknown fields can greatly improve the safety and the security of personnel as well as work efficiency, productivity and flexibility. Solving this problem presents challenges in robotic mechanics and mobility, sensors and sensor fusion, autonomous or semi autonomous navigation and machine intelligence.

The workshop will review and discuss the available risky intervention/environmental surveillance technologies along with their limitations and discusses the development efforts to automate tasks related to reconnaissance/ detection / decontamination / neutralization process wherever possible through robotization. Specific topics include but are not limited to:

- Inspection of fire or crisis/disaster's areas
- CBRN-E threats, Demining actions
- Map building and reconstruction
- Networked crisis management tools
- Human-Machine Interfaces
- Remote controlled, semi-autonomous, autonomous
- Robot (UGV, UAV, USV) navigation
- Networked Multi-robot cooperation
- Swarm of robots

Sponsorship

This Workshop is sponsored by Belgium, Germany, France, Korea, Poland, Russia, UK and USA.

International Programme Committee

Belgium	Geert De Cubber Co-chairman	Royal Military Academy
France	Simon Lacroix	LAAS-CNRS, Toulouse
Germany	Rüdiger Dillmann,	Universität ,Fakultät für Informatik, Karlsruhe
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Russia	V. Gradetsky	Institute for Problems in Mechanics, Moscow
U.K	G. Pegman	RURobots, Manchester
USA	Jim Overholt	Dir. Joint Ground Robotics Enterprise

FP7 ICARUS - TIRAMISU

The ICARUS project aims at development of a light sensor capable of detecting human beings, cooperative UAS, UGV, USV tools for USAR, heterogeneous robot collaboration between USAR devices (CTAE), a self-organizing cognitive wireless communication network, assuring network interoperability, integration of USAR tools in the C4I systems of the Human Search And Rescue forces as well as development of a training and support system of the developed Unmanned Search And Rescue for the Human Search And Rescue teams.

The TIRAMISU project aims at providing the foundation for a global toolbox that will cover the main Mine Action activities, from the survey of large areas to the actual disposal of explosive hazards, including Mine Risk Education. These tools will have been designed with the help of end-users and validated by them in mine affected countries.

Registration of Interest form

6th IARP Workshop on
**‘Robotics for Risky Interventions
and Environmental Surveillance-
Maintenance’**
11-13 September 2012

Please type or write in block letters.

Name/Title:

Address:

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Phone:

Fax:

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I plan to attend the Workshop

Please return this form to
a.maslowski@imm.org.pl
Yvan.baudoin@rma.ac.be
Geert.de.cubber@rma.ac.be