

## IARP Member and Observer Countries

<b>Australia</b>	<i>Hugh Durrant-Whyte</i>
<b>Austria</b>	<i>P. Kopacek</i>
<b>Belgium</b>	<i>Y. Baudoin</i> <i>H. Bruyninckx,</i> <i>P. Dehombreux</i>
<b>Brazil</b>	<i>Liu Hsu</i>
<b>Canada</b>	<i>E. Dupuis</i>
<b>China, P.R</b>	<i>Qiang Huang</i>
<b>European Commission (Observer)</b>	<i>P. Karp</i> <i>Wolfgang Boch</i>
<b>France</b>	<i>Philippe Bidaud</i> <i>Etienne Dombre</i>
<b>Germany</b>	<i>R. Dillmann</i>
<b>Italy</b>	<i>C. Moriconi</i>
<b>Japan</b>	<i>Kazuhito Yokoi</i>
<b>Korea</b>	<i>Mun-Sang Kim</i>
<b>Poland</b>	<i>A. Maslowski</i>
<b>Russia</b>	<i>V. Gradetsky</i>
<b>Spain</b>	<i>M. Armada</i>
<b>United Kingdom</b>	<i>G. Pegman</i>
<b>USA</b>	<i>Michael M. Reischman</i>

## IARP Executive Committee

<b>President</b>	<i>N. Caplan</i>
<b>Vice-President</b>	<i>G. Pegman</i>
<b>Executive Secretary</b>	<i>G. Giralt</i>
<b>JCF 2011 Chair</b>	<i>Philippe Bidaut</i>

## Time Schedule for Paper Submission

The contribution should focus on theories, principles and developments which have been explicitly developed for (terrestrial, aerial) 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 15 April 2011. Electronic submissions of the abstracts (Word, PS-format, PDF-files) should be mailed to:

[yvan.baudoin@rma.ac.be](mailto:yvan.baudoin@rma.ac.be)  
[frank.schneider@fkie.fraunhofer.de](mailto:frank.schneider@fkie.fraunhofer.de)

- ⌘ Deadline for abstracts: 15 April 2011
- ⌘ Selection of abstracts: 30. April 2011
- ⌘ Receipt of full papers: 27 May 2011

## Local Organization Committee

Workshop inquiries to:

Workshop *'Risky Interventions and Environmental Surveillance RISE 2010*

Yvan Baudoin  
Royal Military Academy  
30 Av de la Renaissance  
B1000 Brussels Belgium

ELROB inquiries to:

C-ELROB 2011

Frank E. Schneider  
eMail: [elrob@fkie.fraunhofer.de](mailto:elrob@fkie.fraunhofer.de)

IARP Workshop at R.M.A  
Royal Military Academy



**INTERNATIONAL ADVANCED  
ROBOTICS PROGRAMME**

**Fifth International Workshop**

on

**Robotics for risky  
interventions and  
Environmental Surveillance-  
Maintenance**

**5<sup>th</sup> IARP RISE'2011**

**20-22 June**

**C-ELROB 2011**

**21-24 June**

**Brussels - Leuven**

**Call for Papers**



**FNRS**



## Background

The general objective of the International Advanced Robotics Programme (IARP) is to encourage the 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 fifth workshop, the IARP working group **RISE** (Risky Intervention and Surveillance /Maintenance of the Environment) and the NATO-RTO AVT, IST, and SCI Task groups focusing on military Robotics ([www.rta.nato.int](http://www.rta.nato.int)) organise dedicated sessions on next topics:

## 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
- 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 the next IARP Countries

Belgium	Yvan Baudoin <b>Co-chairman</b>	Royal Military Academy
France	Simon Lacroix	LAAS-CNRS, Toulouse
Germany	Rüdiger Dillmann, Frank Schneider <b>Co-chairman</b>	Universität ,Fakultät für Informatik, Karlsruhe FhG-FKIE, Wachtberg (NATO RTO)
Korea	C-W. Lee	Korea Institute of Science and Technology, Seoul
Poland	A. Maslowski	University of Warsaw
Russia	V. Gradetsky	Institute for Problems in Mechanics, Moscow
U.K	G. Pegman	RURobots, Manchester
USA	Jim Overholt	Dir. Joint Ground Robotics Enterprise

## C – ELROB 2011

The annual ELROB competition allows demonstrating and comparing the capabilities of unmanned systems in realistic scenarios and terrains. Therefore, it is as close as possible to the typical deployment scenario for today. We believe that we are all committed to demonstrating at ELROB is presenting cutting edge robotics technology, applied to real world applications, that can save lives now and shape the direction of

research for the short and medium term. ELROB will enable Europe to re-engage in the benefits robotics can deliver now and the future.

**The detailed scenarios will be described on [www.elrob.org](http://www.elrob.org) by end of May 2011.**

**The C-ELROB will take place in Leuven (Belgium) from 20 - 24 June 2011**

## IARP WG RISE- IPC

5<sup>th</sup> IARP Workshop on

## ‘Robots for Risky Interventions and Environmental Surveillance-Maintenance’ 20-22 June 2011

Charles Bostater	USA
Enric Cervera	ESP
Jacques.Penders	GBR
Manuel Armada	ESP
Honghai Liu	GBR
Lino Marques	POR
Fabio P. Bonsignorio	ITA
Humberto Martinez Barbera	ESP
Andrzej Maslowski	POL
Karsten Berns	DEU
Peter Kopacek	AUS
Rezzia.Molfino	ITA
Emin Faruk Kececi	TRK
Maki K. Habib	EGY
Giovanni Muscato	ITA
Raúl Sebastián	ESP
Rüdiger Dillmann	DEU
Geert De Cubber	BEL