



Informal Meeting of the IFAC Officers Laxenburg, Austria, 13 – 14 April, 2012

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Laxenburg 2012

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Contributed by Prof Iven Mareels
Chair, Technical Board of IFAC

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The IFAC Officers convened at the Secretariat in Laxenburg 13-14 April for the 2012 Informal Officers' Spring Meeting. This tradition stems from the IFAC presidency of Professor Yoshikazu Sawaragi (1981 - 1984), when international communications were slower and more costly, but continues today, because it is often more productive to meet and discuss issues in person than via email or chat program. It is also a time for IFAC to acknowledge its ties to and support from Austria.

IFAC traditionally presents a yearly lecture at an Austrian university. The following presentation was given by IFAC Treasurer, Professor Lino Guzzella at Vienna Technical University

Engineering Options for the Automobile of the Future Abstract

The level of individual mobility of any society is intimately related to its affluence. Obviously, well-developed public and private transportation systems offer many benefits, but cause relevant problems as well. This presentation focuses on automobiles and on two closely related problems, i.e., the emission of carbon dioxide and the consumption of primary energy resources. A comprehensive description of the current situation is given and some of the most important options available for future improvements are described, highlighting the role that automatic control systems can play in this development.

As per IFAC tradition, a dinner hosted by IFAC's president was held on Thursday evening before the start of the meeting. This year's dinner had

a total of 52 people in attendance. In addition to the current officers, staff members, and invited Austrian guests, IFAC was fortunate to welcome the members of the Publications Managing Board (PUMB) in town for their annual meeting—this year held at the Vienna Technical University, as well as former IFAC Presidents Brian D.O. Anderson (Australia, 1990-1993), Stephen Kahne (USA, 1993-1996), Yong-Zai Lu (China, 1996-1999), Pedro Albertos (Spain, 1999-2002), Vladimir Kucera (Czech Republic, 2002-2005), Wook-Hyun Kwon (Korea, 2005-2008), and Alberto Isidori (Italy, 2008-2011.)

This year's dinner honored longtime staffers Barbara Aumann and Ernestine Rudas who are retiring from IFAC after 34 and 27 years of service respectively. Former IFAC President Brian Anderson and current President Ian Craig gave speeches in honor of both ladies. IFAC wishes both ladies happy and healthy retirements.

New IFAC staff member Katharina Willixhofer was introduced to the IFAC community at the dinner and meeting. She is working with Elske Haberl and Harald Albrecht in the Secretariat in Laxenburg.

Various topics were presented and discussed in preparation for the upcoming Council meeting, to be held in conjunction with the MMM 2013 Workshop in Gifu, Japan from 10-12 September 2012. Among them were the expressions of interest for the IFAC World Congress in 2020, as well as the ongoing strategic planning.

The date for the 2013 Informal Meeting in Laxenburg was scheduled to be held in Laxenburg from 4-6 April 2013.

Changes at the IFAC Secretariat

Already a year ago, the IFAC Secretariat started to prepare for a generational change at its Laxenburg office. Considering the fact that both Barbara Aumann and Ernestine Rudas are due for retirement in 2012, a first new employee was found more than a year ago in the person of Mrs. Elske Haberl, who is now taking over the position of Barbara Aumann as Deputy Secretary. In December 2011, a second new employee was taken on, Ms. Katharina Willixhofer, who will be introduced to Newsletter readers in on the next issues of the IFAC NL. In all this time, both Barbara Aumann and Ernestine Rudas were still there to help the new staff in learning to deal with the many and varied tasks at the Secretariat.

On April 12, in the framework of the dinner held at the annual Informal Meeting of the IFAC Officers, there was occasion to say IFAC's good byes to both Barbara and Ernestine.



Barbara Aumann

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Barbara Aumann started her employment with IFAC at the time that the Secretariat found its permanent home in Laxenburg, Austria in 1978. Together with Mr. Fred Margulies, who was Secretary of IFAC at that time, she built up the Secretariat from scratch, bringing in the long-needed stability which an organization that changes most of its volunteer staff every three to six years needs. After the births of each of her two children, Barbara returned to work very soon. Both her son and her daughter are now grown up of course and have finished their own studies. Meanwhile Barbara is grandmother of two and pursues her hobby of having, training and breeding flat coated retrievers.

After a five year interval from 1980 to 1985, when Barbara Aumann was assisted by Ms. Elfriede Schrott, who retired at that time, a new employee was sought and found with Ernestine Rudas.



Ernestine Rudas

She started her employment in September that year, just a short time before Barbara had her second baby. Barbara and Ernestine, who had known each other before, had an excellent working and soon also friendly relationship right from the start. This is very important in an office with just very few employees. At that time, i.e. from 1984 to 2005, Gusztav Hencsey from Budapest, Hungary was Secretary of the Federation and thus responsible for the activities at the Secretariat. This function was then taken over by Kurt Schlacher from Linz, Austria.

Together, Barbara and Ernestine managed the ongoing tasks at the Secretariat and provided the stability, an organization such as IFAC needs. Of course they meanwhile have decades of historical knowledge of IFAC. They have travelled to all Council meetings over the years. Also, they went

through all the technological changes that have occurred in office work over these last four decades. When they started, mail was still ordinary letters, written on electric typewriters, communication via telex and telephone at best. Gradually, new means of communication came in – the telex was replaced by the fax, a first computer was purchased, which could print the addresses required for the IFAC Newsletter.

Speaking of the Newsletter... In the first years of Ernestine's employment, the Newsletter layout was still done manually. With the first Apple com-

Well – a long way from typewriters to this type of communication – and Barbara and Ernestine went along with all of that.

At the dinner in March, which marked the farewell to Barbara and Ernestine, President Ian Craig and Advisor Brian D.O. Anderson gave speeches in which they talked about their attachment and dedication to IFAC, wishing them an active and enjoyable retirement.

I am sure that the Newsletter readers will concur in this.



Ernestine Rudas, Brian D.O. Anderson, Barbara Aumann

puters available in the second half of the eighties it was finally possible to write letters fast and to do the layout for the Newsletter using DTP.

The real breakthrough, however, was the advent of electronic mail. For the first time, communication was fast and direct and, after its first teething problems, has become reliable and practically replaced letter writing. Changes and developments did not stop there. Soon, IFAC got its first homepage, developed by Juan de la Puente. Also our computers got bigger, faster and better. At the Secretariat we finally arrived at a point where an IT technician was employed to cope with the ever increasing requirements of IT. A new, interactive homepage was developed, a new database now serves both the event and persons management. Meanwhile the Secretariat is at the point that material is no longer sent around physically or electronically, but is made available to authorized persons on the web.



Ian Craig

On the Geographic and Other Distributions of Participation In IFAC Technical Committees Contributed by Prof Iven Mareels, Chair Technical Board of IFAC

Table 1 - Some statistics on IFAC participation

Region	# TC Members	# Scopus Publications	Population In Million	GDP in US\$ Billion
Africa	31	230	176	789
Asia	325	13,678	3,235	19,680
Europe	1,396	7,642	720	20,798
North America	284	5,278	347	16,831
Oceania	48	661	27	1,650
South America	59	565	375	4,344
The IFAC World	2,143	28,054	4,880	64,092

Table 1 provides an overview of some statistics describing how IFAC Technical Committee volunteers are spread around the globe. Table 1 summarises a more detailed set of data based on the 59 countries that contribute TC members into IFAC (see Table 2).

The IFAC TC-countries, and the number of TC volunteers each country provides are listed in Table 2. The regional statistics are collected on the basis of these countries alone; for example the statistics for South America in Table 1 do not include the population or publications or GDP of Venezuela, as Venezuela did not provide any TC members.

In Table 1, the column labelled „#TC Members“ indicates the number of Technical Committee members each region provides in support of the IFAC Technical Board activities, current on 12 May 2012. This information was derived from the IFAC www-site by the IFAC Secretariat (thank you Elske and Katharina).

As can be gleaned from Table 2, there are 59 nations providing TC members. Nine of these do not have a National Member Organisation within the IFAC structure, these are indicated with an *. Moreover there are two countries, Venezuela and Peru, that have NMOs within the IFAC but that have not provided any volunteer members participating in the TCs at all. A situation we would like to rectify, and hence we call on our volunteers and these NMOs to assist us in identifying potential technical committee volunteers based in Peru or Venezuela. The second column in Table 1 labelled „# Scopus

Publications“ is provided through the Scopus and SJR engine <http://www.scimagojr.com/countryrank.php>. It lists the number of contributions published in 2010 and found in Scopus indexed journals in the area of mathematics, and engineering, but limited to the subfield of control and optimization. This column provides us with a rough proxy for the total activity in the fields of control and optimization for that particular region.



FORTHCOMING EVENTS

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Title	2012	Place	Further Information
IFAC Symposium Advances in Control Education - ACE 2012	June 19 – 21	Nizhny Novgorod Russia	http://ace2012.ru/ e-mail: ifac.ace2012@gmail.com
IFAC Symposium Robust Control Design – ROCOND	June 20 – 22	Aalborg Denmark	http://www.rocond12.org/ e-mail: lsj@aalborg.dk
IFAC Conference Analysis and Control of Chaotic Systems - CHAOS 12	June 20 – 22	Cancun Mexico	http://www.ipicyt.edu.mx/Chaos12/chaos12.html e-mail: erui@ipicyt.edu.mx
IFAC Workshop Time Delay Systems (IFAC-TDS-2012)	June 22 – 24	Boston MA, USA	http://www.coe.neu.edu/IFACTDS2012/main.htm e-mail: olgac@enr.uconn.edu
American Control Conference - in cooperation with IFAC -	June 27 – 29	Montreal Canada	http://a2c2.org/conferences/acc2012/index.php
IFAC Symposium Advanced Control of Chemical Processes - ADCHEM-2012	July 10 – 13	Singapore Singapore	http://www.adchem2012.org/ e-mail: ivan@adchem2012.org
IFAC Symposium System Identification – SYSID 2012	July 11 – 13	Brussels Belgium	http://www.sysid2012.org/ e-mail: secretariat@sysid2012.org
INSTICC/IFAC 9th Int. Conference Informatics in Control, Automation and Robotics – ICINCO 2012	July 28 – 31	Rome Italy	http://icinco.org e-mail: icinco.secretariat@insticc.org
IFAC Conference Nonlinear Model Predictive Control - NMPC 12	August 23 – 27	Noordwijkerhout Netherlands	http://www.nmpc12.tue.nl/ e-mail: nmpc12@tue.nl
17th Int. IEEE/IFAC Conference Methods and Models in Automation and Robotics – MMAR 2012	August 27 – 30	Miedzyzdroje Poland	http://www.mmar.edu.pl/ e-mail: mmar@mmar.edu.pl
IFAC Symposium Fault Detection, Supervision and Safety for Technical Processes – - SAFEPROCESS	August 29 – 31	Mexico City Mexico	http://safeprocess2012.unam.mx/ e-mail: SafeProcess12@iingen.unam.mx
IFAC Symposium Modelling and Control in Biomedical Systems – BMS 2012	August 29 – 31	Budapest Hungary	http://bms.iit.bme.hu/ e-mail: bms@iit.bme.hu
IFAC Workshop Lagrangian and Hamiltonian Methods for Nonlinear Control LHMNLC'12	August 29 – 31	Bertinoro (Bologna) Italy	http://www.lhmnlc12.deis.unibo.it e-mail: not yet available
IFAC Symposium Power Plants and Power Systems Control	September 02 – 05	Toulouse France	http://www.pppsc2012.org/ e-mail: pppsc2012@inp-toulouse.fr
IFAC Symposium Robot Control – SYROCO 2012	September 05 – 09	Dubrovnik Croatia	http://www.syroco2012.org/ e-mail: syroco2012@syroco2012.org
KSAE/IFAC Symposium Advanced Vehicle Control - AVEC 12	September 09 – 12	Seoul Korea	http://avec12.ksae.org/ e-mail: avec12@ksae.org
IFAC Workshop Automation in Mining, Mineral and Metal Industries – IFAC MMM12	September 10 – 12	Gifu Japan	http://www.ifacmmm2012.org/ e-mail: info@ifacmmm12.org
IFAC Symposium Control in Transportation Systems - CTS'12	September 12 – 14	Sofia Bulgaria	http://hs27.iccs.bas.bg/
7th Int. Workshop (cosponsored by IFAC) on Enterprise Integration, Interoperability and Networking – EI2N'2012	September 12 – 13	Rome Italy	http://www.onthemove-conferences.org/ e-mail: not yet available
IFAC Workshop Control Applications of Optimization - CAO'12	September 13 – 16	Rimini Italy	http://cao2012.imm.uran.ru e-mail: not yet available

FORTHCOMING EVENTS, ctd

IFAC Workshop Distributed Estimation and Control of Networked Systems – NecSys2012	September 14 – 15	Santa Barbara CA, USA	http://necsys2012.engr.ucsb.edu/ e-mail: not yet available
IFAC Symposium Manoeuvring and Control of Marine Craft - MCMC'2012	September 19 – 21	Arenzano Italy	www.memc2012.issia.cnr.it
IFAC Workshop Generalized Statements and Solutions of Control Problems - GSSCP	September 24 – 30	Gelendzhik Russia	https://sites.google.com/site/gsscp2012/international-workshop e-mail: gsscp-2012@yandex.ru
IFAC Workshop Discrete Event Systems – WODES	October 01 – 03	Guadalajara Mexico	http://www.gdl.cinvestav.mx/wodes-12 e-mail: wodes2012@gdl.cinvestav.mx
IFAC Workshop Multi Vehicle Systems – MVS	October 03 – 05	Espoo Finland	http://mvs2012.aalto.fi/ e-mail: mvs2012@aalto.fi
IFAC Workshop on Engine and Powertrain Control Simulation and Modelling	October 23 – 25	Paris France	http://www.ecosm12.org
Latin American Control Conference – LACC- - in cooperation with IFAC	October 23 – 26	Lima Peru	http://congreso.pucp.edu.pe/clca-2012/
IFAC Workshop Maintenance for Dependability, Asset Management and PHM - A-MEST	November 22 – 23	Seville Spain	http://www.amest2012.com/ e-mail: adolfo@us.es
IEEE/IFAC Int. Conference on Connected Vehicles and Expo (ICCVE)	December 05 – 09	Beijing China	http://www.iccve.org e-mail: not yet available
Title	2013	Place	Further Information
IFAC Symposium System Structure and Control	February 04 – 06	Grenoble France	http://www.gipsa-lab.grenoble-inp.fr/colloque/sssc2013/ e-mail: sssc2013@gipsa-lab.grenoble-inp.fr
IFAC Conference Biorobotics	March 27 – 29	Sakai Japan	http:// not yet available e-mail: not yet available
IFAC Symposium Mechatronic Systems	April 10 – 12	Hangzhou China	http:// not yet available e-mail: not yet available
IFAC Workshop International Stability, Technology and Culture (SWIIS 2013)	June 06 – 08	Prishtina Kosovo	http://www.ubt-uni.net/swiis2013 e-mail: not yet available
IFAC Symposium Intelligent Autonomous Vehicles - IFAC-IAV 2013	June 26 – 28	Gold Coast City Australia	http://www.iav2013.org/ e-mail: l.vlacic@griffith.edu.au
IFAC Workshop Periodic Control Systems- (PSYCO'2013)	July 03 – 05	Caen France	http://psyco-2013.sciencesconf.org/ e-mail: psyco-2013@sciencesconf.org
IFAC Workshop Adaptation and Learning in Control and Signal Processing (ALCOSP 2013)	July 06 – 08	Caen France	http://www.ubt-uni.net/swiis2013 e-mail: alcosp-2013@sciencesconf.org
IFAC IFORS, IMACS, IFIP Symposium Large Scale Complex Systems: Theory and Applications	July 07 – 10	Shanghai China	http:// not yet available e-mail: not yet available
IFAC Conference Modelling and Control in Agriculture, - Horticulture and Post Harvest Industry (AGRICONTROL 2013)	August 28 – 30	Espoo Finland	http:// not yet available e-mail: not yet available
IFAC/(IFIP/IFORS/IEA) Symposium Analysis, Design, and Evaluation of Human-Machine Systems – HMS 2013	August 11 – 15	Las Vegas USA	http:// not yet available e-mail: not yet available
IFAC Symposium Advances in Control Education - ACE 2013	August 28 – 30	Sheffield UK	http://ace2013.group.shef.ac.uk/ e-mail: not yet available

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Table 2 - Countries by Region with number of Technical Committee Volunteers

Region	Country	# TC Members	Region	Country	# TC Members
Europe	Austria	41	Africa	Egypt*	1
Europe	Belarus*	4	Africa	Morocco*	2
Europe	Belgium	29	Africa	South Africa	25
Europe	Bulgaria	45	Africa	Tunisia	3
Europe	Croatia	9	Africa		31
Europe	Cyprus*	6	Asia	China	80
Europe	Czech Republic	66	Asia	Hong Kong	19
Europe	Denmark	13	Asia	India	2
Europe	Estonia	7	Asia	Indonesia	1
Europe	Finland	25	Asia	Iran*	3
Europe	France	252	Asia	Israel	9
Europe	Germany	132	Asia	Japan	106
Europe	Greece	17	Asia	Korea (South)	46
Europe	Hungary	44	Asia	Malaysia*	3
Europe	Ireland	9	Asia	Singapore	9
Europe	Italy	103	Asia	Taiwan*	4
Europe	Kosovo	3	Asia	Turkey	34
Europe	Lithuania	1	Asia	Viet Nam	9
Europe	Macedonia	5	Asia		325
Europe	Netherlands	55	N-America	Canada	40
Europe	Norway	14	N-America	United States	244
Europe	Poland	70	North America		284
Europe	Portugal	37	Oceania	Australia	45
Europe	Romania	74	Oceania	New Zealand*	3
Europe	Russia	44	Oceania		48
Europe	Serbia*	3	S-America	Argentina	1
Europe	Slovakia	20	S-America	Brazil	33
Europe	Slovenia	15	S-America	Chile	4
Europe	Spain	62	S-America	Cuba	1
Europe	Sweden	33	S-America	Mexico	20
Europe	Switzerland	11	South America		59
Europe	Ukraine	1	IFAC outside Europe		747
Europe	United Kingdom	146			
Europe		1,396	IFAC World		2,143

* not an NMO of IFAC

For comparison purposes, Table 1 also includes an estimate of the region's Gross Domestic Product (GDP) in 2010 expressed in billions of US\$ as provided by the International Monetary Fund, as well as an estimate of the country's population in 2010 as provided by the US Census Bureau.

Table 3 - Some relative statistics on IFAC participation

Region	% TC Members	% Scopus Publications	% Authors IFAC World Congress ¹	% Population	% of IFAC GDP
Africa	1	1	<1	4	1
Asia	15	49	17	66	31
Europe	65	27	60	15	32
North America	13	19	15	7	26
Oceania	2	2	4	1	3
South America	3	2	4	8	7
The IFAC World	100	100	100	100	100

¹ Based on the final report from the Milano World Congress 2011, countries with fewer than 100 authors were not included in this report, hence the data in this column are somewhat biased.

Table 3 re-interprets the data in Table 1 in a relative form, relative to the IFAC world.

To situate the IFAC world in actual world terms, it is worth observing that the countries participating in IFAC capture for all practical purposes 100% of the world's GDP, but only about 70% of the world's population (estimated at 7.0 billion), and about 30% of the world's countries (there are between 192 and 196 countries in the world, depending on whose definition of country you like to adopt). This demonstrates clearly that a minimum amount of economic activity is required before a country can participate fully in „world class“ research; IFAC aligned control and automation research being just one aspect of this.

Perhaps the most striking observation that may be derived from Table 3 is just how dominant Europe is in the IFAC. Europe provides nearly two thirds of all the TC members (and over 60% of participants in the Milano World Congress). In contrast, on a global IFAC scale, Europe represents a third of the World's GDP and only one sixth of the IFAC aligned world population. Also, Europe produces just over a quarter of all (SCOPUS indexed) scientific journal output in engineering and mathematics related to control and automation. Depending on which criterion you want to weigh the most, European participation in IFAC could be seen as about two to four times what one would expect on the basis of a more uniform distribution across the world.

Perhaps from a TC-work load point of view, after all the TC is a review body, that reviews papers and entire areas of scientific and engineering interest in automation and control, a distribution that reflects the scientific and engineering activity in the field is the most obvious distribution one could argue for. Table 3 suggests that Asia and North America are both under-represented in the TCs. Although clearly this distribution has also flaws. One could well argue that impact and technical quality should play a role too, and there is only a weak correlation between quality and quantity. Moreover, the TC is mainly concerned with conference work, and journal and conference activities are not always well aligned.

Notice that the distribution of TC membership does follow IFAC World Congress Activity, see column 4 in Table 3. One could argue that the distribution of TC members is very appropriate, but of course, this embodies a rather invalid circular argument.

Table 1 and Table 3 seem to beg for a further analysis of the IFAC position in the entire world of control and automation. Indeed at present the numbers seem to indicate that IFAC TCs represent a significant share of the world market in control and automation, but the picture is incomplete, as we should include the IFAC suite of journals and their boards of associate editors to complete that picture.

Despite all of the above, the distribution of TC members is of course simply what it is. There is no right distribution for an organisation like the IFAC. The present distribution does not follow any grand rule, it simply reflects IFAC's organic growth over fifty odd years, where one has strived to have a balance between activity and geographic distribution aligned with NMOs. IFAC's history is rooted in Europe, with a significant USA and Russia contribution. Equally, it is also clear that IFAC is an organisation that serves the world, and as such, in order to fulfil its ambitions, it is rather obvious in which direction the IFAC family has to and most likely will evolve. For all the NMOs in IFAC, and the IFAC Council, it is time to consider how such an evolution can be best pursued in an orderly fashion. From within the ranks of the TB, we must balance technical quality (which is poorly related to quantity of TB work), volunteerism (which obviously must be related to volume of work) and achieve a more appropriate geographic distribution amongst the TC participants.

Navigation, Guidance and Control of Underwater Vehicles - NGCUV'12 IFAC Workshop Porto, Portugal 10 – 12 April, 2012

The IFAC Workshop on Navigation, Guidance and Control of Underwater Vehicles (NGCUV'12) was held at the Faculty of Engineering of the University of Porto, in Portugal, 10-12 April 2012. The workshop was organized and hosted by the Underwater Systems and Technologies Laboratory (Laboratório de Sistemas e Tecnologias Subaquáticas - LSTS) of the University of Porto.

NGCUV'12 was the third Workshop in this thematic area sponsored by the IFAC Technical Committee on Marine Systems. NGCUV'2012 was sponsored by the Office of Naval Research Global, Luso-American Development Foundation, OceanScan – Marine Systems & Technology LDA, and the Port of Leixões.

The Workshop attracted 91 participants from Australia, Brazil, Croatia, Denmark, France, Germany, Greece, Iceland, Ireland, Italy, Netherlands, Norway, Portugal, Russia, Spain, South Korea, Switzerland, Turkey, United Kingdom and the United States of America. One third of the participants came from Portugal.

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There were over 72 submitted papers, out of which 62 papers from 162 authors were accepted for presentation at the workshop, after a rigorous peer review process. Overall, 60 papers were presented at the workshop, with only two no-shows. The technical program consisted of 7 plenary sessions, 10 parallel technical sessions, and one session for open discussions. In addition to the technical sessions, there was an organized visit to the LSTS laboratory where the delegates could see autonomous underwater, surface and air vehicles. The program is available at

http://paginas.fe.up.pt/~ngcuv2012/docs/IFAC%20WorkshopFinalProgram_vPL.pdf

The plenary sessions addressed exciting areas of advanced research in unmanned marine vehicle systems: non-linear observers for integration of position and IMU measurements; sampling of oceanographic features by autonomous underwater vehicles (AUVs); cooperative navigation and motion control of multiple marine vehicles; high-resolution sea-floor mapping using unmanned underwater vehicles (UUV); the role of Artificial Intelligence for AUV sampling, command and control; and algorithms for single beacon navigation. The technical sessions covered themes of great relevance to academia, industry and practitioners: vehicle modeling and control (two sessions); navigation; cooperation in multi-vehicle systems; simultaneous localization and mapping (SLAMs) and localization; planning, guidance and cooperation; industry developments; operations; vision and estimation; and European Union FP7 Projects in marine robotics.



Antonio Pascoal

At the opening ceremony the conference was addressed by Prof. Manuel Pinto de Abreu, Portuguese Secretary of State for the Sea, Prof. Jorge Gonçalves, Vice-Rector of the University of Porto, and Prof. Sebastião Feyo de Azevedo, Dean of the Faculty of Engineering of the University of Porto.



Opening of the Workshop

The workshop was a great success, as confirmed by the delegates who complimented the technical and social programs and praised the networking possibilities made possible by the elegant and pleasant conference venue. Praise was also given to the fact that the registration fee included the welcome reception, coffee breaks, and the banquet. The latter was held on April 11th at the restaurant of one of the oldest port wine houses with spectacular views of old Porto. The social program included also a visit to the Port wine cellars where port wine was served.



Porto Wine Cellars

FORTHCOMING EVENTS, ctd.

IFAC Symposium Automatic Control in Aerospace - ACA 2013	September 02 – 06	Wuerzburg Germany	http://www7.informatik.uni-wuerzburg.de/aca2013 e-mail: aca2013@informatik.uni-wuerzburg.de
IFAC Symposium Nonlinear Control Systems - NOLCOS	September 04 – 06	Toulouse France	http://www.laas.fr/NOLCOS2013 e-mail: nolcos2013@laas.fr
IFAC Conference Management and Control of Production and Logistics – MCPL 2013	September 12 – 14	Fortaleza Brazil	http:// not yet available e-mail: not yet availalbe
Title	2014	Place	Further Information
19th IFAC World Congress	August 25-29	Cape Town South Africa	http://www.ifac2014.org/ email: not yet available
Title	2015	Place	Further Information
IFAC Symposium System Identification – SYSID 2015	October 19 – 21	Beijing China	http:// not yet available e-mail: not yet available