

PAPER SUBMISSION

The working language of IFAC A-MEST'10 is English. The material submitted must be original, not published or being considered elsewhere. The papers are limited to 6 pages formatted in the standard two-column IFAC proceedings format.

All papers, including papers solicited for special sessions, undergo the same rigorous reviewing process by anonymous and independent reviewers. For further details concerning the submission on line, please visit <http://www.a-mest10.ipb.pt/>.

PAPER PUBLICATION

All papers accepted for presentation will appear in the Preprints of the meeting and will be distributed to the participants. Papers duly presented at the workshop will be compiled in the IFAC Proceedings that will be hosted on-line on the www.IFAC-PapersOnLine.net website.

The presented papers will be further screened for possible publication in the IFAC Journals (Automatica, Control Engineering Practice, Annual Reviews in Control, Journal of Process Control, Engineering Applications of Artificial Intelligence, and Mechatronics), or in IFAC affiliated journals. All papers presented will be recorded as an IFAC Publication.

IFAC COPYRIGHT POLICY

Copyright of material presented at an IFAC meeting is held by IFAC. Authors will be required to transfer copyrights electronically and/or in hard copy.

The IFAC journals and, after these, the IFAC affiliated journals have priority access to all contributions presented. However, if the author is not contacted by an editor of these journals, within three months after the meeting, he/she is free to submit an expanded version of the presented material for journal publication elsewhere. In this case, the paper must carry a reference to the IFAC meeting where it was originally presented and, if the paper has appeared on the website www.IFAC-PapersOnLine.net, a reference to this publication.

VENUE

The IFAC A-MEST workshop (shortly IFAC A-MEST'10) will be organized in conjunction with the IFAC IMS'10 workshop on July 1st-2nd 2010 in Lisbon, Portugal. These two events will share a lot of technical and scientific materials in order to improve workshops efficiency while keeping enough scientific visibility required by the two communities (maintenance and IMS).

The conference location is the Campus of Faculty of Science and Technology from the New University of Lisbon. For further details on touristic information please visit <http://www.a-mest10.ipb.pt/>.

CONFERENCE FEES

Each registration (regular or student) can only allow one accepted paper to be included in the conference proceedings.

	Early registration fee	Late registration fee
Regular	350 EUR	400 EUR
Student	150 EUR	200 EUR

For details concerning conference fees and registration form, please visit <http://www.a-mest10.ipb.pt/>.

SPECIAL SESSIONS

IFAC A-MEST'10 solicits the proposal of special sessions to be held as part of the workshop.

A special session is a group of 4 papers, organized at the initiative of a special session organizer. Session topics must be in areas consistent with IFAC A-MEST'10 theme and topics. Each potential session organizer has to submit his/her special session to the workshop chair (send to marco.macchi@polimi.it). The template for the proposal is available at <http://www.a-mest10.ipb.pt/>.

IMPORTANT DATES

- ✓ **January 1st 2010**
Deadline for proposal of special sessions.
- ✓ **February 1st 2010**
Deadline for submission of papers.
- ✓ **April 1st 2010**
Notification of papers acceptance / rejection.
- ✓ **May 1st 2010**
Final papers submission and early registration.
- ✓ **July 1st-2nd 2010**
Workshop IMS'10 & A-MEST'10.



International Federation of
Automatic Control

FIRST ANNOUNCEMENT AND CALL FOR PAPERS

1st IFAC Workshop on Advanced Maintenance Engineering, Services and Technology IFAC A-MEST '10



July 1st-2nd 2010
Lisbon – Portugal
<http://www.a-mest10.ipb.pt/>

Workshop organized in conjunction
with the 10th IFAC Workshop on
Intelligent Manufacturing Systems (IMS'10)
<http://www.ims10.ipb.pt/>

ORGANIZING & PROGRAM COMMITTEES

National Organizing Committee (NOC)

Chair

Jose Barata, Universidade Nova de Lisboa, Portugal

Vice-Chair from science

Benoit Iung, Université Poincaré, France; Marco Macchi, Politecnico di Milano, Italy

International Program Committee (IPC)

Chair

Benoit Iung, Université Poincaré, France; Marco Macchi, Politecnico di Milano, Italy

Vice-Chair from industry

Christoph Hanisch, Festo, AG & Co. KG, Germany; Fulvio Rusinà, COMAU, Italy

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M. Eid (France)	D. Sauter (France)
C. Emmanouilidis (Greece)	Z. Simeu-Abazi (France)
B.J. Galvan Gonzales (Spain)	J. Stoustrup (Denmark)
M. Garetti (Italy)	J. Szpytko (Poland)
L. Gelman (UK)	M. Tahiri (Marocco)
C. Guerra-Caballero (Mexico)	S. Takata (Japan)
S. Heyns (South Africa)	M. Taisch (Italy)
E. Jantunen (VTT)	M. Tucci (Italy)
J. Jiang (Canada)	B-S. Yang (Korea)
G. Jinji (China)	L. Ye (China)
D. Kiritsis (Switzerland)	E. Zio (Italy)
F. Kristjanpoller (Chile)	

Editor

Paulo Leitao, Polytechnic Institute of Bragança, Portugal

SPONSORS

The IFAC A-MEST'10 is the first official IFAC workshop of the A-MEST working group (A-MEST WG). It is promoted by IFAC Technical Committee Manufacturing Plant Control (TC 5.1) as main-sponsor. It is also promoted by IFAC Technical Committee Safe Process (TC 6.4) as co-sponsor. Other international networks are supporting the event as co-sponsor: the IFIP WG 5.7 APMS Advances in Production Management Systems; the ESReDA / ESRA Maintenance Modelling and Applications Project Group.

SPECIAL ISSUES

From the scientific point of view, the reason to organize the IFAC A-MEST'10 in the frame of the IFAC IMS'10 is to take profit of the presence, in the same place, of academic people working on manufacturing, intelligent manufacturing, maintenance, asset management areas which are very close to the A-MEST focus. Besides, the sponsorships from both IFAC TCs, IFIP WG, ESReDA / ESRA PG has to be considered an excellent opportunity to boost co-operation between international networks through common interests.

Taking advantage of this opportunity, the A-MEST WG is considering IFAC journals, IFAC affiliated journals and journals target of the communities of IFIP WG 5.7 and ESReDA / ESRA PG in order to promote special issues. The topics addressed by IFAC A-MEST'10 and the special sessions organized in this scope will be considered to develop the proposal of the special issues.

WORKSHOP PROGRAM

The IFAC A-MEST'10 should underline the state of the art and new issues on maintenance for driving the A-MEST working group on an innovative way well in phase with international problem statement. The workshop will be organised in three main parts to achieve this end.

- ✓ Parallel scientific sessions / special sessions (special sessions chaired by the special session organizers)
- ✓ One industrial session with invited speeches aiming to demonstrate the state of the art and practical applications of A-MEST topics in industry
- ✓ The A-MEST WG meeting (at the end of the first day session); all A-MEST members and interested people are invited to attend the meeting.

SCOPE & OBJECTIVE

Maintenance can play a crucial role today for achieving competitiveness in manufacturing. Indeed, the word *maintenance* is becoming a little bit limited for expressing what can be done for guaranteeing reliability, availability, quality and safety in industrial assets. Efficiency and effectiveness in manufacturing should be addressed by considering not only technical but also economical and social constraints. *Physical asset management* or *asset lifecycle management* are becoming popular extensions of the "classical" *maintenance* concept. Based on this, the adoption of an integrated approach is nowadays required. The impact of maintenance services improvement, advanced ICT tools for maintenance, intelligent maintenance systems, novel integrated approaches for reliability and maintenance engineering are some of the issues to be addressed by maintenance in view of a competitive manufacturing. To this end, the workshop is calling for papers addressing the main domains of interest of *Advanced Maintenance Engineering, Services and Technology* (A-MEST). The objective is to bring together a wide range of specialists from academia, R&D firms and industry in this field in order to underline the problem statement, to discuss and exchange experiences and to present emergent contributions.

TOPICS

The workshop covers all topics concerning A-MEST. In particular, this first workshop is addressing the following topics:

- ✓ Maintenance Engineering;
- ✓ Reliability, statistical approaches;
- ✓ Maintenance and Integrated Logistic Support;
- ✓ Asset and maintenance management;
- ✓ Maintenance related services, maintenance service improvement;
- ✓ ICT supporting tools and systems (PEIDs, RFID, wireless, SOA, PLM, ...);
- ✓ E-maintenance technology and processes;
- ✓ Diagnostics, prognostics, reasoning and decision support;
- ✓ Condition monitoring, sensors, signal analysis and failure analysis.