Report of Activities
Period: October 2005 – November 2006

Note: The names of the committee members are bold marked

1. Editorial Board Members of the IEEE IES Trans. on Industrial Informatics

Colombo, A. W., Associated Editor of the IEEE Transaction on Industrial Informatics.

Lastra, J., Associated Editor of the IEEE Transaction on Industrial Informatics.

Vogel-Heuser, B., Associated Editor of the IEEE Transaction on Industrial Informatics.

Camarinha-Matos, L., Associated Editor of the IEEE Transaction on Industrial Informatics.

Pham, D., Associated Editor of the IEEE Transaction on Industrial Informatics.

2. Editorial Activities within IEEE IES Publications for 2006

Colombo, A. W. and Lastra, J. *"Special Section/Issue on Reconfigurable Automation Systems"* IEEE Transaction on Industrial Informatics (http://www.ewh.ieee.org/soc/ies/tii/). 2006.

3. Contribution to the IES Newsletter (2005/6)

Colombo, A. W.: *"IEEE IES New Technical Committee on Industrial Agents"*. *IEEE Industrial Electronics Society Newsletter,* Vol. 52, No. 2, pp. 8. June 2005.

Colombo, A. W.: *"Industrial Agents: Towards Collaborative Production-Automation, -Management and -Organization"*. *IEEE Industrial Electronics Society Newsletter,* Vol. 52, No. 4, pp. 17-18. December 2005.

Ulieru, M.: *"Women in Industrial Electronics"* – series of articles featuring the women IES-AdCom members in the IES Newsletters 2006.

4. Organization of Activities within IEEE IES Events and IFAC Events

IECON'05

Schoop, R. *"Keynote on Towards Intelligent Distributed Systems"*.31st IEEE Conf. of the Industrial Electronics Society (IECON´05 - http://www.adac.ncsu.edu/IECON05/). Raleigh, USA. 2005.

Ulieru, M. *"Tutorial on Industrial Agent Technologies"*. 31st IEEE Conf. of the Industrial Electronics Society (IECON´05 - http://www.adac.ncsu.edu/IECON05/). Raleigh, USA. 2005.

Jammes, F. "*Special Session on Service Oriented Architectures in Embedded and Real-Time Systems*". 31st IEEE Conf. of the Industrial Electronics Society (IECON´05 - http://www.adac.ncsu.edu/IECON05/). Raleigh, USA. 2005.

INDIN'05

Ulieru, M., *Tutorial on 'Context-Aware Computing and Ambient Intelligence'*, 3rd IEEE Industrial Informatics Conference, August 9-12, 2005, Perth, Australia.

ISIE'06

Colombo, A. W. and J. J. Rodriguez-Andina "*Track on Industrial Information Technology*" IEEE Int. Symposium on Industrial Electronics (ISIE´06 - www.isie2006.com). Montreal, Canada. 2006.

Lastra, J. L. and Delamer, I., "*Tutorial on Factory Information Systems in Electronics Production*". IEEE Int. Symposium on Industrial Electronics (ISIE´06 - www.isie2006.com). Montreal, Canada. 2006.

Barata, J., "*Special Session on Evolvable Production Approaches*". IEEE Int. Symposium on Industrial Electronics (ISIE´06 - www.isie2006.com). Montreal, Canada. 2006.

IFAC – INCOM'06

Colombo, A. W. , Harrison, R. and J. L. M. Lastra "*Special Session on Reconfigurable Manufacturing Systems*". 12th IFAC Symposium on Information Control Problems in Manufacturing (INCOM´06 - http://www.emse.fr/incom06). St-Etienne, France. 2006.

IEEE/IFAC –ICINCO 2006

Ulieru, M.,Tutorial on Industrial Agent Technologies at IEEE/IFAC International Conference on Informatics in Control, Automation and Robotics, August 1-5, 2006, Portugal.
Ulieru, M., Opening Keynote Address, Engineering Self-Organizing Applications in the Pervasive Information Technologies Age, IEEE-IFAC International Conference on Informatics in Control, Automation and Robotics, August 1-5, 2006, Portugal

INDIN'06

Colombo, A. W. and Lastra, J., Technical Program Co/Chairs of the 4th IEEE Conference on Industrial Informatics Informatics (INDIN´06 - http://www.SIMTech.a-star.edu.sg/indin2006). Singapur, August 2006.

Smitt, H. and **F. Jammes**"*Tutorial on Service-Oriented Architectures (SoA)*". 4th IEEE Conf. on Industrial Informatics (INDIN'06 - INDIN´06 - http://www.SIMTech.a-star.edu.sg/indin2006). Singapur. 2006.

Harrison, R. "*Track on Collaborative Manufacturing and Service System*". 4th IEEE Conf. on Industrial Informatics (INDIN'06 - INDIN´06 - http://www.SIMTech.a-star.edu.sg/indin2006). Singapur. 2006.

Ferrarini, L.. "*Track on Distributed, Embedded and Networked Control*". 4th IEEE Conf. on Industrial Informatics (INDIN'06 - INDIN´06 - http://www.SIMTech.a-star.edu.sg/indin2006). Singapur. 2006.

ETFA'06

Colombo, A. W., L. Gomes and M. *Wollschlaeger "Panel & Public Sessions / Co-Chairs"* 11th IEEE Int. Conf. on Emerging Technologies and Factory Automation (ETFA´06 - http://www.action-m.com/etfa2006/). Prague, Czech Republic. 2006.

IECON'06

Colombo, A. W. and F. Jammes "*Tutorial on Collaborative Automation and Service Oriented Architectures in the Industry*". 32nd IEEE Conf. of the Industrial Electronics Society (IECON´06 - http://www.iecon06.iut-amiens.fr/). Paris, France. 2006.

Ulieru, M., *"Tutorial on Intelligent Environments for Manufacturing"* at IEEE – IECON 2006, 32nd Annual Conference of the Industrial Electronics Society, Paris, France, November 6-10, 2007

5. Review / Evaluation of papers submitted to IES-organized Events

- IECON'05 / Track on Industrial Information Technologies
- ISIE'06 / TP7: Industrial Information Technology
- INDIN'06 / Track on Collaborative Manufacturing and Service System
- INDIN'06 / Track on Service-Oriented Architectures
- INDIN'06 / Track on Distributed, Embedded and Networked Control
- IECON'06 / TPC6: Industrial Informatics
- IECON'06 / TPC4: Sensors, Actuators and Systems Integration

6. Webpage management
Maintenance and update of the Webpage *(http://www.tcia.ipb.pt/)*.
Link of the Committee Webpage to the IES Webpage
Responsible: **Paulo Leitao**

7. Organization and participation in Dissemination-Events

- **A workshop and a course on "Industrial Agents"** in correspondence with the 2005 annual meeting of ANIPLA (Naples, Italy, 23-24 November 2005). *Speakers:* **J. L. M. Lastra, P. Leitao, A. W. Colombo and L. Ferrarini** *(all members of the TConIA)*
- ***DGR (European Union) - NSF (US) Series of Workshop for Preparation of the next RTD Framework Programs (2007-2013)***. Participants: **A. W. Colombo, J. L. M. Lastra** and **R. Harrison** *(all members of the TConIA)*
- **IST-EC2 Workshop for preparation of Europe-Canada collaboration within the IST 7th Framework Program.** Invited: **Mihaela Ulieru** – expert in Networked Embedded Control Systems
- **Workshop on Design for Security and Resilience to Enable the Deployment of Industrial Agents Technologies (December 2006), Mihaela Ulieru** – Distinguished lecturer at RMIT Melbourne, Australia.
- **Distinguished Visiting Professor in Industrial Agent Technologies** – **Mihaela Ulieru**, Graduate Course at the Technical University of Vienna, spring 2006

- **Ulieru, M.**, Invited Member (advising on Industrial Informatics) on the Scientific Advisory Board, Science and Engineering Research Council (SERC), Agency for Science, Technology and Research (A*STAR) of Singapore, (2007-2009).

- **Ulieru, M.**, Invited Member on the International Strategy Panel, Natural Science and Engineering Research Council of Canada (2006).
- **Ulieru, M.**, Tutorial on Agent-Based Supply Chain Management, ICEC 2006, 8th International Conference on Electronic Commerce, August 14-16, 2006, Fredericton, Canada

- **Ulieru, M.**, Invited Keynote *"The Vision for Industrial Informatics"*, Annual Conference of the South Africa Institute of Computer Scientists and Information Technologists (SAICSIT), September 19-21, 2005

- **Ulieru,M.**, Invited Keynote *"Datamining Technologies for Industrial Informatics"*, First International Conference on Pattern Recognition and Machine Intelligence (PReMI'05), Kolkata, India, December 2005

- **Ulieru, M.**, Member on the IEEE Computational Intelligence Society, Emergent Technologies Technical Committee (**liaison** with *TconIA* on the task Force on Agent Technologies), 2006

8. Re-organization of the Technical Committee

8.1 Co-participation of the O3NEIDA-Organization in the chairing activities and in technical areas covered by the technical Committee (June 2006)

8.2 Extension of the chair-organization (June 2006)

8.3 Extension of the number of technical areas covered by the Technical Committee (Initiated in June 2006)

Note: See attached 1-slide-presentation

8.4 A general meeting with the participation of all Co-chairs will take place at the IEEE-INDIN 2007 Conference.

9. Preliminary Plan of Activities for 2007

9.1 IEEE IES ISIE'07: TPC Industrial Informatics (organization & chairing)

9.2 IEEE INDIN'07: Track on Service-Oriented Architectures (organization & chairing)

9.3 IEEE INDIN'07: Track on E-Applications (organization and chairing)

9.4 IEEE INDIN'07: Track on Embedded and Networked Control in Collaborative Manufacturing (organization and chairing)

9.5 IEEE INDIN'07: **Mihaela Ulieru and Armando Colombo** – Members on the International Advisory Board

9.6 IEEE – IES ENF 2007 – Workshop on 'Emulating the Mind' – **Mihaela Ulieru**, Program Committee Member

9.7 IEEE Symposium on Industrial Embedded Systems (IES'07): Industrial Applications (organization and chairing)

9.8 **Mihaela Ulieru** will liaise between the *TconIA* and the Foundation for Intelligent Physical Agents (FIPA) to enable development of FIPA standards for networked embedded control systems as well as the deployment of the FIPA standards in the manufacturing industry.

10. Financial Aspects

10.1 IES allocated 3000 U$D to the TconIA (June 2005 – May 2006)

10.2 1200 U$D have been allocated to support the Workshop and Meeting of Co-Chairs scheduled for November 2005 in Neaple (with the ANIPLA Yearly Meeting). This amount of money has still to be paid.

10.3 500 U$D have been allocated to support the setup and maintenance of our WebPage.

10.4 A new budget and the corresponding allocation will be defined till the next AdCom meeting.

Dr.-Ing. Armando Walter Colombo *(Technical Committee Chair)*
Prof. Paulo Leitao