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I*PROMS monthly newsletter is edited by the Network's Central Coordination Team based at the MEC, Cardiff University, UK.

Tel:+44(0)29 2087 0049

Fax:+44(0)29 2087 9066

E-mail: iproms@iproms.org

Introduction

While a tremendous volume of R&D resources is being expended on developing new manufacturing technologies, it is clear that: there is much redundant effort being focused in a few key areas; many cross-cutting infrastructure issues that affect all of industry are receiving insufficient attention; and huge investments in proprietary solutions are either not delivering on their promises or are being rendered moot by new technologies or changes in the business environment. To ensure that investments are well placed, the I*PROMS Network of Excellence will review the state-of-the-art of its umbrella technology areas, identify the key enabling technologies and create R&D roadmaps that will help define a path to the future for manufacturing. This monthly newsletter serves as a digest of I*PROMS activities and events relevant to its mission. It covers:

- IPROMS 2005 Virtual Conference
- Network Activities
- Partner Profile
- Latest News
- Forthcoming Events

IPROMS 2005 Virtual Conference

To enable the spreading of excellence to users beyond its membership, I*PROMS NoE is organising an online web-based conference on Intelligent Production Machines and Systems, IPROMS 2005, during the period **4-15 July 2005**. IPROMS 2005 seeks to provide a platform for presenting, discussing and disseminating research results contributed by scientists and industrial practitioners active in the area of intelligent systems and soft computing techniques and their application in different areas of manufacturing. The conference proceedings will be published as a book and a CD-ROM by **Elsevier**. The deadline for paper submission is **30 April 2005**. Prospective participants can now prepare their papers using the provided **template** and submit them online at: <http://conference.iproms.org>

Network Activities

- Calls for bids are still open for I*PROMS core partners to submit proposals to carry out cluster-based and Network-wide activities. The activities eligible for bidding will help integrate the partners' expertise and spread their excellence both within and outside the Network. They complement the ongoing activities designed to achieve the set of deliverables and targets described in the Joint Plan of Activities (JPA) for the first 18 months. The Calls will stay open until all deliverables and targets are met.
- All the calls and bidding documents are available at I*PROMS website.
- Bids received in response to the Calls are evaluated by the respective board members.
- The six months Interim Review meeting with the Commission took place on 18 March 2005 in Brussels, Belgium. The meeting discussed the Network progress and its plans for the remaining period of the first 18 months.
- The forthcoming meetings for Cluster Executive Committees are scheduled for 28th April 2005 at the MEC, Cardiff University, UK.
- The Executive Board will meet on 29th April 2005 at Cardiff University, UK.

Partner Profile

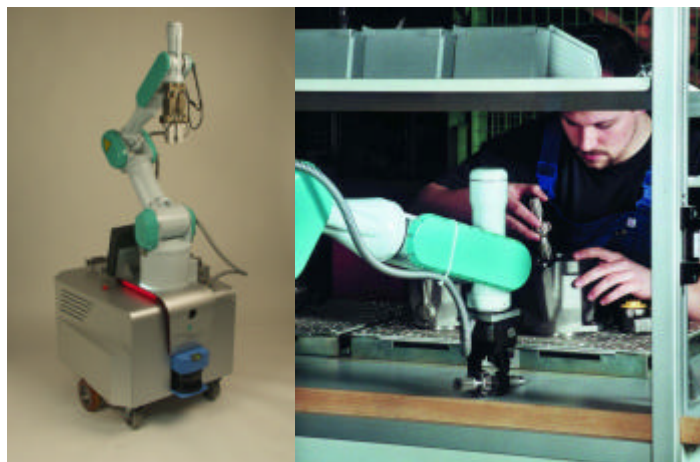
In each issue, this section will be devoted to a brief introduction of one of the partner organisations.

Fraunhofer Institute for Manufacturing Engineering and Automation (IPA)

Fraunhofer IPA is one of the largest of the 53 Institutes of the Fraunhofer Gesellschaft in Germany. It provides R&D services in the field of manufacturing engineering and automation to industry. It employs over 200 engineers in the business fields of Corporate Management, Enterprise Logistics, Automation Systems, Manufacturing Automation and Manufacturing Technologies. The aim of the R&D projects carried out by Fraunhofer IPA is to demonstrate to industry the potential of automating and streamlining production, processes and products. This is achieved by developing, testing and implementing methods, components, devices and even whole pieces of machinery and equipment. One main focus of Fraunhofer IPA work is Product Innovation and Development, where various innovative products in the area of industrial manufacturing, control and sensor systems have been successfully developed.

Fraunhofer IPA's Automation Division of Control Systems has a long lasting history of experience in the development and operation of control systems for CNC machines, robots and special purpose production systems. Fraunhofer IPA has been a project initiator and European Co-ordinator of the international IMS research project "HMS - Holonic Manufacturing Systems" with over 50 project partners from Europe, USA, Canada, Japan and Australia. Within HMS a highly decentralised and co-operative control system architecture based on agent control theory has been defined and successfully implemented. Fraunhofer IPA is the leader of I*PROMS Production Automation and Control (PAC) Cluster.

For more information about Fraunhofer IPA visit <http://www.ipa.fhg.de> .



Collaborative work between man and robot, demonstrator rob@work, Fraunhofer IPA, Stuttgart

News

- **Springer-Verlag, the internationally renowned publisher and associate partner of I*PROMS has agreed to sponsor a prize of books to the value of €300 for the best paper presented at the IPROMS 2005 Virtual Conference.**
- Latest calls for proposals and papers for international journals and news about products, systems, and joint ventures can be found at: <http://www.iproms.org/news>
- **Registered users can view/download documents, including published papers and books, from I*PROMS website. Currently a book on Neural Networks for Identification, Prediction and Control and over 20 journal and conference papers relevant to manufacturing contributed by Network partners and associates are available at: <http://www.iproms.org/browser>**
- Partners, associates and interested researchers are encouraged to contribute published work in the area of manufacturing to be made available for viewing/downloading on I*PROMS website. Contributions can be sent to iproms@iproms.org
- **On Behalf of I*PROMS Associate Partner, leading publisher Springer-Verlag, I*PROMS is pleased to announce a new book series directly relevant to I*PROMS. The series covers all major subjects in the field of advanced manufacturing. It will include textbooks, research monographs, edited works and conference proceedings in appropriate media (paper and electronic). Suggestions for books within the scope of the series can be sent to Duc Pham phamdt@cardiff.ac.uk the series editor, or Anthony Doyle anthony.doyle@springer-sbm.com Springer's Senior Editor (Engineering).**
- Researches from within and outside I*PROMS Network are invited to submit papers to the special issue of the Engineering Applications of Artificial Intelligence (EAAI) Journal which to be dedicated to I*PROMS. Submit papers to this special issue using the journal web site: <http://www.ees.elsevier.com/eaai/>

Events

This section provides brief information about international events pertinent to I*PROMS with URL links to their origins. Similar events can be advertised on I*PROMS website by contacting iproms@iproms.org

- The 2nd International Conference on Applications of Holonic and Multi-agent Systems, HoloMAS 2005 is organised in collaboration with I*PROMS.
<http://gerstner.felk.cvut.cz/HoloMAS/2005/>
- More information on forthcoming events relevant to I*PROMS can be found at: <http://www.iproms.org/events>

I*PROMS core and associate partners receive the newsletter without subscription. Interested non-I*PROMS members can subscribe to the newsletter by writing to: iproms@iproms.org
To learn more about I*PROMS Network of Excellence please visit <http://www.iproms.org>