IEEE ISAM 2009

2009 IEEE International Symposium on Assembly and Manufacturing
17-20 November 2009, Seoul, Korea
www.isam2009.org

Call for Papers

Welcome to IEEE ISAM 2009

2009 IEEE International Symposium on Assembly and Manufacturing (IEEE ISAM 2009) will be held in Seoul, Korea on 17 to 20 November 2009. The Symposium aims at providing a forum for researchers and practitioners working on the diverse issues of assembly and manufacturing in various product sizes, production scales, and product life-cycle. Authors are solicited to submit papers for all aspects of theories, methodologies, applications, and case studies relating to assembly and manufacturing.

Symposium Scope and Topics

Assembly and Manufacturing has contributed to carrying out the high technologies from its very beginning in planning and designing to its end in the disassembling process. With the advent of nano- and bio-technologies in recent days, it is further expected to play an important role in supporting the advancement of such high technologies. IEEE ISAM 2009 not only deals with traditional assembly and manufacturing but also extends its scope to cover the special themes such as **Micro Assembly**, **Printed Electronics Manufacturing**, and **Human Robot Cooperative Assembly**. Topics of interest include but not limited to:

- Assembly/disassembly/manufacturing planning and automation
- Assembly/disassembly cost estimation
- Assembly/disassembly in product life-cycle engineering and management
- Assembly and manufacturing process planning
- CAD/CAM integration
- Design for manufacturing, (dis)assembly, sustainability, and environment
- Dismantling, sorting, and separation for reuse and recycling
- Fixturing, grasping, and manipulation
- Line balancing and optimization
- Macro, micro, and nano assembly processes and systems
- Modelling, simulation, and design of manufacturing processes and systems
- Monitoring, error detection and recovery
- Motion and contact planning
- Part feeding and reorientation
- Planning and scheduling under uncertainty
- Precision and robotic assembly
- Self-assembly and disassembly
- Task, production, and manufacturing process planning and scheduling
- Tolerance analysis and design
- Virtual assembly, prototyping, and manufacturing
- Visual assembly
- Micro robotics
- Micro system of production
- Manipulation planning
- Assembly and human user model in a unified environment
- Human-robot interaction
- Human posture
- Assembly synthesis of structural products
- Design for product-embedded disassembly
- Design for remanufacturing
- Joint configuration design for robust dimensional integrity
- Telemanipulation
- Tolerancing
- Motion Planning
- Haptics - interaction/haptic rendering for virtual assembly/haptic guidance for teleoperation, etc.
- Distributed Intelligent Scheduling
- Self-configuration, optimization, healing, and/or protection in multi-agent
- Automatic computing systems for scheduling – theory and models

Important Dates

- **Submission of full paper: May 31, 2009**
- **Notification of Acceptance: August 15, 2009**
- **Final manuscript submission: September 15, 2009**

Paper Submission

Prospective authors are invited to submit high-quality papers representing original results in all areas of the assembly and manufacturing. Papers must be submitted through the symposium website and will be rigorously peer-reviewed and evaluated by at least two referees for technical content. The standard number of pages is 6 and the maximum page limit is 8 pages. At least one of the authors must register for the symposium in order for the paper to be included in the symposium proceedings. Accepted papers will be published in IEEE RAS CD-Rom Proceedings. Outstanding selected papers will be published in international journals.

Call for Tutorials & Workshops

The organizers intend to arrange an extensive program of workshops and tutorials to be held prior to the conference. Proposals for tutorials and workshops that address topics related to the conference topics are welcome. Proposals must be submitted by **May 31, 2009**. More details on how to submit proposals for workshops and tutorials are announced on the website.

Plenary Speakers

Dr. Youngsoo Oh
Samsung Electro-Mechanics
Korea

Prof. Harry E Stephanou
University of Texas at Arlington
USA

Dr. Rainer Bischoff
KUKA Roboter GmbH
Germany

Dr. Roland Menassa
General Motors
USA

Special Theme / Organizer

Printed Electronics Manufacturing
Dr. Jin Woo Cho
Korea Electronics Tech. Institute
Korea

Micro Assembly
Prof. Reijo Tuokko
Tampere University of Technology
Finland

Human Robot Cooperative Assembly
Dr. Hyun Sub Park
Korea Institute of Industrial Tech.
Korea

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