Environmentally Conscious Manufacturing III (RB03)

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Environmentally Conscious Manufacturing (ECM) is concerned with developing methods for manufacturing new products from conceptual design to final delivery and ultimately to the end-of-life disposal such that all the environmental standards and requirements are satisfied. Industrialized countries all over the world are facing serious aftermath of the rapid development that has taken place in the last few decades.

In recent years, environmental awareness and recycling regulations have been putting pressure on many manufacturers and consumers, forcing them to produce and dispose of products in an environmentally responsible manner. Government regulations are becoming more compelling as many manufacturers feel the pressure to use recycled materials whenever possible. Sometimes they are even required to take care of their products at the end of their useful lives. This has created a need to design products that are friendly towards the environment, and easy to disassemble and recycle. To that end, there is a need to develop algorithms, models, heuristics and software for addressing recycling and other end-of-life issues (such as the economic viability and the logistic aspects of disassembly, recycling, and remanufacturing) for an ever-increasing number of discarded products.

This conference will provide a forum for the latest developments in the field of environmentally conscious manufacturing (ECM) such as product reuse, remanufacturing, disassembly, and recycling strategies in a focused manner. Potential topics to be addressed in this conference include, but are not limited to, the following:

- algorithms and heuristics in ECM
- case studies in ECM
- closed-loop supply chain
- design for disassembly
- design for environment
- design for recycling
- design for remanufacturing
- disassembly process planning
- disassembly scheduling
- disposition and waste management
- ECM design of product and processes
- economic aspects of ECM
- end-of-life management and recovery
- environmental impact assessment models
- environmentally benign packaging
- integrated disassembly line
- life cycle assessment of ECM
- logistic aspects of ECM
- OR models in ECM
- product reuse
- product recovery
- recycling process planning
- remanufacturing process planning
- remanufacturing and inventory issues
- return flows in the supply chain
- reverse logistics
- sustainable products.

Abstract Due Date: May 1, 2003
Manuscript Due Date: 29 September 2003
Submission of Abstracts for Photonics Technologies for Robotics, Automation, and Manufacturing Symposium

Abstract Due Date: 1 May 2003  Manuscript Due Date: 29 September 2003

Submissions imply the intent of at least one author to register, attend the symposium, and present the paper (either orally or in poster format), and submit a full-length manuscript.

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5. BRIEF BIOGRAPHY (principal/presenting author) Approximately 50 words.
6. ABSTRACT TEXT Approximately 250 words.
7. KEYWORDS List a maximum of five keywords.

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