Call for Papers

REVERSE SUPPLY CHAINS

As part of the IFAC MIM 2013 conference in Saint-Petersburg (http://www.mim2013.org) during June 19-21, 2013, we are organizing a special session on Reverse Supply Chains. This is an open call for papers and we invite you to participate in it.

Reverse supply chains consist of a series of activities required to collect used products from consumers and reprocess them to either recover their leftover market values or dispose of them. It has become common for companies involved in a traditional (forward) supply chain (series of activities required to produce new products from virgin materials and distribute them to consumers) to also carry out collection and reprocessing of used products (reverse supply chain). Strict environmental regulations and diminishing raw material resources have intensified the importance of reverse supply chains at an increasing rate. In addition to being environment friendly, effective management of reverse supply chain operations leads to higher profitability by reducing transportation, inventory and warehousing costs. Moreover, reverse supply chain operations have a strong impact on the operations of forward supply chain such as the occupancy of the storage spaces and transportation capacity. The introduction of reverse supply chains has created many challenges in the areas of network design, transportation, selection of used products, selection and evaluation of suppliers, performance measurement, marketing related issues, end-of-life (EOL) alternative selection, remanufacturing, disassembly and product acquisition management to name a few.

This session will provide a forum for the latest developments in a variety of topics within reverse supply chains such as closed-loop supply chain; reverse logistics; end of life products; environmentally conscious manufacturing; remanufacturing; disassembly; etc. Potential topics to be addressed in this session include, but are not limited to, the following:

- closed-loop supply chain
- design for disassembly
- design for environment
- design for recycling
- design for remanufacturing
- disassembly process planning
- disassembly line balancing
- disassembly scheduling
- disposition and waste management
- environmentally conscious manufacturing design of product and processes
- end-of-life products management and recovery
- environmental impact assessment models

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- environmentally benign packaging
- integrated disassembly line
- product reuse
- product recovery
- recycling process planning
- remanufacturing process planning
- remanufacturing and inventory issues
- return flows in the supply chain
- reverse logistics
- sustainable products.

If interested, please contact either one of the following:

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