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Annals of Operations Research
Special Volume on
Benders Decomposition and its Application in Engineering
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The Benders decomposition method has been successfully used in a variety of applications involving process synthesis and design, scheduling and planning problems, project selection, timing and sequencing problems, energy management problems, as well as scenario-based, multistage stochastic programming problems. Although a number of successful case studies have been presented in the literature there are still a number of outstanding questions regarding (a) the applicability of the Benders decomposition, (b) the convergent properties of the method based on the specific application.

In this special volume of the *Annals of Operations Research* we are interested in applications of the Benders decomposition method in areas of engineering and applied science. This comes at a time of international recognition of the significance of Benders decomposition: Professor Benders has been awarded the 2009 Gold medal from the Association of European Operations Research Societies.

We expect this special volume to be a collection of high quality research contributions and advances in mathematical programming and decomposition-based methods. The review process will be the same as that used by the journal. Topics suitable for this special volume include, but are not limited to, the following:

- Benders decomposition applied in planning and scheduling problems
- Benders decomposition applied in chemical, biochemical, biomedical, financial, electrical, and computer engineering
- Benders decomposition applied in transportation and supply chain management
- Applicability of the Benders decomposition approach in comparison to the other decomposition methods
- Issues of the convergence of Benders decomposition algorithms
- Acceleration of Benders decomposition algorithms
- Hybrid schema: Benders decomposition combined with other decomposition methods
- Benders decomposition applied in non-convex optimization
- Expert systems and Benders decomposition
- Benders decomposition and stochastic programming
- Benders decomposition and global optimization
- Benders decomposition and heuristic algorithms

Deadline for submission: September 30th 2010

New deadline for submissions: January 31th 2011

Submission procedure:

To submit your manuscript for consideration to the *Annals of Operation Research* special volume *Benders Decomposition and Its Application in Engineering* please click on the url:

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