

CALL FOR PAPERS International Journal of Reliability and Safety (IJRS) ISSN (Online): 1479-3903 - ISSN (Print): 1479-389X

"Reliable Engineering Computing"

Main Theme

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Robert L. Mullen

Department of Civil Engineering Case Western Reserve University Cleveland, Ohio 44106 USA <u>rlm@cwru.edu</u> Achieving reliable products is one of the most important objectives of engineering practice. The unavoidable presence of different forms of uncertainty in all aspects of engineering activities (modeling to analysis, design, manufacturing/construction, and service) provide a challenge for engineering communities in achieving reliable products/systems. Reliability, here, is defined as the ability of a component, product, or system to perform its required functions under stated conditions in the presence of uncertainty.

In this special issue we are seeking papers that discuss methods for treating uncertainty in analysis and design of mechanical systems based on available information. Information availability in real life problems may range from limited to comprehensive. Most problems of engineering practice lay in between these extremes. Allowing for engineering design based on the degree of information available is of a significant importance for engineering practice. Development of such methods will allow for the system uncertain behavior to be quantified without requiring specific assumptions on the PDFs or ignoring the available, leading to a realistic product reliability evaluation.

We encourage all researchers working in this area to submit papers to this special Issue.

The topics of interest include, but are not limited to:

- Imprecise probability
- Interval Analysis
- Possibility theory
- Fuzzy theory
- Evidence theory
- Probabilistic methods
- Design Optimization

Manuscript preparation and submission:

Please follow the guidelines in "Specific Notes for Authors" in the International Journal of Reliability and Safety <u>http://www.inderscience.com/ijrs/</u>

Please submit your manuscript in electronic form by e-mail to the Special Issue Guest Editors

	Important Dates:	
Manuscript submission:	April 18, 2008	
Notification of acceptance:	June 30, 2008	
Submission of final manuscript:	July 30, 2008	