

## Special Issue on Mathematical Modeling and Optimization of Functionally Graded Structures

### Call for Papers

Functionally graded structures such as beams, plates and shells are those in which the volume fractions of two or more materials are varied continuously as a function of position along certain direction(s) of the structure to achieve a required function. Due to the dramatic increase in the use of functionally graded materials (FGMs) in a variety of engineering structures (e.g., mechanics, aerospace, automotive, nuclear, civil engineering, and medical prosthetics), as typical and principal mathematical issues, modeling and optimization of functionally graded structures has attracted the attention of many scientists in recent years for predicting the mechanical behavior of such structures.

We invite researchers and investigators to contribute original research as well as review papers that will stimulate the continuing efforts to apply mathematical models and mathematical methods for analysis of functionally graded structures. Analytical as well as numerical methods are welcome, together with experimental verification of theoretical models. Potential topics include, but are not limited to:

- Thermomechanical investigation of functionally graded structures
- Dynamics and stability of functionally graded structures
- Strength of functionally graded structures: fatigue, buckling, collapse, and fracture
- Mathematical models applied to the inspection and monitoring of functionally graded structures
- Plasto-elastic behavior of functionally graded structures
- Multidisciplinary issues in functionally graded structures
- Design and economics of functionally graded structures

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complete manuscript through the journal Manuscript Tracking System at <http://mts.hindawi.com/author/submit/journals/mpe/mmgs/> according to the following timetable:

Manuscript Due	Friday, 26 April 2013
First Round of Reviews	Friday, 19 July 2013
Publication Date	Friday, 13 September 2013

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