

ADVANCES IN BOUNDARY ELEMENT METHODS

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ABSTRACT

This symposium will bring together researchers from academia, government research laboratories, and industries around the world to discuss the recent progresses in the development of the boundary integral equation and boundary element methods (BIE/BEM). Researchers from all countries are cordially invited to participate in this minisymposium. Presentations dealing with all aspects of the BIE/BEM formulations and applications are welcome. Topics will include, but are not limited to:

- Fast boundary element methods (e.g., fast multipole methods, parallel computing, and others);
- Large-scale, multi-scale and multi-physics analyses using the BIE/BEM;
- Efficient coupling of the BEM with other methods;
- Modeling of materials (e.g., MEMS, composites, functionally graded materials, and others);
- Wave propagation, fracture mechanics and biomedical/bioengineering problems;
- Multiscale Green's functions and applications;
- Other formulations (e.g., boundary meshless methods, method of fundamental solutions);
- Software development and industrial applications.