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Analytical Methods in Wave Scattering and Diffraction

Guest Editor:

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Deadline for manuscript submissions: closed (15 July 2022)

Message from the Guest Editor

Dear colleagues,

Boundary-value problems (BVPs) pertaining to scattering and radiation by devices supporting novel wave phenomena are of primary importance in Applied and Computational Mathematics, Computational Physics and Engineering. The purpose of this special issue is to gather contributions from experts on analytical and semianalytical techniques with application domains including but not limited to single- or multiple-particle scattering, metamaterials, direct and inverse scattering by inclusions in layered media, propagation in waveguides, resonators, and analysis of periodic, layered or complex media. The techniques applied for the analytical modeling are expected to span from integral-equation/differentialequation based methodologies to generalized separation of variables and Fourier-series expansions as well as to eigenfunction Galerkin and series techniques. Contributions with main emphasis on numerical methods for wave phenomena are also welcome provided that they exploit analytical means at certain stages of the procedures employed for the derivations of the solutions.









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Message from the Editor-in-Chief

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