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# FEM and Hybrid Modeling for Electric Machines and Materials

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### **Message from the Guest Editors**

The interest for electrical motors having higher performance, increased efficiency, and reliability of work leads to new motor construction. This challenge can be achieved through mutual connection of the structure and materials used in their construction. This goal can be achieved by combining FEM/hybrid modeling and knowledge from experimental tests carried out on new electromagnetic materials. This Special Issue will deal with novel designs, joined with optimization techniques and with the application of new electromagnetic materials for electrical motors. Topics of interest for publication include but are not limited to:

- Techniques for designing electrical machines, using FEM and hybrid methods;
- Multiphysics coupled modeling and simulation;
- Electromagnetic, thermal, and vibration simulations, with regard to electric motors;
- New magnetic materials—applications in electrical motors;
- Energy-efficient motor solutions;
- Impact of production technology on motor parameters (cutting, assembling, etc.).

Prof. Zbigniew Gmyrek

Guest Editor



**Special**sue





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