**Minisymposium Title**

Materials Modeling

**Description**

A wide variety of numerical models have been used to study the origin of the significant properties in all types of materials for decades. Phase field models simulate the evolution of the microstructure with order parameters; *ab initio* models and related atomistic calculations solve quantum mechanical equations and model every atom; molecular dynamics models simulate the interaction of atoms, and are applied to reveal the mechanism of interesting phenomenon. Recently, many new models have been proposed to solve the problems with the non-linearity, multi-physics coupling, and multi-scales. In this minisymposium, we aim to provide a forum to present and exchange research results featuring contributions on advancing materials modeling techniques, giving in-depth insight of the mechanism of materials.

**Lead Organizer:**

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