



## Advanced Materials for Application in Catalysis

Guest Editors:

**Dr. Orhan Şişman**

**Dr. Surjyakanta Rana**

**Dr. José Joaquín Velázquez  
García**

**Dr. Rajesh Dagupati**

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submissions:

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### Message from the Guest Editors

Catalysis is extensively used in innumerable chemical reactions. Catalysis can provide attractive solutions to energy exhaustion and environmental problems. Basically, noble metal-based nano-sized materials have been extensively used due to their highly controllable morphology as well as their tunable and remarkable electrical properties. However, limited sources and the high costs of noble metals have shifted the research trends to cost-effective, environmentally friendly, and renewable catalytic materials.

This Special Issue is devoted to the design and characterization of advanced catalytic materials for different types of applications. The main aim is to accumulate the current state of information, the direction of ongoing expansion work, and avenues for further research. Potential topics include but are not limited to:

Carbon-based materials, metal oxides, composite materials, semiconductors, hybrid materials, zeolites, and nanomaterials:

- Advanced synthesis approaches
- Synthesis and characterization
- Nanomaterials/smart materials
- Organic transformations
- Energy and environmental applications

