



Special Issue on Synthesis and Characterization of

Advanced Materials

Call for Papers

New materials are prepared by variety of growth methods: conventional arc melting and powder metallurgical techniques, solution methods, high temperature intermetallic, oxide or sulfide flux as well as chemical vapor transport and deposition. Automated physical and structural characterization is the essential component of the lab. In order to optimize synthesis parameters, it is necessary to characterize structural and physical properties of materials. The goal of this special issue is to provide a platform for scientists and academicians all over the world to promote, share, and discuss various new issues and developments in this area of **Synthesis and Characterization of Advanced Materials**.

In this special issue, we invite front-line researchers and authors to submit original research and review articles that explore **Synthesis and Characterization of Advanced Materials**. In this special issue, potential topics include, but are not limited to:

- Problems related to the character of SACAM research
- Scientific challenges arising from technological needs
- Interdependence of synthesis and characterization
- Synthesis of nanostructures by chemical vapor deposition
- Self-assembly methods for polymers
- Solution-based processing of organic thin films by spin-casting and dip coating
- Structural and functional probing of nanostructures using x-ray scattering, optical, and scanning probes methods
- Electrical characterization under various temperature, magnetic field, and illumination conditions
- Graphene-based materials: synthesis, characterization, properties, and applications
- Thermodynamic and magnetic properties of new materials
- Development of new synthesis and measurement methods

Authors should read over the journal's [For Authors](#) carefully before submission. Prospective authors should submit an electronic copy of their complete manuscript through the journal's [Paper Submission System](#).

Please kindly specify the “**Special Issue**” under your manuscript title. The research field “**Special Issue - Synthesis and Characterization of Advanced Materials**”



should be selected during your submission.

Special Issue timetable:

Submission Deadline	September 25th, 2026
Publication Date	November 2026

Guest Editor:

For further questions or inquiries
Please contact Editorial Assistant at
jmmce@scirp.org