

Special Issue on
Spectroscopic Analysis of Corrosion of Materials

CALL FOR PAPERS

Journal of Spectroscopy is issuing a Special Issue on the spectroscopic analysis of the corrosion of materials. The issue highly welcomes both theoretical and experimental studies that further the understanding on the corrosion mechanisms, dissolution, pitting, galvanic effects, cathodic reeducation, evolution of passive films, permeability, mass transfer, physical properties of the corrosion products, and their chemical and electrochemical evolution. The issue especially welcomes studies on engineering materials whose alloying composition and microstructure are being developed to meet special mechanical and chemical requirements or operational challenges. And as corrosion is a complex phenomenon influenced by multiple physical, chemical, and metallurgical factors, contributions on modifying the current spectroscopy approaches to understand corrosion more comprehensively are highly encouraged.

Contributions from all fields are sought. Contributions on corrosion in *pipelines, high-temperature applications* such as *boilers, heat exchangers, and gas turbines, biomedical applications, and water processing* would address vital needs in predicting the lifetime of these applications and their materials selection.

Journal of Spectroscopy, a peer-reviewed open-access journal, is an international forum disseminating cutting-edge research on a number of rapidly evolving areas in spectroscopy. In addition to theoretical contributions, the journal welcomes experimental investigations on the use or development of spectroscopic techniques dedicated to evaluating materials and relevant phenomena in specific applications.

Potential topics include but are not limited to the following:

- ▶ Raman spectroscopy (RS)
- ▶ Auger electron spectroscopy (AES)
- ▶ Modulation infrared reflection absorption spectroscopy (PM-IRRAS)
- ▶ Thermal infrared imaging spectrometer (TIS)
- ▶ Scanning probe microscopy (AFM and STM)
- ▶ Glow discharge (GD-OES)
- ▶ FTIR spectroscopy
- ▶ Scanning tunneling spectroscopy (STS)
- ▶ Atomic or optical emission spectroscopy (AES or OES)
- ▶ X-ray photoelectron spectroscopy (XPS)
- ▶ Ion scattering spectroscopy (ISS)
- ▶ Wavelength dispersive spectroscopy (WDS)
- ▶ Mössbauer spectroscopy
- ▶ Electrochemical impedance spectroscopy (EIS)

Authors can submit their manuscripts through the Manuscript Tracking System at <https://mts.hindawi.com/submit/journals/jspec/sacm/>.

Papers are published upon acceptance, regardless of the Special Issue publication date.

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