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In Situ and Operando Vibrational Spectroscopy in Catalysis

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Deadline for manuscript submissions:
closed (30 November 2020)

Message from the Guest Editors

Dear Colleagues,

This Special Issue on "In situ and operando vibrational spectroscopy" will provide updates on the recent advances in our understanding of catalytic and adsorption processes, taking place at the gas–solid and liquid-phase interfaces, using vibrational spectroscopy. Topics related to in situ characterization, operando characterization, elucidation of reaction mechanisms, adsorption, time-resolved experiments, modulation-type experiments, and isotope exchange will be of interest. Contributions to this Special Issue are expected to include structural analysis and properties assessment of active sites in catalysts and sorbents. Characterization of surface species during reaction would be just ideal. Submissions to this Special Issue are welcome in the form of original research papers or short reviews reflecting knowledge in the field of characterization of materials within the following thematic subjects: catalytic processes; adsorption for capture/storage/separation applications; processes on minerals and soils; electrocatalysis; and structure by in situ/operando spectroscopy.