# Emerging Trends in Spectral Analysis with Optical Sensors: Modern Approaches and Applications

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## Message from the Guest Editors

Spectral sensing has significant and broad application prospects in the future. In terms of fine astronomy, photometric and spectroscopic surveys can effectively promote research on the evolution of the universe, exoplanets, and dark matter and energy. Concerning consumer electronics, the popularization of spectral measurements will also drive a new round of device innovation. Moreover, emerging instruments combining deep learning and spectral measurement have emerged in large numbers. Thus, to further promote the development of spectroscopy and optical sensing, this Special Issue intends to bring together contributions from leading experts in the field, fostering effective solutions for the future challenges in "Emerging Trends in Spectral Analysis with Optical Sensors."

Topics of this Special Issue include, but are not limited to, the following:

- fiber sensors
- astrophotonics
- optical instrumentation and measurements
- integrated photonics
- interferometers
- diffraction neural network

Special Issue