

Optical Sensor Technologies in Sustaining Quality of Life

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Deadline for manuscript
submissions:
closed (31 August 2023)

Message from the Guest Editors

The focus of this issue is on the application of the following optical instrumentation and measurement techniques:

- Ultraviolet, visible, and near infrared spectroscopy
- Raman spectroscopy
- Fourier transform infrared spectroscopy
- Fluorescence spectroscopy
- Colorimetry
- Optical fibre sensor technologies
- Development of specialised, simplified and lower-cost optical sensing systems

For the following (but not limited) potential applications

- The measurement of air pollution, such as quantification of aerosol and particulate matter
- Water quality measurement, including turbidity, total suspended solids, total dissolved solids
- Characterising light pollution and its threat to biodiversity
- The measurement of solar ultraviolet irradiance, including its implication on human health
- Monitoring of climate change
- Early detection of plant disease and physiological responses to stress
- Measurement of fruits' intrinsic qualities, such as soluble solid contents...
- Detection of food adulteration and mishandling

