



## Advanced Spectroscopy Technology for Chemical Qualitative and Quantitative Analysis

Guest Editors:

**Dr. Xiong Wan**

Shanghai Institute of Technical  
Physics Chinese Academy of  
Sciences, Shanghai, China

**Dr. Lei Zhang**

State Key Lab of Quantum Optics  
and Quantum Optics Devices,  
Institute of Laser Spectroscopy,  
Shanxi University, Taiyuan, China

**Prof. Dr. Jiulin Shi**

National Engineering Laboratory  
for Nondestructive Testing and  
Optoelectric Sensing Technology  
and Application, Nanchang  
Hangkong University, Nanchang  
330063, China

Deadline for manuscript  
submissions:

**31 August 2024**

### Message from the Guest Editors

Dear Colleagues,

Through spectroscopic research, various microscopic and macroscopic properties can be analyzed, including the energy levels and geometric structures of atoms and molecules, the reaction rates of specific chemical processes, the concentration distribution of substances in a specific area of space, etc.

In recent years, with the application of advanced sensing technology and devices in spectral instruments, the wavelength range, spectral resolution, time-space resolution, and other spectral measurement indicators have made considerable progress. The improvement of hardware indicators, combined with advanced chemometrics algorithms, such as artificial intelligence and machine learning, has greatly improved the speed and accuracy of chemical qualitative and quantitative analysis.

This Special Issue aims to collect the latest achievements of advanced spectral technology in the fields of life science, food, the environment, and aerospace.





an Open Access Journal by MDPI

## Editor-in-Chief

### **Prof. Dr. Nicole Jaffrezic-Renault**

Institute of Analytical Sciences,  
UMR CNRS 5280, Department  
LSA, 5 Rue de La Doua, 69100  
Villeurbanne, France

## Message from the Editor-in-Chief

*Chemosensors* is an international, scientific, open access journal on the science and technology of chemical sensors published by MDPI. All articles are released on the internet immediately following acceptance. The journal publishes reviews, regular research papers, and communications. The scope of Chemosensors includes:

New chemical sensors design

Electrochemical devices, potentiometric sensor, redox electrode

Optical chemical sensors

Analytical methods

Environmental monitoring

Gas detectors

electronic nose, etc.

## Author Benefits

**Open Access:** free for readers, with [article processing charges \(APC\)](#) paid by authors or their institutions.

**High Visibility:** indexed within [Scopus](#), [SCIE \(Web of Science\)](#), [CAPus / SciFinder](#), [Inspec](#), and [other databases](#).

**Journal Rank:** JCR - Q1 (*Instruments & Instrumentation*) / CiteScore - Q2 (*Analytical Chemistry*)

## Contact Us

*Chemosensors* Editorial Office  
MDPI, St. Alban-Anlage 66  
4052 Basel, Switzerland

Tel: +41 61 683 77 34  
[www.mdpi.com](http://www.mdpi.com)

[mdpi.com/journal/chemosensors](http://mdpi.com/journal/chemosensors)  
[chemosensors@mdpi.com](mailto:chemosensors@mdpi.com)  
[X@chemosens\\_MDPI](https://twitter.com/chemosens_MDPI)