



## Colorimetric and Fluorescent Sensors: Current Status and Future Development

Guest Editors:

**Prof. Dr. Kien Wen Sun**

Department of Applied  
Chemistry, National Chiao Tung  
University, Hsinchu 30010,  
Taiwan

**Dr. Muthaiah Shellaiah**

Department of Research and  
Analytics, Saveetha Dental  
College and Hospitals, Saveetha  
Institute of Medical and  
Technical Sciences (SIMATS),  
Saveetha University, Chennai  
600077, India

Deadline for manuscript  
submissions:

**15 November 2025**

### Message from the Guest Editors

The detection of important and harmful metal ions and anions has become essential to maintaining clean and safe ecosystems. Compared to other methods, the colorimetric and fluorometric approaches are exceptional due to their unique applications, such as paper strips, in vitro/in vivo bioimaging, and real-time water analysis. Moreover, advanced and easily synthesizable organic colorimetric probes and fluorophores with specific ion binding sites have been demonstrated by researchers. More recently, reports on easily operable nanomaterial-based colorimetric and fluorometric sensors under sustainable environments have also attracted much attention. For example, silver and gold nanoparticle (Ag NP and Au NP)-driven colorimetric sensors and carbon dots (CDs), graphene quantum dots (GQDs), MOFs, metal halide perovskites (HPs), and composite-based fluorescent sensors are becoming the focus of environmental research with real-time applications. The aim of this Special Issue is to collect and publish these innovative colorimetric and fluorometric sensors, analytical techniques, and studies that could drive future developments in related research fields.





an Open Access Journal by MDPI

## Editors-in-Chief

### Prof. Dr. Jin-Ming Lin

Beijing Key Laboratory of  
Microanalytical Methods and  
Instrumentation, Department of  
Chemistry, Tsinghua University,  
Beijing 100084, China

### Prof. Dr. Nicole Jaffrezic- Renault

Institute of UTINAM, University of  
Franche-Comté, UMR-CNRS 6213,  
16 Gray Road, 25030 Besançon,  
France

## Message from the Editorial Board

*Chemodosensors* continues to grow as a forum for all manners of sensing that encompass chemistry. *Chemodosensors* is published in open access format – all articles and content are released on the internet immediately following acceptance, thus allowing unlimited access to the content as soon as it is published. We would be happy to have you join our growing list of authors.

## 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](#), [Engineering Village](#) and [other databases](#).

**Journal Rank:** JCR - Q2 (Instruments and Instrumentation) / CiteScore - Q1 (Physical and Theoretical Chemistry)

## Contact Us

*Chemodosensors* Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland

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

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