



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

Guest Editors:

**Dr. Kien Wen Sun**

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

**Dr. Shellaiah Muthaiah**

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:

**31 August 2024**

### 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.





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

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

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