Tentative Outline

Special Issue for "Current Analytical Chemistry"

(Sorbent-based extraction methods for pretreatment of complicated samples)

Guest Editor: Dr. Chiyang He

Aims & Scope:

Sample pretreatment is an essential step toward analyzing complicated samples due to their complex matrices and sometimes low analyte concentrations. Sample pretreatments prior to detection can preconcentrate trace analytes to concentration levels above their detection limits, separate analytes of interest from complicated matrices or simplify the matrices, and remove interferants. Among all pretreatment methods, the sorbent-based extraction strategies, including solid-phase extraction, dispersive solid-phase extraction, magnetic solid-phase extraction, stir bar solid-phase extraction and solid-phase microextraction, etc, are commonly used because of their several advantages. For these sorbent-based extraction methods, the sorbents play key roles in obtaining high clean–up and enrichment efficiency for analysis of trace analytes in complicated samples. In recent years, a variety of new sorbents have been prepared for these extractions methods, such as molecularly imprinted materials, metal organic frameworks, porous organic polymers (macrocyclic molecule polymers, covalent organic polymers, porous aromatic polymers, etc), organic-inorganic hybrid materials, functionalized silica and other matrices, etc. Moreover, some common sorbents have also been utilized for the new applications to the pretreatment of complicated samples.

This special issue focuses on the new sorbent-based extraction methods, new sorbents and new applications of common sorbent-based extraction methods for pretreatment of environmental, food, biological and pharmaceutical samples. The reviews on these topics are especially welcome for this special issue. Meanwhile, a small amount of research papers will also be considered for this special issue.

Keywords: Solid-phase extraction, Dispersive solid-phase extraction, Magnetic solid-phase extraction, Stir bar solid-phase extraction, Solid-phase microextraction, New sorbent, Complicated sample, New application

Subtopics:

The subtopics to be covered within this issue are listed below:

* Solid-phase extraction methods (off-line and on-line modes)
* Dispersive solid-phase extraction methods
* Magnetic solid-phase extraction methods
* Stir bar solid-phase extraction methods
* Solid-phase microextraction methods (off-line and on-line modes)

Schedule:

- ✧ Manuscript submission deadline: 30 November 2020
- ✧ Peer Review Due: 31 January 2021
- ✧ Revision Due: 15 January 2021
- ✧ Announcement of acceptance by the Guest Editors: 15 February 2021
- ✧ Final manuscripts due: 1 May 2021

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