separations

Editorial

Chromatographic Separations

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The topic of chromatographic separations is a recent addition to the *Separations* journal.

It covers the methods based on analytical techniques where separation is due to differing distribution between two phases: one stationary and one mobile. These may include gas chromatography (GC), liquid chromatography (LC), high-performance liquid chromatography (HPLC), LC-MS, LC-MS/MS, LC-NMR, 2D LC, 2D GC, GC-MS, capillary electrochromatography, thin-layer chromatography, paper chromatography and supercritical fluid chromatography, among others.

From a quick glance at the literature, it can be observed that since the introduction of the concept by Mikhail Tsvet, tremendous advances have been made in recent decades, including the instrumentation and the materials used in stationary or mobile phases. All these advances focus on compliance with the principles of green analytical chemistry. Automation, speed, sustainability and safety are of the utmost importance in every method's development.

Moreover, two-dimensional techniques, in conjunction with spectroscopic techniques, have improved the feature characteristics of established separation techniques, making them the best analytical tool in the analysis of any kind of sample derived from various chemistry sectors as well as other scientific fields such as food science, veterinary medicine, biology, dentistry, archeology, forensics, pharmaceutical chemistry, medicine and environmental science, among others. To this end, major advances in separation science have led to significant findings in the above-mentioned scientific fields.

The aim of this section is to illustrate the state of the art in chromatographic separations. All manuscripts to be considered for publication in will undergo a rigorous peer-review process, and decisions made will be based on recommendations from independent reviewers.

Experts in the field are welcome to share the results of their research with the scientific community. Review articles are also invited.

Keywords:

- Gas Chromatography (GC)
- Liquid Chromatography (LC)
- High-Performance Liquid Chromatography (HPLC)
- LC-MS
- LC-MS/MS
- LC-NMR
- 2D LC
- 2D GC
- GC-MS
- Capillary electrochromatography
- Supercritical Fluid Chromatography

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