Editor's Note: Journal of Chromatography and Separation Techniques

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Editor’s Note

Separation process holds the crucial role in identifying the character and function of individual component in a sample, which is the most important thing in analytical science. There are various separation techniques available like Capillary electrophoresis, chromatography, pretreatment method etc. Among those chromatography technique is more advanced form of purification. Chromatography is a useful technique to separate various components from any given sample. Chromatographic process follows the basic separation principle, which separates individual ingredients from the mixture, according to their chemical or physical properties. Depending upon the application type chromatography can be divided into analytical or preparatory and further the operational process also can be differed from instrument to instrument depending upon small or large scale production.

Journal of Chromatography & Separation Techniques covers wide range of topics like Analytical and Biomedical chromatography, Capillary Electrophoresis, Solid or Liquid Extraction Pretreatment Procedure, LC-MS, GC-MS, Method Validation, Ion-exchange chromatography, Separation techniques, HPTLC and many more. Journal of Chromatography & Separation Techniques of current issue Volume 7 Issue 6 discuss various interesting topics such as determination of Methadone in human urine using salting out effect and HPLC-UV, development of solid-phase extraction using molecularly imprinted polymer for study of Chlorpyrifos, Quantification of Linoleic acid in Solanum by using HPTLC, comparative study of whey proteins separation by solvent sublation in two different modes, and evaluation of gas injection in the horizontal wells by Eclipse software.

Salting out is an effect based on the electrolyte-nonelectrolyte interaction, used as method of separating proteins. Akramipour et al. [1], combined the salting out effect with dispersive liquid-liquid microextraction for determination of drug in urine samples. Methadone is a synthetic analgesic drug, used for the treatment of opioid dependence. The salting out effect was combined with the DLLMESFO technique before HPLC-UV analysis. It is concluded that the separation system can be applied for determination of other drugs from complex biological and pharmaceutical matrices utilizing various analytical instruments.

Sample preparation plays a key role for obtaining accurate analysis of pesticide residues in food. A new and selective sorbent for molecularly imprinted solid-phase extraction is prepared to extract chlorpyrifos residue from solutions. Author Binsalom et al. [2], studied four different pyrogen to synthesize the molecularly imprinted polymers and investigated the type of solvent used during polymerization that influences the affinity of the polymers. It is observed that sorbent developed is good for extracting chlorpyrifos from environmental samples.

Solanum nigrum is a medicinal plant belonging to family of Solanaceae and that has been traditionally used to treat various ailments. Chakraborty et al. [3], developed a method by HPTLC for identifying and standardizing linoleic acid in methanolic extract of Solanum nigrum berries. Linoleic acid is a polyunsaturated omega-6 fatty acid found as phytoconstituent and act as antianaphylactic, anticancer, anticonvory, antifibrinolytic, antiarthritic and many more. It is concluded that the method developed can be successfully applied for study of linoleic acid as marker in various herbal extracts.

In cheese industry and sweet industry whey is produced as a byproduct. Saha et al. [4], presented the work based on study regarding the separation of proteins from whey waste collected from local confectionery. The separation technique used involves solvent sublation in both batch and continuous mode. Along with the effect of pH, initial and concentration of feed, rate of nitrogen gas flow, ionic strength, surfactant concentration, organic solvent concentration and temperature were studied in details. It is observed that the method applied is found to be more effective in continuous mode and hence, optimization for a suitable model may provide more precise operating conditions for maximum recovery of proteins.

Horizontal drilling is a process in which the well is turned horizontally at depth. It is normally used to extract energy and gas from source. Davarpanah et al. [5], presented the evaluation of gas injection in the horizontal wells and optimized oil recovery factor utilizing Eclipse software. It is a software integrated development environment used in computer programming. Thereby, the results obtained from the injection methods have best efficiency and depicted least pressure loss during the period of time.

In the conclusion, Journal of Chromatography & Separation Techniques is an excellent and useful Journal presenting several chromatographic techniques for the compound analysis with quite difficult matrix samples and supply useful information to the readers. In that sense, this Journal is an indispensable Journal to the analytical chemists.

References


