



Doubly Imprinted Polymer Modified Electrodes for Simultaneous Analysis of Certain Biomolecules/ Metal ions

B. B. Prasad

Banaras Hindu University, India

Abstract

Traditional imprinting techniques involve single template polymers showing specific recognition of the template, with almost insignificant non-specific adsorption. However, memory sites for only a single compound in Molecularly Imprinted Polymers (MIP) network might exert restriction in the separation and detection of a group of analytes present in various samples. To address this attendant problem and expand practicability of MIPs, we have resorted to synthesize a few recognition systems using more than one compounds as templates (print molecules) in a single MIP format. Although the analysis of group of analytes in a single sample is able to shorten time of analysis thereby making it cost effective, this is rather an arduous task amidst massive interferences and false positives from the complicated matrices of real samples. The present lecture would shed light on ultra-trace simultaneous analysis of different pair of analytes such

as Ascorbic acid and Dopamine, Glyphosate and Glufosinate, D- and L- Aspartic acids, Cadmium and Copper, Cerium and Gadolinium, and mixture of Organochlorine pesticides using various MIP-modified electrodes with suitable transduction..

Biography:

B. B Prasad is currently working as Professor of Analytical Chemistry in Banaras Hindu University (India). He is the Co-ordinator of Forensic Science in the same University. He has published more than 150 papers in reputed journals and has been serving as an editorial board member of several journals.