

Biography

The primary focus of Professor Pawliszyn's research program is the design of highly automated and integrated instrumentation for isolating analytes from complex matrices and the subsequent separation, identification, and determination of these species. Results of his research leads to the elimination of organic solvents from the sample preparation step and miniaturization of the sampling devices to facilitate on-site monitoring and in-vivo analysis. Several alternative techniques to solvent extraction are investigated including the use of coated fibers, packed needles, membranes, thin film devices and supercritical fluids. Dr. Pawliszyn is exploring the application of computational and modeling techniques to enhance sample preparation, chromatographic separations, and detection performance. Professor Pawliszyn has supervised over 100 graduate students, and he is an author of over 700 scientific publications. His Hirsch Index (H-index) is 103. He is a Fellow of the Royal Society of Canada, Editor-in-Chief of Trends in Analytical Chemistry and Green Analytical Chemistry. He initiated a conference, "ExTech", focusing on new advances in sample preparation and disseminating new scientific developments in the area, which meets every year in a different part of the world.