Andrew Shalliker, J Chromatogr Sep Tech 2015, 6:4
http://dx.doi.org/10.4172/2157-7064.S1.010

OMICS International
conferenceseries.com

International Conference and Expo on
Separation Techniques
August 10-12, 2015 San Francisco, USA

Reaction flow chromatography: High efficiency post-column derivatisations

Andrew Shalliker
University of Western Sydney, Australia

Reaction flow (RF) chromatography utilizes a new column design to undertake high efficiency post column derivatisations in HPLC. To date, RF chromatography has been tested on assays that involve decolorisation reactions with the free radical DPPH for the selective detection of antioxidants, the colorimetric analysis of phenols, and the post column derivatisation of amino acids using fluorescamine. In addition to high efficiency in the post column derivatisation process, the RF chromatography column enables the detection process to be multiplexed, so that, the sample can be analysed in its derivatised and underivatised forms. In this presentation the design and operation of RF columns will be illustrated for a variety of post-column derivatisation reactions, each with multiplexed detection incorporating UV and fluorescence detection.

Biography

Andrew Shalliker completed his PhD in 1992 from Deakin University, Waurn Ponds and Australia. He completed Postdoctoral studies at Queensland University of Technology, Brisbane (Australia) and the University of Tennessee, Knoxville, the latter under the mentorship of Distinguished Professor Georges Guiochon. He is currently a Professor in Analytical Chemistry at the University of Western Sydney and a Deputy Director of the Australian Centre for Research on Separation Science (ACROSS). He has approximately 130 publications.

r.shalliker@uws.edu.au

Notes: