Optimization and validation of online column-switching assisted HPLC-spectrometric method for quantification of dansylated endocannabinoids and neurotransmitters in animal models of brain diseases

Published On: December 24, 2019 | Pages: 083 - 093

Author(s): Maria Baranyi* and Beata Sperlagh

In scientific research, animal modelling of human disease is pivotal in both studying the mechanisms of the disease and developing potential therapies. An imbalance in the interaction between the endocannabinoid (eCB) and Neurotransmitter (NT) systems may play a role in the pathogenesis of neurological diseases, such as Parkinson’s Disease (PD). The major limitation o ...

Identification of antioxidative ingredients from feverfew (Tanacetum parthenium) extract substantially free of parthenolide and other alpha-unsaturated gamma-lactones

Published On: December 13, 2019 | Pages: 076 - 082

Author(s): Fa Zhang*, Jinyun Zhou, Yiqun Shi and Ken Karaisz

Extract of feverfew (Tanacetum parthenium) has anti-inflammatory effect with various therapeutic benefits. Alpha-unsaturated gamma-lactones including parthenolide were recognized as part of the major active ingredients but with undesirable allergic reactions. ...

Development and validation of stability indicating RP-HPLC method for
simultaneous estimation of Ibuprofen and Carisoprodol in Pharmaceutical formulation

A novel, rapid, precise and accurate stability indicating RP-HPLC method was developed and validated for the simultaneous estimation of Ibuprofen and Carisoprodol in combined pharmaceutical formulation. ...

Fast multi-residue method for determination of nineteen benzimidimidazoles in meat tissues by liquid chromatography tandem mass spectrometry

A fast, sensitive and selective method has been developed for quantitative determination of residues of nineteen benzimidazoles in meat by speeding the productivity of the conventional liquid chromatographs. ...

Analysis are of the hidden properties of the macromolecular system as an example of the reaction centers of bacteria Rhodobacter sphaeroides

Relevant: Is the study of the response of biological macromolecules to external stimuli. Often the reaction of macromolecules has an effect of structural self-regulation. In this case, their reaction is not only external influence, but also the spatial-temporal motions of the macromolecule. In this situation deserves the attention of electronic-conformational interac ...
**Potentiometric sensing platform for selective determination of Pregabalin in pharmaceutical formulations**

Published On: September 05, 2019 | Pages: 049 - 056

Author(s): Eman H El-Naby*

Pregabalin is a structural analogue of, but functionally unrelated to, the naturally occurring neurotransmitter -aminobutyric acid (GABA) with potent analgesic, anticonvulsant and anxiolytic activity. The abuse potential of pregabalin is a well-documented with high risk of addiction that may be fatal with overdoses particularly, among opiate addicts and polydrug use ...

[Abstract View]  [Full Article View]  [DOI: 10.17352/ojabc.000011]

**HPLC-DAD method for simultaneous determination of natural polyphenols**

Published On: August 08, 2019 | Pages: 039 - 043

Author(s): Vanya Dimcheva*, Nikolay Kaloyanov, Maria Karsheva, Milena Funeva-Peycheva and Nadezhda Stoilova

A simple and reliable high-performance liquid chromatography with diode-array detection (HPLC-DAD) method was developed for simultaneous determination of 9 natural substances common in plants: three major catechins ((-) - epicatechin gallate, (-) - catechin, (-) - epigallocatechin), four major flavonoids (rutin, quercetin, myricetin, kaempferol), gallic and vanillic a ...

[Abstract View]  [Full Article View]  [DOI: 10.17352/ojabc.000009]

**The polyphenol composition of Cistus incanus L., Trachystemon orientalis L. and Melissa officinalis L. infusions by HPLC-DAD method**

Published On: August 07, 2019 | Pages: 031 - 038

Author(s): Vanya Dimcheva*, Nikolay Kaloyanov and Maria Karsheva

Because of plants, health benefits consumption of herbal infusions as a dietary additive has increased in the last years. ...

[Abstract View]  [Full Article View]  [DOI: 10.17352/ojabc.000008]
Further remarks on the new criterion differentiating between Non-Redox and Redox Electrolytic Systems

Published On: July 16, 2019 | Pages: 018 - 030

Author(s): Anna M Michaowska-Kaczmarczyk, Tadeusz Michaowski

The new general criterion, distinguishing between non-redox and redox electrolytic systems, is based on the properties of the linear combination \( f_{12} = 2f(O) - f(H) \) of elemental balances: \( f_1 = f(H) \) for \( Y_1 = H \), and \( f_2 = f(O) \) for \( Y_2 = O \). The \( f_{12} \) is the primary form of the Generalized Electron Balance (\( f_{12} = pr\text{GEB} \)), completing the set of balances needed to formulate a re ...

Abstract View  |  Full Article View  |  Additional File(s)  |  DOI: 10.17352/ojabc.000007

General properties of the balance \( 2f(O) - f(H) \) in electrolytic systems some detailed remarks on elemental versus core balances

Published On: July 16, 2019 | Pages: 006 - 017

Author(s): Anna M Michaowska-Kaczmarczyk, Tadeusz Michaowski

Any electrolytic system in aqueous media is described with use of charge balance, \( f_0 = ChB \), and \( K \) elemental or core balances, \( f_k = f(Y_k) \) (\( k = 1, ..., K \)). The balances: \( f_1 = f(H) \) and \( f_2 = f(O) \) are the basis to formulate the linear combination \( f_{12} = 2f_2 - f_1 = 2f(O) - f(H) \). For a redox system with \( K - K^* \) electronactive elements (players), \( f_{12} \) is linearly independent on ...

Abstract View  |  Full Article View  |  DOI: 10.17352/ojabc.000006

Determination of pyridoxine by means of an indicator diazo-test strip

Published On: June 28, 2019 | Pages: 001 - 005

Author(s): Vera M Ostrovskaya, Alexander V Ivanov* and Dmitry Yu Marchenko

Pyridoxine (vitamin B6) plays an important role in the body's metabolism. Reaction of azocoupling with diazoaryl compound underlies in a basis a known photometric method of its chemical analysis. This method is not selective. In the present work the test method of determination of the pyridoxine containing in a molecule hydroxyarylgroup, was proposed