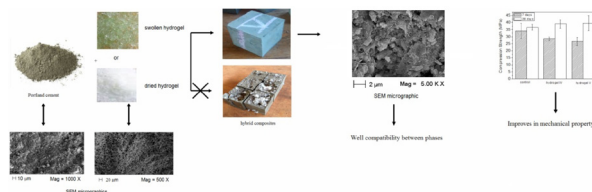


Editorial

- 123 Novo modelo de financiamento para as publicações da SBQ
Diretoria, Conselho Consultivo e PubliSBQ

Artigo

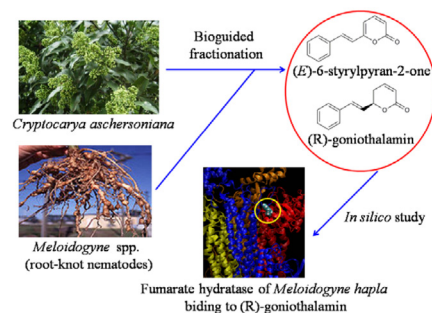
- 124 Obtenção de compósitos híbridos baseados em hidrogéis e cimento Portland
Jefferson C. dos Santos, Mauro M. Tashima, Marcia R. de Moura e Fauze A. Aouada



The presence of cement improves the mechanical property of hydrogel, and no phase separation between hydrogel and cement was detected.

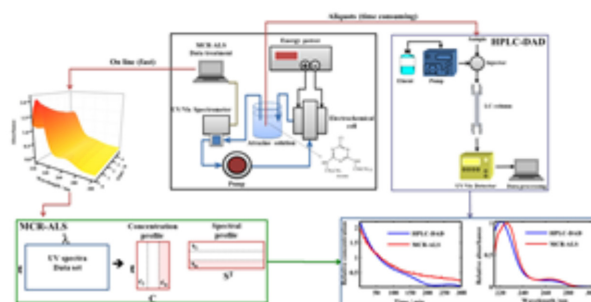
- 130 Estiril-lactonas de *Cryptocarya aschersoniana* Mez. (Lauraceae Juss.) com atividade contra *Meloidogyne* spp. e interação *in silico* com provável fumarase de *Meloidogyne hapla*
Viviane A. C. Campos, Alan R. T. Machado, Willian J. R. Silva, Karina C. Lopes, Willian C. Terra, Vicente P. Campos e Denilson F. Oliveira

A bioguided fractionation of the extract from *Cryptocarya aschersoniana* resulted in the isolation of two active substances against root-knot nematodes (*Meloidogyne* spp.). According to an *in silico* study one of these substances inhibits the fumarate hydratase of these plant pathogens.



- 137 MCR-ALS aplicado no monitoramento quantitativo do processo de eletrodegradação da atrazina usando espectros UV: resultados comparativos com HPLC-DAD como um método de referência
Thálisson S. Souza, Hudson G. Zanin, Alfredo Peterlevitz, Vitor Baranauskas, Gilmar A. da Silva, César Reis, Efraim L. Reis e Reinaldo F. Teófilo

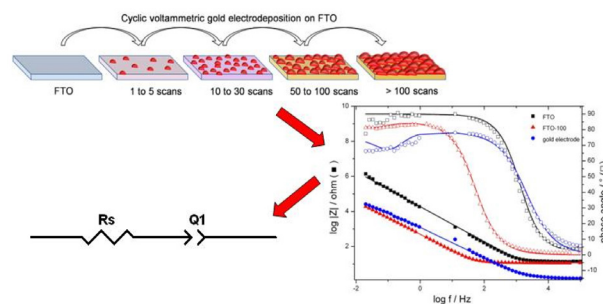
The electrodegradation of atrazine in water was performed using boron-doped diamond. The degradation was monitored by liquid chromatography and UV spectroscopy with multivariate curve resolution. The results were compared between the two methods.



- 146 Eletrodos de FTO modificados por eletrodeposição direta de ouro: produção, caracterização e aplicação como sensor eletroquímico

Rogério de Oliveira, Fabio L. Pissetti e Alzira M. S. Lucho

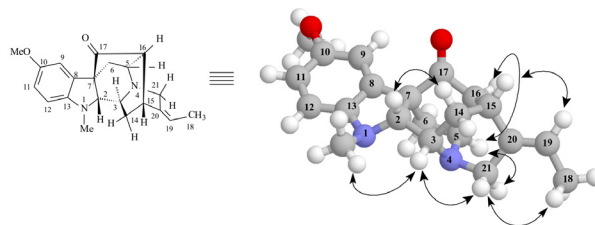
Gold electrodeposition on FTO by cyclic voltammetry and the electrochemical impedance spectroscopy study showing the lowest impedance values for FTO with 100 scans of electrodeposition and the respective simulated electric circuit.



- 156 Novel alkaloid from *Rauvolfia capixabae* (Apocynaceae)

Lanamar A. Carlos, Leda Mathias, Raimundo Braz-Filho and Ivo J. C. Vieira

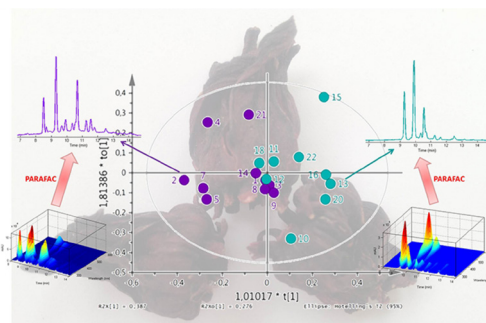
Chemical structure of the novel sarpganine-type alkaloid, Na-methylraufloirine (1), isolated from *Rauvolfia capixabae* (Apocynaceae).



- 160 Application of PARAFAC and OPLS-DA analyses on HPLC fingerprints for the characterization of *Hibiscus sabdariffa* calyces

Freddy A. Bernal, Luisa L. Orduz-Díaz and Ericsson Coy-Barrera

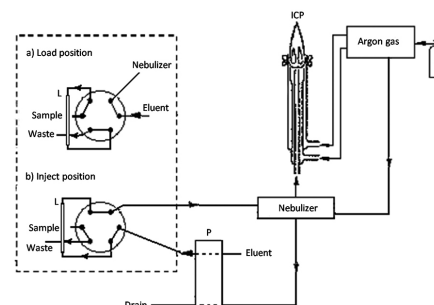
HPLC-UV-DAD profiles of *Hibiscus sabdariffa* extracts were submitted to data mining by Parallel Factor model (PARAFAC) and the corresponding 3D-profile information could be discriminated by means of OPLS-DA.



- 167 A novel method for the determination of trace thorium by dispersive liquid-liquid microextraction based on solidification of floating organic droplet

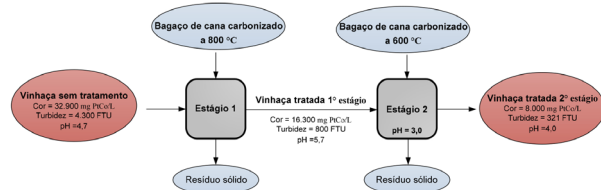
Mohammad Rezaee and Faezeh Khalilian

In this study, dispersive liquid-liquid microextraction based on the solidification of floating organic droplets was used for the preconcentration and determination of thorium in the water samples.



172 Tratamento da vinhaça por adsorção em carvão de bagaço de cana-de-açúcar

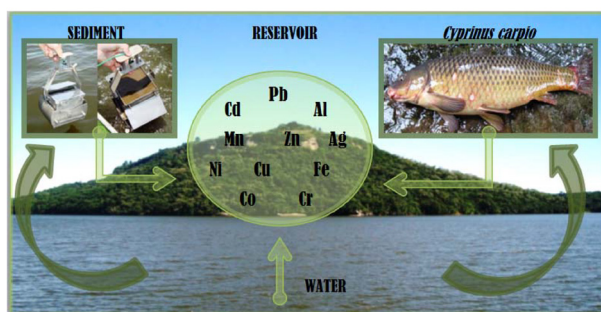
Fernanda L. Seixas, Marcelino L. Gimenès e Nádya R. C. Fernandes-Machado



Vinasse adsorption diagram in two stages.

180 Avaliação da bioacumulação de metais em *Cyprinus carpio* pela interação com sedimento e água de reservatório

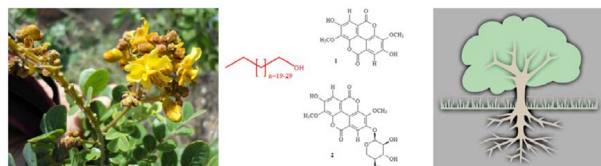
Carmen L. Voigt, Cleber P. da Silva e Sandro X. de Campos



Bioaccumulation is one of the most important processes among the various consequences of the presence of metals in the reservoirs; metals can accumulate in fish organs by exposure to contaminated sediment and water.

189 Composição química das cascas das raízes e flores de *Poincianella pyramidalis* (Fabaceae)

José C. S. de Oliveira, Jorge M. David e Juceni P. David

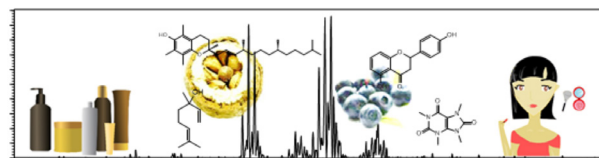


The chemical studies of root and flower extracts resulted in isolation of 3',3'-dimethylellagic acid and 3',3'-dimethylellagic acid-4'-O-β-D-xyloside, terpenes, fatty acid methyl derivatives and fatty alcohols.

Revisão

194 Amazon rainforest cosmetics: chemical approach for quality control

Mariko Funasaki, Hileia dos S. Barroso, Valdelira L. A. Fernandes and Ingrid S. Menezes

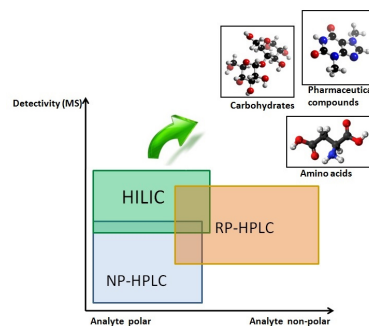


Chemical aspects of fourteen species from Amazon rainforest used in cosmetics were reviewed for the purpose of quality control.

210 Cromatografia por interações hidrofílicas (HILIC): estado da arte e aplicações

Carla G. A. da Silva, Carla B. G. Bottoli e Carol H. Collins

Hydrophilic interaction liquid chromatography (HILIC) is an effective technique for the separation of polar compounds, with separation properties complementary to reversed-phase high performance liquid chromatography (RP-HPLC), while eliminating some of the disadvantages of normal-phase high performance liquid chromatography (NP-HPLC).

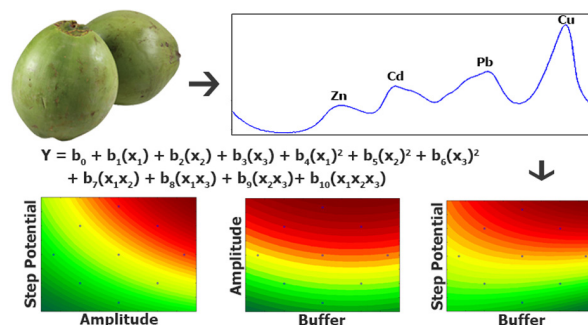


Nota Técnica

221 Uso do planejamento experimental para otimização de um procedimento voltamétrico para determinação simultânea das concentrações dos metais Zn, Cd, Pb e Cu livres em água de coco

Thalles R. Rosa, José G. A. Rodrigues e Rafael de Q. Ferreira

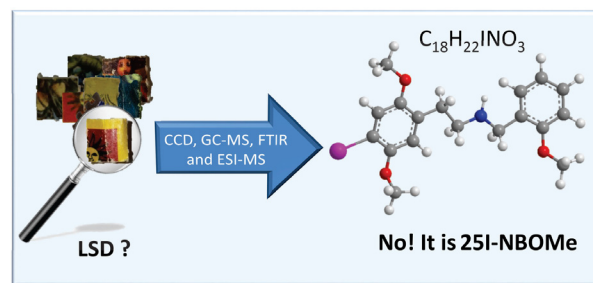
This study employed a factorial design and center composite design in the optimization of the main experimental parameters of SWASV (square-wave anodic stripping voltammetry) for the simultaneous determination of metals Zn, Cd, Pb and Cu free in coconut water.



229 2-(4-iodo-2,5-dimetoxifenil)-N-[(2-metoxifenil)metil]etamina OU 25I-NBOMe: caracterização química de uma designer drug

Pâmella F. dos Santos, Lindamara M. Souza, Bianca B. Merlo, Helber B. Costa, Lilian V. Tose, Heloá Santos, Gabriela Vanini, Leandro F. Machado, Rafael S. Ortiz, Renata P. Limberger, Boniek G. Vaz e Wanderson Romão

The chemical profile of a new designer drug, 2-(4-iodine-2,5-dimethoxyphenyl)-n-(2-methoxyphenyl)methyl]etamine or 25I-NBOMe, was explored using TLC, UV-Vis, ATR-FTIR, GC-MS and ESI-FT-ICR MS.

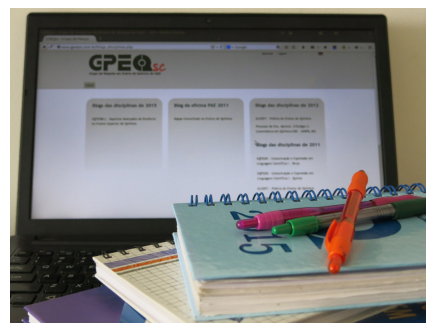


Educação

238 Blogs no ensino de química: análise de comentários publicados em disciplina de comunicação científica

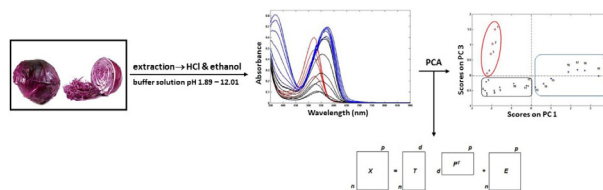
Mario R. Barro, Lea Veras e Salete L. Queiroz

Development and integration of blogs in undergraduate chemistry teaching.



245 Proposta experimental didática para o ensino de análise de componentes principais

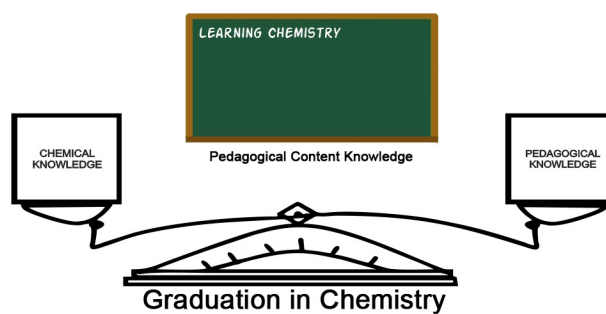
Leonardo Valderrama, Vassula B. Paiva, Paulo H. Março e Patrícia Valderrama



An experiment to teach principal component analysis (PCA) is proposed based on the extraction of anthocyanins from red cabbage and measurement of the UV-Vis spectra in buffer solutions with pH 1.89-12.01.

250 Conhecimento pedagógico e conhecimento químico na formação de professores: a construção da identidade docente

Karla F. D. Cassiano, Nyuara A. da S. Mesquita e Pabline G. Ribeiro



This study describes the construction of the teaching identity of chemistry teachers training at the Federal Institute of Goiás, Brazil, and focuses on the existing tensions between pedagogical and chemical knowledge.

