

Editorial/Editorial

- 363 Movimento Química Pós 2022, aspirando ao Desenvolvimento Sustentável e Soberano do Brasil ajudado pela Química
Romeu C. Rocha Filho

<http://dx.doi.org/10.21577/0100-4042.20170899>

Artigos/Articles

- 365 Predictive model for determining the mass of BHA and BHT to be added in commercial biodiesel

Felipe Y. Savada, Hagata C. Silva, Ana Carolina G. Mantovani, Letícia T. Chendynski, Karina B. Angilelli and Dionísio Borsato

<http://dx.doi.org/10.21577/0100-4042.20170827>

Biodiesel samples with different masses of synthetic antioxidants were analyzed. A mathematical model was created to predict the antioxidant masses to be added to biodiesel in order to reach the legislation values.

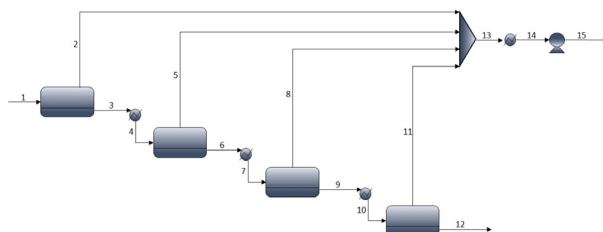


- 374 Detailed evaluation of pervaporation modeling to obtaining anhydrous ethanol

Camila Cavalcanti, Wagner Ramos, Romildo Brito and Karoline Brito

<http://dx.doi.org/10.21577/0100-4042.20170840>

Flowsheet of pervaporation in Aspen Plus™.

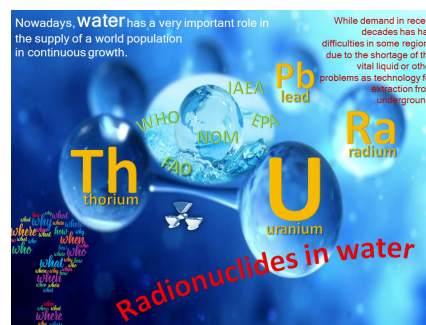


- 383 Natural radionuclides in water using inductively coupled plasma - sector field mass spectrometry

Elizabeth T. Romero Guzmán, José L. Iturbe García, María de J. Marín Allende, Héctor Hernández Mendoza and Lázaro R. Reyes Gutiérrez

<http://dx.doi.org/10.21577/0100-4042.20170841>

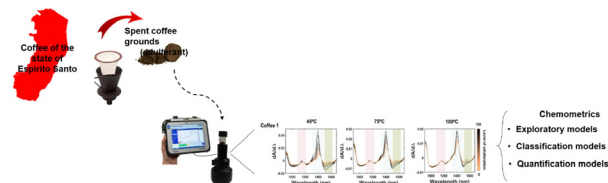
The global water situation is currently working on guidelines for establishing reference levels for radioactivity in drinking water including naturally occurring radioactivity consumed by humans. Simultaneous analysis of radionuclides in water was performed by ICP-SFMS.



- 392 Infravermelho portátil na região do próximo (NIR) aplicado no controle de qualidade de cafés adulterado por borra

Radigya M. Correia, Pedro H. Cunha, Bárbara Z. Agnoletti, Lucas L. Pereira, Fábio L. Partelli, Paulo R. Filgueiras, Valdemar Lacerda Jr. e Wanderson Romão

<http://dx.doi.org/10.21577/0100-4042.20170850>

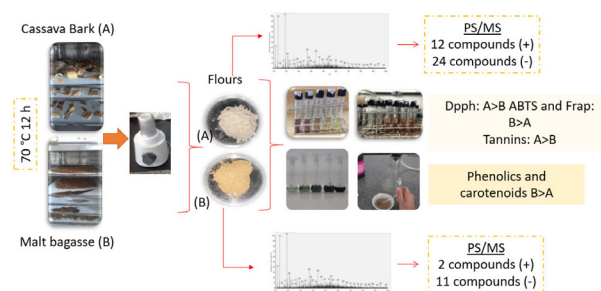


Portable NIR associated with chemometric tools to determine the quality and authenticity of coffee samples from the state of Espírito Santo adulterated by the coffee grounds.

- 403 Characterization and identification of bioactive compounds in agro-food waste flours

Camila G. Rodrigues, Viviane D. M. Silva, Anna C. de Freitas e Loyola, Mauro R. Silva, Rodinei Augusti, Julio O. F. Melo, Lanamar de A. Carlos e Camila A. Fante

<http://dx.doi.org/10.21577/0100-4042.20170853>



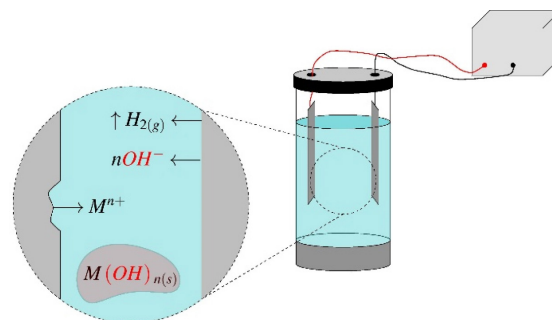
The residues were dried in a tray dryer at 70 °C by 12, after being crushed in a blender of domestic use with the aid of mill attachment. The analyses were: total carotenoids, condensed tannins, total phenolics, antioxidant activity, phenolic profile and paper sprayfingerprint.

Revisão/Review

- 410 Eletrocoagulação/eletrofloculação para tratamento de águas residuárias: eletrodos não convencionais e acoplamento de técnicas

Luís H. A. Grecco, Bárbara C. de A. Souza e M^a Valnice B. Zanoni

<http://dx.doi.org/10.21577/0100-4042.20170846>

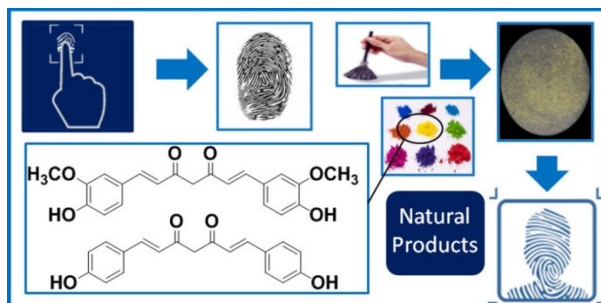


Electrocoagulation system with a cylindrical reactor (right). On the left, there is a representation of the region between the electrodes where the products of the cathodic and anodic reactions are released, and the insoluble metallic hydroxide is formed.

- 424 A Química de Produtos Naturais aplicados a reveladores de impressões digitais latentes

Amanda F. Leitzke, Lucas M. Berneira, Bruno N. da Rosa, Bruna C. Moreira, Kristiane de C. Mariotti, Dalila Venzke e Claudio M. P. Pereira

<http://dx.doi.org/10.21577/0100-4042.20170843>

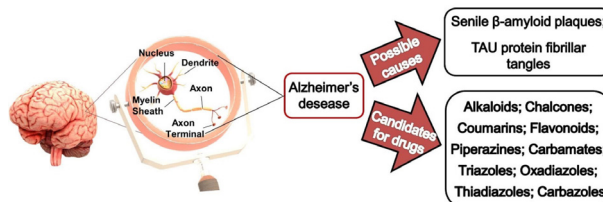


This review provides an overview of the application of a series of natural products in the development of latent fingerprints for forensic purposes.

- 435 Atividade anti-Alzheimer de substâncias oriundas de produtos naturais e de origem sintética: alguns exemplos importantes dos últimos 20 anos

Ana B. S. Velloso, Valdinei B. Lima Filho, Breno A. Soares e Nailton M. Nascimento-Júnior

<http://dx.doi.org/10.21577/0100-4042.20170860>



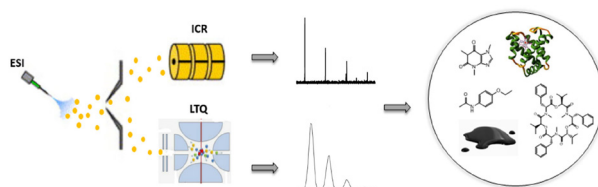
As a way to contribute to the knowledge regarding to Alzheimer's disease, this review describes molecular modeling and medicinal chemistry aspects of natural product derivatives and synthetic compounds developed in the last 20 years.

Nota Técnica/Technical Notes

- 455 Comparando o desempenho de dois analisadores de massas (FT-ICR MS & LTQ MS): uma aula experimental sobre análise de compostos orgânicos

Marcos V. V. Lyrio, Amanda E. Feu, Larissa C. Motta, Laura P. R. Figueroa, Leonardo Boasquevisque, Roberta T. Pinto, Ana Caroline L. Rosa, Heryson T. L. de Arantes, Ramon R. T. Bottocim, Victor da R. Fonseca, Nayara A. Santos, Valdemar Lacerda Jr., Eustaquio V. R. Castro e Wanderson Romão

<http://dx.doi.org/10.21577/0100-4042.20170832>



The performance of two mass analyzers (FT-ICR and LTQ) was tested on low ($M_w = 165\text{--}679$ Da) and high ($M_w = 783\text{--}8.58$ kDa) molecular weight molecules, e.g., Phenacetin, Procaine, Benzocaine, Caffeine anhydrous, Lidocaine, two porphyrins, and two proteins standards, and an oil sample.

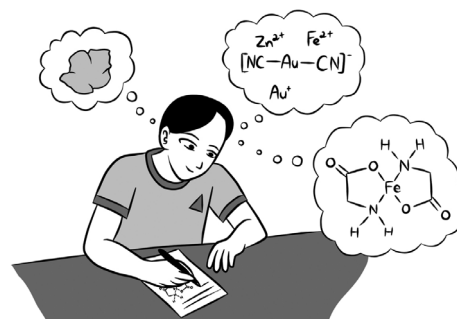
Educação/Education

- 466 Promovendo o envolvimento e a aprendizagem de estudantes no Ensino Superior: uma experiência com a escrita científica na disciplina de Química Inorgânica

Gilson DeFreitas-Silva, Roberta G. Corrêa e Ana L. de Quadros

<http://dx.doi.org/10.21577/0100-4042.20170854>

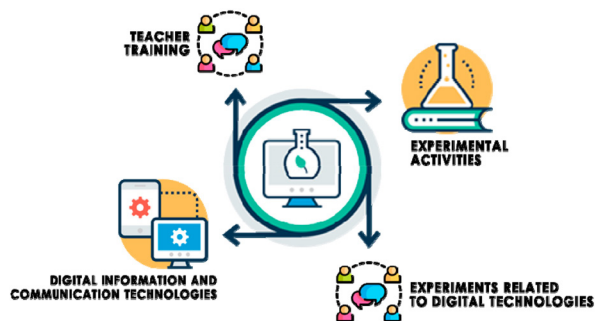
Students' involvement in creative writing of scientific texts should be encouraged throughout the entire undergraduate course. Here we describe an activity developed in the Inorganic Chemistry course.



- 474 Experimentação articulada às tecnologias digitais de informação e comunicação: problematizações de conhecimentos na formação de professores de Química

Renata I. Guaita e Fábio P. Gonçalves

<http://dx.doi.org/10.21577/0100-4042.20170859>



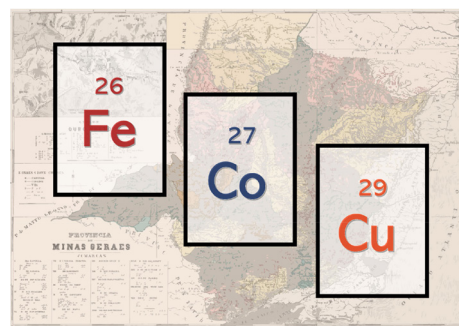
This work about training of chemistry teachers discussed about Digital Information and Communication Technologies in chemistry experimentation.

Assuntos Gerais/General Subject

484 As malsucedidas buscas de minerais em Minas Gerais

Luciano E. Faria e Carlos Alberto L. Filgueiras

<http://dx.doi.org/10.21577/0100-4042.20170844>



How could historical chemical analyzes have confused iron minerals, either with copper or with cobalt minerals?

497 Movimento Química pós 2022: construção de um plano de ação para que a Química e Seus Atores impactem a Sustentabilidade e Soberania no Brasil

Ingrid F. Silva, Pedro H. P. Nascimento, Rochel M. Lago, Mozart N. Ramos, Fernando Galembeck, Romeu C. Rocha Filho e Ana Paula C. Teixeira

<http://dx.doi.org/10.21577/0100-4042.20170898>

The process of formulating an action plan with the aim that chemistry and its actors contribute for the sustainable and sovereign development of Brazil in the coming years is described in detail.

Action plan "Chemistry and its Actors for a More Sustainable and Sovereign Brazil"

