

## Editorial

137 Perspectivas para 2022

Giovanna Machado, Jorge M. David e Nelson H. Morgan

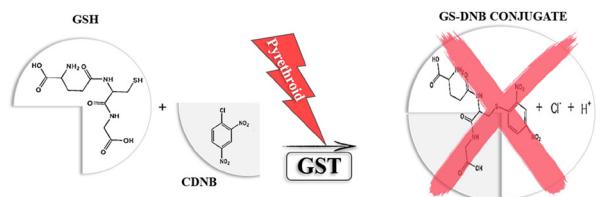
<http://dx.doi.org/10.21577/0100-4042.20170873>

## Artigos/Articles

138 Atividade inibitória de pesticidas piretroides sobre a glutatona S-transferase

Eliane B. Ribeiro, Mihaela Badea, Danilo B. Ribeiro, Andressa R. C. Costa, Djanira R. dos Santos, Paulo R. B. O. Marques e Gilvanda S. Nunes

<http://dx.doi.org/10.21577/0100-4042.20170804>

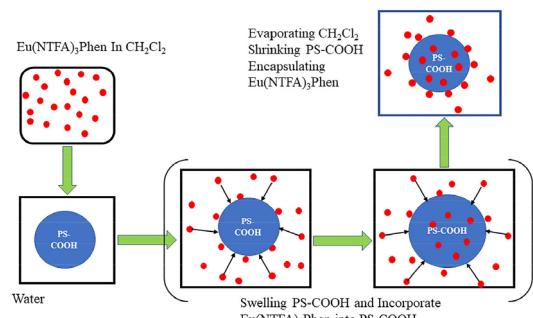


Inhibition effect promoted by pyrethroid insecticides in the reaction catalyzed by glutathione S-transferase (GST) between reduced glutathione (GSH) and 1-chloro-2,4-dinitrobenzene (CDNB).

145 Preparation of fluorescent polystyrene microspheres by improving swelling performance based on molecular weight and surface carboxyl group content

Fei Sun, Chao Feng, Yang Wang, Xue Yang and Hong Zhao

<http://dx.doi.org/10.21577/0100-4042.20170808>



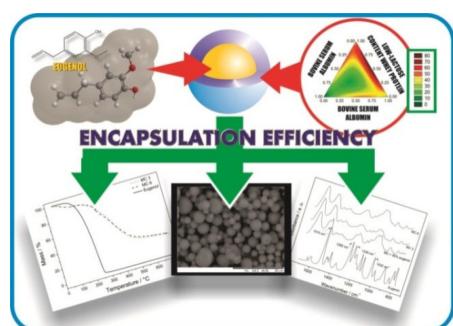
In the paper, fluorescent polystyrene microspheres are prepared by incorporating Eu(NTFA)<sub>3</sub>Phen (NTFA=4,4,4-trifluoro-1-(2-naphthyl)-1,3-butanedione, Phen=1,10-phenanthroline) molecules into carboxylated polystyrene microspheres via the swelling-evaporation method.

152 Optimização de microcápsulas carregadas com eugenol obtidas por spray drying usando um design de mistura simplex-centroid

Paulo R. S. Bittencourt, Ruth dos S. da Veiga, Rosana A. da Silva-Buzanello, Fernando R. Scremenin, Tania A. Becker-Algeri, Marinês P. Corso, Éder L. de M. Flores and Cristiane Canan

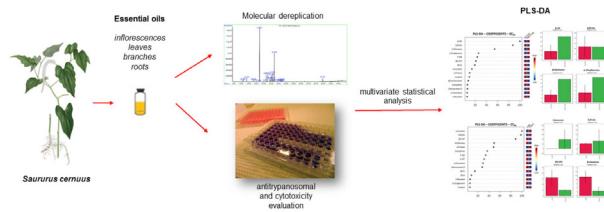
<http://dx.doi.org/10.21577/0100-4042.20170810>

Microencapsulated eugenol system obtained by spray drying using low-lactose content whey protein, rice bran protein, and bovine serum albumin as wall materials.



- 159 Molecular dereplication of volatile oils from *Saururus cernuus* L. and evaluation of anti-*Trypanosoma cruzi* activity  
*Juliana R. Brito, Thais A. Costa-Silva, Vinicius S. Londero, João L. Baldim, Andre G. Tempone, Edgard A. Ferreira and João Henrique G. Lago*

<http://dx.doi.org/10.21577/0100-4042.20170811>

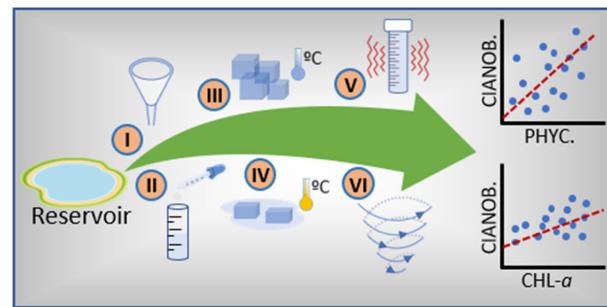


This work describes the molecular dereplication (GC/MS and PLS/DA) and the evaluation of anti-*T. cruzi* activity/toxicity against NCTC cells of volatile oils from inflorescences, leaves, and roots of *Saururus cernuus* L.

- 165 Ficocianina como indicador de cianobactérias em reservatórios

*Thiago T. da Silva, Rufina A. M. Albuquerque e Helena Becker*

<http://dx.doi.org/10.21577/0100-4042.20170814>



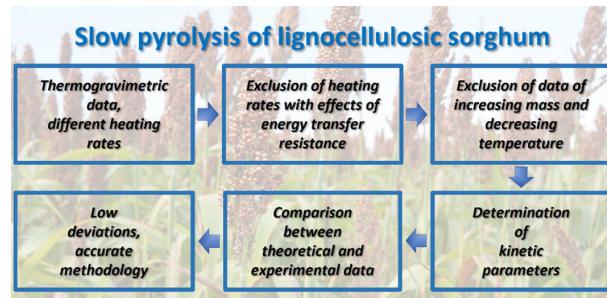
Steps of the phycocyanin analysis procedure in water: (I) filtration, (II) addition of buffer, (III) freezing, (IV) thawing, (V) sonication, (VI) centrifugation.

- 171 Cinética de pirólise para o sorgo lignocelulósico: análise de dados termogravimétricos para aplicação do modelo de Friedman

*Matheus H. B. P. da Silva, Tiago J. P. de Oliveira, Carlos H. Ataíde, Daniel A. Cerqueira, Nádia G. Sousa e Cássia R. Cardoso*

<http://dx.doi.org/10.21577/0100-4042.20170816>

The work aimed to explore the slow pyrolysis of lignocellulosic sorghum; a biomass still little explored for kinetic parameters estimation. The Friedman model was used to determine accurate values of activation energy.



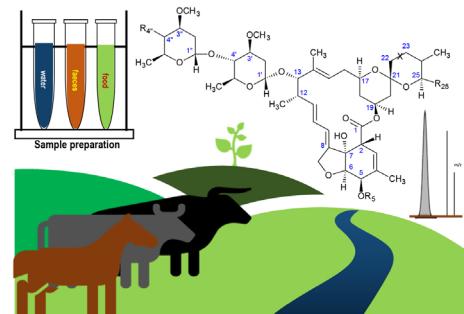
## Revisão/Review

- 178 Métodos analíticos para determinar lactonas macrocíclicas en diferentes tipos de matrices. una revisión

*Patricia E. Vázquez-Quintal, Roger I. Rodríguez-Vivas y David Muñoz-Rodríguez*

<http://dx.doi.org/10.21577/0100-4042.20170818>

The review focuses on sample preparation and analytical techniques related with the determination of macrocyclic lactones in biological, alimentary, and environmental simples.

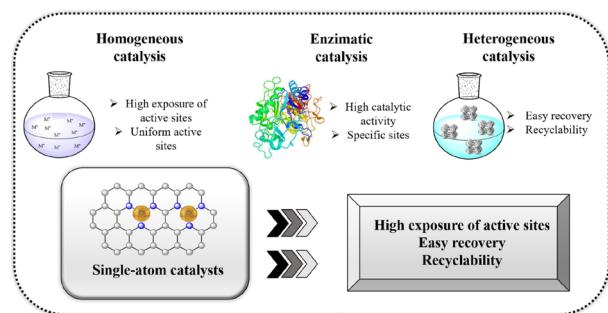


194 Uma breve revisão sobre a catálise por átomos isolados: conceitos e aplicações

*Luanne E. M. Ferreira, Ruan S. A. Ribeiro, Vinicius G. C. Madriaga, Sancler C. Vasconcelos, Eric T. T. Shimabukuro, Vinicius Rossa, Sara S. Vieira, Fabio B. Passos e Thiago M. Lima*

<http://dx.doi.org/10.21577/0100-4042.20170822>

Single-atom catalysts link homogeneous and heterogeneous catalysis, presenting advantages such as easy recovery, recyclability, high exposure, and uniformity of active sites.

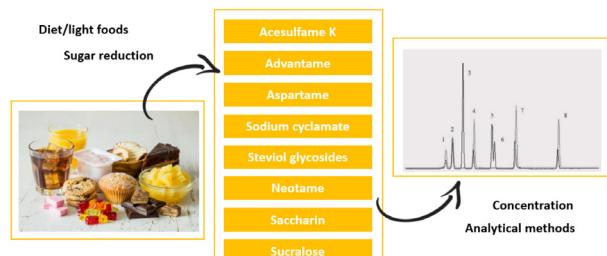


207 Edulcorantes de alta intensidade: tendências de uso em alimentos e avanços em técnicas analíticas

*Ícaro G. Nicoluci, Carolina T. Takehara e Adriana P. A. Bragotto*

<http://dx.doi.org/10.21577/0100-4042.20170828>

Several analytical methods have already been developed for the determination of sweeteners in foods and they are of great importance for ensuring food and consumer safety.



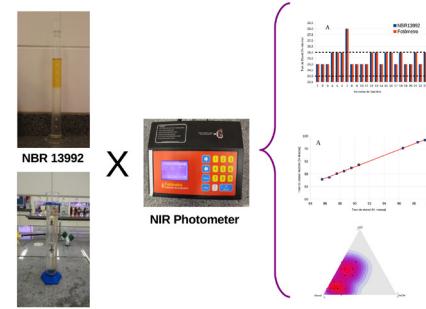
## Nota Técnica/Technical Notes

218 Avaliação analítica de analisador de combustível comercial no controle de qualidade de etanol e gasolina comum

*Sthefany dos S. Sena e Ernesto C. Ferreira*

<http://dx.doi.org/10.21577/0100-4042.20170817>

Volumetric and glass densimeter official methods versus commercial photometric method: Accuracy, Precision, Linearity and Selective studies on fuel analysis.

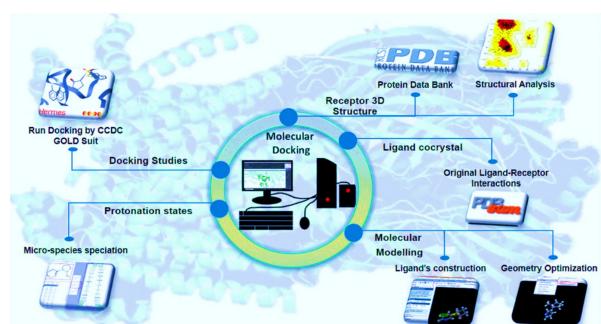


223 Construção, otimização e ancoragem molecular de substâncias bioativas em biomacromoléculas: um tutorial prático

*Victor S. Batista, Renan L. Farias, Leonardo P. M. Simões e Nailton M. Nascimento-Júnior*

<http://dx.doi.org/10.21577/0100-4042.20170821>

We described herein, a low-cost workflow for molecular docking. In this context, you will learn: how to build up and optimize the ligands, micro-species speciation, how to perform molecular docking, ligand-receptor analysis and generation of quality figures.



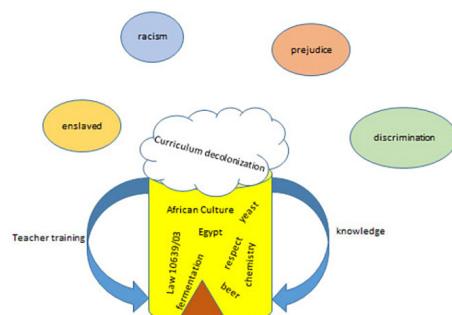
## Educação/Education

- 235 Cerveja egípcia? Educação para as relações étnico-raciais (ERER) na formação docente em Química

*Eliete L. Silva, Marysson J. R. Camargo e Anna M<sup>a</sup> C. Benite*

<http://dx.doi.org/10.21577/0100-4042.20170833>

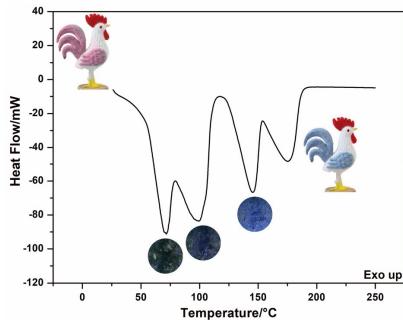
This article brings the insertion of theoretical and methodological aspects in the chemistry teacher training course for the implementation and operationalization of Law 10639/03.



- 245 Microlearning as a tool for scientific dissemination: thermal analysis of the Portuguese good luck rooster

*Raquel Magri, Caroline Gagliari, Rafael T. Alarcon, Aguinaldo R. de Souza and Gilbert Bannach*

<http://dx.doi.org/10.21577/0100-4042.20170836>



DSC curve shows the behavior of cobalt (II) chloride hexahydrate during heating.

## Assuntos Gerais/General Subject

- 249 Anais dos ENEQ: o que nos dizem sobre a área de educação em química no Brasil?

*Daniela M. Alexandrino, Paulo S. Bretones e Salete L. Queiroz*

<http://dx.doi.org/10.21577/0100-4042.20170834>

The relationship between National Meeting on Chemistry Education and the Chemistry Education area.

