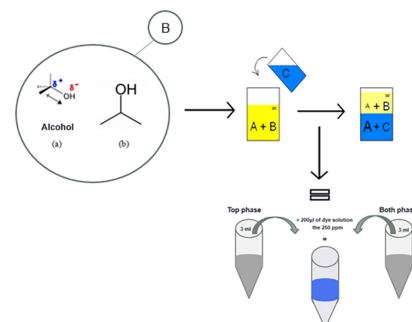


- 1039 Extração de corantes têxteis utilizando sistemas aquosos bifásicos compostos por 2-propanol e sais de sulfato

Juliana G. Pimentel, Olga R. R. Gandolfi, Vanessa S. Sampaio, Lizzy A. A. Veríssimo, Luciano B. Rodrigues, Cristiane M. Veloso, Rafael da C. I. Fontan e Renata C. F. Bonomo

<http://dx.doi.org/10.21577/0100-4042.20170911>

Short chain alcohols (B) are infinitely soluble in water (C). Adding inorganic salt (A) increases the polarity of this aqueous phase, separates the organic constituent of this phase, making it an excellent component in the extraction of organic substances, such as textile dye.

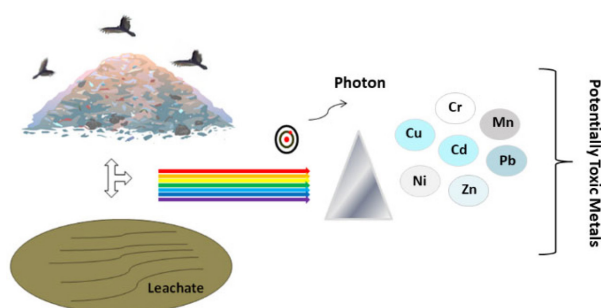


- 1047 Avaliação de metais potencialmente tóxicos em chorume proveniente de área de deposição de resíduos sólidos em Belém – Pará

Lianne M^a M. Dias, M^a Vitória R. da Silva, Kelson do C. F. Faial, Neuton T. Vasconcelos Junior, Raimunda F. S. Maia, José A. S. Souza e Emanuel N. Macedo

<http://dx.doi.org/10.21577/0100-4042.20170912>

Determination of potentially toxic metals in slurry sampling in Solid Waste Disposal area by Inductively coupled plasma atomic emission spectrometry technique.

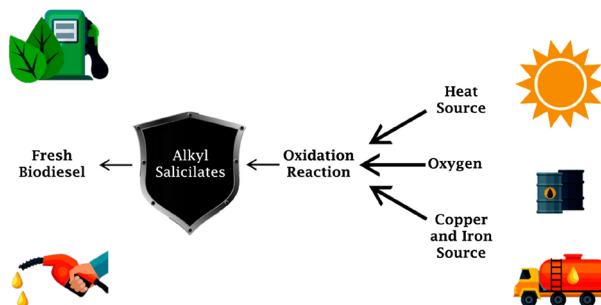


- 1053 Salicilatos como inibidores do processo oxidativo mediado por cobre e ferro no biodiesel B100

Eduardo V. Masetto, Ana C. Lazaroto, Giovanna Oleinik, Fernanda O. Lima, André L. Gallina e Letiére C. Soares

<http://dx.doi.org/10.21577/0100-4042.20170916>

Biodiesel when exposed to heat, metals, oxygen and other factors triggers the biofuel's oxidation reaction. In this work, alkyl salicylates were used to inhibit the biodiesel oxidative process by exposure to heat, copper and iron.

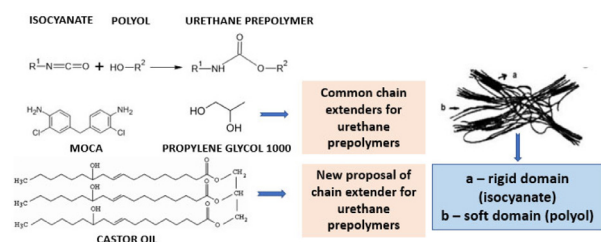


- 1060 Synthesis of toluene diisocyanate urethane prepolymer using castor oil and evaluation of mechanical properties

Mayara Q. Savioli and José R. R. Bortoleto

<http://dx.doi.org/10.21577/0100-4042.20170921>

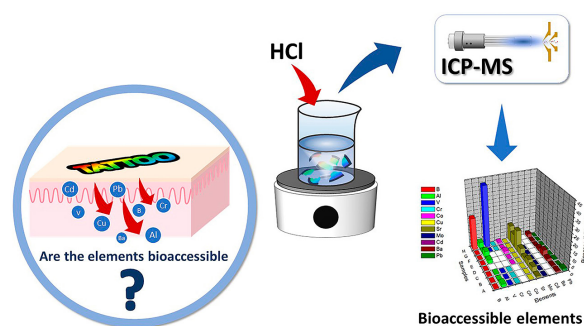
The search for renewable products brings concern to the polymer's segment due difficulties to replace the synthetic raw materials. This research shows a possible solution to replacement of synthetic polyol by a natural polyol, castor oil, for the manufacturing of cured polyurethanes.



- 1067 Determination of total and bioaccessible elements in temporary adhesive tattoos used by children and adults

André L. Squizzato, Augusto T. S. del Claro, Riad D. Lourenço, Alexandre M. Fioroto, Angerson N. Nascimento and Rodrigo A. A. Muñoz

<http://dx.doi.org/10.21577/0100-4042.20170917>



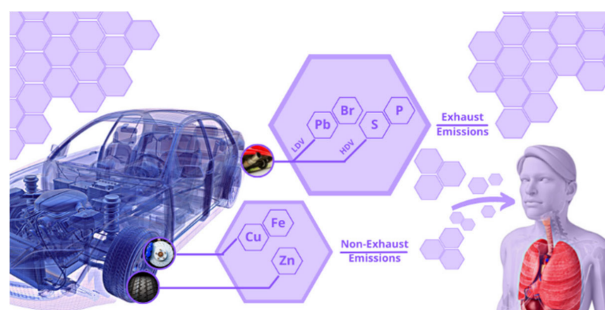
We show that commercially-available temporary adhesive tattoos, including those packaged with bubble gums, present bioaccessible elements.

- 1075 Fatores de emissão e de enriquecimento da crosta para elementos traço ($PM_{2.5}$) emitidos pela frota veicular na região metropolitana de São Paulo, Brasil

Juan R. S. Benatti, Pedro J. Pérez-Martínez e Regina M. Miranda

<http://dx.doi.org/10.21577/0100-4042.20170923>

Automotive vehicles are one of the main sources of $PM_{2.5}$. This $PM_{2.5}$ contains several trace elements, which can result from either exhaust or non-exhaust emissions. Determining the emission factors of these elements helps in the decision making aimed to improve air quality.

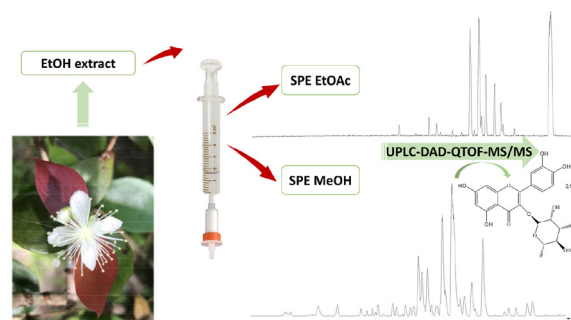


- 1083 Taninos e flavonoides das flores de *Eugenia uniflora* (Myrtaceae)

Patricia S. O. de Souza, Micheline T. dos Santos, Rejane G. Monteiro, M^a Tamires A. Espindola, Helter J. S. de Souza, Amanda L. B. Monteiro, Celso de A. Camara e Tania M^a S. Silva

<http://dx.doi.org/10.21577/0100-4042.20170920>

Eugenia uniflora (pitanga) flowers are rich in flavonoids and tannins.

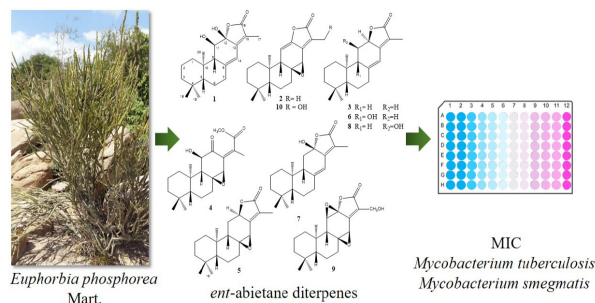


- 1092 Diterpenos *ent*-abietanos de *Euphorbia phosphorea* (Euphorbiaceae)

Roseana A. R. Meireles, Lucas S. Abreu, Joanda P. R. e Silva, Andreza B. S. Cavalcanti, Renata P. B. de Menezes, Gabriela C. S. Rodrigues, Valnês S. Rodrigues Junior, José I. M. de Melo, Massuo J. Kato, Vicente C. de O. Costa, Marcus T. Scotti e Josean F. Tavares

<http://dx.doi.org/10.21577/0100-4042.20170932>

The phytochemical study of the roots of *Euphorbia phosphorea* Mart. (Euphorbiaceae) resulted in the isolation of ten *ent*-abietane diterpenes submitted to investigation of their antimycobacterial activity.



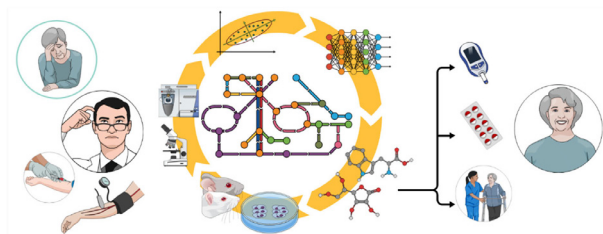
Revisão/Review

- 1098 Biomarcadores moleculares de doenças humanas: conceitos fundamentais, modelos de estudo e aplicações clínicas

Hans R. Zamora-Obando, Adriana T. Godoy, Alan G. Amaral, Alessandra de S. Mesquita, Bruna E. S. Simões, Heloíse O. Reis, Isabela Rocha, Matheus Dallaqua, Mariana Baptista, Milena C. V. Fernandes, Monica F. Lima e Ana V. C. Simionato

<http://dx.doi.org/10.21577/0100-4042.20170905>

Currently, clinical research uses biological models and advances in chemical analysis platforms to identify compounds (biomarkers) that better understand the disease and generate diagnostic and therapeutic advances to improve people's quality of life.



- 1114 Norbornadieno: síntese e aplicações

Anni C. S. Gomes, Antonio J. Demuner, Bryan N. S. Pinto e Elson S. Alvarenga

<http://dx.doi.org/10.21577/0100-4042.20170904>

Norbornadiene (NBD) is versatile molecule. From 1950 to the present day, to solar energy to agrochemicals, NBD has proven to be a molecule with many applications in chemistry.

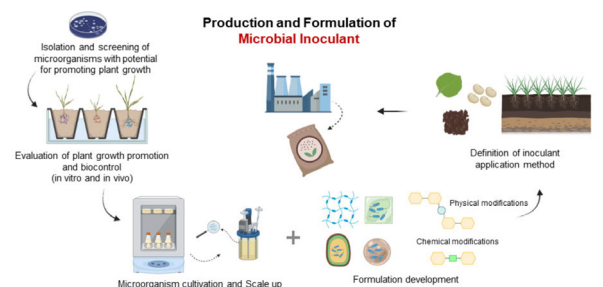


- 1133 Avanços na produção e formulação de inoculantes microbianos visando uma agricultura mais sustentável

Camila Florencio, Ricardo Bortoletto-Santos, Camila P. Favaro, Mariana G. Brondi, Camila C. V. Velloso, Rodrigo Klaic, Caue Ribeiro, Cristiane S. Farinas e Luiz H. C. Mattoso

<http://dx.doi.org/10.21577/0100-4042.20170909>

Biofertilizers/microbial inoculants are potential alternatives for sustainable agriculture and the development of new formulations is a crucial step for the success of these bioproducts.



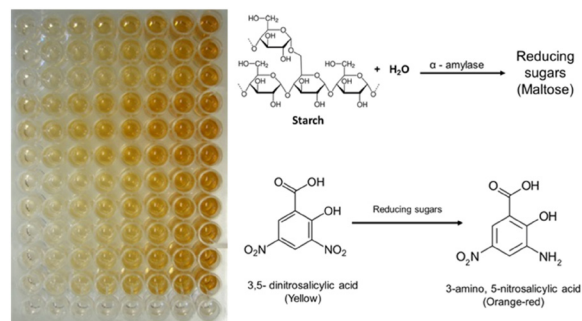
Nota Técnica/Technical Notes

- 1146 Assessment of α -amylase inhibition activity by an optimized and validated *in vitro* microscale method

Graciela Granados-Guzmán, Blanca A. Alanís-Garza, Rocío Castro-Ríos, Noemí Waksman-Minsky and Ricardo Salazar-Aranda

<http://dx.doi.org/10.21577/0100-4042.20170919>

α -Amylase catalyzes the cleavage of the α -D-(1-4) glycosidic bond in starch to produce reducing sugars. Reducing sugars reduce the aldehyde group of 3,5-dinitrosalicylic acid (DNS) to form 3-amino-5-nitrosalicylic acid (ANSA).

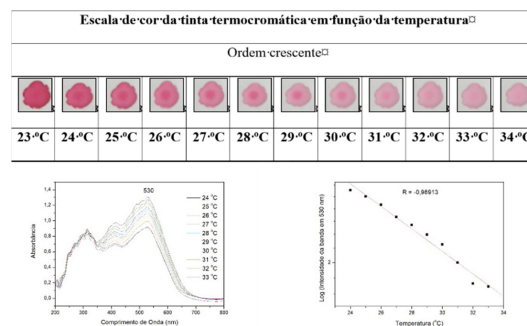


- 1153 Desenvolvimento de acessório portátil de controle de temperatura para medidas espectroscópicas

Daniel A. Pires, Henrique J. da Silva, Lucas A. Rocha e Eduardo J. Nassar

<http://dx.doi.org/10.21577/0100-4042.20170925>

Temperature effect on structure and properties of the chemical substance. Development of the accessory using Peltier principle, this system can be used to identify the degradation in function of the temperature to low cost.



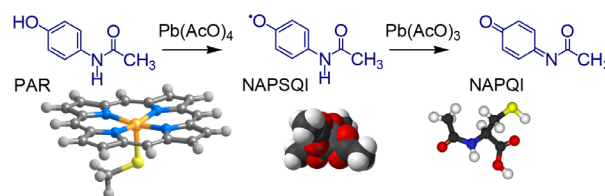
Educação/Education

- 1160 Estudo teórico e experimental de estrutura e reatividade relacionado ao metabolismo e toxicidade do paracetamol

Rosivaldo S. Borges, Wanda S. Costa, Ellen P. C. Gurrão, Luiz H. C. Holanda, Alanna C. L. F. Sousa, Joyce K. L. Vale, Cláudio N. Alves e Albérico B. F. da Silva

<http://dx.doi.org/10.21577/0100-4042.20170927>

Paracetamol is an analgesic and antipyretic related to liver toxicity. The metabolism and chemical intermediates are involved in its side effect. These mechanisms were evaluated using theoretical and experimental approaches. All results can be applied on pharmaceutical chemistry teaching.

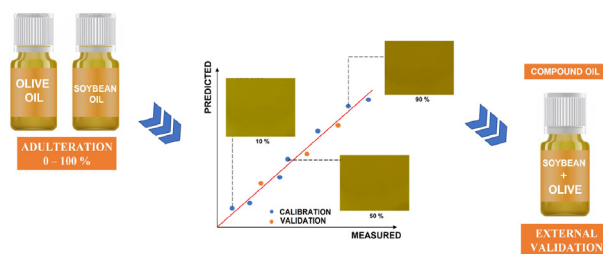


- 1167 Experimento didático de Quimiometria empregando imagens digitais obtidas por celular para determinar adulteração de azeite de oliva com óleo de soja: um tutorial, parte VI

Carlos A. Rios, André M. de Souza, Ronei J. Poppi e Márcia C. Breikreitz

<http://dx.doi.org/10.21577/0100-4042.20170946>

The mixtures of olive oil with soybean oil were prepared and digital images were collected. Based on the images and using univariate and multivariate approaches, analytical curves were constructed and these were used to predict the percentage of olive oil in commercial samples.



Assuntos Gerais/General Subject

- 1177 Uma nota sobre a transposição de termos químicos para a língua portuguesa

Giuliana C. de Souza, Luciano R. Bastos e André G. H. Barbosa

<http://dx.doi.org/10.21577/0100-4042.20170931>

In the graph above It is remarked that while the “real referent” and “scientific meaning” are actually independent of any particular language, the “orthographic signs”, in written and spoken forms, are always language dependent.

