In this issue

Krzysztof Kuciński and Grzegorz Hreczycho
Diisopropylamine as a single catalyst in the synthesis of aryl disulfides

DOI 10.1515/gps-2016-0205
Green Process Synth 2018; 7: 12–15

Original article: The oxidative coupling of aryl thiols was carried out in the presence of catalytic amount of iPr$_2$NH in air (room temperature) in acetonitrile, without metal catalysts, additives, or external activators.

**Keywords:** amines; base catalysis; disulfides; oxidative coupling; thiols.

Zena Xin, Panchao Zhao, Jialin Chen, Yaohong Ma, Ying Xu, Hao Cui and Wei Yi
Processing and properties of high-purity micro-lamellate (NH$_4$)$_2$RuCl$_6$ particles

DOI 10.1515/gps-2016-0128
Green Process Synth 2018; 7: 16–22

Original article: High-purity micro-lamellate (NH$_4$)$_2$RuCl$_6$ particles from crude Ru powder were achieved through the chemical separation method. The thermal decomposition behavior of (NH$_4$)$_2$RuCl$_6$ was analyzed by TG-DTA-MS combined with the HTXRD and SEM techniques.

Keywords: (NH$_4$)$_2$RuCl$_6$; HTXRD; ruthenium; TG-DTA-MS; thermal decomposition.
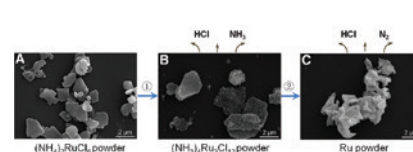

Yuting Bai, Wenyuan Wu and Xue Bian
Dynamic synthesis route of zeolite Y with kaolin to improve yield

DOI 10.1515/gps-2016-0172
Green Process Synth 2018; 7: 23–29

Original article: Zeolite NaY was successfully synthesized with kaolin by using a dynamic hydrothermal crystallization method; the yield of zeolite NaY was significantly improved and relative crystallinity reached 74.18%.

**Keywords:** dynamic crystallization; kaolin; structure-directing agent; zeolite.
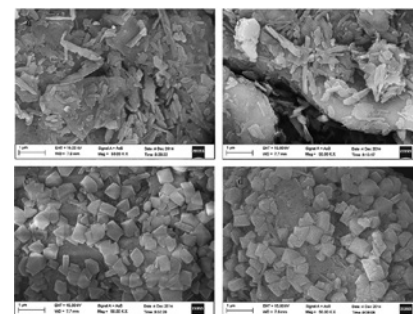
Ramesh Vinayagam, Thivaharan Varadavenkatesan and Raja Selvaraj
Green synthesis, structural characterization, and catalytic activity of silver nanoparticles stabilized with *Bridelia retusa* leaf extract

DOI 10.1515/gps-2016-0236
Green Process Synth 2018; 7: 30–37

Original article: For the first time, silver nanoparticles (SNPs) were synthesized from the leaf extract of *Bridelia retusa,* and the resulting SNPs showed potential catalytic activity to degrade Rhodamine B dye.

Keywords: *Bridelia retusa*; dye degradation; green synthesis; Rhodamine B; silver nanoparticles.
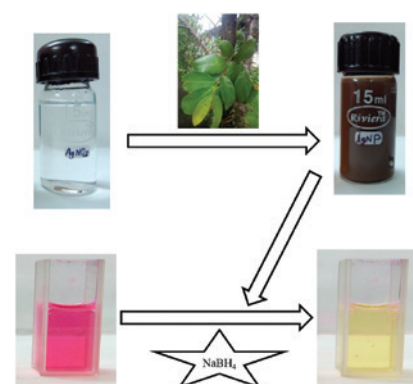
Maryam Eskandari-Nojedehi, Hoda Jafarizadeh-Malmiri and Javad Rahbar-Shahrouzi
Hydrothermal green synthesis of gold nanoparticles using mushroom (*Agaricus bisporus*) extract: physico-chemical characteristics and antifungal activity studies

Original article: Hydrothermal green synthesis of AuNPs was developed using edible mushroom extract.

**Keywords:** antifungal activity; edible mushroom; gold nanoparticles (AuNPs); green synthesis; hydrothermal process.
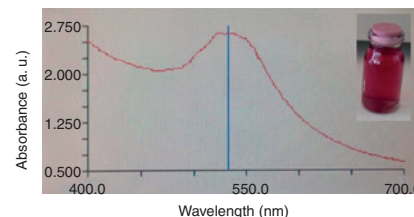
Evgeni Simeonov, Zvezdelina Yaneva and Chavdar Chilev
Kinetics of green solid-liquid extraction of useful compounds from plant materials: kinetics coefficients and modeling

Original article: The kinetics of extraction of valuable target compounds from tobacco leaves (*Nicotiana tabacum* L.) and red geranium roots (*Geranium sanguineum* L.) at periodic conditions in a batch mode was experimentally investigated and satisfactorily modeled by a four-parameter empirical model for variable diffusivity.
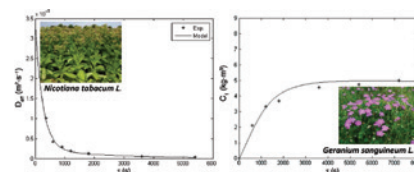
**Keywords:** diffusion coefficient; kinetics; modeling; plant material; solid-liquid extraction.

Mihaela Roşca, Raluca-Maria Hlihor, Petronela Cozma, Elena Niculina Drăgoi, Mariana Diaconu, Bruna Silva, Teresa Tavares and Maria Gavrilescu
Comparison of *Rhodotorula* sp. and *Bacillus megaterium* in the removal of cadmium ions from liquid effluents

Original article: A full comparison between two different types of dead biomasses was performed to demonstrate the ability in Cd(II) removal from liquid effluents, considering the influence of operating parameters, such as: pH, biosorbent dosage, contact time, temperature, initial metal concentration followed by a modeling approach based on linear regression with Durbin-Watson statistics.
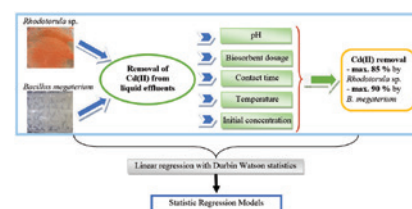
Keywords: biosorption; Cd(II); microorganisms; modeling; statistical model.