

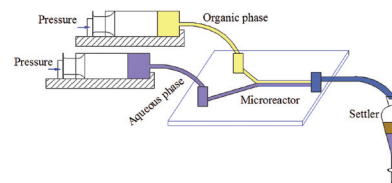
In this issue

Libo Zhang, Feng Xie, Shiwei Li,
Shaohua Yin, Jinhui Peng and
Shaohua Ju
**Solvent extraction of Nd(III) in a Y
type microchannel with 2-ethylhexyl
phosphoric acid-2-ethylhexyl ester**

DOI 10.1515/gps-2014-0095
Green Process Synth 2015; 4: 3–10

Original article: Solvent extraction of Nd(III) in a Y type microchannel with 2-ethylhexyl phosphoric acid-2-ethylhexyl ester was studied.

Keywords: microreactor; Nd(III); P507 extractant; solvent extraction.

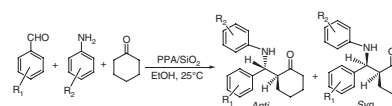


Di Liu, Jingwei Zhang, Chi Zhang and
Xiaoyan Kou
**One-pot synthesis of β -amino
carbonyl compounds catalyzed silica
supported phenylphosphinic acid**

DOI 10.1515/gps-2014-0077
Green Process Synth 2015; 4: 11–15

Original article: A simple and easy synthesis of β -amino carbonyl compounds was developed by the one-pot condensation of ketones, aromatic aldehydes and anilines at 25°C in the presence of silica supported phenylphosphinic acid.

Keywords: β -amino carbonyl compounds; Mannich reaction; silica supported phenylphosphinic acid; synthesis.

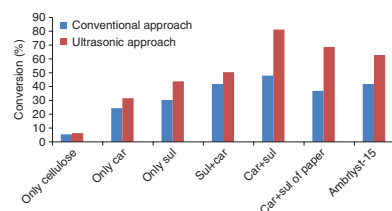


Namrata D. Gaikwad and Parag R.
Gogate
**Synthesis and application of carbon
based heterogeneous catalysts
for ultrasound assisted biodiesel
production**

DOI 10.1515/gps-2014-0079
Green Process Synth 2015; 4: 17–30

Original article: Catalyst prepared by hydrothermal carbonization followed by sulfonation from the commercial cellulose showed the best catalytic performance in an intensified process for biodiesel production based on the use of ultrasonic irradiations and sustainable feedstock as palm fatty acid distillate.

Keywords: biodiesel; esterification; heterogeneous catalyst; intensification; ultrasound.

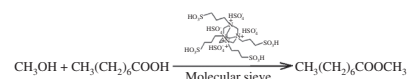


Chen Keke, Du Huan, Zhang Jiawen,
Zhang Xiaofang, Kuang Yingying and
Han Xiaoxiang

**Catalytic synthesis of methyl
caprylate using multi-SO₃H
functionalized Brønsted acidic
ionic liquid as catalyst**

DOI 10.1515/gps-2014-0080
Green Process Synth 2015; 4: 31–36

Original article: Multi-SO₃H
functionalized Brønsted acidic ionic
liquid was very efficient for the
esterification of methyl caprylate and
the catalyst could be recovered and
reused several times without major
loss of catalytic activity.



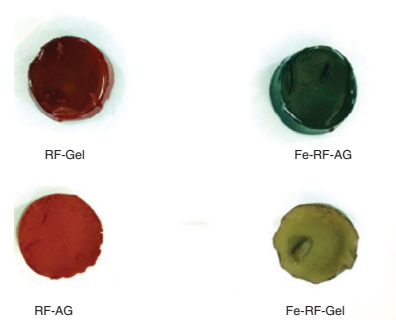
Keywords: esterification; ionic
liquid; methyl caprylate.

Naveen Kumar Verma, Prateek Khare
and Nishith Verma

**Synthesis of iron-doped resorcinol
formaldehyde-based aerogels for
the removal of Cr(VI) from water**

DOI 10.1515/gps-2014-0072
Green Process Synth 2015; 4: 37–46

Original article: The resorcinol
formaldehyde-based aerogels doped
in situ with Fe contents were syn-
thesized and used for the removal
of Cr(VI) from water using adsorption,
with the maximum adsorption
capacity of ~55 mg/g obtained at the
aqueous phase concentration of 275
mg/l.



Keywords: adsorption;
chromium(VI); Fe-doping; RF aero-
gels; wastewater treatment.