

Reaction Chemistry & Engineering

Bridging the gap between chemistry and chemical engineering

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IN THIS ISSUE

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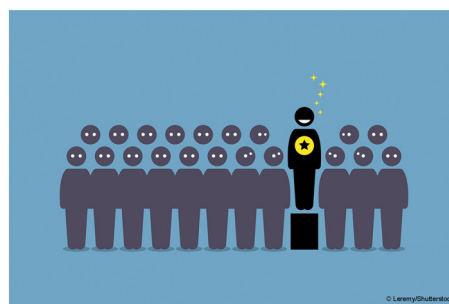
Cover

See Atul Bari,
Haresh Manyar *et al.*,
pp. 1994–2003.
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Dr Haresh Manyar
from *React. Chem. Eng.*,
2025, 10, 1994.

EDITORIAL

1962

Outstanding Reviewers for *Reaction Chemistry & Engineering* in 2024

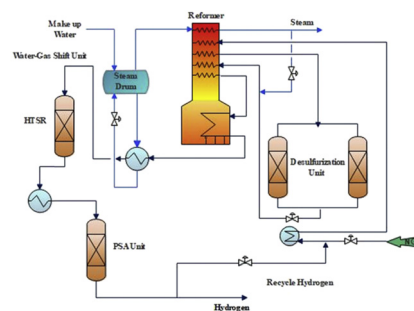


REVIEW

1963

Steam reforming of methane: state of the art and novel technologies

Aimaro Sanna, Dillon Openshaw, Princess Oghotomo and Giuseppe Bagnato*



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Elemental answers

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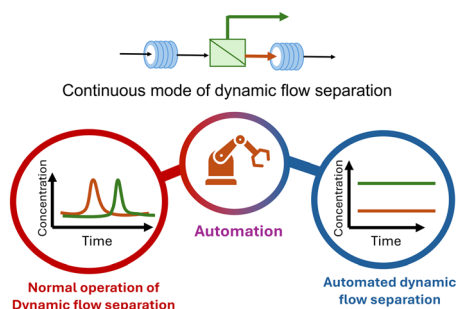


MINI REVIEW

1978

Opportunities for automation in continuous dynamic flow separation

Chetsada Khositanon, Panitan Thakhiew,
Charoen Chinwanitcharoen, Kousuke Hiromori
and Nopphon Weeranoppanant*

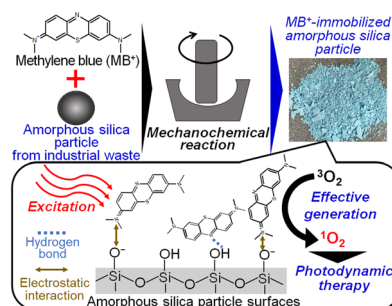


COMMUNICATION

1989

Monomeric immobilization of methylene blue on pure silica particles derived from industrial waste

Reo Kimura, Sunao Chatani, Masahiko Inui,
Satoshi Motozuka, Wanyu Shi, Iori Yamada
and Motohiro Tagaya*

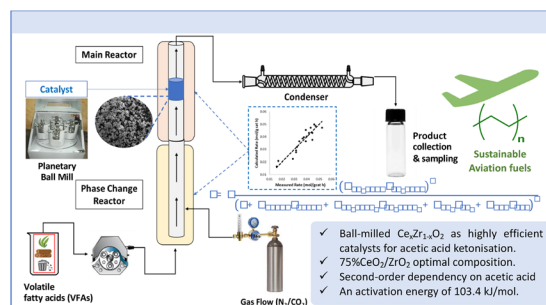


PAPERS

1994

Efficacy of mechanochemically prepared ceria-zirconia catalysts in ketonisation of acetic acid

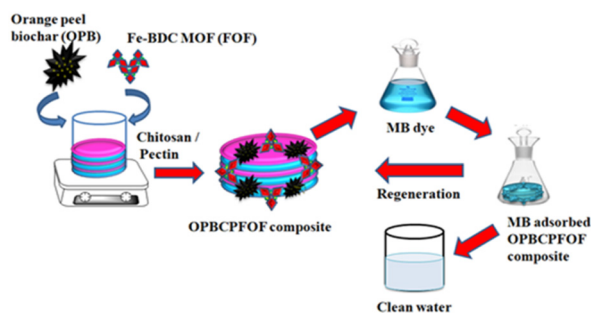
Krutarth Pandit, Gunjan Deshmukh, Dipti Wagh,
Vikram Chatake, Aniruddha Pandit,
Supriyo Kumar Mondal, Atul Bari,* Nancy Artioli
and Haresh Manyar*



2004

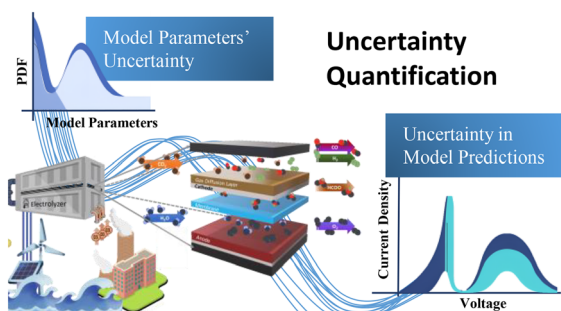
Recyclable biopolymer encapsulated orange peel biochar embedded iron-organic framework composite for selective uptake of methylene blue

Vellaiyapillai Sathiyajothi, Natrayasamy Viswanathan,*
Manickam Selvaraj and Mohammed A. Assiri



PAPERS

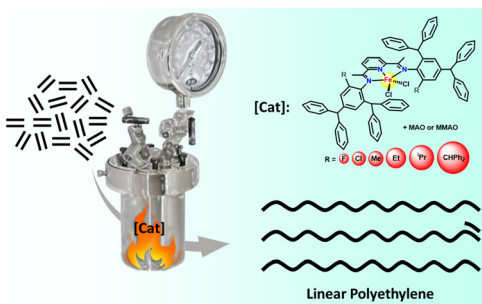
2018



Uncertainty quantification analysis of electrochemical reduction of CO₂

R. K. Hariharan and Himanshu Goyal*

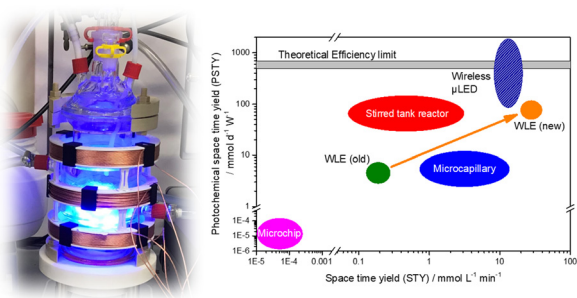
2030



Enhanced thermostability of C₂-symmetrical bis(imino)pyridine-iron precatalysts for ethylene polymerisation *via* a hybrid steric strategy

Shuangshuang Liu, Qiuyu Li, Qaiser Mahmood,* Zhixin Yu,* Yizhou Wang, Ran Zhang, Geng Ren and Wen-Hua Sun*

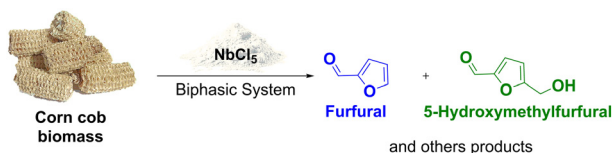
2043



Intensification of heterogeneous photocatalytic reactions using wireless light emitters: the case study of nitrobenzene reduction

Hong T. Duong, Bruno Ortnier, Alexander Sutor, Bastien O. Burek and Jonathan Z. Bloh*

2053



Niobium pentachloride in a biphasic catalytic system for valorization of corn cob biomass

Gabriel Abranches Dias Castro,* Juliana Ribeiro Paes and Sergio Antonio Fernandes*

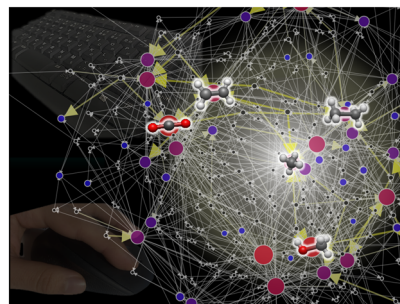


PAPERS

2062

Web-based graphical user interface for visualizing and analyzing chemical reaction networks

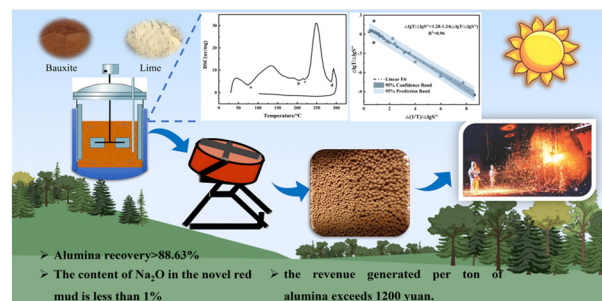
Akihiro Honda, Mikael Kuwahara, Yoshiki Hasukawa, Keisuke Takahashi* and Lauren Takahashi*



2067

An eco-friendly process of high-temperature calcification transformation process for sustainable alumina production from gibbsitic bauxite

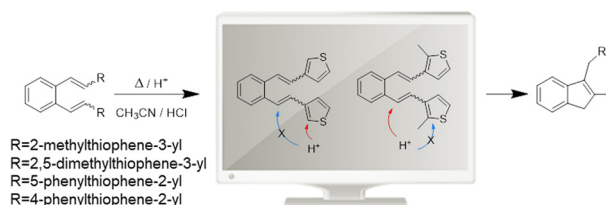
Xin He, Guo-zhi Lv,* Song Wang and Ting-an Zhang



2080

Protonation pattern as a controlling factor of thermal reactions of aryl *o*-divinylbenzenes in acidic media: an integrated experimental-theoretical study

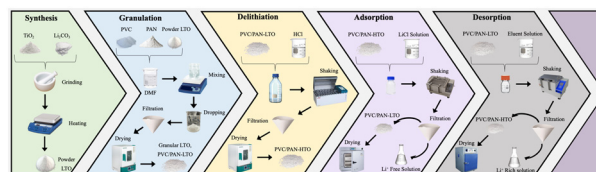
Vilma Lovrinčević, Monika Znika, Jerome Le-Cunff, Ines Despotović* and Dragana Vuk*



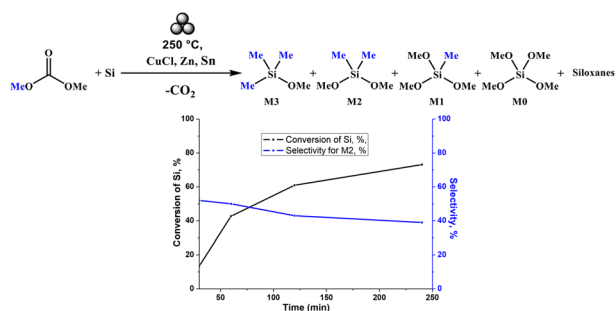
2091

PVC/PAN-immobilized H₂TiO₃ adsorbent: a tailored titanium-based lithium-ion sieve for high-performance lithium recovery

Yaşar Kemal Recepoğlu, Onur İpek and Aslı Yüksel*



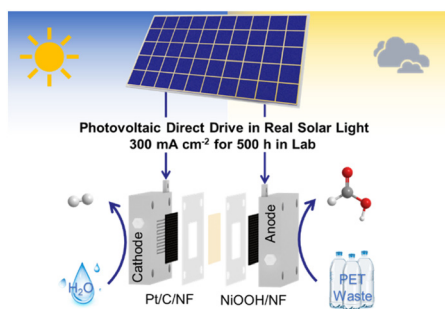
2102



Features of the mechanochemical synthesis of methylmethoxysilanes from silicon and dimethyl carbonate in the presence of promoters

I. N. Krizhanovskiy, M. N. Temnikov,* A. K. Ratnikov, I. V. Frank, M. V. Shishkanov, A. A. Anisimov, A. V. Naumkin and A. M. Muzafarov

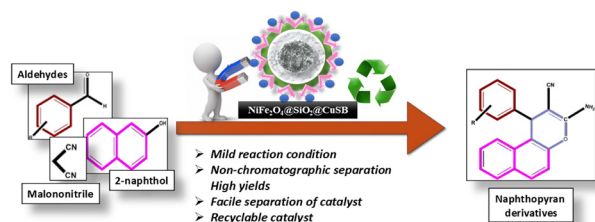
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Photovoltaic-driven electrocatalytic upcycling for polyethylene terephthalate plastic waste from simulated electrolysis to photovoltaic direct-driven electrolysis

Jiyi Sun, Sen Yang, Chengcheng Cai, Xin Li, Huijing Ma, Yichan Wen, Yan Fang, Hongyu Song, Xufang Qian,* Yixin Zhao* and Tianfu Wang*

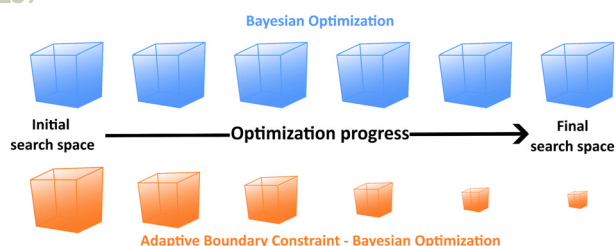
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NiFe₂O₄@SiO₂-immobilized copper Schiff base complex as a versatile heterogeneous catalyst for efficient one-pot multicomponent synthesis of bioactive naphthopyran derivatives

Sneha Paul, Thangjam Sanjurani, Anjana Gorai and Pranjit Barman*

2137



Adaptive boundary constraint in Bayesian optimization: a general strategy to prevent futile experiments in complex reaction optimization

Aravind Senthil Vel,* Julian Spils, Daniel Cortés-Borda and François-Xavier Felpin*

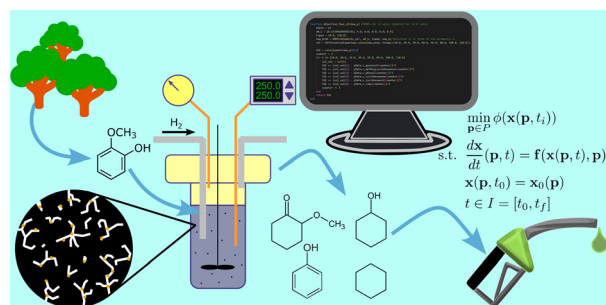


PAPERS

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An integrated reaction model of guaiacol hydrodeoxygenation using activated carbon supports: effects of support properties, metals, and solvents

Lei Yu, Robert X. Gottlieb, Jeffrey R. Page, Julia A. Valla* and Matthew D. Stuber*



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Gas-solid two-phase flow low-temperature solid-phase method: a novel approach to mechanically synthesize heterometallic-organic frameworks

Neng mei Deng, Yang Liu, Lu lu Tang, Xu cheng Fu* and Jun Zhao*

