



# Fuelling your energy research



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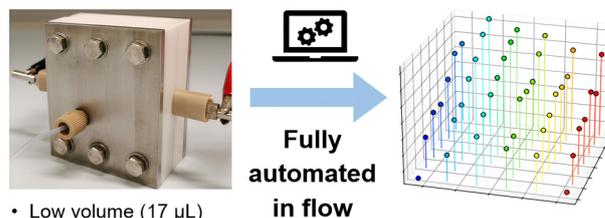
Registered charity number: 207890

## COMMUNICATIONS

31

**A low-volume flow electrochemical microreactor for rapid and automated process optimization**

Eduardo Rial-Rodríguez, Johannes F. Wagner, Hans-Michael Eggenweiler, Thomas Fuchss, Alena Sommer, C. Oliver Kappe, Jason D. Williams\* and David Cantillo\*



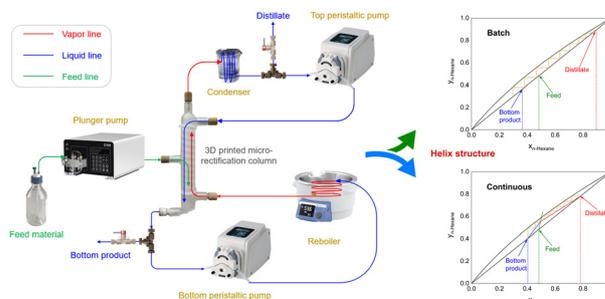
Fully automated in flow

- Low volume (17  $\mu$ L)
  - Fast reactions (7 s)
  - Low reagent consumption
- ✓ 42 reactions per run  
✓ 3 chemical examples

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**Design and evaluation of a microrectification platform using 3D printing**

Yuting Zheng, Guandong Fang, Zhuoqin Fan, Haomiao Zhang,\* Jingdai Wang and Yongrong Yang

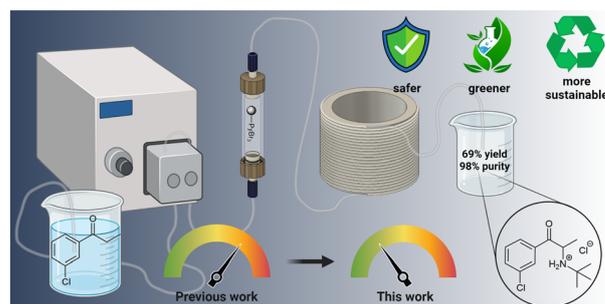


## PAPERS

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**The synthesis of bupropion hydrochloride under greener and safer conditions utilizing flow technologies**

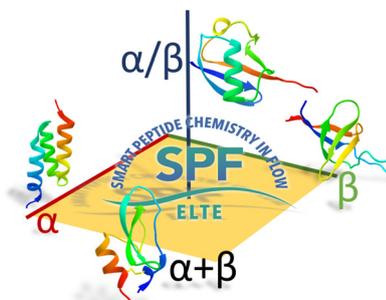
Lorinda T. van Wyk, Nicole C. Neyt, Jaimee Jugmohan, Jenny-Lee Panayides and Darren L. Riley\*



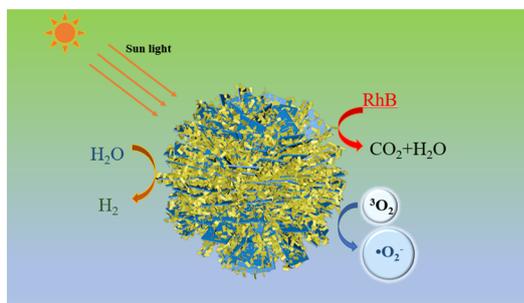
58

**Synthesis of small protein domains by automated flow chemistry**

Kristóf Ferentzi, Dóra Nagy-Fazekas, Viktor Farkas and András Perczel\*



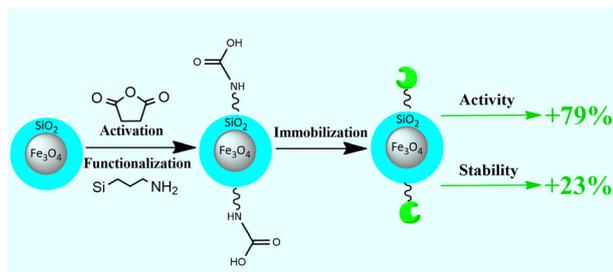
70



### An investigation on a $\text{WO}_3/\text{MoO}_{3-x}$ heterojunction photocatalyst for excellent photocatalytic performance and enhanced molecular oxygen activation ability

Yuxuan Shao, Dan You,\* Yuqi Wan, Qingrong Cheng\* and Zhiquan Pan

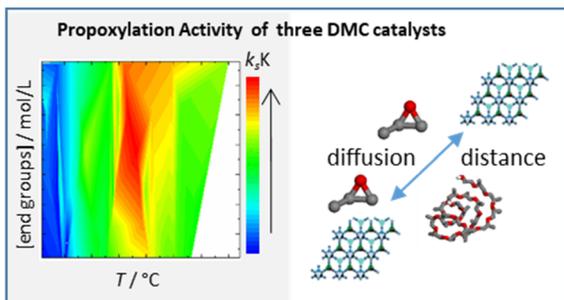
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### Improvement of DERA activity and stability in the synthesis of statin precursors by immobilization on magnetic nanoparticles

Dino Skendrović, Anera Švarc, Tonči Rezić, Andrey Chernev, Aleksandra Rađenović and Ana Vrsalović Presečki\*

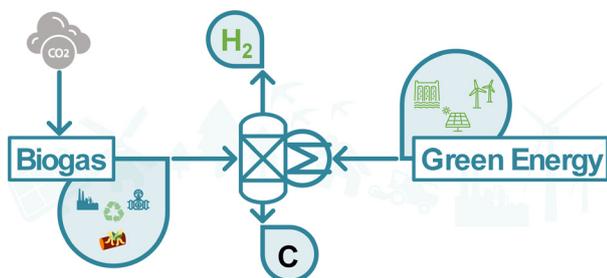
91



### Analysis of propoxylation with zinc-cobalt double metal cyanide catalysts with different active surfaces and particle sizes

Sarah-Franziska Stahl and Gerrit A. Luinstra\*

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### Pyrolysis of biogas for carbon capture and carbon dioxide-free production of hydrogen

Ahmet Çelik, Iadh Ben Othman, Heinz Müller, Patrick Lott\* and Olaf Deutschmann



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## LearnCK: mass conserving neural network reduction of chemistry and species of microkinetic models

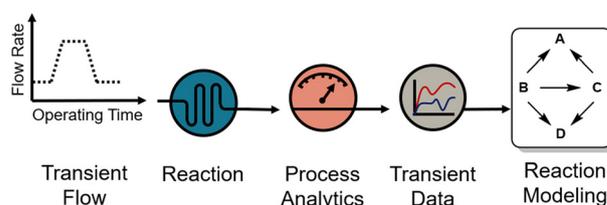
Sashank Kasiraju and Dionisios G. Vlachos\*



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## Dynamic experiments in flow accelerate reaction network definition in a complex hydrogenation using catalytic static mixers

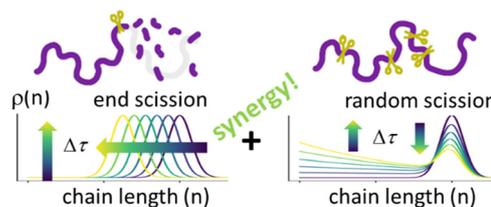
Stefano Martinuzzi, Markus Tranninger, Peter Sagmeister, Martin Horn, Jason D. Williams\* and C. Oliver Kappe\*



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## Quantifying synergy for mixed end-scission and random-scission catalysts in polymer upcycling

Ziqiu Chen, Emmanuel Ejiogu and Baron Peters\*



*Slowly, slowly, slowly getting faster...*

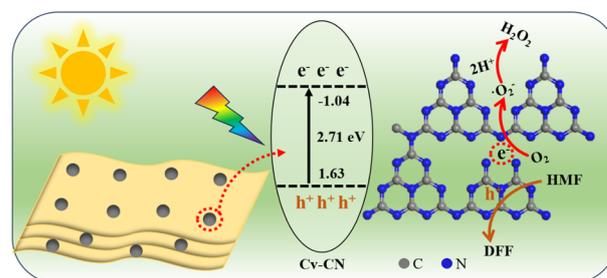
*Faster, faster, it is so exciting...*

*- the Count, Sesame Street*

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## Carbon-vacancy engineering approach to g-C<sub>3</sub>N<sub>4</sub> for selective 5-hydroxymethylfurfural oxidation coupled with H<sub>2</sub>O<sub>2</sub> production

Jingru Han, Mengzhen Song, Yingjie Li, Yue Yao, Shuxiang Lu and Xiaoyuan Liao\*





## CORRECTION

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**Correction: From traditional to greener alternatives: potential of plant resources as a biotransformation tool in organic synthesis**

Vinay Kumar, Rituparna Saha, Satyaki Chatterjee\* and Vivek Mishra\*

