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# RSC Sustainability

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## IN THIS ISSUE

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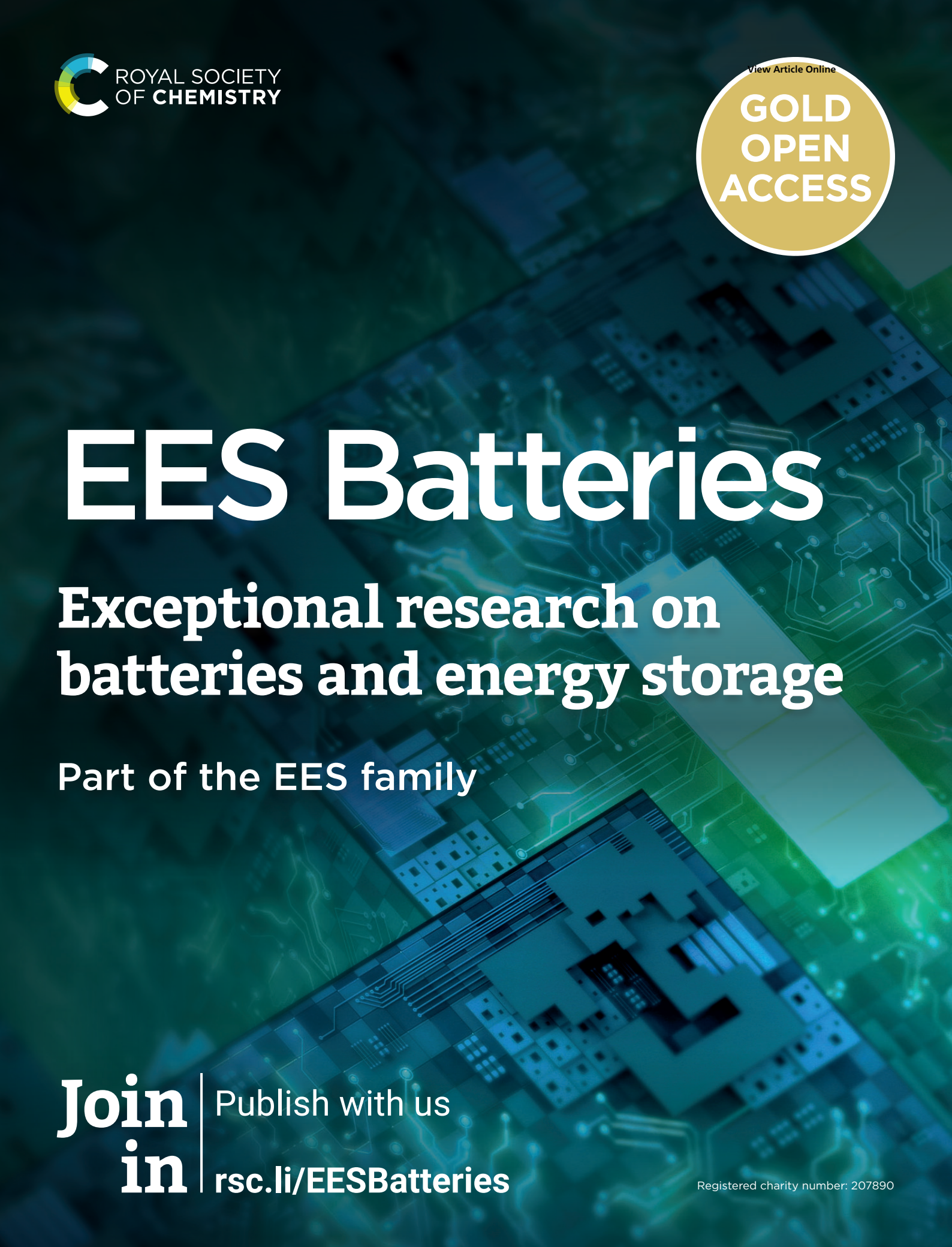
**Inside cover**
See Liza Abraham *et al.*, pp. 3788–3797. Image generated with Adobe Firefly. Image reproduced by permission of Madison West from *RSC. Sustainability.*, 2024, **2**, 3788.

## EDITORIALS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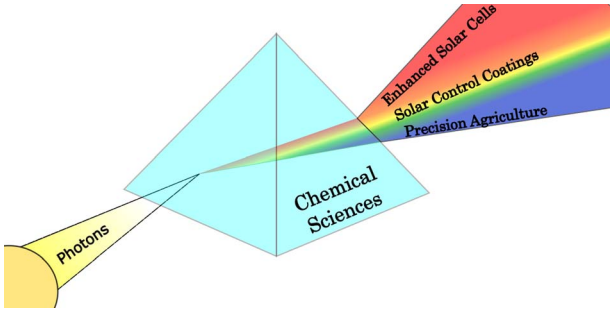
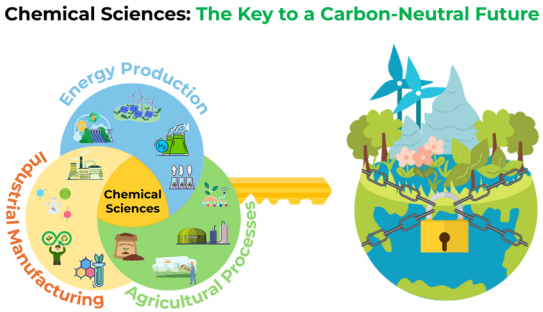
ESSAYS



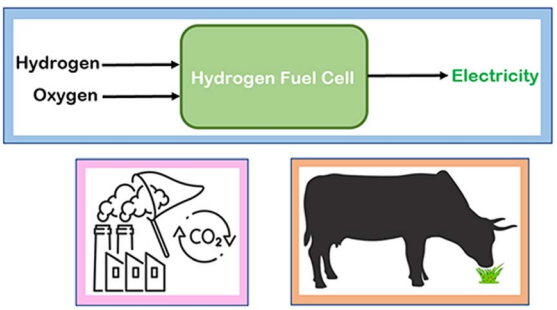






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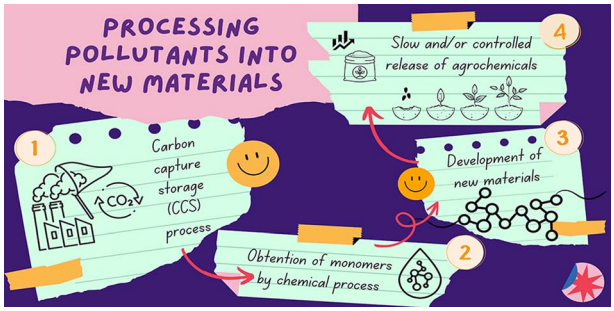
## ESSAYS

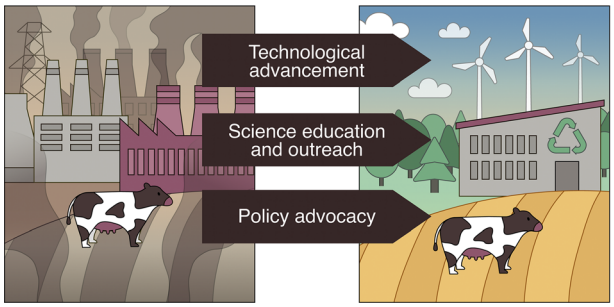





### Chemical advances in transforming pollutants into new materials

Tales da Silva Daitx*

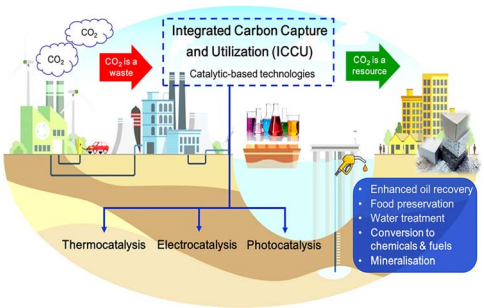





### Towards a net-zero future: the chemical sciences across technology, education, and policy

Amanda Mikaela Celestine Tolentino



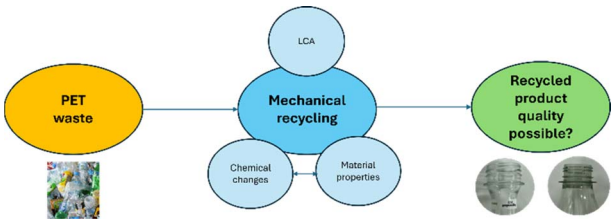



### Utilizing advancements in chemical sciences for decarbonization: a pathway to sustainable emission and energy reduction

Faith Mwende Johnson

## CRITICAL REVIEWS






### Molecular and material property variations during the ideal degradation and mechanical recycling of PET

Chiara Fiorillo, Lynn Trossaert, Erion Bezeraj, Simon Debrie, Hannelore Ohnmacht, Paul H. M. Van Steenberge, Dagmar R. D'hooge* and Mariya Edeleva*



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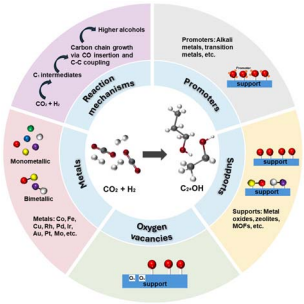
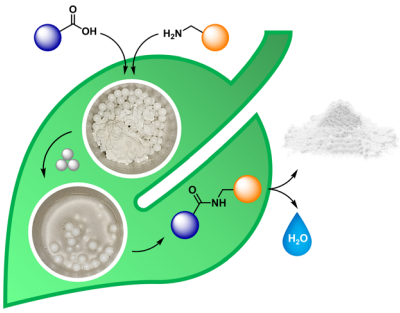
## CRITICAL REVIEWS

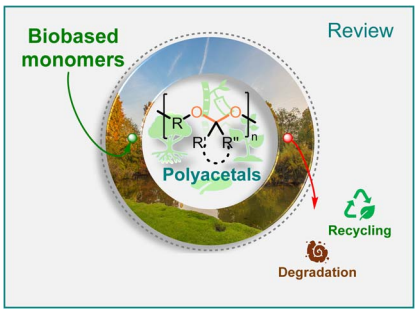




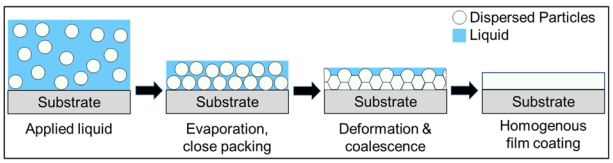




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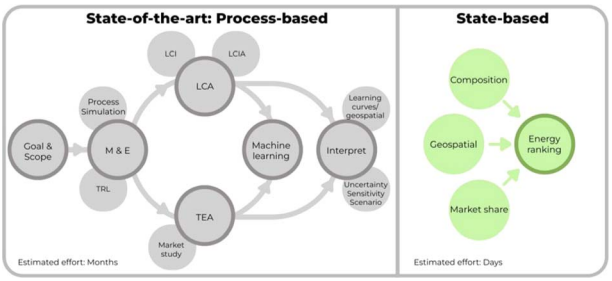
## TUTORIAL REVIEWS

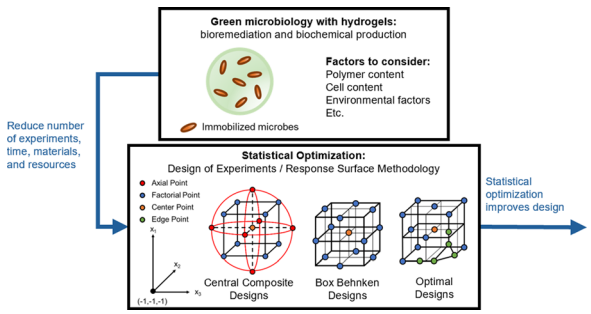





### Lignocellulosic biomass valorisation: a review of feedstocks, processes and potential value chains and their implications for the decision-making process

Britt Segers, Philippe Nimmegeers, Marc Spiller, Giorgio Tofani, Edita Jasiukaitytė-Grojzdek, Elina Dace, Timo Kikas, Jorge M. Marchetti, Milena Rajić, Güray Yildiz and Pieter Billen*



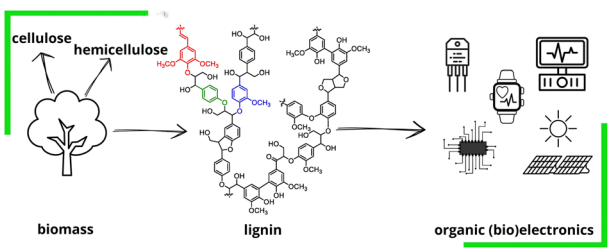



### Statistical optimization of cell–hydrogel interactions for green microbiology – a tutorial review

Conor G. Harris, Lewis Semprini, Willie E. Rochefort and Kaitlin C. Fogg*

## PERSPECTIVE



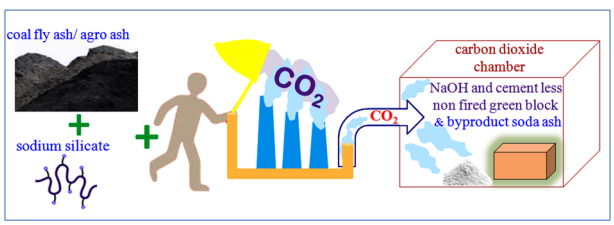



### Green gold: prospects of lignin in organic electronics and bioelectronics

Laura Tronci and Assunta Marrocchi*

## COMMUNICATION






### $CO_2$ assisted geo-polymerization: a win-win pragmatic approach for the synthesis of soda ash leading to reversal of the climate clock

Sandeep Gupta*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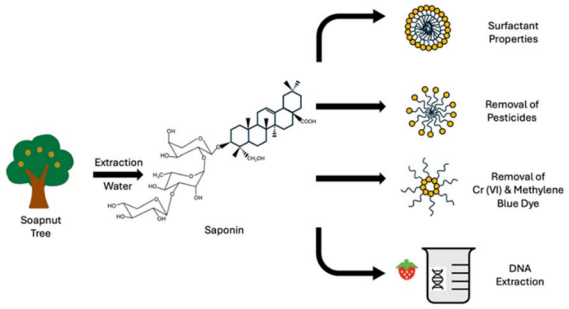
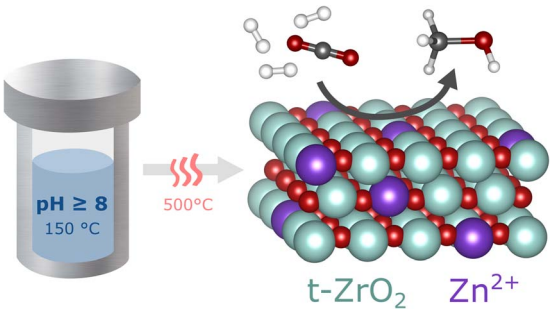
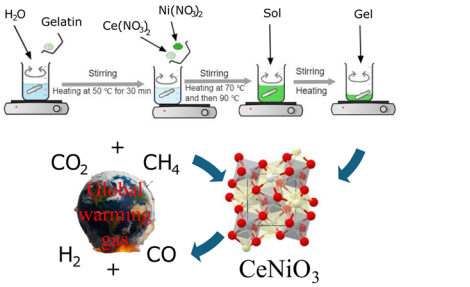




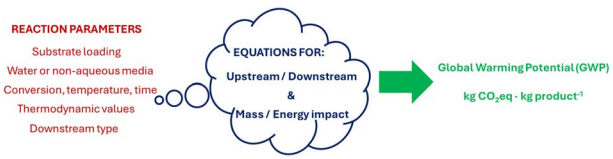






Dry reforming of methane on CeNiO3 nanoparticles



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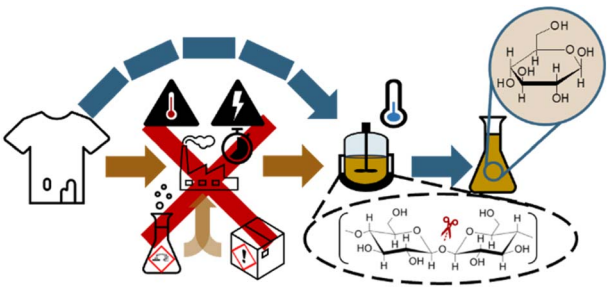



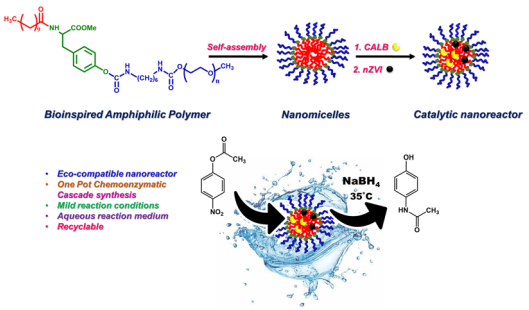




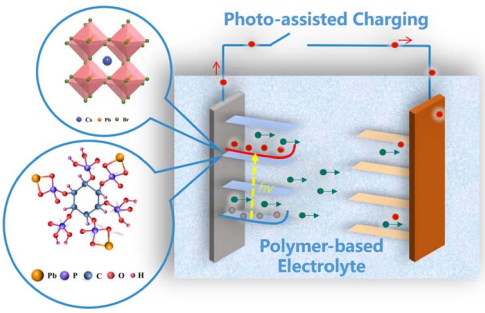


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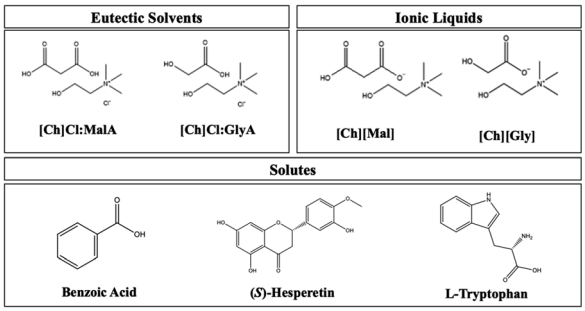


## CORRECTION



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