

MSDE

Molecular Systems Design & Engineering rsc.li/molecular-engineering

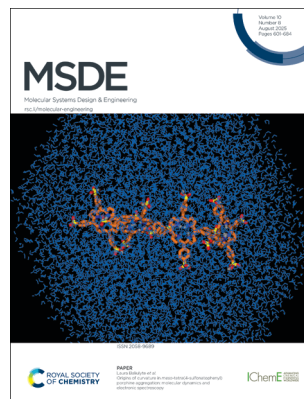
The Royal Society of Chemistry is the world's leading chemistry community. Through our high impact journals and publications we connect the world with the chemical sciences and invest the profits back into the chemistry community.

IN THIS ISSUE

ISSN 2058-9689 CODEN MSDEBG 10(8) 601-684 (2025)



Cover
See Gustavo Chaparro and Erich A. Müller, pp. 619–633.
Image reproduced by permission of Gustavo Chaparro and Erich A. Müller from *Mol. Syst. Des. Eng.*, 2025, **10**, 619.



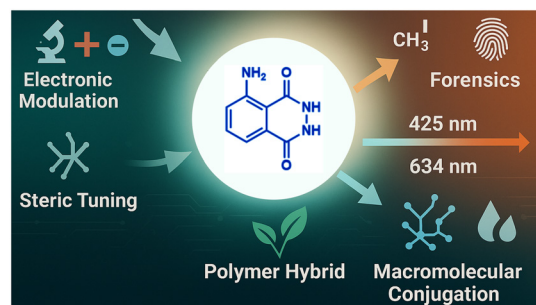
Inside cover
See Laura Baliulyte et al., pp. 635–648.
Image reproduced by permission of Laura Baliulyte from *Mol. Syst. Des. Eng.*, 2025, **10**, 635.

REVIEW

606

Re-engineering luminol: new frontiers in chemiluminescence chemistry

Amir M. Alsharabasy

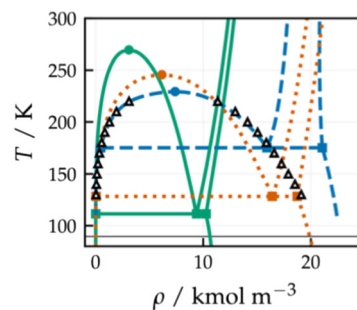


PAPERS

620

Fitting a square peg in a round hole: parameterisation of quasi-spherical molecules employing the Mie potential

Gustavo Chaparro and Erich A. Müller*



VLE
VLE + viscosity
VLE + solid data



Industrial Chemistry & Materials

GOLD
OPEN
ACCESS

Focus on industrial chemistry
Advance material innovations
Highlight interdisciplinary feature

Innovative.
Interdisciplinary.
Problem solving

APCs currently waived

Learn more about ICM
Submit your high-quality article

 @IndChemMater

 @IndChemMater

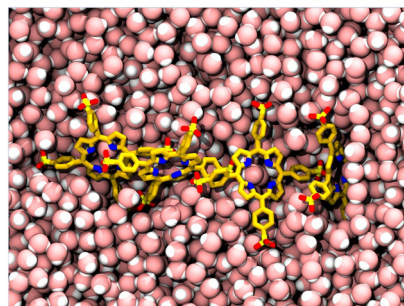
rsc.li/icm



635

Origins of curvature in *meso*-tetra(4-sulfonatophenyl) porphine aggregation: molecular dynamics and electronic spectroscopy

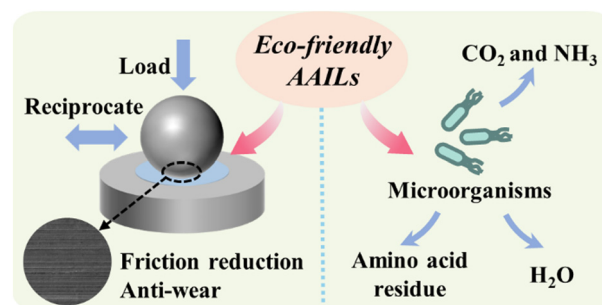
Laura Baliulyte,* Eimantas Urniezius, Vytautas Bubilaitis, Mindaugas Macernis, Lorenzo Cupellini and Darius Abramavicius



649

Biodegradable glucosamine-amino acid-based ionic liquids as efficient water-based lubricant additives for green tribological chemistry

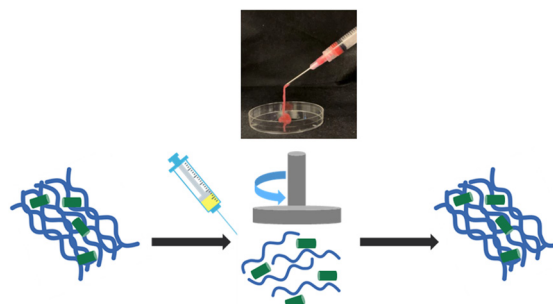
Jing Yang, Xiao Liu,* Chongyun Sun, Qiang Chen, Pingxia Guo, Kai Feng,* Meirong Cai* and Feng Zhou



662

Harnessing peptide–cellulose interactions to tailor the performance of self-assembled, injectable hydrogels

Jessica A. Thomas, Alex H. Balzer, Subhash Kalidindi and LaShanda T. J. Korley*



675

Flame growth of nickel-based cocatalyst for efficient solar water splitting of BiVO₄ photoanode

Haohua Wang, Youyi Su, Xiangui Pang, Ming Zhang, Wufang Wang, Pingping Yang, Xinxin Lu* and Jiale Xie*

