

# Polymer Chemistry

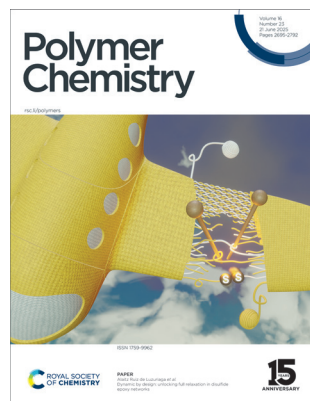
The home for the most innovative and exciting polymer chemistry, with an emphasis on polymer synthesis and applications thereof

[rsc.li/polymers](https://rsc.li/polymers)

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 1759-9962 CODEN PCOHC2 16(23) 2695–2792 (2025)



### Cover

See Alaitz Ruiz de Luzuriaga *et al.*, pp. 2701–2717.

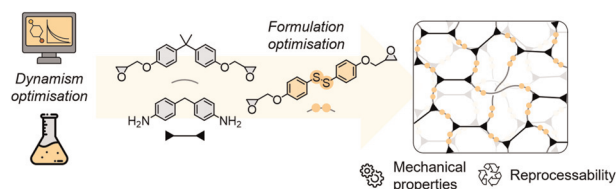
Image reproduced by permission of Marta Ximenis from *Polym. Chem.*, 2025, **16**, 2701.

## PAPERS

2701

### Dynamic by design: unlocking full relaxation in disulfide epoxy networks

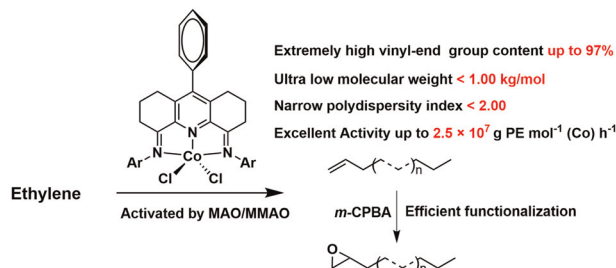
Paula Fanlo, Osman Konuray, Olaia Ochoteco, Marta Ximenis, Alaitz Rekondo, Hans Jürgen Grande, Xavier Fernández-Francos, Haritz Sardon and Alaitz Ruiz de Luzuriaga\*



2718

### Ultra-low-molecular-weight PE wax using a cyclohexyl-fused bis(imino)pyridine-cobalt catalyst functionalized with a remote *para*-phenyl group

Yizhou Wang, Zheng Wang, Qiuyue Zhang, Quanchao Wang, Gregory A. Solan,\* Xuelel Duan, Yanping Ma, Jiahao Gao, Zhe Zhou and Wen-Hua Sun\*



# Royal Society of Chemistry approved training courses

Explore your options.  
Develop your skills.  
Discover learning  
that suits you.

**Courses in the classroom,  
the lab, or online**

Find something for every  
stage of your professional  
development. Search our  
database by:

- subject area
- location
- event type
- skill level

Members **get at least 10% off**

Visit [rsc.li/cpd-training](https://rsc.li/cpd-training)

**SAVE  
10%**

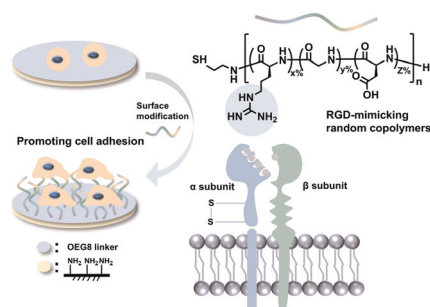


## PAPERS

2732

### RGD peptide-mimicking random copolymers synthesized via rapid and controllable NCA polymerization to promote cell adhesion

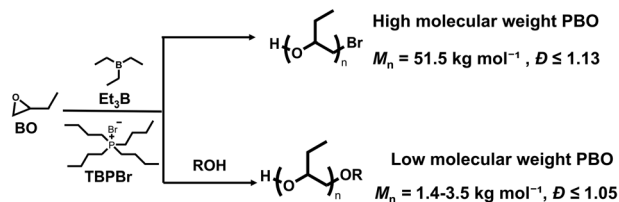
Wenhui Dai, Yueming Wu,\* Kang Chen, Xinyi Xie, Luhang Chen, Minzhang Chen, Jiangzhou Wang, Dan Wang and Runhui Liu\*



2742

### Commercial organic Lewis-pair catalysts for efficient ring-opening polymerization of 1,2-butylene oxide

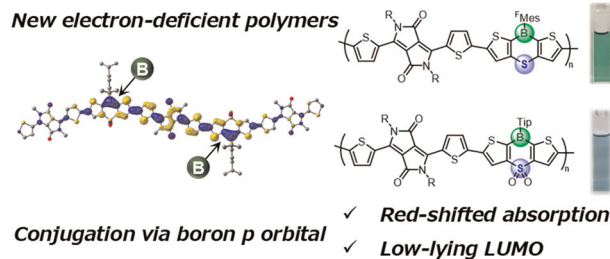
Xianqiang Zeng, Chen Liu, Xue Wang, Yan Cao, Zheng Zheng, Peng He, Huiquan Li and Liguang Wang\*



2751

### Synthesis of electron-deficient polymers based on sulfur-bridged dithienylboranes as a building block

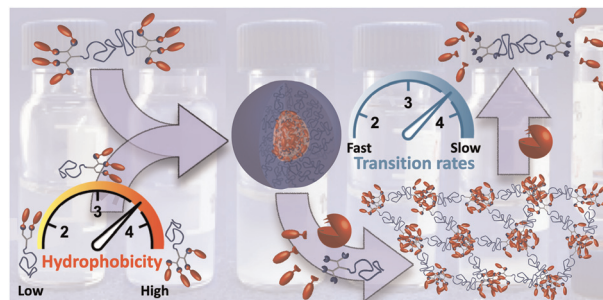
Yohei Adachi,\* Ryuji Matsuura, Mitsuru Sakabe, Hiroki Tobita, Hideki Murakami and Joji Ohshita\*



2757

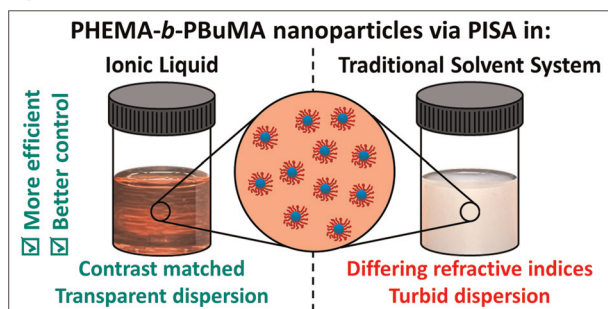
### Programming cascade mesophase transitions of enzyme-responsive formulations via molecular engineering of dendritic amphiphiles

Krishna Vippala, Nicole Edelstein-Pardo, Shahar Tevet, Parul Rathee, Gil Koren, Roy Beck and Roey J. Amir\*



## PAPERS

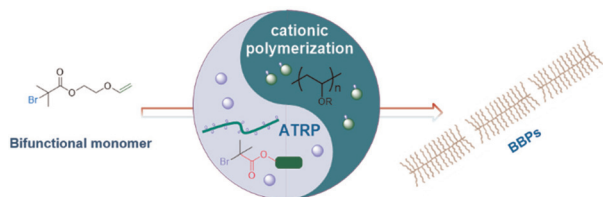
2767



### Transparent diblock copolymer nanoparticle dispersions via efficient RAFT emulsion polymerisation in ionic liquid

Anisha Patel, Georgia L. Maitland, Evelina Liarou, Paul D. Topham and Matthew J. Derry\*

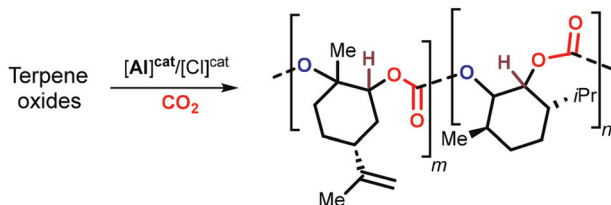
2778



### "Grafting-from" synthesis of polyvinyl ether bottlebrush polymers via a combination of cationic polymerization and ATRP

Junqi Huang, Wenpei Xiao, Zan Yang, Xi Yan, Liuyin Jiang\* and Saihu Liao\*

2784



control over  $m:n$  ratio • use of different (a)cyclic terpenes • selective and quantitative depolymerization

### Synthesis and depolymerization studies of biohybrid polycarbonates derived from terpenes

Thirusangumurugan Senthamarai, Enrico Lanaro, Jack Tinker, Antoine Buchard and Arjan W. Kleij\*

