

### IN THIS ISSUE

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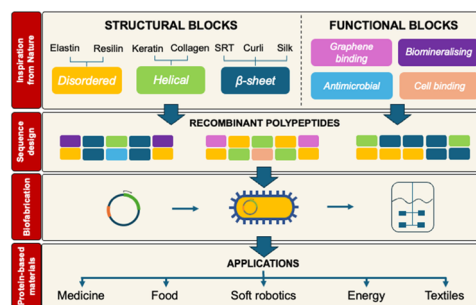
**Cover**  
See Mrigendra Dubey *et al.*,  
pp. 1210–1214.  
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Soft Materials Research Group,  
IIT Indore, India from *Mol. Syst.  
Des. Eng.*, 2024, 9, 1210.

### REVIEW

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#### Molecular design of protein-based materials – state of the art, opportunities and challenges at the interface between materials engineering and synthetic biology

Ebony Shire, André A. B. Coimbra, Carlos Barba Ostria, Leonardo Rios-Solis\* and Diego López Barreiro\*

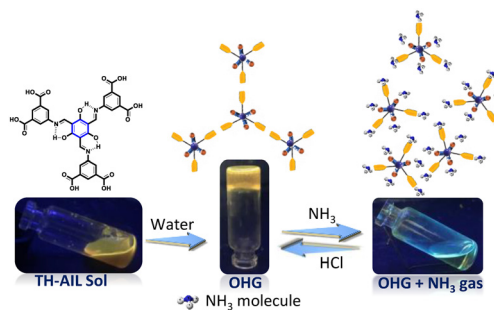


### COMMUNICATION

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#### Dual responsive fluorescence switching of organohydrogel towards base/acid

Manish Kumar Dixit, Moupia Mukherjee, Bharat Kumar Sahu, Abul Kalam and Mrigendra Dubey\*





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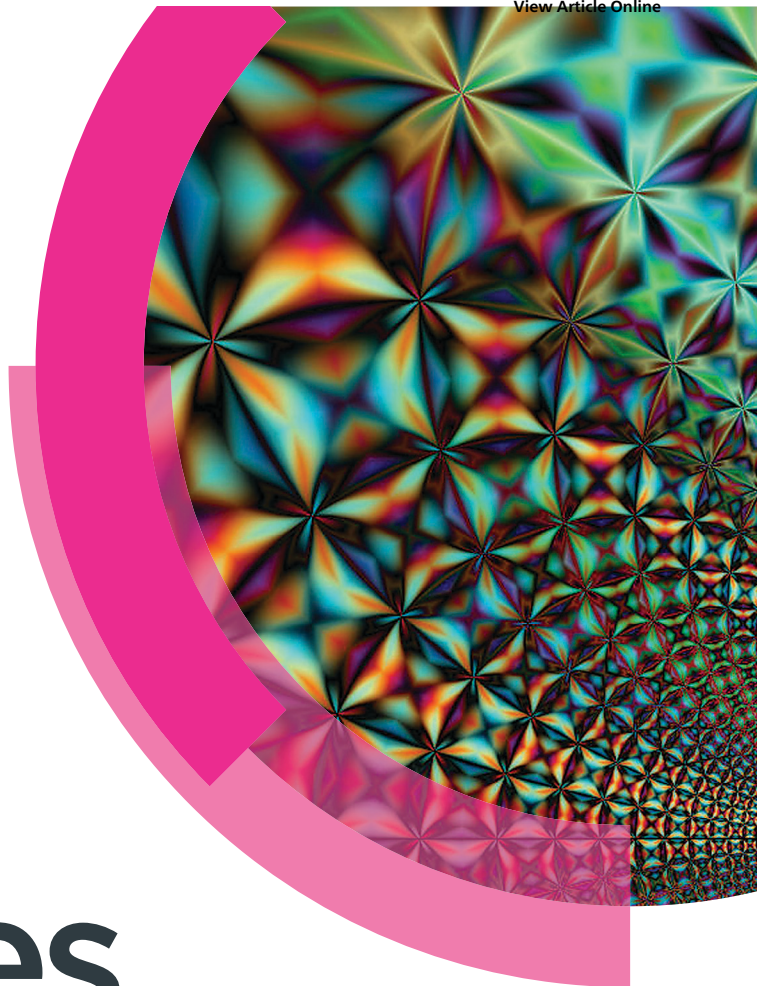
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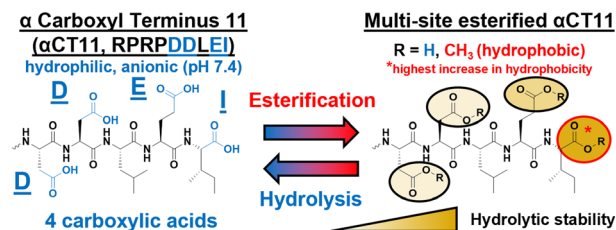
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### Multi-site esterification: a tunable, reversible strategy to tailor therapeutic peptides for delivery

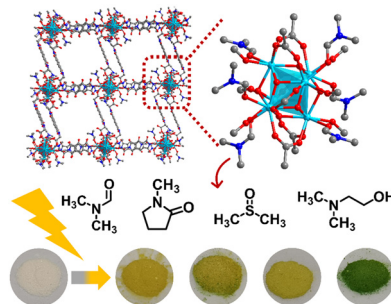
Mark S. Bannon, Jeffrey F. Ellena, Aditi S. Gourishankar, Spencer R. Marsh, Dilza Trevisan-Silva, Nicholas E. Sherman, L. Jane Jourdan, Robert G. Gourdie and Rachel A. Letteri\*



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### Controlling the photochromism of zirconium pyromellitic diimide-based metal-organic frameworks through coordinating solvents

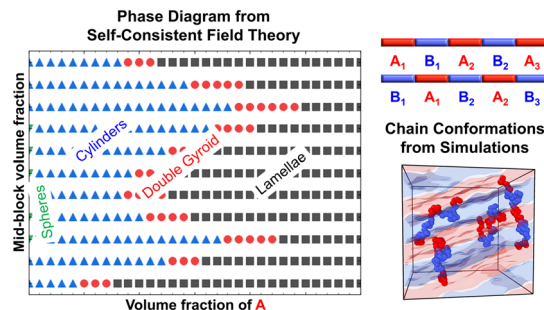
Youcong Li, Jiahao Dong, Yue Zhao, Lei Gao, Yu-Hao Gu and Shuai Yuan\*



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### Self-consistent field theory and coarse-grained molecular dynamics simulations of pentablock copolymer melt phase behavior

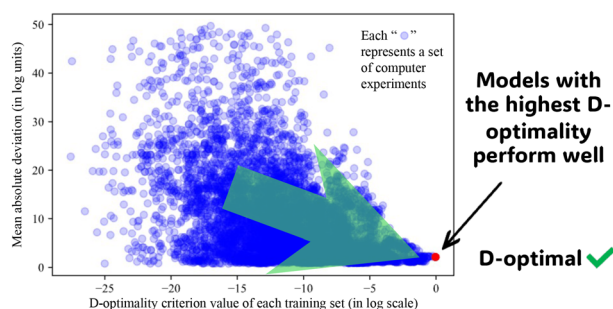
So Jung Park, Tristan Myers, Vinson Liao and Arthi Jayaraman\*



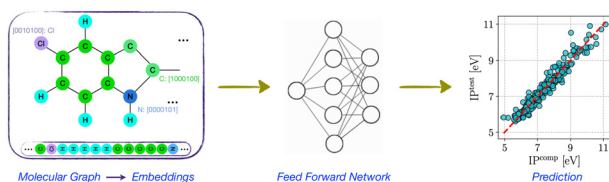
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### On the design of optimal computer experiments to model solvent effects on reaction kinetics

Lingfeng Gui, Alan Armstrong, Amparo Galindo, Fareed Bhasha Sayyed, Stanley P. Kolis and Claire S. Adjiman\*



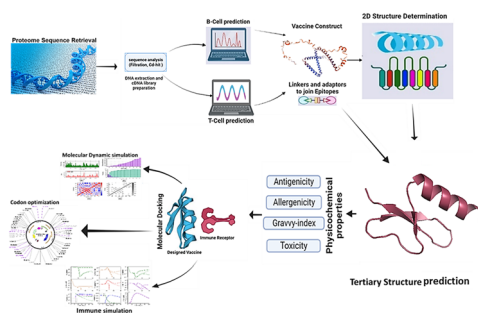
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### Graph-based networks for accurate prediction of ground and excited state molecular properties from minimal features

Denish Trivedi, Kalyani Patrikar and Anirban Mondal\*

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### Promising vaccine models against astrovirus MLB2 using integrated vaccinomics and immunoinformatics approaches

Syed Luqman Ali, Awais Ali, Waseef Ullah, Asifullah Khan,\* Elham Mohammed Khatravi, Abdul Malik, Aigul Abduldayeva, Aliya Baiduissenova, Hind Jaber Althagafi and Deema Fallatah

