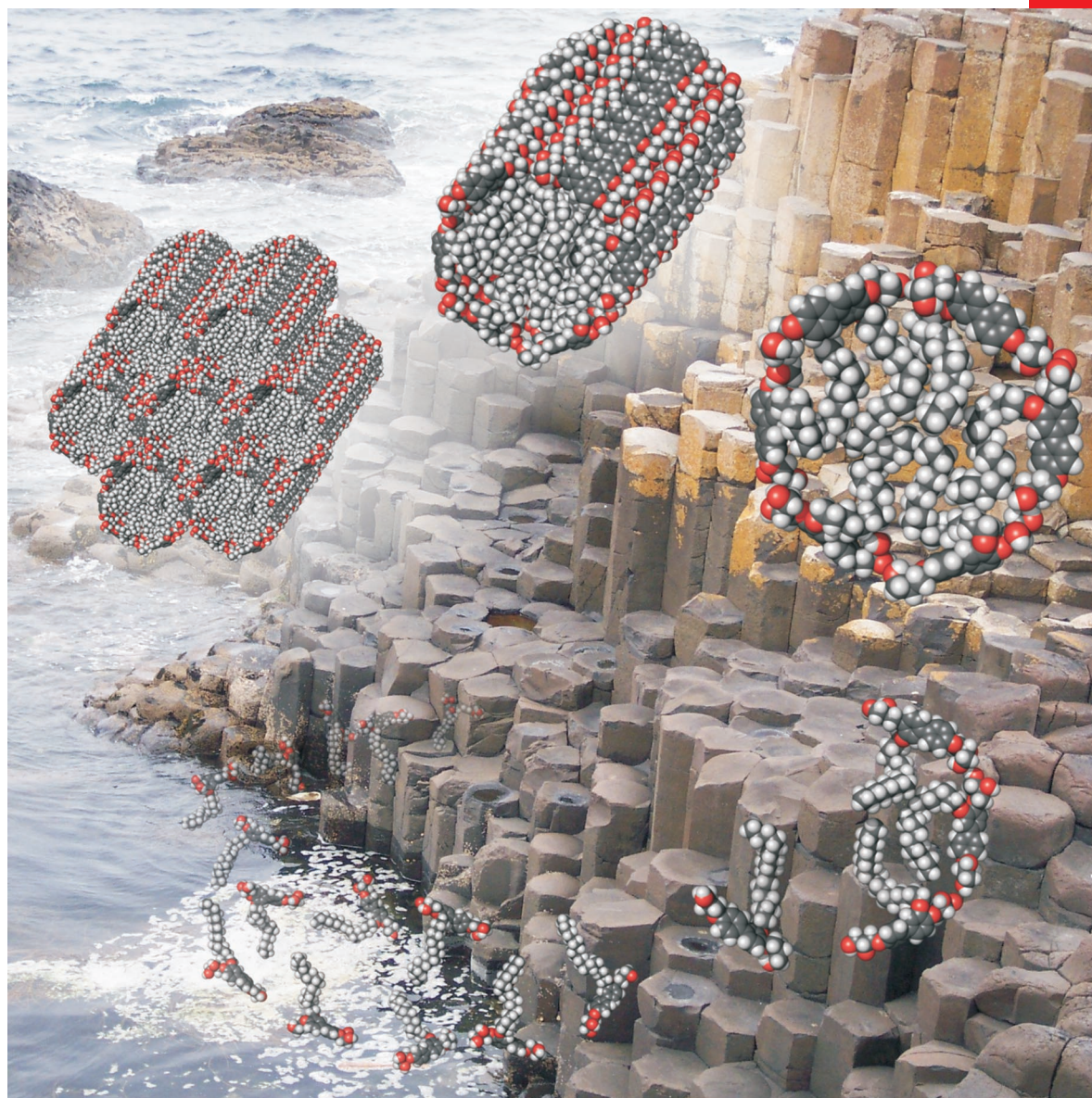


CHEMISTRY

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Communications



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Concept

Organic–Inorganic Nanohybrids through the Direct Tailoring of Semiconductor Nanocrystals with Conjugated Polymers

Z. Lin

Review

One-Pot Oxidative Esterification and Amidation of Aldehydes

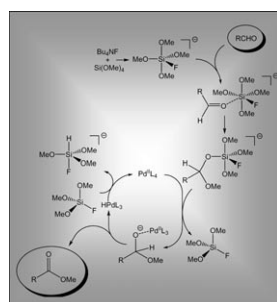
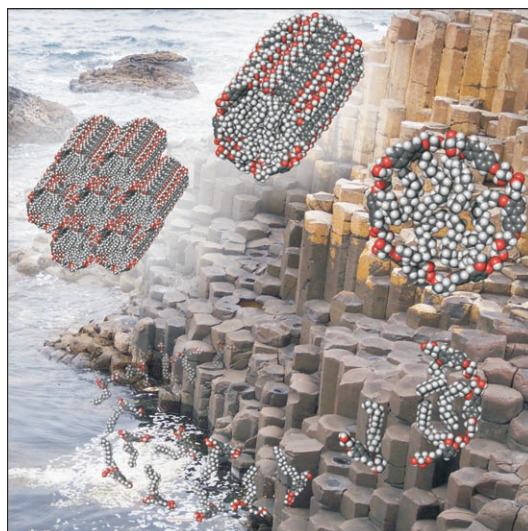
C. Wolf and K. Ekoue-Kovi

 WILEY-VCH

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Polyphilic T-shaped molecules...

... self-assemble into new liquid-crystalline phases in which rodlike aromatic units form arrays of polygonal cylinders that are fused by hydrogen-bonding networks running along the edges to give honeycomb-like networks in which the cells are filled by fluid alkyl chains. A range of different molecular structures are reported in the Full Paper by C. Tschierske et al. on page 6352 ff.

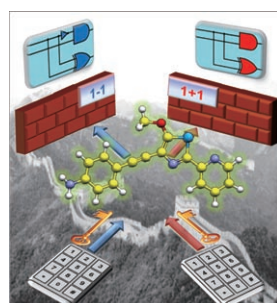
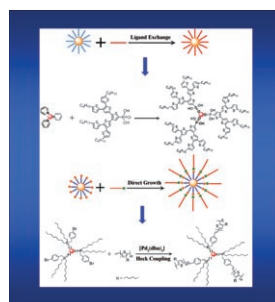


One-Pot Procedures

In the Review article on page 6302 ff., the concepts, substrate scope, and functional group tolerance of powerful one-pot procedures that convert aldehydes to amides and esters by integrating oxidation and either C–N or C–O bond formation into a single operation are discussed by C. Wolf and K. Ekoue-Kovi.

Tailored Semiconductor Nanocrystals

In the Concept article on page 6294 ff., Z. Lin describes the synthesis of new organic–inorganic nanohybrids consisting of electroactive conjugated oligomers or polymers (COs or CPs) tethered on the surface of semiconductor nanocrystals on a molecular scale by using two main synthetic strategies: ligand exchange and direct grafting.



Molecular Devices

In their Full Paper on page 6342 ff., C. H. Yan et al. report an activation strategy to transmit information at the molecular level. Fluorescent states with distinct recognition features are only activated through input-sequence-sensitive conversions. With the rationally controlled reaction sequences in the fluorescent switch, the molecular computing device can perform user-specific algebraic functionalities, and thus defend against information invasion.

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