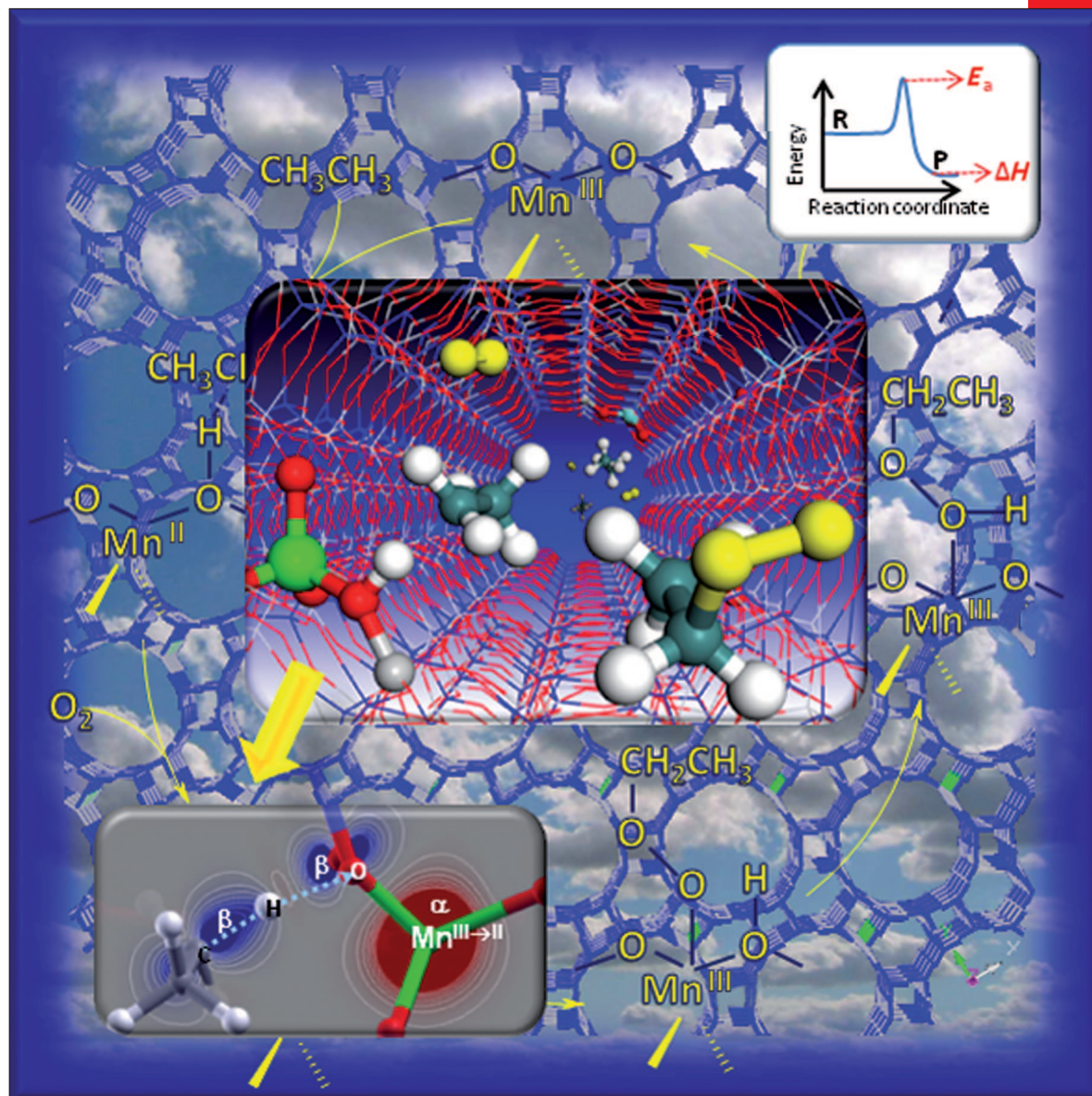


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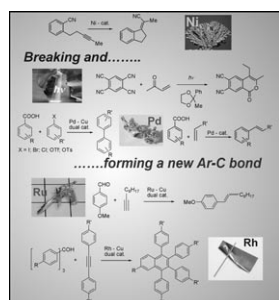
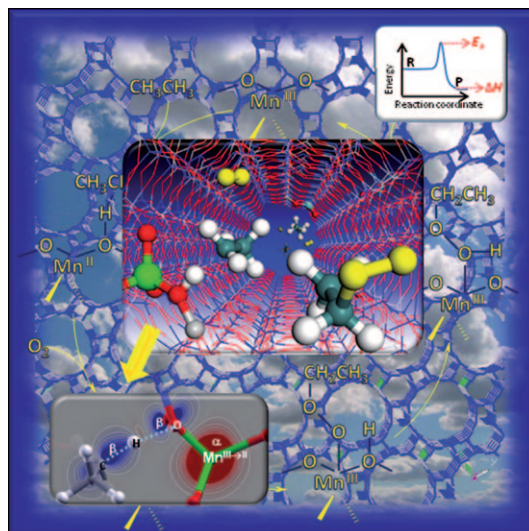
Review

The Aromatic Carbon–Carbon *ipso*-Substitution Reaction
M. Fagnoni and S. M. Bonesi

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... for the environmentally benign aerobic oxidation of hydrocarbons, catalyzed by Mn-doped aluminophosphates, has been characterized by electronic-structure computational methods based on hybrid-exchange density functional theory. For more information see the Full Paper by L. Gómez-Hortigüela et al. on page 13638 ff.

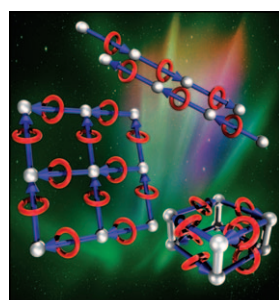
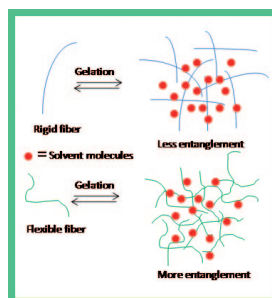


Aromatic Synthesis

In their Review on page 13572 ff., M. Fagnoni and S. M. Bonesi explore strategies for the aromatic carbon-carbon *ipso*-substitution reaction and reveal that most carbon-based substituents of an aromatic ring can be replaced by a new Ar-C bond, providing the correct reaction conditions are used. These processes represent an emerging and intriguing technique for the synthesis of substituted aromatics.

Gels

Distinct differences are found in the mode of self-assembly between bis-amide- and bis-urea-functionalised dialkoxy-naphthalene (DAN-A and DAN-U respectively) chromophores. DAN-U forms J aggregates in solution with a superior self-assembling propensity and thermal stability than the H-aggregated DAN-A system. The DAN-U system also showed gelation in versatile organic solvents with much greater thermal stability and lower critical gelation concentration, whereas DAN-A formed gels with higher mechanical stability. For more details see the Communication by S. Ghosh and A. Das on page 13622 ff.



Supramolecular Materials

S. J. Loeb and V. N. Vukotic have demonstrated, in their Full Paper on page 13630 ff., a new methodology to incorporate molecular interlocked molecules (MIMs) into neutral, porous, metal-organic framework (MOF) materials. The utilization of a new, anionic [2]pseudorotaxane ligand and cationic Zn^{II} metal centers results in the formation of neutral, ML_2 -style square grids. These neutral layers can be pillared to create full three-periodic MOF structures that are neutral and porous.

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