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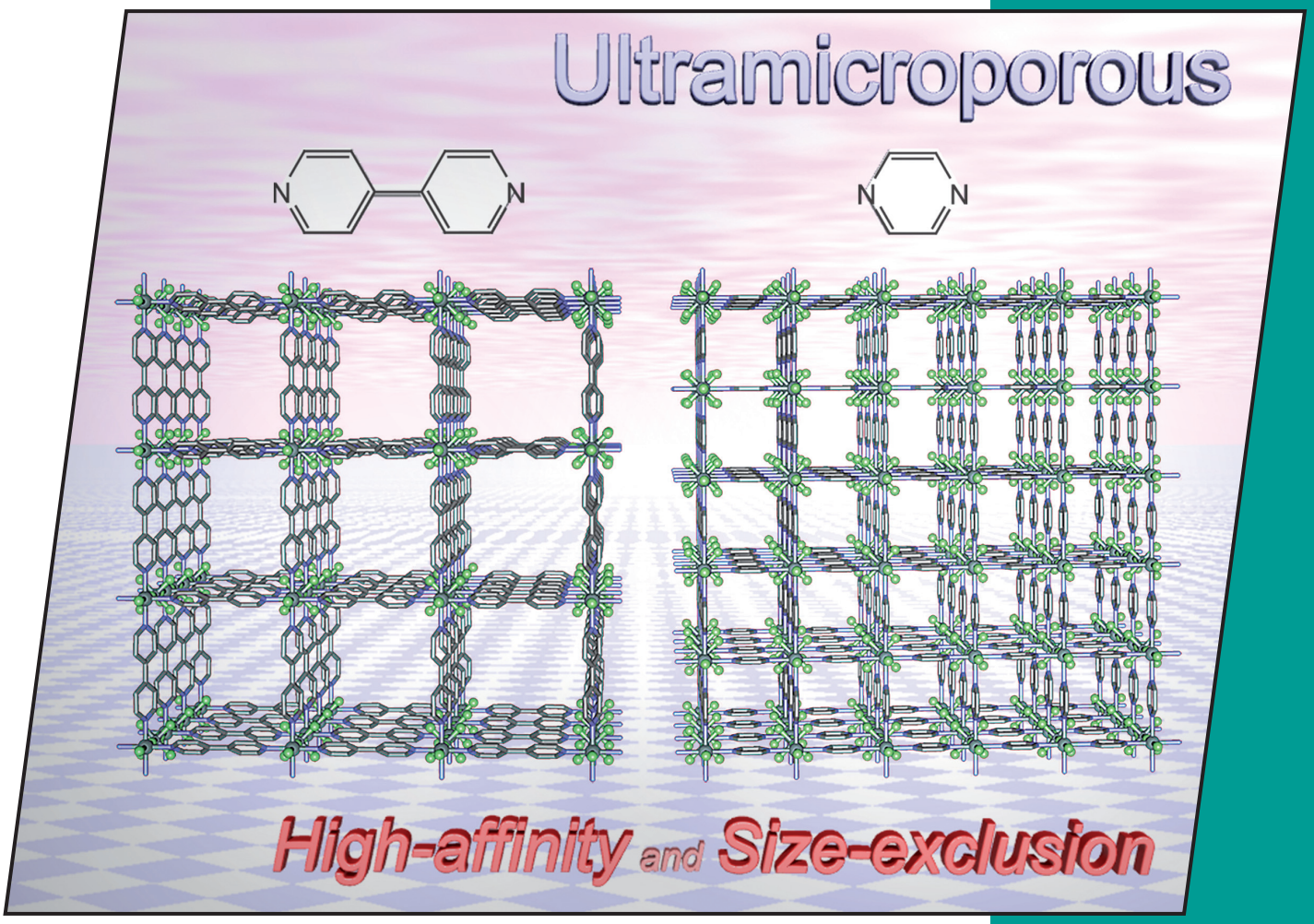

Cover Picture
Kazuhiro Uemura et al.
Ultramicroporous Coordination Polymers

Microreview
Eric Clot
Ion-Pairing in Organometallic Chemistry

A Journal of

ChemPubSoc Europe

WILEY-VCH

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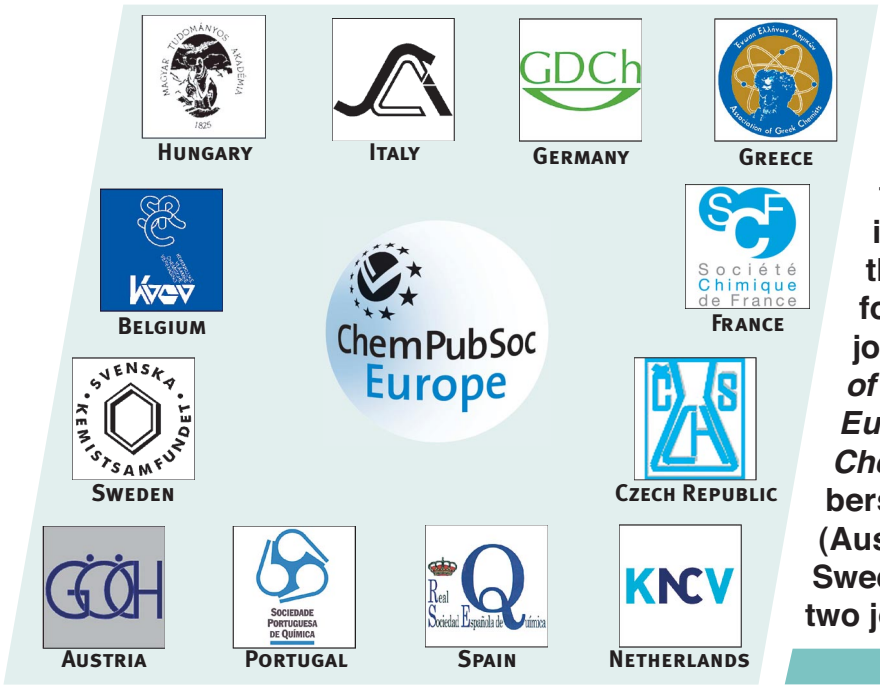
Eur. J. Inorg. Chem. **2009**, 2309–2432



A union formed by chemical societies in Europe (ChemPubSoc Europe) has taken the significant step into the future by merging their traditional journals, to form two leading chemistry journals, the *European Journal of Inorganic Chemistry* and the *European Journal of Organic Chemistry*. Three further members of ChemPubSoc Europe (Austria, Czech Republic and Sweden) are Associates of the two journals.

COVER PICTURE

The cover picture shows two crystal structures of porous coordination polymers, $[Cu(SiF_6)(4,4'\text{-bpy})_2]_n$ and $[Zn(SiF_6)(pyz)_2]_n$ (4,4′-bpy = 4,4′-bipyridine, pyz = pyrazine), which have been generated from square-grid coordination polymers that are cross-linked by μ-SiF_6 anions. Although typical bridging ligands such as 4,4′-bpy and 1,4-benzenedicarboxylate produce open octahedral coordination polymers with micropores, such micropores need to be further narrowed to become ultramicropores (< 7 Å) for separation and purification of smaller gas molecules. We have succeeded in obtaining the ultramicroporous coordination polymer $[Zn(SiF_6)(pyz)_2]_n$ with 4.5 ± 4.5 $Å^2$ pores by simply replacing 4,4′-bpy in $[M(SiF_6)(4,4'\text{-bpy})_2]_n$ (M = Zn^{2+}, Cu^{2+}) with pyz. The ultramicropores of $[Zn(SiF_6)(pyz)_2]_n$ adsorb Me_2CO rather than *i*PrOH, showing the size-exclusive effect. Additionally, this compound shows a sharp uptake in H_2 adsorption at 77 K, because the interaction potential is expected to be strong as a result of the synergistic effect of the neighbouring pore walls. Details are discussed in the article by K. Uemura et al. on p. 2329ff.