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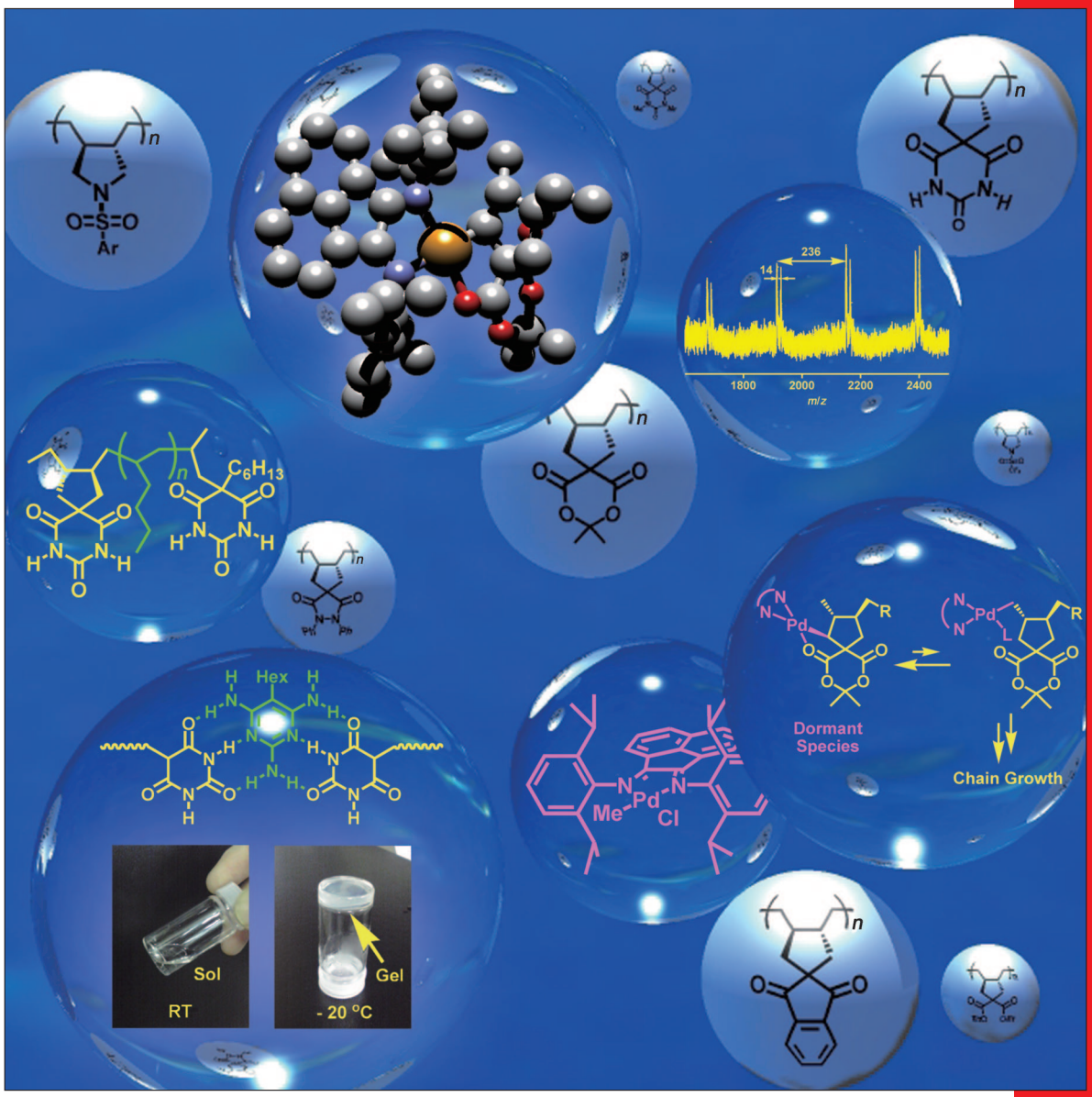

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Minireview

Synthetic Studies Inspired by Vinigrol

N. K. Garg and A. D. Huters

WILEY-VCH

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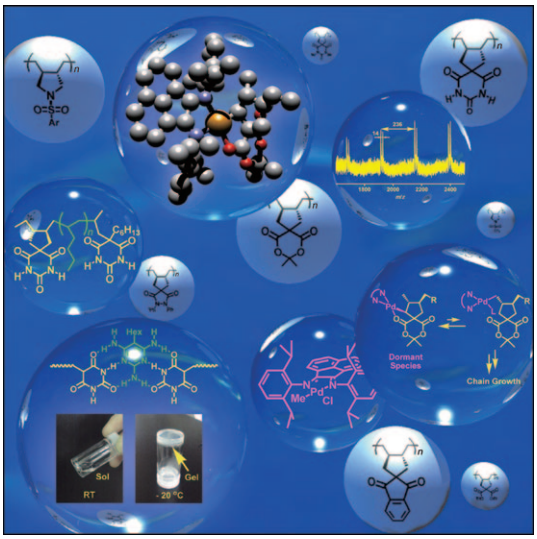
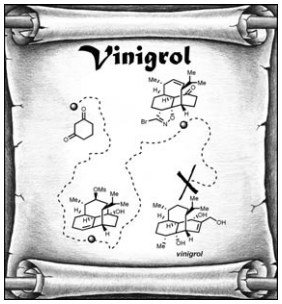
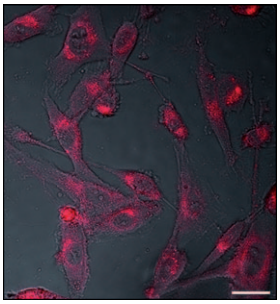
… of functionalized 1,6-heptadienes catalyzed by Pd complexes is presented in the Full Paper by K. Osakada et al. on page 8662 ff. The polymer growth involves selective chain-walking isomerization and inter- and intramolecular insertion reactions of the vinyl groups into the Pd–polymer bond.

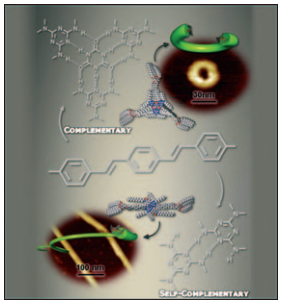




Total Synthesis
In their Minireview on page 8586 ff., A. D. Huters and N. K. Garg describe the recent progress in the total synthesis of the diterpene natural product vinigrol. This includes the strategies employed by Barriault, Njarđarson, and Hanna to access the complex molecular scaffold of vinigrol, as well as Baran's first total synthesis of the natural product.



Imaging Agents
Bioimaging or bioanalysis based on nanoprobes encapsulating Eu^{3+} complexes with excellent two-photon-sensitized luminescence properties combines the advantages of deep penetration, high sensitivity, high signal-to-noise ratio, stable signals during long-term observation, low photodamage to biological samples, and desirable target recognizability. For the latest results in this field, see the Communication by Y. Wang et al. on page 8647 ff.



Hydrogen Bonding
Dimeric and trimeric oligo(*p*-phenylenevinylene) supramolecular complexes are formed through self-complementary and complementary multiple hydrogen-bonding interactions, providing distinct self-assembled nanostructures through hierarchical organization. The former provides one-dimensionally elongated fibers, whereas the latter provides a closed nanostructure, a nanoring. The details of this study are presented in the Full Paper by S. Yagai, A. Ajayaghosh et al. on page 8652 ff.