Abstract Submitted
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Strong van der Waals attractive forces in nanotechnology. JEF-
FREY REIMERS, Shanghai University / University of Technology Sydney — The
Dobson classification scheme for failure of London-like expressions for describing
dispersion is reviewed. New ways to measure using STM data and calculate by
first principles free energies of organic self-assembly processes from solution will be
discussed, considering tetraalkylporphyrins on graphite. How strong van der Waals
forces can compete against covalent bonding to produce new molecular isomers and
reaction pathways will also be demonstrated, focusing on golds-sulfur bonds for sen-
sors and stabilizing nanoparticles. .(1) Reimers, J. R.; Goerigk, L.; Ford, Elemans,
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Jeffrey Reimers
Shanghai University / University of Technology Sydney

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