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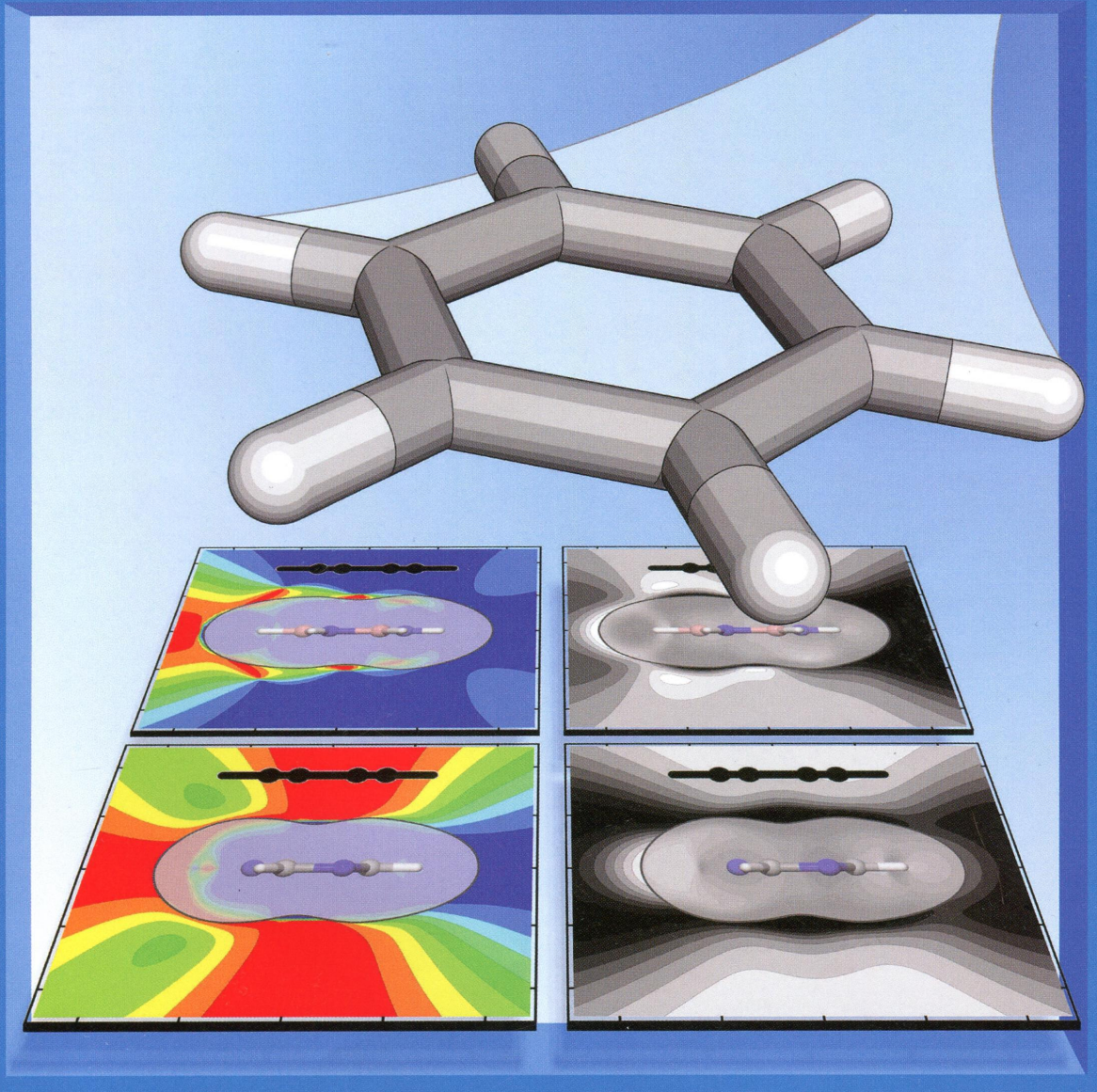

Unraveling Substituent Effects in π-Stacking Interactions through Examination of Electric Fields
(see page 5A)

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ON THE COVER: Unraveling substituent effects in π-stacking interactions through examination of electric fields. Noncovalent interactions involving aromatic rings are central to many areas of physical chemistry. Recently, it has been revealed that substituent effects in π-stacking interactions are dominated by the interaction of the local dipole associated with the substituent and the electric field of the other ring. Consequently, comparing the strengths and direction of the electric fields surrounding unsubstituted arenes can explain trends in substituent effects in stacking interactions involving these systems. Bottom four figures adapted from: Raju, R. K.; Bloom, J. W. G.; Wheeler, S. E. Broad Transferability of Substituent Effects in π-Stacking Interactions Provides New Insights into Their Origin. *J. Chem. Theory Comput.* **2013,** *9*, 3479−3490. See page 6133.

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