JAGIELLONIAN UNIVERSITY IN KRAKÓW

Faculty of Chemistry Seminar

Anion–π interactions: insights from theory and experiment

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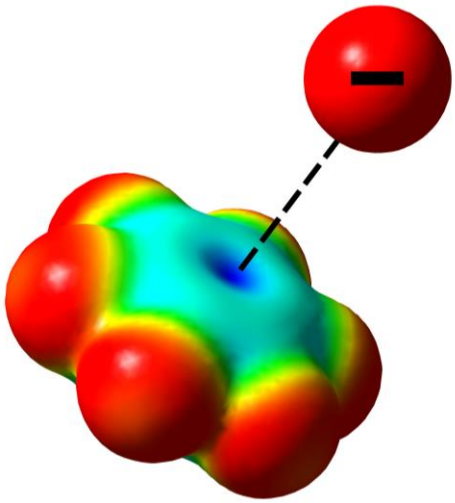
Nowadays anion–π interactions are accepted and well established in the chemical community. However, the first studies were controversial and started mainly as a scientific curiosity. The initial experimental results by Hiraoka *et al*. in 1987;[1] Schneider *et al*. in 1993;[2] and Woollins *et al*. in 1996[3] already indicated the existence of an attractive interaction between anions and electron-deficient arenes experimentally. Unfortunately, they were ignored for a long time. Later, the simultaneous publication of the works by Mascal,[4] Alkorta[5] and Deyà[6] was decisive to rise the scientific interest on this intermolecular force. These reports in 2002 were the origin of a plethora of scientific publications and initiated a debate about the real existence and relevance of this new interaction.[7,8]

In this faculty seminar I would like to emphasize different aspects of the anion–π interaction, starting from the initial investigations, its physical insights and some pioneering works. Moreover, some relevant applications and future perspectives of anion–π interactions are also discussed.



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