

## Debjani Roy

### Selected Publications

#### *Book Chapter*

Chemical Origin of Life: How do Five HCN Molecules Combine to form Adenine under Prebiotic and Interstellar Conditions. *Debjani Roy* and Paul v. R. Schleyer, *Quantum Biochemistry, Edited by Cherif F. Matta*, WILEY-VCH, Weinheim, (2010), 199-217.

#### *Journals*

Verification of stereospecific dyotropic racemisation of enantiopure D and L-1,2-dibromo-1,2-diphenylethane in non-polar media. D. Christopher Braddock, *Debjani Roy*, Dieter Lenoir, Edward Moore, Henry S. Rzepa, Judy I-Chia Wu and Paul von Ragué Schleyer. *Chem. Commun.*, **2012**, 48, 8943-8945

Modeling Dinitrogen Activation by Lithium: A Mechanistic Investigation of the Cleavage of N<sub>2</sub> by Stepwise Insertion into Small Lithium Clusters. *Debjani Roy*, Armando Navarro, Paul v. R. Schleyer. *J. Am. Chem. Soc.*, **2009**, 131(36):13045-53,

2-Norbornyl Ion Pair Leakage in Electrophilic Addition of HCl to Nortricyclene and Norbornene. Jing Kong, *Debjani Roy*, Dieter Lenoir, Xiangwen Zhang, Ji-jun Zou, Paul von Ragué Schleyer, 2009, *Org. Lett.*, **2009**, 11(20), pp 4684–4687

Chemical evolution: The mechanism of the formation of adenine under prebiotic conditions. *Debjani Roy*, Katayoun Najafian, Paul v. R. Schleyer. *Proc. Natl. Acad. Sci. USA*, **2007**.104(44), 17272–17277,

Planar Tetracoordinate Carbon Atoms Centered in Bare Four-membered Rings of Late Transition Metals. *Debjani Roy*, Clémence Corminboeuf, Chaitanya S. Wannere, R. Bruce King, Paul v. R. Schleyer. *Inorg. Chem.*; **2006**. 45(22) 8902 –8906,

Octahedral and Tetrahedral Coinage Metal Clusters: Is Three Dimensional d Orbital Aromaticity Viable? Clémence Corminboeuf, Chaitanya S. Wannere, *Debjani Roy*, R. Bruce King, and Paul v. R. Schleyer *Inorg. Chem.*, **2006**. 45 (1), 214 219