

Theoretical Gas to Liquid Shift of ^{15}N Isotropic Nuclear Magnetic Shielding in Nitromethane using Ab Initio Molecular Dynamics and GIAO / GIPAW Calculations.

Iann C. Gerber^a and Franck Jolibois^{*,b}

^a Université de Toulouse-INSA-UPS, LPCNO, 135 av. de Rangueil 31077 Toulouse, France; CNRS UMR 5215, Toulouse, France; Fax: (+33)-5-61-55-96-97; Tel: (+33)-5-61-55-96-64; E-mail: igerber@insa-toulouse.fr

^b Université de Toulouse-INSA-UPS, LPCNO, 135 av. de Rangueil 31077 Toulouse, France; CNRS UMR 5215, Toulouse, France; Fax: (+33)-5-61-55-96-97; Tel: (+33)-5-61-55-96-64; E-mail: franck.jolibois@univ-tlse3.fr

Figure S1 Variation of ^{15}N chemical shielding of nitromethane calculated using 6-311++g(d,p) basis sets.

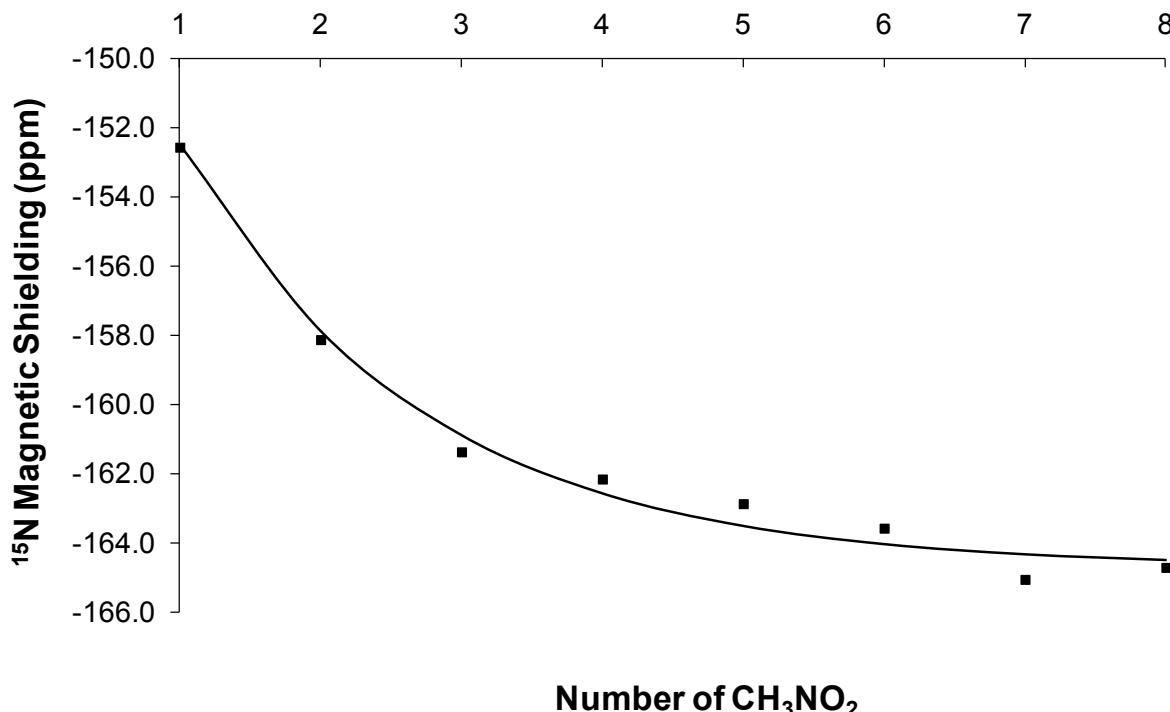


Figure S2. Selected radial distribution functions for nitromethane. Molecular Dynamics within Periodic Boundary Conditions using 8 molecules (Solid line) and 20 molecules (dash line).

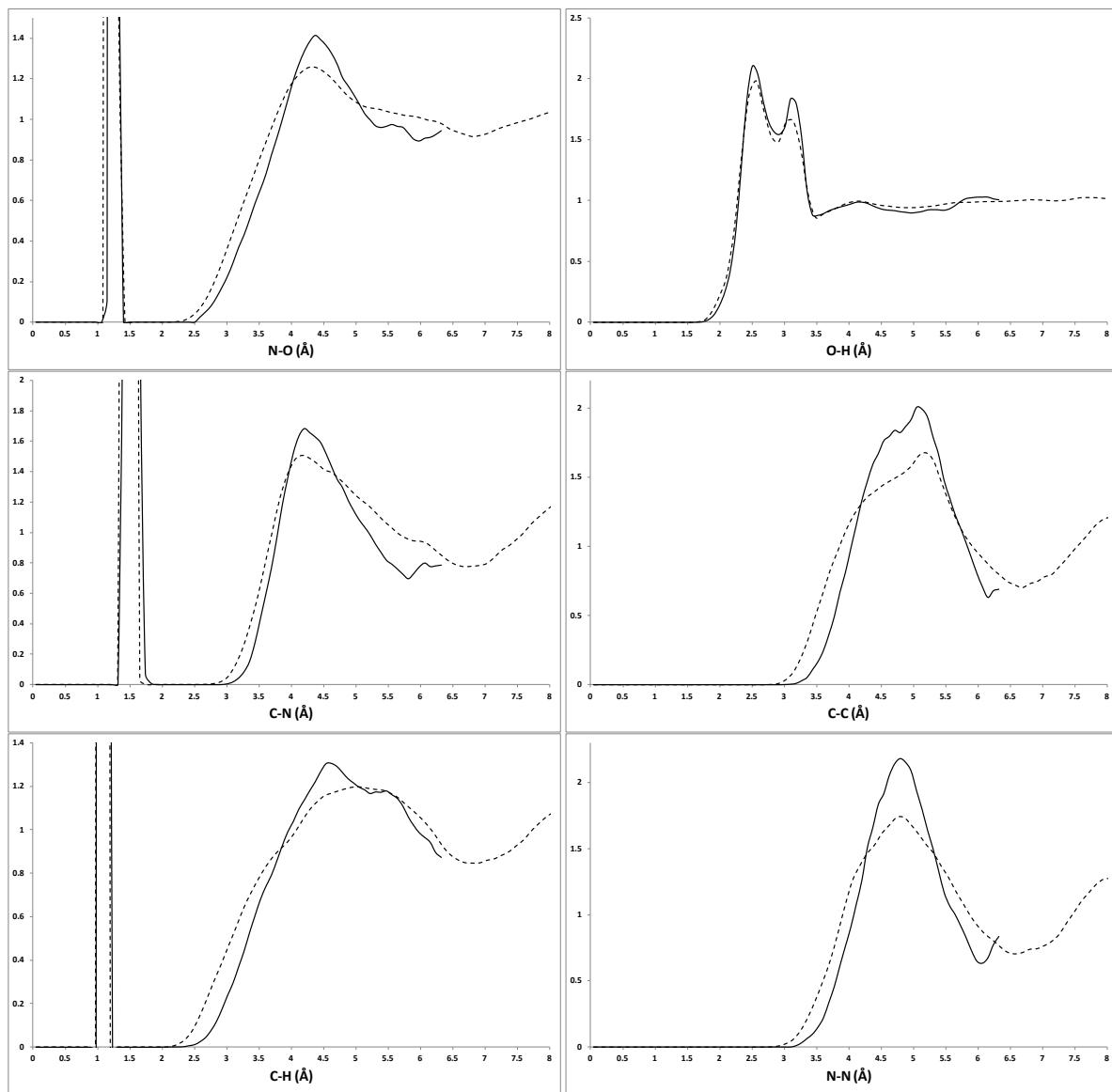


Figure S3. ^{15}N shielding average evolution as a function of the number of structures. The structures used for the NMR calculations were extracted from dynamic simulations performed in several conditions.

