

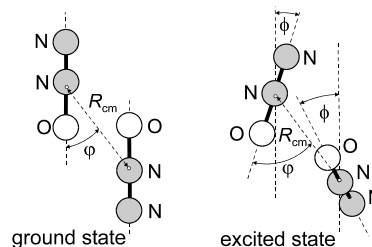
313
IR

 N_4O_2
Dinitrogen monoxide dimer
(weakly bound complex)

 (large-amplitude motion)
 $\text{NNO} \cdots \text{NNO}$

State	$R_{\text{cm}} [\text{\AA}]^{\text{a}}$	$\varphi [\text{deg}]^{\text{a}}$	$\phi [\text{deg}]^{\text{a}}$	Symmetry
$\nu=0$	3.443(2)	61.0(2)	0	$\text{C}_{2\text{h}}$
$\nu_1=1$	3.416(2)	61.2(3)	0	$\text{C}_{2\text{h}}$
$\nu_3=1$	3.4287(5)	60.90(2)	0	$\text{C}_{2\text{h}}$
$\nu_1=\nu_3=1$	3.493(4)	59.2(5)	0	$\text{C}_{2\text{h}}$
$\nu_3=\nu_{\text{tor}}=1$	3.261(2)	43.9(1)	29.8(2)	C_2

The geometries of the monomer subunits were assumed to be unchanged upon complexation.



^a) Uncertainties were unidentified in the original paper.

Hecker, A., Scheele, I., Havenith, M.: Phys. Chem. Chem. Phys. **5** (2003) 2333.

See also: Qian, H.-B., Herrebout, W.A., Howard, B.J.: Mol. Phys. **91** (1997) 689.

Replaces [II/25A\(2, 845\)](#)