

24 January 2013

Prof. A.F.Krupnov, Dr. M.Yu. Tretyakov, Microwave Spectroscopy Laboratory, Institute of Applied Physics. Russian Academy of Science, Uljanov St 46, Nizhny Novgorod, Russia

Dear Prof. Krupnov and Dr. Tretyakov

Please accept my sincere congratulations on your detection of the water dimer at room temperature which has just been accepted for publication in Physical Review Letters (PRL). Both atmospheric science and the theory of liquid water have long awaited direct observational confirmation of the existence of water dimers at equilibrium in the gas phase under atmospheric conditions This topic has even survived two previous false detections published, respectively, in Nature and Science. It is only fair that the other high profile journal, PRL, should publish your real discovery.

I believe the direct observation of ambient water dimers is the most significant advance in this field during my scientific lifetime (more than 30 years). Its importance for the key atmospheric problem of understanding the so-called water continuum cannot be over-emphasised. Once more I congratulate you with the exceptional result. I hope that this is only the start of a fruitful set of discoveries in your study on this important problem.

Yours truly,

Jonathan Tennyson FRS

Massey Professor of Physics

Chair Royal Society Discussion Meeting on "Water in the Gas Phase"

Touthauleung Son

Chair International Union of Pure and Applied Chemistry task group on the spectroscopy of water from experiment and theory.