



Laboratoire PPSM – UMR CNRS 8531

Photochimie et Photophysique Supramoléculaires et Macromoléculaires

Séminaire PPSM

Lundi 10 Juin 2013 - 13h00

Auditorium D. Chemla - Bâtiment IDA

Professeur Toshiyuki SHIKATA

Graduate School of Agriculture, Tokyo University of Agriculture
and Technology, Japon

Invité par : Robert Pansu

«Hydration and Dynamics of Polymeric Materials in Aqueous Solution»

Because water molecules have a relatively large permanent electric dipole moment, their whole molecular motions are clearly detectable using extremely high frequency dielectric spectrum measurements. Moreover, free and hydrated water molecules in aqueous solutions are easily distinguished from dielectric spectra. By use of the extremely high frequency dielectric techniques, one can precisely determine hydration numbers of some polymeric materials, e.g., poly(ethylene glycol) and poly(vinyl alcohol)) as functions of temperature. Simultaneously, information on segment motions for the polymers in aqueous solution is also detectable. Hydration behavior and dynamics of such the polymeric materials in aqueous solution will be shown.

PPSM

ENS Cachan – 61 avenue du Président Wilson
94235 Cachan Cedex – France

Tél : +33 1 47 40 53 38 – Fax : +33 1 47 40 24 54

e-mail : ahusson@ppsm.ens-cachan.fr

site web : <http://www.ppsm.ens-cachan.fr>

