

L'Institut de Chimie et des Matériaux Paris-Est (ICMPE) et l'Université Paris Est ont le plaisir de vous convier au cours avancé (niveau master ou thèse) qui sera donné par M. le **Professeur Atsushi TAKAHARA** de l'*Institute for Materials Science & Engineering* à l'*Université de Kyushu* (Japon).



M. Takahara est actuellement membre associé du Conseil scientifique du Japon, président de la MRS-Japan, *fellow* de la SRC, *fellow* de l'APS et éditeur senior de *Langmuir*. Il est coauteur d'environ 500 publications dans diverses revues scientifiques. Il a obtenu son doctorat en 1983 au Département de Chimie appliquée de l'Université de Kyushu. Ses recherches portent sur la caractérisation des structures de surface et les propriétés physiques des matériaux mous.

Le cours sera organisé du **12 au 14 novembre 2018** sur le campus de Thiais-Vitry du CNRS, à quelques kilomètres au nord de l'aéroport international d'Orly et à environ 5 kilomètres au sud de Paris intramuros.

**Titre du cours** : « Structure and Physical Properties of Polymeric Solids »

**Dates** : Du lundi 12 novembre à 10h au mercredi 14 novembre vers 16h (15h de cours au total)

**Programme du cours (en anglais)** : This course will present the mechanical, thermal and surface properties of polymers with respect to the underlying physics and physical chemistry of polymers in the solid state. Topics include primary and secondary structure of polymer chains, a characterization of the structure of glassy, crystalline, and rubbery elastic states of polymers; thermal properties, viscoelastic properties, thermodynamics of polymer surface and interfaces. Several examples on relationships between structure and function in technologically important polymeric systems will be given in the class.

**Frais d'inscription**: Gratuit pour tous les participants, mais une pré-inscription est obligatoire (par l'envoi d'un courriel avant le 5 novembre à [penelle@icmpe.cnrs.fr](mailto:penelle@icmpe.cnrs.fr)).

Une attestation de suivi des cours pourra être délivrée, sur demande, aux participants intéressés.

Il est possible de déjeuner sur le campus (restaurant CNRS). Des logements et hôtels à prix raisonnables peuvent être trouvés à proximité du campus pour les étudiants ou collègues potentiellement intéressés.

The East Paris Institute of Chemistry and Materials Science (ICMPE - EPICaMS) and the East Paris University Graduate School cordially invite you to attend a master class that will be delivered by **Prof. Atsushi TAKAHARA** from the *Institute for Materials Science & Engineering* at *Kyushu University* (Japan).



Prof. Dr. Takahara is currently an associate member of the Science Council of Japan, a president of MRS-Japan, an RSC Fellow, an APS Fellow and a senior editor of *Langmuir*. He is the co-author of about 500 publications in various scientific journals. He received his Ph.D. degree in 1983 from the *Department of Applied Chemistry* at *Kyushu University*. His research interests involve the characterization of surface structures and the physical properties for soft materials.

The course will be organized from **November 12 to 14, 2018** on the Thiais-Vitry CNRS campus, a few kilometers north of Orly international airport and about 5 kilometers south of downtown Paris.

**Title:** “Structure and Physical Properties of Polymeric Solids”

**Dates:** From Monday November 12 at 10:00 am to Wednesday November 14 at 4:00 pm (15h total)

**Topics to Be Covered:** This course will present the mechanical, thermal and surface properties of polymers with respect to the underlying physics and physical chemistry of polymers in the solid state. Topics include primary and secondary structure of polymer chains, a characterization of the structure of glassy, crystalline, and rubbery elastic states of polymers; thermal properties, viscoelastic properties, thermodynamics of polymer surface and interfaces. Several examples on relationships between structure and function in technologically important polymeric systems will be given in the class.

**Cost:** Free to all participants, but a pre-registration is mandatory (by sending an e-mail before November 5 to [penelle@icmpe.cnrs.fr](mailto:penelle@icmpe.cnrs.fr)).

A certificate of course attendance may be issued, on request, to interested participants.

A restaurant is available on campus. Reasonably priced local hotels/accommodations are available for potentially interested visitors from outside the Ile-de-France area.