

# ADVANCED IN MECHANICS AND CHEMISTRY OF ADHESION

## TRAINING SCHOOL 3

13<sup>th</sup>-15<sup>th</sup> September 2017, Paris (CNRS/ESPCI)  
10 Rue Vauquelin, 75005/ PO75231 Paris Cedex 05

### 13<sup>th</sup> September 2017

08:30 - 08:45 Registration

08:45 - 09:00 Welcome (Yvette Tran, CNRS/ESPCI and Alla Synytska, IPF Dresden)

#### Session I: Surface Functionalization and Characterization

09:00 - 09:45 **Surface Functionalization on Particles, Model Rough Surfaces**  
Alla Synytska, IPF Dresden

09:45 - 10:30 **Techniques for surface and thin films analysis**  
Yvette Tran, CNRS/ESPCI

10:30 - 10:50 *Coffee Break*

#### Session II: Adhesion: Fundamentals and applications

10:50 - 11:35 **Fundamentals of Adhesion I**  
Matteo Ciccotti, CNRS/ESPCI

11:35 - 12:35 **Presentation research projects by ESRs**

11:35 – 11:55 ESR 6: *Vaishali Chopra*

11:55 – 12:15 ESR 4: *Francisco Cedano*

12:15 – 12:35 ESR 5: *Mehdi Vahdati*

12:35 - 13:45 *Lunch*

13:45 - 14:15 **Fundamentals of Adhesion II**  
Matteo Ciccotti, CNRS/ESPCI

14:15 - 15:00 **Molecular effects on Adhesion: role of entanglements**  
Frederic Restagno, CNRS

15:00 - 15:20 *Coffee Break*

15:20 - 16:20 **Bioinspired reversible Adhesion**  
Al Crosby, University Massachusetts Amherst, USA

16:20 - 17:00 **Presentation research projects by ESRs**

16:20 - 16:40 ESR 8: *Victor Kang*

16:40 - 17:00 ESR 9: *Justine Tavera*

19:00 *Sightseeing and Dinner*

## 14<sup>th</sup> September 2017

### Session III: Fundamentals of Molecular Simulations

- 09:00 - 10:15 **Fundamentals of Simulations I**  
Vlasis Mavrantzas, UPATRAS
- 10:15 - 11:00 **Experimental aspects of tack experiments in water**  
Costantino Creton, CNRS/ESPCI
- 11:00 - 11:20 *Coffee Break*
- 11:20 - 12:20 **Presentation research projects by ESRs**  
11:20 - 11:40 ESR 9: *Maciej Chudak*  
11:40 - 12:00 ESR 10: *Dimitris Mintis*  
12:00 - 12:20 ESR 11: *Aurélie Féat*
- 12:20 - 13:30 *Lunch*

### Session IV: Viscoelasticity in Adhesion

- 13:30 - 14:30 **Dynamic networks**  
Niels Holten-Andersen, Massachusetts Institute of Technology, Cambridge
- 14:30 - 15:15 **Viscoelastic adhesives: rheology and adhesion**  
Costantino Creton, CNRS/ESPCI
- 15:15 - 15:35 *Coffee Break*
- 15:35 - 16:35 **Presentation research projects by ESRs**  
15:35 - 15:55 ESR 3: Marco Dompé  
15:55 - 16:15 ESR 2: Maria Villiou  
16:15 - 16:35 ESR 1: Ugo Sidoli
- 16:35 - 18:00 **Administrative Meeting (supervisors)**  
Sandra Martinka, IPF Dresden

## 15<sup>th</sup> September 2017

### Session V: Soft Skills

- 09:30 - 10:10 **Starting your own company**  
Andrew Griffiths, CNRS/ESPCI
- 10:10 - 10:50 **Fundamentals about IP protection**  
Bruno Rostand, PSL
- 10:50 - 11:10 *Coffee Break*
- 11:10 - 11:50 **Introduction to Funding in Academia**  
Costantino Creton, CNRS/ESPCI
- 11:50 - 13:00 *Lunch*

### Session VI: Training elements

- 13:00 - 16:00 **Workshop Adhesion Tests**  
Francisco Cedano and Mehdi Vahdati, CNRS/ESPCI