

Biological and Biomimetic Adhesives

Mons, 18-20 May 2011

Programme overview

Wednesday May 18th

Oral sessions and Management Committee meeting will be held in the Gutenberg auditorium. Coffee breaks, lunch, and poster session will take place in the Plisnier Hall.

08:00 - 09:15 Registration

09:15 - 09:30 Welcome talks

09:30 - 10:30 Oral communications (Chairman: Markus Linder)

9:30 Janek von Byern “Gluing to survive-Antipredator strategy of salamanders”

9:50 Mustafa O. Guler “Dopa functionalized peptide nanofibers for metal implant surface bioactivation”

10:10 Peter Ladurner “*Macrostomum lignano* as a model system to study duo-gland adhesive organs of flatworms”

10:30 – 11:00 Coffee break

11:00 – 12:00 Oral communications (Chairwoman: Marisa Almeida)

11:00 Peter Kasak “Zwitterionic polymer as tool against biofouling”

11:20 Markus Linder “Biological adhesives as building blocks in nanomaterials”

11:40 Jon Barnes “Wet but non slippery: bioinspired adhesives that work in humid and flooded conditions

12:00 – 13:30 Lunch

13:30 – 15:00 COST Management Committee meeting
(Everybody can join but only the Management Committee is allowed to vote)

15:00 – 15:30 Coffee break

15:30 – 17:30 Poster session

Thursday May 19th

Oral sessions and Management Committee meeting will be held in the Curie auditorium. Coffee breaks, lunch, and poster session will take place in the Plisnier Hall.

09:30 - 10:30 Oral communications (Chairman: Janek von Byern)

9:30 Bjoern Melzer “The climbing roots of *Vanilla spec.* –first insights into the attachment system of a monocot”

9:50 Havazelet Bianco-Peled “Small angle X-ray scattering for the study of biological adhesives”

10:10 Niall Crawford “The self-cleaning properties of the toe pads of tree frogs”

10:30 – 11:00 Coffee break

11:00 – 12:00 Oral communications (Chairman: Philippe Leclère)

11:00 Vanessa Zheden “*Dosima fascicularis*: a barnacle which floats rather than sticks”

11:20 Dagmar Voigt “Study of biological adhesives using cryo-scanning electron microscopy”

11:40 Luigi Petrone “Settlement assays of *Balanus Amphitrite* cyprids”

12:00 – 13:30 Lunch

13:30 – 15:30 Working Group discussions

15:30 – 16:00 Coffee break

16:00 – 17:20 Oral communications (Chairwoman: Aránzazu del Campo)

16:00 Meir Haber “Skin surface model”

16:20 Tina Steinbrecher “Permanent attachment pads of *Parthenocissus spec.* –morphology and biomechanics”

16:40 Gabriel Furtos “Mechanical properties of dual curing bone cement based on glass fibers”

17:00 Pdraig Keane “Asymmetric spatula heads combined with lateral forces provide a mechanism for controlling the adhesive attachment of a range of spider species”

19:00 Banquet (Mundaneum)

Friday May 20th

Oral sessions and Management Committee meeting will be held in the Curie auditorium. Coffee breaks, lunch, and poster session will take place in the Plisnier Hall.

09:30 - 10:30 Oral communications (Chairwoman: Dagmar Voigt)

9:30 Klaus Rischka “Adsorption properties of mussel based peptide sequences”

9:50 Ebru Toksoy Oner “Thin nanostructured bioactive films by MAPLE assembling”

10:10 Michael Roehrig “Fabrication of hierarchical gecko-mimicking structures”

10:30 – 11:00 Coffee break

11:00 – 12:30 Oral communications (Chairman: Willi Schwotzer)

11:00 Sven Bundschuh “Stress analysis and parameter study of permanent attachment pads of *Parthenocissus tricuspidata* by finite element simulations”

11:20 João F. Mano “Development of new multilayer films based on chitosan and dopamine-modified hyaluronic acid”

11:40 Marleen Kamperman “Design, Synthesis and Characterization of Artificial Bioinspired Adhesives”

12:30 – 14:00 Lunch

14:00 – 15:00 Working Group discussions

15:00 Goodbye coffee