

Preparatory Meeting - Program

Monday, 25th of March

09h00 *Welcome coffee*
09h45 General introduction

Session 1: Membranes

10h00 Introduction of the session – Carlos Marques
10h10 Mély/Römer
“Investigation by advanced fluorescence probes and techniques of the plasma membrane dynamics induced by the binding of the bacterium *Pseudomonas aeruginosa*”
10h20 Bechinger/Süss
“Membrane active polypeptides and liposomal complexes for nucleic acid delivery”
10h30 Behrends/Marques
“Lipid membrane translocation of biorelevant particles: oxidation effects”
10h40 Meier/Schröder
“Polymersomes as photosensitizer carriers for the oxidation of bio-mimetic membranes”
10h50 Anselme/Rühe
“The interaction between biosystems and 3D microstructured surfaces”
11h00 Discussion
11h30 *Coffee break*

Session 2: Soft matter interfaces: Mechanical properties, tribology, and adhesion related phenomena

11h50 Introduction of the session – Vincent Le Houérou
12h00 Decher/Shastri
"Artificial cellular 2D and 3D microenvironments: Control of cell adhesion and behaviour"
12h10 Karine Anselme
“Influence of morphology of microtopography on cellular mechanotransduction: how cells response differentiate microstructures with sharp or smooth edges?”
“Selection of cancer stem cells by modulating physical properties of their extracellular microenvironment.”
12h20 Vincent Le Houérou
“Friction on textured surfaces: Application to Insect-Plant interactions”
12h30 Jürgen Rühe
„Wetting and adhesion on model microstructures”
12h40 Baschnagel-Blumen/Reiter-Rubin
“Linear mechanical properties of freestanding polymer films”
12h50 Discussion
13h20 *Lunch*

Session 3: From Design to Multifunctional Materials and Devices

- 14h45 Introduction of the session – Rolf Mülhaupt
- 14h55 Brinkmann-Samori/Reiter-Sommer
“Graphene-induced crystallization of semi-crystalline conjugated polymers”
- 15h05 Brinkmann-Samori/Sommer
“Polymorphism in high-mobility n-type main chain conjugated naphthalene diimide copolymers”
- 15h15 Projet Brinkmann/von Hauff/Ludwigs
“Controlled nucleation & growth of conjugated polymers”
- 15h25 Giuseppone/Reiter
“Long-range ordering of conducting triarylamine-based nanowires and heterojunctions”
- 15h35 Behrends/Lutz
„Reading Polymers: recognition of synthetic water-soluble polymers in nanopores”
- 15h45 Projet Lutz/Mülhaupt
“Compartmentalized polymer ionic liquids: toward unimolecular machines”
- 15h55 *Coffee break*
- 16h10 Projet Mülhaupt/P. Lutz
„Nanocrystalline layered systems and adaptive polymeric multilayer composites”
- 16h20 Rühle/J.F.Lutz/Mülhaupt
„High precision synthesis of carbohydrate analog polymers for functional coatings and microsystem engineering “
- 16h30 Decher/Mülhaupt
"Bone-like Multicomposites"
- 16h40 Mésini/Reiter
“Self-assembled nanotubes sheathing semi-conducting wires”
- 16h50 Discussion
- 17h20 *Coffee break*

Session 4: Discussion on possibilities to integrate further proposals and about another thematic area

- 17h35 Introduction of the session – Jörg Baschnagel and Günter Reiter
- 17h45 Bartsch/Semenov
“Colloid stabilization by unattached polymers in solution - from hard walls to soft and sterically stabilized colloids”
- 17h55 Bartsch/Hébraud
“Influence of shear prehistory and particle attractions on the relaxation dynamics from non-equilibrium states to metastable colloidal glass states”
- 18h05 Igor Kulic
"Project Brainiac: Building a Self - Assembled- Associative Memory"
- 18h15 Decher/Meier
"3D Patterned Polyelectrolyte Multilayers through Phase Separation of Diblock- and Triblock-Polyelectrolytes"
- 18h25 Discussion
- 19h30 *Diner in Maison Kammerzell*

Tuesday, 26th of March

12h00	<i>Lunch</i>
13h30	Establishing the list of IRTG projects for the renewal proposal Discussing financial matters and man-power requests Prioritization: Ranking projects <i>Coffee break</i>
17h00	Final comments and summary