












## Agenda

### INSA – IPF Workshop 9<sup>th</sup> May until 11<sup>th</sup> May 2023

Tuesday, 9th May 2023			
	From 7 pm	Arrival INSA Members	
Wednesday, 10th May 2023			
<b>Chemistry and sustainability</b>  	8.45-9.00	Jannick Duchet-Rumeau, Jean-Francois Gerard, Brigitte Voit	Welcome and introduction
	9.00- 9.25 am	Brigitte Voit (IPF)	Polyesters with biogenic units
	9.25- 9.50 am	Catherine Marestin (INSA)	Synthesis of aromatic and heterocyclic polymers through non-conventional routes
	9.50- 10.15 am	Jens Gaitzsch (IPF)	Functional Polyesters from Radical Ring-Opening Polymerisation
	10.15- 10.35 am	<b>Coffee break</b>	
<b>Chemistry and sustainability</b>  	10.35- 11.00 am	Sébastien Livi (INSA)	EPOXY-Ionic Liquid : from synthesis to end of life
	11.00- 11.25 am	Pauline Voigt (IPF)	Effective experimental design for polymer networks with bio based components using DOE
	11.25- 11.50 am	Romain Tavernier (INSA)	Monomer design for the improvement of sustainability and performances of polymer networks
	11.50- 12.15	Jean-François Gérard (INSA)	AMETHYST Project: Discovering new polymeric materials by combining high-throughput tools for synthesis and characterisation with Artificial Intelligence
	12.15- 12.50 pm	<b>Lunch break</b>	

	12.50- 1.30 pm	<b>Lab tour</b>	Polymer Characterization (MSA, PG etc.)
<b>Sustainability and Physico-Chemistry</b>  	1.30- 1.55 pm	Dieter Fischer (IPF)	Quantitative particle analysis by a combination of optical microscopy with FTIR and Raman spectroscopy: advanced automation enhanced by Machine learning and data management
	1.55- 2.20 pm	Albena Lederer (IPF)	Advanced Field Flow Fractionation techniques for characterization of supramolecular and complex polymer materials
	2.20- 2.45 pm	Dietmar Appelhans (IPF)	Enzyme reactions in different cavities
	2.45- 3.10 pm	Sylvestre Njakou-Djomo (INSA)	Circularity and sustainability Assessment of Composites: Case of wind turbine blades in France
	3.10- 3.30 pm	Coffee Break	
<b>Functional composites</b>  	3.30- 3.55 pm	Jannick Duchet-Rumeau (INSA)	Management of interfaces to make composites functional
	3.55- 4.20 pm	Beate Krause (IPF)	Polymer/CNT nanocomposites for thermoelectric application
	4.20- 4.45 pm	Sébastien Pruvost (INSA)	Functional materials for electrical applications and molecular mobility
	4.45- 5.10 pm	Ulrike Staudinger (IPF)	Vapor sensing behavior of electrically conductive Polymer/CNT composites
	5.10- 5.35 pm	Anatoli Serghei (INSA)	Universal relationship between the electromagnetic interference shielding effectiveness of composite materials and their electrical properties
	5.35- 6.00 pm	Discussion	
	From 7.00 pm	<b>Dinner at the restaurant</b>	

**Thursday, 11th May 2023**

<b>Polymer materials</b> 	9.00- 9.25 am	Michaela Gedan-Smolka (IPF)	Influence of chemical bonding in PA-PTFE-Oil-cb compounds on physico-chemical, mechanical and tribological properties
	9.25- 9.50 am	Lars Bittrich (IPF)	Material modelling for short and endless fiber reinforced composites
	09.50- 10.15 am	Markus Stommel/ Anna Sambale (IPF)	<i>In situ</i> experiments to study deformation-induced structure formation in soft polymers.
	10.15-10.40	Anna Sambale (IPF)	Characterization and Modelling of Moisture Gradients in PA 6
	10.40- 11.00	<b>Coffee break</b>	
<b>Polymer materials</b>	11.00- 11.25 am	Andreas Fery (IPF)	Making materials communicative
<b>Polymers at the interface with life sciences</b> 	11.25- 11.50 am	Silvia Moreno (IPF)	Smart decoration of microcarriers using different loaded polymersomes providing a dual therapeutic action
	11.50- 12.15 am	Thomas Trimaille (INSA)	Drug delivery systems ; hydrogels (sensitive to pH, temperature, enzymes)
	12.15- 12.40 pm	Günter Auernhammer (IPF)	Dynamics at Polymer Interfaces: Wetting, Electrokinetics, etc.: From fundamentals towards applications
	12.40- 1.40 pm	<b>Lunch break</b>	
	1.40- 2.20 pm	<b>Lab tour</b>	Processing etc.
<b>Polymers at the interface with life sciences</b> 	2.20- 2.45 pm	Arnaud Favier (INSA)	Fluorescent polymer probes for bio-imaging (infectiology, immunology, cancerology) ; well-defined polymer bioconjugates ; gold/polymer hybrid nanoparticles
	2:45-3:10	Carsten Werner (IPF)	Overview IPF Institute Biofunctional Polymers
	3:10- 4.30 pm	<b>Final Discussion</b>	Further steps