Sunday 26th August

14:00 – 19:00

REGISTRATION

Tutorial Lectures

14:00 – 15:00

Aurora Nogales
CSIC Madrid

Introduction to dielectric relaxation
Case study: performing ‘bulk’ experiments in nanoconfined systems

Silvina Cerveny
Centro de Física de Materiales

Dynamics of water
Case study: molecular relaxation in aqueous solutions of synthetic and biological materials

15:00 – 16:00

Zaneta Wojnarowska
University of Silesia

High pressure dielectric spectroscopy
Case study: charge transfer in ionic glass-formers

16:00 – 17:00

Kristine Niss
Roskilde University

Maxwell-Wagner polarization
Case study: analysis of crystallization kinetics

17:00 – 18:00

18:00 -19:00

WELCOME DRINK
### Monday 27th August

**REGISTRATION**

08:00 -

**WELCOME SPEECH**

08:30 - 08:50

### BDS in relation to other techniques 1

<table>
<thead>
<tr>
<th>Time</th>
<th>Speaker</th>
<th>Topic</th>
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<tbody>
<tr>
<td>08:50 -</td>
<td>Friedrich Kremer</td>
<td>Dielectric spectroscopy with optical detection – a realistic perspective?</td>
</tr>
<tr>
<td>09:20 -</td>
<td>Aurélien Roggero</td>
<td>Broadband dielectric and thermally-stimulated electrochemical impedance spectroscopies for the analysis of organic coatings</td>
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<tr>
<td>09:40 -</td>
<td>Florian Pabst</td>
<td>Dielectric spectroscopy with optical detection – a realistic perspective?</td>
</tr>
<tr>
<td>10:00 -</td>
<td>Alejandro Sanz</td>
<td>Simultaneous dielectric and scattering techniques in the temperature-pressure plane</td>
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</tbody>
</table>

**COFFEE BREAK**

10:30 - 11:00

### BDS in relation to other techniques 2

<table>
<thead>
<tr>
<th>Time</th>
<th>Speaker</th>
<th>Topic</th>
</tr>
</thead>
<tbody>
<tr>
<td>11:00 -</td>
<td>David Nieto Simavilla</td>
<td>Kinetics of irreversible adsorption: thermodynamics vs molecular mobility</td>
</tr>
<tr>
<td>11:20 -</td>
<td>Tina Hecksher</td>
<td>What shear mechanics see that dielectrics doesn't: slow modes in glycerol and glycerol-water mixtures</td>
</tr>
<tr>
<td>11:40 -</td>
<td>Wilhelm Kossack</td>
<td>Infrared and dielectric spectroscopy to unravel the nature of the structural- and the secondary-relaxation in glycerol, threitol, xylitol and sorbitol</td>
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### Terahertz Spectroscopy 1

<table>
<thead>
<tr>
<th>Time</th>
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<th>Topic</th>
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</thead>
<tbody>
<tr>
<td>12:00 -</td>
<td>Boris Gorshunov</td>
<td>Nano-confined water: from incipient ferroelectricity to ferroelectric relaxor behavior</td>
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<tr>
<td>Time</td>
<td>Speaker</td>
<td>Affiliation</td>
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<tr>
<td>12:30 – 13:00</td>
<td>Paul Ben Ishai</td>
<td>Ariel University</td>
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<td>13:00 – 14:30</td>
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<tr>
<td><strong>Terahertz Spectroscopy 2</strong></td>
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<tr>
<td>14:30 – 14:50</td>
<td>Mohsen Sajadi</td>
<td>Fritz Haber Institute der MPG</td>
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<tr>
<td>14:50 – 15:10</td>
<td>Keisuke Tominaga</td>
<td>Ariel University</td>
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<tr>
<td><strong>Industrial applications 1</strong></td>
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<tr>
<td>15:10 – 15:40</td>
<td>Marian Paluch</td>
<td>University of Silesia</td>
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<td>15:40 – 16:00</td>
<td>Emeline Dudognon</td>
<td>Université de Lille</td>
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<td><strong>16:00 – 17:00</strong></td>
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<tr>
<td><strong>Industrial applications 2</strong></td>
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<tr>
<td>17:00 – 17:30</td>
<td>Madalena Dionisio</td>
<td>Universidade Nova de Lisboa</td>
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<tr>
<td>17:30 – 17:50</td>
<td>Natalia Correia</td>
<td>Université de Lille</td>
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<tr>
<td>17:50 – 18:10</td>
<td>Roger Walker</td>
<td>Penn State University</td>
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<td><strong>19:45 –</strong></td>
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### Young Researcher Session

**08:30 – 08:42**

**Thomas Gambino**  
Centro de Fisica de Materiales, MICHELIN  
**Combined dielectric spectroscopy and neutron scattering study of a Polymer Blend as a Simplified Industrial System**

**08:42 – 08:54**

**An-Sofie Huysecom**  
KULeuven  
**Predicting the localization and interconnectivity of carbon nanotubes in compatibilized bi-phase polymer blends**

**08:54 – 09:06**

**Bienvenu Atawa**  
UNIROUEN  
**Molecular dynamics of chiral amorphous compounds: Original case study of Nac-MBA**

**09:06 – 09:18**

**Preeya Kuray**  
Pennsylvania State University  
**Correlating the ionic conductivity and Morphology of Pendant and Backbone Polymerized Ionic Liquids**

**09:18 – 09:30**

**Achillefs Pipertzis**  
University of Ioannina  
**Polythiophene-based polyelectrolytes from polymerized ionic liquids. Self-assembly and dc conduction**

**09:30 – 09:42**

**Sebastian Peter Bierwirth**  
TU Dortmund  
**Coexistence of two structural relaxation processes in mixtures involving monohydroxy alcohols**

**09:42 – 09:54**

**Arda Yildirim**  
BAM  
**Molecular mobility and ionic conductivity of Ionic Liquid Crystals Forming a Hexagonal Columnar Mesophase**

**09:54 – 10:06**

**Anna Czaderna-Lekka**  
Lodz University of Technology  
**The analysis of molecular relaxation in thermo-responsive polymer hydrogels**

**10:06 – 10:18**

**Jorge Melillo**  
Centro de Fisica de Materiales  
**Dynamics of ice in ice nucleating protein (INP) solutions**

**10:18 – 10:30**

**Alessia Gennaro**  
KULeuven  
**Surface imprinting surface characterization for cell detection by dielectric relaxation spectroscopy**

**10:30 – 11:00**

**COFFEE BREAK**

### Nanoconfinement 1

**11:00 – 11:30**

**Koji Fukao**  
Ritsumeikan University  
**Asymmetric interfacial dynamics and glass transition in stacked thin polymer films**

**11:30 – 12:00**

**Andreas Schönhals**  
BAM  
**Growth kinetics and molecular mobility of irreversibly adsorbed layers in thin polymer films**
12:00 – 12:20
Sherif Madkour
University of Leipzig
Mapping the Dynamic Heterogeneities in Thin Films of Miscible PVME/PS Blend by Nano-sized Relaxation and X-ray Spectroscopies

12:20 – 12:40
Magdalena Tarnacka
University of Silesia
How does the vitrification of the interfacial layer affects the Molecular Dynamics of Glass-Formers at the Nanoscale? The Impact of Interactions

12:40 – 13:00
William Hunter Woodward
The Dow Chemical Company
On the glass transition suppression of Polystyrene in SBS Rubber

13:00 – 14:30
LUNCH

Nanoconfinement 2

14:30 – 15:00
Angel Alegría
Universidad del Pais Vasco
Size effects on the segmental dynamics of sub 10-nm segregated polydimethylsiloxane

15:00 – 15:30
Karolina Adrjanowicz
University of Silesia
Confinement induced changes in the Relaxation Dynamics and Crystallization Behavior of Glass-Forming Liquids

15:30 – 16:00
Daniele Cangialosi
CSIC
Glass transition and molecular mobility by calorimetry in confined glasses

16:00 – 16:30
COFFEE BREAK

Pressure and volume

16:30 – 16:50
Ronald White
Dartmouth University
The Cooperative Free Volume Rate Model for pressure dependent dynamics

16:50 – 17:20
Jane Lipson
Dartmouth University
Relaxation in bulk and thin films: Insights using the Cooperative Free Volume Model

17:20 – 17:50
Kristine Niss
Roskilde University
Mapping isobaric aging onto the equilibrium phase diagram

17:50 – 18:20
Daniel Fragiadakis
Naval Research Laboratory
Isochronal superposition, density scaling and the nature of the $\beta$ relaxation

18:20 – 18:40
Henriette Wase Hansen
Institut Laue-Langevin
Isochronal superposition from picosecond to second investigated with simultaneous dielectric and neutron spectroscopy
Wednesday 29th August

Scaling of alpha and beta

08:30 – 09:00
Ryusuke Nozaki
Hokkaido University
Microscopic nature of β process of sugar alcohols

09:00 – 09:30
Kia Ngai
IPCF-CNR Pisa
The JG β-relaxation / primitive relaxation never fail to show up in binary mixtures and polymer blends

09:30 – 09:50
Federico Caporaletti
Università di Trento
Nuclear resonant scattering as microscopic probe for the Johari-Goldstein relaxation process in supercooled liquids

09:50 – 10:10
Shimon Lerner
JCT Lev Academic Center
New link between structural and Johari-Goldstein Relaxation Parameters in Glass Formers

10:10 – 10:30
Pierre-Michel Dejardin
Université de Perpignan
Linear and non-linear orientational correlation factors from the rotational Dean-Kawasaki equation

10:30 – 11:00
COFFEE BREAK

11:00 – 11:30
Alessio Zaccone
University of Cambridge
Microscopic modelling of dielectric α and β relaxation in glasses and orientationally disorder crystals based on Generalized Langevin Equations

11:30 – 12:00
Alexei Sokolov
University of Tennessee
Qualitative change in temperature dependence of Structural Relaxation: Diverge or not Diverge

Soft Matter 1

12:00 – 12:30
Ranko Richert
University of Arizona
Control of Crystallization Outcomes in Molecular Glass-Formers by Electric Fields

12:30 – 13:00
Michael Wübbenhorst
KULeuven
Competing order phenomena and peculiar crystallization kinetics of polyamide 12 as revealed by dielectric spectroscopy

13:00 – 14:30
LUNCH
Aurora Nogales  
IEM-CSIC  
Relaxations and Relaxor-Ferroelectric-like Response of Poly(vinylidene fluoride) confined in cylindrical nanocavities

Christoph Grams  
University of Cologne  
Soliton excitations in multiferroic LiCuVO_4

Cristian Rodríguez-Tinoco  
University of Silesia  
Further insights into vapour deposited ultrastable glasses from dielectric spectroscopy

Patricia Losada-Pérez  
Université libre de Bruxelles  
Asymmetry liquid-liquid criticality in the refractive index and the dielectric constant coexistence curves

COFFEE BREAK

Małgorzata Jasiurkowska-Delaporte  
Polish Academy of Sciences  
The interplay between crystallization and glass transition in nematic liquid crystal 2,7-bis(4-pentylphenyl)-9,9-diethyl-9H-fluorene (5P-EtFLEt-P5)

Josep Tamarit  
Barcelona Research Center in Multiscale Science and Engineering  
Dynamics in weakly disordered solids

Joshua Sangoro  
University of Tennessee  
Dynamics and ion transport in mesoscopic Structured Liquids

Non-linear

Catalin Gainaru  
TU Dortmund  
Nonlinear dielectric response beyond structural relaxation in glass-forming materials

François Ladieu  
Université Paris-Saclay  
Third and fifth harmonic responses in liquids

Roland Böhmer  
TU Dortmund  
Nonlinear electrical and rheological responses of glass formers

IDS Board Meeting
Thursday 30th August

Polymer Dynamics 1

<table>
<thead>
<tr>
<th>Time</th>
<th>Speaker</th>
<th>Institution</th>
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<tbody>
<tr>
<td>08:30 – 09:00</td>
<td>George Floudas</td>
<td>University of Ioannina</td>
<td>Effect of chain topology on segmental dynamics</td>
</tr>
<tr>
<td>09:00 – 09:20</td>
<td>Martin Tress</td>
<td>University of Tennessee</td>
<td>Network formation and molecular dynamics in hydrogen-bonding telechelic polymers: a competition between association lifetime and structural relaxation</td>
</tr>
<tr>
<td>09:20 – 09:40</td>
<td>Stavros Drakopoulos</td>
<td>Loughborough University</td>
<td>Understanding the evolution of entanglements upon the dielectric relaxations in dis-UHMWPE in the presence of Al2O3 catalytic ashes</td>
</tr>
<tr>
<td>09:40 – 10:00</td>
<td>Daniel Martinez-Tong</td>
<td>Donostia International Physics Center</td>
<td>Molecular dynamics of novel poly(pentamethylene 2,5-furanoate): Exploring a complete landscape of molecular dynamics and finding unexpected results</td>
</tr>
<tr>
<td>10:00 – 10:30</td>
<td>Silvina Cerveny</td>
<td>Centro de Física de Materiales</td>
<td>Dynamics of raw and vulcanized rubber. What can we learn from dielectric spectroscopy studies?</td>
</tr>
</tbody>
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10:30 – 11:00

COFFEE BREAK

Polymer Dynamics 2

<table>
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<th>Speaker</th>
<th>Institution</th>
<th>Topic</th>
</tr>
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<tr>
<td>11:00 – 11:30</td>
<td>Ivan Popov</td>
<td>Oak Ridge National Laboratory</td>
<td>Straightening effect of the polymer chains around nanoparticles</td>
</tr>
<tr>
<td>11:30 – 11:50</td>
<td>Beatriz Robles-Hernández</td>
<td>Donostia International Physics Center</td>
<td>Dramatic effect on the slower component topology on the matrix dynamics in polymer mixtures</td>
</tr>
<tr>
<td>11:50 – 12:10</td>
<td>Paulina Szymoniak</td>
<td>BAM</td>
<td>Rigid amorphous phase in Nanocomposites as Revealed by Relaxation Spectroscopy</td>
</tr>
<tr>
<td>12:10 – 12:40</td>
<td>Shiwang Cheng</td>
<td>Michigan State University</td>
<td>Analyzing the interfacial layer properties in nanocomposites by broadband dielectric spectroscopy</td>
</tr>
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12:40 – 14:10

LUNCH
**Water and Bio 1**

**Yuri Feldman**  
The Hebrew University of Jerusalem  
*Water and its dielectric signature. New markers for biosensing*

**Thomas Blochowicz**  
TU Darmstadt  
*Depolarized Dynamic Light Scattering and Dielectric Spectroscopy: Two Perspectives on the Debye-Relaxation in Monohydroxy Alcohols*

**Sławomir Kołodziej**  
University of Silesia  
*Advantages of examining alcohols containing a phenyl group by the means of Broadband Dielectric Spectroscopy*

**Sebastian Pawlus**  
University of Silesia  
*How various strength of the H-bonds is reflected by relaxation dynamics of associated liquids*

**18:30 – 19:30**  
CONCERT

**20:00 – 23:00**  
10TH ANNIVERSARY PARTY  
including the 2018 DEBYE PRIZE Awarding Ceremony
Friday 31st August

Water and Bio 2

08:50 – 09:20
Apostolos Kyrtsis
National Technical University of Athens
Dynamics of hydration water in gelatin – hyaluronic acid hydrogels

09:20 – 09:50
Simone Capaccioli
Università di Pisa
Dynamics of freeze-dried solvated proteins revealed by broadband dielectric spectroscopy

09:50 – 10:10
Kamil Kaminski
University of Silesia
Application of BDS to follow cis to trans isomerism in photoswitchable molecule Aberchrome 670

10:10 – 10:30
Pedro Santos Prezas
University of Aveiro
BDS and TSDC measurements on \( \text{Ca}_{10}(\text{PO}_4)_6(\text{OH})_2 \), \( \beta-\text{Ca}_3(\text{PO}_4)_2 \) and biphasic bioceramics

10:30 – 11:00
COFFEE BREAK

Charge transport 1

11:00 – 11:30
Zaneta Wojnarowska
University of Silesia
Scaling behavior of electric conductivity and structural relaxation in supercooled ionic liquids

11:30 – 11:50
Bernard Mostert
Swansea University
On protonic and electronic charge transport in eumelanin

11:50 – 12:10
Arthur Markus Anton
University of Leipzig
Charge transport and glassy dynamics in polymeric Ionic Liquids as reflected by its Inter- and Intramolecular Interactions

12:10 – 12:30
Tyler Cosby
University of Tennessee
Impact of mesoscale organization on charge Transport and Dynamics in Ionic Liquids

12:30 – 13:00
Joshua Sangoro
University of Tennessee
Dynamics and ion transport in mesoscopic Structured Liquids

13:00 – 14:30
LUNCH
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<td>Anatoli Serghei</td>
<td>Coupled electrical/mechanical investigation on elastomeric composite materials</td>
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<tr>
<td>15:00 – 15:20</td>
<td>Asma Triki</td>
<td>Dielectric properties of jute fibers reinforced Poly(lactic acid) / Poly(butylene succinate) blend</td>
</tr>
<tr>
<td>15:20 – 15:40</td>
<td>Avanish Bharati</td>
<td>BDS as a novel tool to probe phase separation in compatibilized polymer blends</td>
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<tr>
<td>15:40 –</td>
<td>Closing Remarks</td>
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