12th Conference on Broadband Dielectric Spectroscopy and its Applications

BDS2024

01 – 06 September 2024

Lisbon, Portugal

under the auspices of the International Dielectric Society

INTERNATIONAL DIELECTRIC SOCIETY since 2001

NOVA SCHOOL OF SCIENCE & TECHNOLOGY

universidade de aveiro

TÉCNICO LISBOA

UNIVERSIDADE D COIMBRA

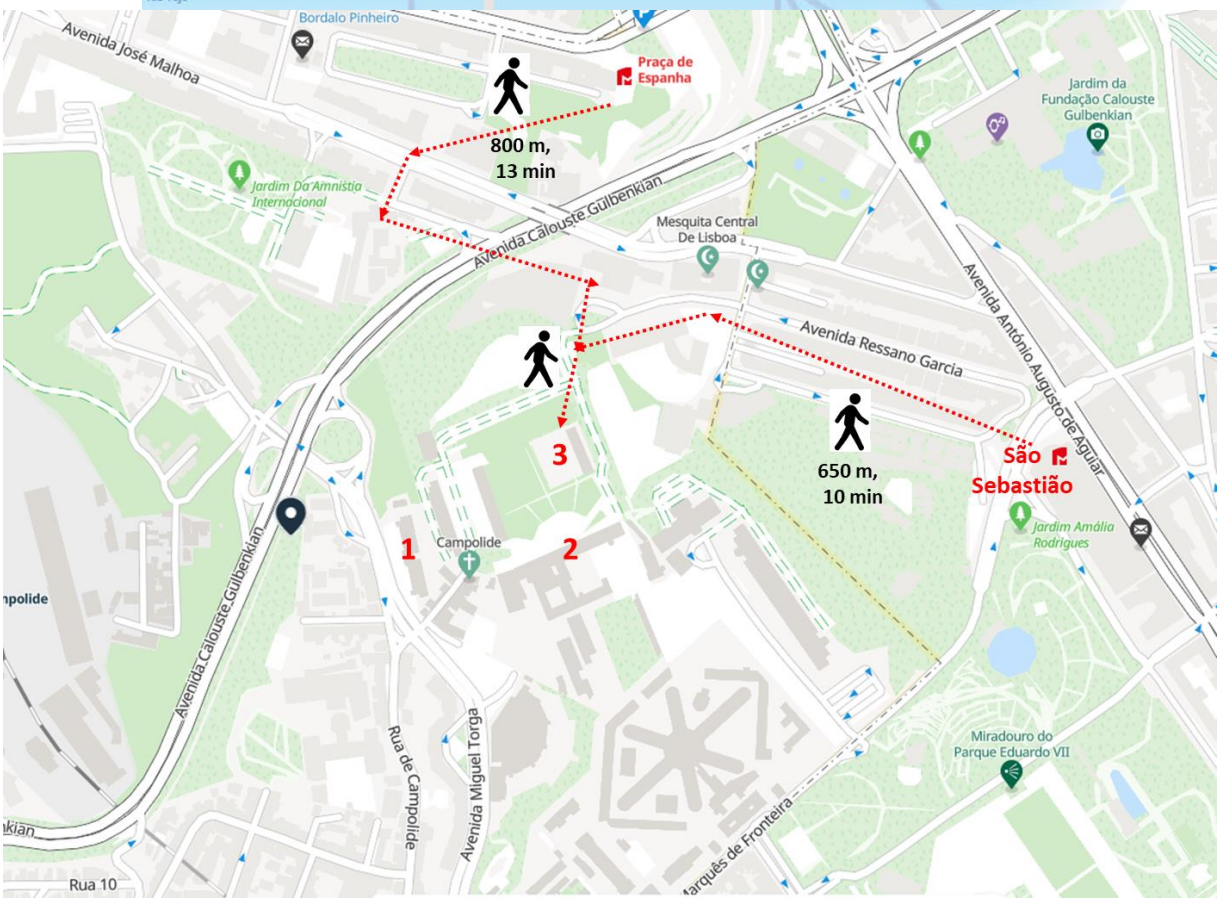
Université de Lille

NOVA NORLEQ

Turismo de Lisboa

HOW TO REACH THE BDS2024 VENUE?

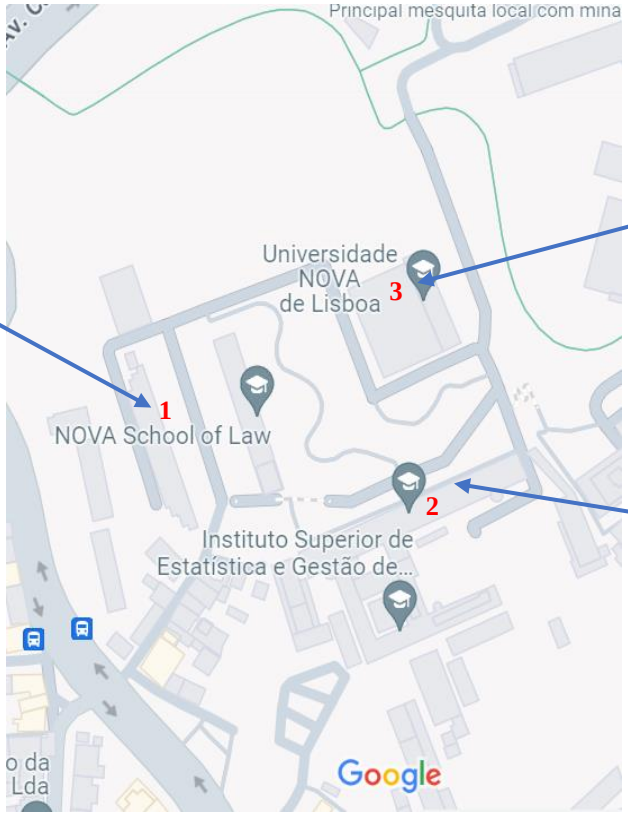
Metro line diagram - Lisbon



1 - Residência universitária, Alfredo de Sousa 2 - Colégio Almada Negreiros; 3 - Conference Hall Reitoria da Universidade NOVA de Lisboa

Additional information

Registration desk
on Sunday, 1st Sept
Residência
universitária
Alfredo de Sousa



Conference Hall
Rectorat of NOVA
University
of Lisbon, Campolide

Welcome Party
on Monday, 2nd Sept
Colégio Almada
Negreiros

Google map

Arriving by plane

From the airport take the METRO (red line - *Linha Vermelha*) start at AEROPORTO and stop at terminal station (SÃO SEBASTIÃO).

Taxi is also a good option (takes 15-20 minutes); it should be around 15-20€.

Arriving by train

If you arrive by train, you will get off at GARE DO ORIENTE station. There take the METRO (red line) to terminal station (SÃO SEBASTIÃO). Alternatively, get off at SANTA APOLÓNIA station. There take the METRO (blue line) and exit at station (SÃO SEBASTIÃO).

Arriving from other parts of Lisbon

From other parts of Lisbon, we particularly recommend the use of public transportation. Buses stopping close (10 min by walk) to the conference site: 713, 726, 742, 746, and 52B. To consult routes and timetables go to: www.carris.pt/.

Metro stations nearest the conference venue: SÃO SEBASTIÃO (red line - *Linha Vermelha*) and, alternatively, PRAÇA DE ESPANHA (Blue line – *Linha Azul*). Metro: www.metrolisboa.pt/eng.

For occasional journeys Bus/Metro tickets go to: https://www.metrolisboa.pt/en/buy/

Discover Lisbon with the Lisbon Card: https://www.lisboacard.org/

Lisbon Official Website: https://www.visitlisboa.com/en

PROGRAM

BDS2024 TIMETABLE

ISC = Invited Speaker Communication — 20 min talk (questions included)
OC = Oral Communication — 15 min talk (questions included)
YRS = Young Researcher Session — 10 min talk (questions included)

Sunday

Monday

Chair (A. Schönhals)

Tutorial 1
The glass transition: linear vs non-linear perspective
Daniele Cangialosi

Break

Tutorial 2
Molecular Dynamics simulations: limits and possibilities
Frédéric Affouard

Coffee break

Tutorial 3
Dielectric spectroscopy in relation to other experimental techniques
Catalin Gainaru

Break

Opening session

S01 - Polymer Dynamics A (Chair: R. Richert)

ISC1-S01 Alexei Sokolov
Energy Barrier for Structural Relaxation, Molecular and Ion Transport in Polymers: a Revised Approach

ISC2-S01 Aurora Nogales
Dielectric Spectroscopy on vitrimers based on transesterification reactions

Lunch

S08 BDS in relation to other A (Chair E. Rössler)

ISC8-S08 Thomas Blochowicz
The spectral shape of structural : relaxation in supercooled liquids light scattering vs. dielectric spectroscopy

OC2-S08 Marceau Hénot
Orientational dynamics in supercooled glycerol computed from MD simulations

ISC9-S08 Anne-Caroline Genix
Coupling of shear rheology with SAXS and BDS in rubber nanocomposites

S06 Monitoring of chem (Chair S. Cheng)

ISC10-S06 Tiberio Ezquerra
Hydrogen bonding during cold crystallization of Poly(alkylene 2,5-furanoate)s

OC3-S06 Jessica Mangialetto
Modelling of the Evolving Glass Transition Temperature During Cure of Diels-Alder ...

ISC11-S06 Raj Suryanarayanan
Time and temperature dependence of nucleation and crystallization in amorphous pharmaceuticals

ISC12-S06 Kristine Niss
Density Scaling and Single Parameter Aging

19-21h
Welcome Party
@Colégio Almada Negreiros

Tuesday

S02 Soft matter dynamics A (Chair M. Paluch)

ISC13-S02 Alois Loidl
Critical behavior and phase transitions in supercooled liquids and glasses

OC4-S02 Caroline Raepsaet
Non linear responses in a family of oligomers: inspecting the possible influence of the length of the molecules

OC5-S02 Aitor Erkoreka
An interpretation of the dielectric spectra of polar nematic phases

ISC14-S02 Emeline Dudugnon
Amorphous solid dispersions of Terfenadine into PVP: insights from the molecular mobility characterisation

OC6-S02 Federico Caporaletti
The slow Arrhenius process: a simple solution to multiple problems in glass equilibration

OC7-S02 Marzena Rams-Baron
Image of the internal solid-state rotation in the diel. response of sizable molecules with polar rotors

ISC15-S02 Michela Romanini
Multiple relaxations in orientationally disordered benzene derivatives with strongly restricted rotational dynamics

Coffee break & Posters

S10 - Modelling A (Chair F. Kremer)

ISC16-S10 Frédéric Affouard
Investigation of the nature of the translational and orientational disorder in pharmaceutical cocrystals from MDS and DRS experiments

OC8-S10 Dmitry Matyushov
Nonlinear dielectric spectroscopy of liquids and protein solutions

OC9-S10 Kazunori Takahashi
Inversion of Coaxial Transmission Line Data Using Numerical Simulation

OC10-S10 Pierre-Michel Déjardin
On the Kirkwood correlation factor of dense isotropic polar fluids

ISC17-S10 Jeppe Dyre
Solved and unsolved problems relating to the Random Barrier Model

Lunch & Posters

S09- Confinement effects A (Chair S. Cerveny)

ISC18-S09 George Floudas
Nanopores as separation membranes for blends comprising polymers of different architecture and microstructure

OC11-S09 Katarzyna Chat
The influence of pressure and volume changes on the non-equilibrium segmental dynamics of polymers

OC12-S09 Anna Drzewicz
Molecular dynamics of ultrathin films of liquid crystal obtained via organic molecular beam deposition

S07 - Ferroelectrics and Ceram. (Chair P. Vilarinho)

ISC19-S07 Torsten Granzow
Structural (dis-)order, dielectric response and phase transition properties of electrocaloric ferroelectrics

OC13-S07 Men Guo
Insights into the aging mechanism of ZnO ceramics from broadband dielectric spectroscopy

OC14-S07 Adam Sieradzki
Order – Disorder Phase Transitions in Hybrid Organic – Inorganic Perovskites – Insights from BDS

OC15-S07 Herbert Kliem
A feedback Model for Relaxor Ferroelectrics

Coffee break & Posters

S11 -Industrial and Techn. A (Chair E. Dantras)

ISC20-S11 Anatoli Serghei
Improving electrical insulating properties by using conductive materials: the interplay between permittivity and conductivity

OC16-S11 Gustavo Schwartz
Using artificial neural networks to predict the dynamics of molecular glass formers

OC17-S11 Tina Hecksher
Broadband mechanical spectroscopy made available for dielectric setups

S03 The impact of (Chair T. Ezquerra)

ISC21-S03 Ranko Richert
Dielectric Spectroscopy of Vapor Deposited Films

ISC22-S03 Paul Ben-Ishai
Organic Magnetoresistance – a test bed for Dielectric-Spin interactions

OC18-S03 François Ladieu
Optical manipulation of chromophores in a molecular glass former: from photofluidization to random pinning

ISC23-S03 Shiwang Cheng
Dynamics of monohydroxy alcohols: Rouse dynamics, chain swapping, and the Debye relaxation

Dinner Invited and IDS members

Wednesday

S04- Water, H-bond, Biol A (Chair Y. Feldman)

IS24-S04 Silvina Cerveny
Unravelling the Glass Transition of Confined Water: A Calorimetric and Dielectric study

OC19-S04 Yang Yao
Water state in lipidic mesophase during phase transition

IS25-S04 Yasuaki Monnai
Exploring Non-Contact Ultrasound Technology via Sub-Terahertz Photoacoustics for Human-Oriented Applications

OC20-S04 Keisuke Tominaga
Dynamics of Hydrated Soft Matters Studied by BDS and Molecular Dynamics Simulations

OC21-S04 Jacob Gerasimov
Perturbing the Dynamic Structure of Water by Ion Solvation

IS26-S04 Apostolos Kyritsis
Water organization in amphiphilic block copolymers with thermoresponsive behaviour

IS27-S04 Syed Tofail
Is Nanoconfined Water Electrically 'Dead' or 'Alive'?

Coffee break & Posters

Young Research Section A (Chair L. Delbreilh)

YRS1-S02 Kaylie Glynn
Decoupling visc&conduc by leveraging Grotthuss diffusion ...

YRS2-S02 Ioannis Tzourtzouklis
Phase Diagram, Glassy Dynamics, & Crystallization Kinetics of the Bio-based Po...

YRS3-S04 Rolf Zeißler
Identifying dip cross correl contrib to the dielectric response of water

YRS4-S04 Franscesco Coin
Water dynamics on calcium pectin-based hydrogels ...

YRS5-S04 Kosei Kawai
Measurement of rotational relax time of water in bio...

YRS6-S04 Vasileios Moschos
Dynamically and Structually Heter. Ethanol/Water Mixtures

YRS7-S04 Sandra Krüger
Water Dyn in Aq Dipeptide Sol. Stud. by BDS and 2H NMR

YRS8-S07 Sofia Mendes
Evaluating polyantimonic acid membr as solid-state fuel cell...

Lunch & Posters

S11 -Industrial and Techn. B (Chair H. Gomes)

IS28-S11 Geoff Smith
Through-vial impedance spectroscopy as a process analytical technology for developing pharmaceutical freeze-drying cycles

OC22-S11 Cindy Galindo
Microwave Dielectric Response of Cytoplasmic Water in Red Blood Cells Upon Glucose Uptake

IS29-S11 Eric Dantras
Broaden the use of dielectric spectroscopy to non-polar polymers: implementation of dipolar probes by gamma irradiation

S10 - Modelling B (Chair J. Dyre)

IS30-S10 Carlos Dias
Kramers-Kronig relations expressed as a convolution pair and its uses in broadband dielectric spectroscopy

OC23-S10 Ronald White
Introducing a Mechanistic Perspective on the Slow Arrhenius Process (SAP) in Glass Forming Systems

OC24-S10 Bruno Melo
EIS smart tool: An application software for the analysis and modeling of IS data with multi-curve fitting

OC25-S10 Florian Pabst
Dielectric Spectra from First-Principles Simulations: Water, Salty Water and Others

Coffee break & Posters

S08 BDS in relation to other B (Chair C. Alba-Simionesco)

IS31-S08 Daniele Cangialosi
Molecular mechanism of glass aging

OC26-S08 Silvia Arrese-Igor
Old news: dielectric spectroscopy is a good probe to study structural relaxation of glass forming systems

OC27-S08 Sebastien Pruvost
Effect of HBs on molecular mobility in P(MMA-co-MAA)/cellulose nanofibers composites

IS32-S08 Ernst Rössler
Glass spectrum, excess wing phenomenon, and master curves in molecular glass formers

S01 - Polymer Dynamics C (Chair G. Floudas)

IS33-S01 Laurent Delbreilh
Interest of pressure controlled DS to probe the interdependence between fragility and cooperativity for polymeric segmental relaxation

OC28-S01 Jiaxin Zhao
Chain-length-dependent relaxation dynamics in poly(methyl acrylate

IS34-S01 Paulina Szymoniak
Vitrimers – Rethinking Epoxies Towards Recyclable and Reusable Thermosets

IDS meeting
@Residência universitária
Alfredo de Sousa

Thursday

S04- Water, H-bond, Biol B (Chair J. Swenson)

IS35-S04 Yuri Feldman
Duped or Doped? Utilizing Microwave Spectroscopy for Autologous Blood Doping Detection

OC29-S04 Hiroaki Matsuura
Slow dynamics of intracellular water measured by BDS K-K relations and Bruggeman–Hanai equation

IS36-S04 Henrique Gomes
Sensing devices that use electrical double-layers and impedance spectroscopy: design strategies

OC30-S04 Tatiana Starciuc
Contribution of DS used to scrutinize the protein stabilization mechanisms and the role of water

IS37-S04 Michael Vogel
Dynamics of Ice in Nanoconfinements and Mixtures: Combined BDS and NMR Studies

S02 Soft matter dynamics B (Chair E. Dudugnon)

IS38-S02 Roberto Macovez
Relaxation dynamics of amorphous molecular pharmaceutics and of their binary mixtures near the eutectic composition

OC31-S02 Kinga Łucak
Molecular dynamics of halogen monoalcohols at different thermodynamic conditions

Coffee break & Posters

Young Research Section B (Chair A. Sokolov)

YRS9-S03 Silvia Gavinho
Investigation of the Effects of CeO Addition on Bioglass ...

YRS10-S05 Marianna Spyridakou
Enhanced Ion Cond in Single-Ion-Conducting Block Copol

YRS11-S08 Maxwell Sparey
Shear Force Mv Microscopy: Complex imp imaging, and Single...

YRS12-S08 Efrat Hochma
Phyto- and Phyto-2nd Harm Generation-Photodynam Therapy...

YRS13-S09 Lucas Leveque
Conductive P3HT nanotubes: structure/pps relationship and appl

YRS14-S09 Elisa Steinrücken
Water Dyn in Si Confin. with Various Surf Chem Stud BDS and NMR

YRS15-S09 Panagiotis Kardasis
How Do Polymers and Mix of Different Archi Penetrate Nano ...

Lunch & Posters

S09- Confinement effects B (Chair M. Vogel)

IS39-S09 Andreas Schönhals
Signature of the Adsorbed Layer on the Glass Transition of Thin Polymer Films: Broadband Dielectric Spectroscopy and Related Techniques

OC32-S09 Magdalena Tarnacka
The impact of confinement on the behavior of associating materials. The case of phenyl alcohols

OC33-S09 Erik Thoms
Dielectric evidence of high kinetic stability in vapour--deposited binary glasses with large Tg contrast

OC34-S09 Kamil Kaminski
The influence of pore walls nanostructurization on the dynamics of low and high molecular weight systems

S05 Charge transport A (Chair B. Roling)

IS40-S05 Łukasz Pająk
Insight into Electrical Conduction in Phosphate-Based Glasses: The Role of Transition Metal Oxides and the Mixed Glass Former Effect

OC35-S05 Achilleas Pipertzis
Ionic and Electronic Conductivity in Structural Negative Electrode Laminas

IS41-S05 Paula Vilarinho
Decoding Ferroelectrics: Dielectric and Impedance Spectroscopy as Tools for Electrical Microstructure Assessment

Coffee break & Posters

S01 - Polymer Dynamics D (Chair M. Wübbenhorst)

IS42-S01 Ralph Colby
Anhydrous Proton Conduction in Polymers Containing Azoles and Phosphonic Acids

IS43-S01 José L. Gomez-Ribelles
Crystallization and dielectric properties of PVDF-ionic liquid blends

OC36-S01 Stavros Drakopoulos
Segmental Relaxation of Polystyrene Modified with Pyrene Molecules

IS44 - S01 Ana R. Brás Würschig
Structure and Dynamics of Supramolecular poly(alkyl ether)-based Polymers: insight with DS combined with Neutron Scattering and Rheology

PRIZES ANNOUNCEMENT

18h15

BUS to Gala Dinner

Friday

S02 Soft matter dynamics C (Chair S. Napolitano)

IS45-S02 Christiane Alba-Simionesco
Glass Transition and Crystallisation of n-Butanol by simultaneous Dielectric Spectroscopy and Neutron Diffraction

OC37-S02 Thulasinath Ramanvenkatesan
Self-assembly in bottlebrush polymers detected using dielectric spectroscopy

IS47-S02 Marian Paluch
Rearientational Dynamics of Sizable Glass-Formers - BDS Studies

IS48-S02 Ana Santic
Ionic transport in supramolecular ionic liquid gels prepared with bis(amino alcohol)oxamides as gelators

Coffee break

S05 Charge transport B (Chair A. Serghei)

IS49-S05 Bernhard Roling
Elucidating the Transport of Electrons and Molecules in a Solid Electrolyte Interphase (SEI) close to Battery Operation Potentials using a Four-Electrode-Based ...

OC38-S05 Zaneta Wojnarowska
Dynamics of Ionic Liquid-Water Mixtures at Ambient and Elevated Pressure

IS50-S05 Jan Swenson
Relaxation Dynamics and Ionic Conductivity in Structural Battery Electrolytes

OC39-S05 Aurelien Roggero
Molecular mobility and interfacial polarization study on model two-phase epoxy-amine networks

IS51-S05 Joshua Sangoro
Evidence of Liquid-Liquid Transitions in Ionic Liquids

OC40-S05 Martin Tress
BDS on the nanoscale: restricted crystallization and conductivity of polymers in finite size

IS52-S05 Catalin Gainaru
Achieving superionic conductivity in polymer electrolytes

Concluding remarks

Fingers Lunch

14-18h
Registration at the Conf. Campus

Program

Monday, 2nd September, Morning

Tutorials (Chair A. Schönhals)		
8:30	**Daniele Cangialosi**	"The glass transition: linear vs non-linear perspective"
9:20	**Frédéric Affouard**	"Molecular Dynamics simulations: limits and possibilities"
Coffee Break 		
10:20	**Catalin Gainaru**	"Dielectric spectroscopy in relation to other experimental techniques"
11:15 **Opening Session** Director of FCT-NOVA, Prof. Doutor José Júlio Alferes President of IDS, Ranko Richert, Chairs of Conference		
S01 - Polymer Dynamics A (Chair R. Richert)		
11:50	**Alexei Sokolov**	"Energy Barrier for Structural Relaxation, Molecular and Ion Transport in Polymers: a Revised Approach"
12:10	**Aurora Nogales**	"Dielectric Spectroscopy on vitrimers based on transesterification reactions"
Lunch 		
Monday, 2nd September, Afternoon		
S01 - Polymer Dynamics B (Chair A. Nogales)		
14:00	**Michael Wübbenhorst**	"Glass Transition Effects in a Thermo-reversible Network"
14:20	**Senentxu Lanceros-Mendez**	"Broadband dielectric spectroscopy for advancing understanding and applicability of poly(vinylidene fluoride)/ionic liquid blends as sensor, actuators and energy storage systems"
14:40	**Koji Fukao**	"Slow dynamics above and below glass transition for some polymer systems"
15:00	**Mustapha Raihane**	"Bionanocomposites based on biodegradable polyesters and clays prepared by *in-situ* polymerization: structures, characterizations, and dielectric properties"
15:20	**Simone Simon Napolitano**	"The dielectric response of the slow Arrhenius process (SAP)"

15:40	**Morgan Lecoublet**	"Dielectric and viscoelastic properties of 3D-printed cellulose based bionanocomposites for electrical insulation application"
Coffee Break		
S08 - BDS in relation to other Spectroscopic or Scattering Techniques A (Chair E. Rössler)		
16:30	**Thomas Blochowicz**	"The spectral shape of structural relaxation in supercooled liquids: light scattering vs. dielectric spectroscopy"
16:50	**Marceau Hénot**	"Orientational dynamics in supercooled glycerol computed from MD simulations: self and cross contributions"
17:05	**Anne-Caroline Genix**	"Coupling of shear rheology with SAXS and BDS in rubber nanocomposites"
S06 - Monitoring of Chemical Reactions, Crystallization process and Physical Ageing (Chair S. Cheng)		
17:30	**Tiberio A. Ezquerra**	"Hydrogen bonding during cold crystallization of Poly(alkylene 2,5-furanoate)s"
17:50	**Jessica Mangialetto**	"Modelling of the Evolving Glass Transition Temperature During Cure of Diels-Alder Thermo-reversible Networks"
18:05	**Raj Suryanarayanan**	"Time and temperature dependence of nucleation and crystallization in amorphous pharmaceuticals"
18:25	**Kristine Niss**	"Density Scaling and Single Parameter Aging"
19:00 Welcome Drink		

BDS2024

Tuesday, 3rd September, Morning

S02 - Soft Matter Dynamics and Phase Transitions in Amorphous, Partially Ordered and Ordered Systems A (Chair M. Paluch)		
8:30	**Alois Loidl**	"Critical behavior and phase transitions in supercooled liquids and glasses"
8:50	**Caroline Raepsaet**	"Non linear responses in a family of oligomers: inspecting the possible influence of the length of the molecules"
9:05	**Aitor Erkoreka**	"An interpretation of the dielectric spectra of polar nematic phases"
9:20	**Emeline Dudognon**	"Amorphous solid dispersions of Terfenadine into PVP: insights from the molecular mobility characterisation"
9:40	**Federico Caporaletti**	"The slow Arrhenius process: a simple solution to multiple problems in glass equilibration"
9:55	**Marzena Rams-Baron**	"Image of the internal solid-state rotation in the dielectric response of sizable molecules with polar rotors"
10:10	**Michela Romanini**	"Multiple relaxations in orientationally disordered benzene derivatives with strongly restricted rotational dynamics"
Coffee Break & Posters 		
S10 - Modeling, Theory and Simulation A (Chair F. Kremer)		
11:05	**Frédéric Affouard**	"Investigation of the nature of the translational and orientational disorder in pharmaceutical cocrystals from molecular dynamics simulations and dielectric relaxation spectroscopy experiments"
11:25	**Dmitry V. Matyushov**	"Nonlinear dielectric spectroscopy of liquids and protein solutions"
11:40	**Kazunori Takahashi**	"Inversion of Coaxial Transmission Line Data Using Numerical Simulation"
11:55	**Pierre-Michel Déjardin**	"On the Kirkwood correlation factor of dense isotropic polar fluids"
12:10	**Jeppe C. Dyre**	"Solved and unsolved problems relating to the Random Barrier Model"
Lunch 		

Tuesday, 3rd September, Afternoon

S09 - Confinement effects A (Chair S. Cerveny)		
14:00	**George Floudas**	"Nanopores as separation membranes for blends comprising polymers of different architecture and microstructure"
14:20	**Katarzyna Chat**	"The influence of pressure and volume changes on the non-equilibrium segmental dynamics of polymers"
14:35	**Anna Drzewicz**	"Molecular dynamics of ultrathin films of liquid crystal obtained via organic molecular beam deposition"
S07 - Ferroelectrics and Ceramics (Chair P. Vilarinho)		
14:55	**Torsten Granzow**	"Structural (dis-)order, dielectric response and phase transition properties of electrocaloric ferroelectrics"
15:15	**Men Guo**	"Insights into the aging mechanism of ZnO ceramics from broadband dielectric spectroscopy"
15:30	**Adam Sieradzki**	"Order – Disorder Phase Transitions in Hybrid Organic – Inorganic Perovskites – Insights from Broadband Dielectric Spectroscopy"
15:45	**Herbert Kliem**	"A feedback Model for Relaxor Ferroelectrics"
Coffee Break & Posters 		
S11 - Industrial and Technological Applications A (Chair E. Dantras)		
16:30	**Anatoli Serghei**	"Improving electrical insulating properties by using conductive materials: the interplay between permittivity and conductivity"
16:50	**Gustavo A. Schwartz**	"Using artificial neural networks to predict the dynamics of molecular glass formers"
17:05	**Tina Hecksher**	"Broadband mechanical spectroscopy made available for dielectric setups"
S03 - The impact of external variables in dielectric properties (Chair T. Ezquerra)		
17:25	**Ranko Richert**	"Dielectric Spectroscopy of Vapor Deposited Films"
17:45	**Paul Ben Ishai**	"Organic Magnetoresistance – a test bed for Dielectric-Spin interactions"

18:05	**Francois Ladieu**	"Optical manipulation of chromophores in a molecular glass former: from photofluidization to random pinning"
18:20	**Shiwang Cheng**	"Dynamics of monohydroxy alcohols: Rouse dynamics, chain swapping, and the Debye relaxation"

Wednesday, 4th September, Morning

S04 - Water, Hydrogen Bonded and Biological Systems A (Chair Y. Feldman)		
8:30	**Silvina Cerveny**	"Unravelling the Glass Transition of Confined Water: A Calorimetric and Dielectric study"
8:50	**Yang Yao**	"Water state in lipidic mesophase during phase transition"
9:05	**Yasuaki Monnai**	"Exploring Non-Contact Ultrasound Technology via Sub-Terahertz Photoacoustics for Human-Oriented Applications"
9:25	**Keisuke Tominaga**	"Dynamics of Hydrated Soft Matters Studied by Broadband Dielectric Spectroscopy and Molecular Dynamics Simulations"
9:40	**Jacob Gerasimov**	"Perturbing the Dynamic Structure of Water by Ion Solvation"
9:55	**Apostolos Kyritsis**	"Water organization in amphiphilic block copolymers with thermoresponsive behaviour"
10:15	**Syed A. M. Tofail**	"Is Nanoconfined Water Electrically 'Dead' or 'Alive'?"
Coffee Break & Posters 		
Young Research Section A (Chair L. Delbreilh)		
11:10	**Kaylie C. Glynn**	"Decoupling viscosity and conductivity by leveraging Grotthuss diffusion in imidazole systems" **[S02]**
11:20	**Ioannis Tzourtzouklis**	"Phase Diagram, Glassy Dynamics, & Crystallization Kinetics of the Bio-based Polyester Poly(ethylene-2,5-furanoate)" **[S02]**
11:30	**Rolf Zeißler**	"Identifying dipolar cross correlation contributions to the dielectric response of water" **[S04]**
11:40	**Francesco Coin**	"Water dynamics on calcium pectin-based hydrogels for application in water remediation" **[S04]**
11:50	**Kosei Kawai**	"Measurement of rotational relaxation time of water in biosystem by shortwave infrared micro spectroscopy" **[S04]**
12:00	**Vasileios Moschos**	"Dynamically and Structurally Heterogeneous Ethanol/Water Mixtures" **[S04]**

12:10	**Sandra Krüger**	"Water Dynamics in Aqueous Dipeptide Solutions Studied by BDS and 2H NMR" [S04]
12:20	**Sofia R. Mendes**	"Evaluating polyantimonic acid membranes as solid-state fuel cell electrolytes" [S07]
Lunch 		

Wednesday, 4th September, Afternoon

S11 - Industrial and Technological Applications B (Chair H. Gomes)		
14:00	**Geoff Smith**	"Through-vial impedance spectroscopy as a process analytical technology for developing pharmaceutical freeze-drying cycles"
14:20	**Cindy Galindo**	"Microwave Dielectric Response of Cytoplasmic Water in Red Blood Cells Upon Glucose Uptake"
14:35	**Eric Dantras**	"Broaden the use of dielectric spectroscopy to non-polar polymers: implementation of dipolar probes by gamma irradiation"
S10 - Modeling, Theory and Simulation B (Chair J. Dyre)		
15:00	**Carlos J. Dias**	"Kramers-Kronig relations expressed as a convolution pair and its uses in Broadband Dielectric Spectroscopy"
15:20	**Ronald P. White**	"Introducing a Mechanistic Perspective on the Slow Arrhenius Process (SAP) in Glass Forming Systems"
15:35	**Bruno M. G. Melo**	"EIS smart tool: An application software for the analysis and modeling of impedance spectroscopy data with multi-curve fitting"
15:50	**Florian Pabst**	"Dielectric Spectra from First-Principles Simulations: Water, Salty Water and Others"
Coffee Break & Posters 		
S08 - BDS in relation to other Spectroscopic or Scattering Techniques B (Chair C. Alba-Simionesco)		
16:35	**Daniele Cangialosi**	"Molecular mechanisms of glass aging"
16:55	**Silvia Arrese-Igor**	"Old news: dielectric spectroscopy is a good probe to study structural relaxation of glass forming systems"

17:05	**Sébastien Pruvost**	"Effect of hydrogen bonds on molecular mobility in P(MMA-co-MAA)/cellulose nanofibers composites"
17:25	**Ernst Rössler**	"Glass spectrum, excess wing phenomenon, and master curves in molecular glass formers"
S01 - Polymer Dynamics C (Chair G. Floudas)		
17:50	**Laurent Delbreilh**	"Interest of pressure controlled dielectric spectroscopy to probe the interdependence between fragility and cooperativity for polymeric segmental relaxation"
18:10	**Jiaxin Zhao**	"Chain-length-dependent relaxation dynamics in poly(methyl acrylate)"
18:25	**Paulina Szymoniak**	"Vitrimers – Rethinking Epoxies Towards Recyclable and Reusable Thermosets"
IDS Meeting		

Thursday, 5th September, Morning

S04 - Water, Hydrogen Bonded and Biological Systems B (Chair J. Swenson)		
8:30	**Yuri Feldman**	"Duped or Doped? Utilizing Microwave Spectroscopy for Autologous Blood Doping Detection"
8:50	**Hiroaki Matsuura**	"Slow dynamics of intracellular water measured by BDS with Kramers-Kronig relations and Bruggeman–Hanai equation"
9:05	**Henrique Leonel Gomes**	"Sensing devices that use electrical double-layers and impedance spectroscopy: design strategies"
9:25	**Tatiana Starciuc**	"Contribution of dielectric spectroscopy used to scrutinize the protein stabilization mechanisms and the role of water"
9:40	**Michael Vogel**	"Dynamics of Ice in Nanoconfinements and Mixtures: Combined BDS and NMR Studies"
S02 - Soft Matter Dynamics and Phase Transitions in Amorphous, Partially Ordered and Ordered Systems B (Chair E. Dudugnon)		
10:05	**Roberto Macovez**	"Relaxation dynamics of amorphous molecular pharmaceutics and of their binary mixtures near the eutectic composition"
10:25	**Kinga Łucak**	"Molecular dynamics of halogen monoalcohols at different thermodynamic conditions"
Coffee Break & Posters 		
Young Research Section B (Chair A. Sokolov)		
11:10	**Sílvia Gavinho**	"Investigation of the Effects of Cerium Oxide Addition on Bioglass 45S5" [S03]
11:20	**Marianna Spyridakou**	"Enhanced Ionic Conductivity in Single-Ion-Conducting Block Copolymer Electrolytes of PS-*b*-P(EO-co-GME)" [S05]
11:30	**Maxwell Sarey**	"Shear Force Microwave Microscopy: Complex impedance imaging, and Single Entity Electrochemistry" [S08]
11:40	**Efrat Hochma**	"Phyto- and Phyto-Second Harmonic Generation-Photodynamic Therapy of Prostate Cancer Cells" [S08]
11:50	**Lucas Leveque**	"Conductive P3HT nanotubes: structure/properties relationship and applications" [S09]

12:00	**Elisa Steinrücken**	"Water Dynamics in Silica Confinements with Various Surface Chemistries Studied by BDS and NMR" [S09]
12:10	**Panagiotis Kardasis**	"How Do Polymers and Mixtures of Different Architecture Penetrate Nano Channels?" [S09]
Lunch 		

Thursday, 5th September, Afternoon

S09 - Confinement effects B (Chair M. Vogel)		
14:00	**Andreas Schönhals**	"Signature of the Adsorbed Layer on the Glass Transition of Thin Polymer Films: Broadband Dielectric Spectroscopy and Related Techniques"
14:20	**Magdalena Tarnacka**	"The impact of confinement on the behavior of associating materials. The case of phenyl alcohols"
14:35	**Erik Thoms**	"Dielectric evidence of high kinetic stability in vapour-deposited binary glasses with large Tg contrast"
14:50	**Kamil Kaminski**	"The influence of pore walls nanostructurization on the dynamics of low and high molecular weight systems"
S05 - Charge Transport and Interfacial Effects A (Chair B. Roling)		
15:10	**Luka Pavic**	"Insight into Electrical Conduction in Phosphate-Based Glasses: The Role of Transition Metal Oxides and the Mixed Glass Former Effect"
15:30	**Achilleas Pipertzis**	"Ionic and Electronic Conductivity in Structural Negative Electrode Laminas"
15:45	**Paula Vilarinho**	"Decoding Ferroelectrics: Dielectric and Impedance Spectroscopy as Tools for Electrical Microstructure Assessment"
Coffee Break & Posters 		
S01 - Polymer Dynamics D (Chair M. Wübbenhorst)		
16:35	**Ralph H. Colby**	"Anhydrous Proton Conduction in Polymers Containing Azoles and Phosphonic Acids"
16:55	**José Luis Gomez Ribelles**	"Crystallization and dielectric properties of PVDF-ionic liquid blends"

17:15	**Stavros X. Drakopoulos**	"Segmental Relaxation of Polystyrene Modified with Pyrene Molecules"
17:30	**Ana Brás Würschig**	"Structure and Dynamics of Supramolecular poly(alkyl ether)-based Polymers: insight with DS combined with Neutron Scattering and Rheology"
17:50 Prizes Announcement		
18:15 Bus to the Gala Dinner		

Friday, 6th September

S02 - Soft Matter Dynamics and Phase Transitions in Amorphous, Partially Ordered and Ordered Systems C (Chair S. Napolitano)		
9:10	**Christiane Alba-Simionesco**	"Glass Transition and Crystallisation of n-Butanol by simultaneous Dielectric Spectroscopy and Neutron Diffraction"
9:30	**Thulasinath Raman Venkatesan**	"Self-assembly in bottlebrush polymers detected using dielectric spectroscopy"
9:45	**Marian Paluch**	"Reorientational Dynamics of Sizable Glass-Formers - Broadband Dielectric Spectroscopy Studies"
10:05	**Ana Santic**	"Ionic transport in supramolecular ionic liquid gels prepared with bis(amino alcohol)oxamides as gelators"
Coffee Break 		
S05 - Charge Transport and Interfacial Effects B (Chair A. Serghei)		
10:40	**Bernhard Roling**	"Elucidating the Transport of Electrons and Molecules in a Solid Electrolyte Interphase (SEI) close to Battery Operation Potentials using a Four-Electrode-Based Generator-Collector Setup"
11:00	**Zaneta Wojnarowska**	"Dynamics of Ionic Liquid-Water Mixtures at Ambient and Elevated Pressure"
11:15	**Jan Swenson**	"Relaxation Dynamics and Ionic Conductivity in Structural Battery Electrolytes"
11:35	**Aurélien Roggero**	"Molecular mobility and interfacial polarization study on model two-phase epoxy-amine networks"
11:50	**Joshua Sangoro**	"Evidence of Liquid-Liquid Transitions in Ionic Liquids"
12:10	**Martin Tress**	"BDS on the nanoscale: restricted crystallization and conductivity of polymers in finite size"
12:25	**Catalin Gainaru**	"Achieving superionic conductivity in polymer electrolytes"
12:45 Concluding Remarks		
Finger Lunch		

POSTER CONTRIBUTIONS

Achilleas Pipertzis
[P01-S01] "Molecular Dynamics and Self-assembly in Double Hydrophilic Copolymers with Densely Grafted Macromolecular Architecture"
Diogo Gomes
[P02-S01] "Microplastics Evaluation by Electrical Spectroscopy"
Ioannis Tzourtzouklis
[P03-S01] "Molecular Dynamics and Viscoelastic Properties of the Biobased 1,4-Polymyrcene"
Marianna Spyridakou
[P04-S01] "Heterogeneous Local Environments in Mussel-Inspired Elastomers"
Mydhili Varma
[P05-S01] "Dissecting the Role of Reduced Graphene Oxide on the Dielectric Properties of PEDOT:PSS-PVA Blends"
Stavros X. Drakopoulos
[P06-S01] "Relaxation Dynamics of Hydroxypropylmethylcellulose Acetate Succinate: via Dielectric and Mechanical Methods"

Alfred Błażytko
[P07-S02] "Unusual secondary relaxation in the glass-forming molecular rotors"
Fabián Puga
[P08-S02] "Physical characterization of a carbamazepine/oxalic acid cocrystal designed by liquid-assisted grinding"
Federico Caporaletti
[P09-S02] "The slow Arrhenius process beyond thin-film geometry"
Kenneth Rojo
[P10-S02] "Comparative Analysis of the Structure, Thermodynamics, and Dynamics of Amorphous Forms of Trehalose" (Poster & Video)

Nikolaos Fotaras
[P11-S02] "Local and global dynamics of cis-1,4-Polyfarnesene in PS-*b*-Polyfarnesene diblock copolymer as a function of phase state"

Paulina Jesionek
[P12-S02] "Variation of Activation Volume as an Indicator of the Change in Clusterization Phenomenon in Flurbiprofen Enantiomers and the Racemate"
Sara Zimny
[P13-S02] "Is There a Relationship Between Wettability and the Rates of Equilibration of Hydrogen-Bonded Oligomer PMMS under Confinement?"
Teresa Viciosa
[P14-S02] **"**Improving the stability of amorphous drugs by deposition on the surface of silica nanoparticles"

Michal Rajnak
[P15-S03] "Rheo-dielectric study of transformer oil-based magnetic nanofluid"
Mohamad Barzegar
[P16-S03] "High-resolution TGA combined with BDS: a new tool to investigate the effect of water on the electrical conductivity of concrete"

Kaito Sasaki
[P17-S04] "Isotopic Study on the Dynamics of High-Density-Amorphous Ice Under High Pressure"
Kang Hu
[P18-S04] "The Molecular Nature behind the Dielectric Spectra in the Gigahertz Domain"
Marianna Ambrico
[P19-S04] "Early detection of Xylella-related plant disease via Broadband Dielectric Spectroscopy"
Vasileios Moschos
[P20-S04] "Effect of Hard Confinement (in Nanopores) on the Phase State and Dynamics of 1-propanol/water mixtures"

Andreia F. M. Santos
[P21-S05] "Nanoconfined Ionic Liquid Crystals as Hybrid Materials with Improved Conductivity Properties" (Poster & Video)
Jan Swenson
[P22-S05] "Phase Behavior, Relaxation Dynamics and Ionic Conductivity in Mixtures of Protic Ionic Liquids"
Michael Wübbenhorst
[P23-S05] "Enhanced decoupling of conductivity relaxation from structural relaxation in non-stoichiometric protic ionic liquids"
Yun Dong
[P24-S05] "Demixing of Polymerized Ionic Liquid/Ionic Liquid Mixtures by Infiltration in Nanopores"

Hyeong Yong Song
[P25-S06] "Rheo-combined Dielectric Spectroscopy to Monitor Isothermal Crystallization of Poly(butylene succinate) (PBS)"

Peng Fang
[P26-S07] "Using Dielectric-Resonance Spectroscopy to Study the Dielectric Behaviors of Polymer-Based Ferroelectrets"
Silvia Soreto Teixeira
[P27-S07] "Advanced PVDF-TiO_2 Composites for Efficient Energy Storage"
Subir Majumder
[P28-S07] "Dielectric behaviour of BFO ceramics"

Martin Tress
[P29-S08] "Thermal expansion of inter-molecular H-bonds"
Vyankat P. Pawar
[P30-S08] "Temperature Based Study of Dielectric Permittivity and Dielectric Susceptibility in the Binary Mixture of Polar Liquids"

Erik Thoms
[P31-S09] "Dielectric evidence of high kinetic stability in vapour-deposited binary glasses with large Tg contrast"
Lucas Leveque
[P32-S09] "Conductive P3HT Nanostructures: Structure/Property Relationship and Applications"
Natália T. Correia
[P33-S09] "Dynamics of a Confined Drug from Complementary Perspectives: Experiments vs MD Simulations"
Panagiotis Kardasis
[P34-S09] "Imbibition Kinetics of Poly(ethylene oxide) in Nanopores by *In Situ* Nanodielectric Spectroscopy" (Poster & Video)
Shiwang Cheng
[P35-S09] "Dynamics of polylactic acid under ultrafine nanoconfinement: the collective interface effect and the spatial gradient"

Florian Pabst
[P36-S10] "Glassy Dynamics from First-Principles Simulations"

Anatoli Serghei
[P37-S11] "Universal relationship between the electromagnetic interference shielding effectiveness of composite materials and their electrical properties"
Luís Cadillon Costa
[P38-S11] "Materials electrical characterization: from DC to microwave frequencies"

Manuel P. F. Graça
[P39-S11] "Comprehensive Electrical and Biological Analysis of Bioglass in Bulk and Pressed Powder Forms"

Youssef Elamine

[P40-S11] “Dielectric properties of honey: application in botanical origin determination”