



11th Conference on Broadband Dielectric Spectroscopy and its Applications (BDS2022)



04.Sep - 09.Sep 2022

Cod. Z21-22

Mod.:

Face-to-face

Edition

2022

Activity type

Workshop

Date

04.Sep - 09.Sep 2022

Location

Chamber of Gipuzkoa

Languages

English

Academic Validity

50 hours

Web

<http://bds2022.dipc.org/>

Organising Committee



Fundación
BBVA



Description

Broadband dielectric spectroscopy (BDS) is a powerful experimental technique permitting to investigate the molecular dynamics of polar (and nonpolar) materials over a wide frequency range covering up to 16 decades, at different temperatures and pressures.

BDS finds an incredibly large number of applications in different fields of science and technology. The technique has, in fact, been successfully employed in studies on:

- molecular dynamics of liquids, liquid crystals, glasses, polymers and other disordered systems;
- charge transport in ionic glasses and liquids, semiconductors, organic crystals, ceramics, polymers;
- interfacial phenomena and confinement effects;
- non-linear electrical effects. BDS is also a very useful tool to monitor chemical reactions and phase transitions, e.g. crystallization, irreversible adsorption, tautomerization, etc.

The following topics will be addressed in devoted sessions:

S01 Polymer Dynamics

S02 Soft Matter Dynamics and Phase Transitions in Amorphous, Partially Ordered and Ordered Systems (Liquid and Plastic Crystals, Ferroelectrics, Ceramics, Pharmaceuticals, etc.)

S03 Glassy Dynamics and its Scaling under Different Variables (Pressure, Temperature, Electric Fields, etc.)

S04 Confinement Effects

S05 Non-Linear Effects

S06 Advancements in Terahertz Spectroscopy

S07 Industrial Applications

S08 Dielectric Spectroscopy Spatially Resolved at Micro- and Nanoscale

S09 Water and Hydrogen Bonded Systems, Application of BDS to Life Science

S10 Charge Transport, Relaxation and Interfacial Effects

ORGANIZING COMMITTEE:

Chairperson:

Silvina Cerveny Murcia (Centro de Física de Materiales CSIC-UPV/EHU, DIPC)

Academic Committee:

Gustavo Ariel Schwartz (Centro de Física de Materiales CSIC-UPV/EHU, DIPC)

Daniele Cangialosi (Centro de Física de Materiales CSIC-UPV/EHU)

Silvia Arrese-Igor (Centro de Física de Materiales CSIC-UPV/EHU)

Local Committee:

Javier Martínez Sabando (Materials Physics Center, MPC)

Francesco Coin (Materials Physics Center, MPC)

Administration:

Karmela Alonso (Donostia International Physics Center, DIPC)

Objectives

Considering the multidisciplinary approach and the broad set of applications of broadband dielectric spectroscopy, this meeting is open also to researchers outside of the dielectric community whose research could start new synergies at both experimental and theoretical level.

Following the structure of the previous meetings of the International Dielectric Society, BDS2022 will provide a platform to discuss the exciting developments of broadband dielectric spectroscopy at both academic and industrial level.

Course specific contributors



Directed by



Silvina Cervený Murcia

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Registration fees

REGISTRATION FEES	UNTIL 30-06-2022	UNTIL 19-08-2022
Full Delegate	480,00 EUR	540,00 EUR
Student	240,00 EUR	300,00 EUR

Place

Chamber of Gipuzkoa

Avda. de Tolosa, nº 75 - 20018 Donostia/San Sebastián

Gipuzkoa