**Proposals for Symposia**

# Submission deadline: January 31th, 2022 Guideline:

* session duration: 90 minutes, from that:
	+ **1 keynote speaker (30 minutes)** – your part
	+ 3 speakers selected from submitted abstract from organising committee (15 minutes each)
* Upon acceptance of the symposia, the keynote speakers have to **submit an abstract** of the presentation **before March 31th, 2022** (using the online abstract submission system)

# Proposer(s) (max. 2) (name, affiliation and e-mail address):

**Proponent 1** Affiliation

Zip code / City Country Phone

e-mail

**Proponent 2** Affiliation Zip code / City Country

Phone

e-mail

# Title of the symposium:

**Keywords (max 3)**

**You can find the complete topic list at the end of the template:**

Keyword 1

Keyword 2

Keyword 3

# Chair and Co-Chair (name, affiliation and e-mail address – can be identical with proposer):

|  |  |
| --- | --- |
| **Chair Name** |  |
| Affiliation |   |
| Zip code / City |   |
| Country |   |
| Phone |   |
| e-mail |   |
| **Co-Chair Name** |  |
| Affiliation |   |
| Zip code / City |   |
| Country |   |
| Phone |   |
| e-mail |   |

**Title of the Keynote lecture (if already known):**

**Keynote Speaker (name, affiliation and e-mail address):**

|  |  |
| --- | --- |
| **Keynote Name** |  |
| Affiliation |   |
| Street |   |
| Zip code / City |   |
| Country |   |
| Phone |   |
| e-mail |   |

**Learning objectives (max. 50 words):**

**Proposed program (max. 50 words):**

**Intended audience (max. 20 words):**

**Relevance to the main topics of ESB (max. 20 words):**

**Assumption of costs for the keynote speaker:**

Please note: ESB or conference organiser do NOT pay for any costs of your keynote speakers. Conference registration of the keynote speaker is mandatory and a prerequisite for participation. Please confirm the assumption of costs for your keynote speaker:

Yes, we pay the costs for conference registration of our keynote speaker and inform our keynote speaker that neither accommodation nor travel costs will be covered by the ESB or congress organisation of the ESB 2022 conference.

****

Invoice address for registration fee (registration after acceptance through organiser):

**Institution / company** Affiliation Street

Zip code / City

Country

Phone

e-mail

Keynote Speakers will pay registration fees by themselves and confirm that neither accommodation nor travel costs will be covered by the ESB or conference organisation of the ESB 2022 conference. Registration will be made online from speakers themselves after acceptance. We herewith confirm to inform our keynote speaker accordingly.

****

Date: Signature:

# ESB 2022: topic list for symposia and abstract submission

**Biomaterials design**

* Bioceramics and bioactive glasses
* Bio-derived biomaterials (decellularized tissues, tissue banks)
* Biomimetic and bioinspired materials
* Carbon
* Composites
* Hydrogels
* Nano-biomaterials
* Metals
* Polymers/Supramolecular biomaterials
* Porous materials
* Stimuli-responsive
* Textiles and fibers

# Biomaterials processing

* Surface functionalization coatings, patterning
* Additive manufacturing
* Bioprinting and bioinks
* Other synthesis and processing techniques (freeze-casting, electrospinning, plasma-based processing…)

# Biomaterials for specific medical applications

* Adhesives and anti-adhesives
* Antimicrobial
* Drug delivery
* Biosensors and bioelectronics
* Cardio/Vascular tissue
* Dental and maxillofacial
* Gene therapy
* Immuno-modulatory biomaterials
* Neural tissue
* Osteoarticular
* Skin/soft tissue
* Wound healing

# Biomaterials for tissue engineering (TE)

* Scaffolds
* Bioreactors
* Control of innervation
* Modulation of vascularisation

# Biomaterials characterization

* Biomaterials mechanical & physico- chemical characterization
* Modelling of materials properties (in silico testing)
* Biomaterial imaging
* Biocompatibility (in vitro, in vivo testing)
* Biodegradation



# Biological interactions of biomaterials

* Bacteria/material interactions
* Cell & tissue material interactions
* Virus-surface interactions
* Protein-surface interactions

# Tissue and organ models

* Tissue models, lab-on-chip, organ-on- chip
* Organ models, organoids and spheroids

# Key enabling technologies

* Artificial intelligence/machine learning and deep learning
* Robotics
* High-throughput screening

#  Pre-clinical and clinical evaluation of medical devices

# Pre-clinical evaluation of medical devices

# Clinical evaluation of medical devices

**Industrial transfer of biomaterials and medical devices**

* Production
* Commercialization

# Legal and regulatory aspects