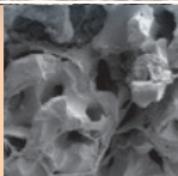
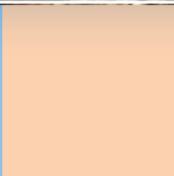
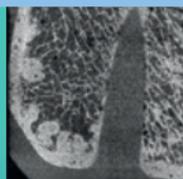
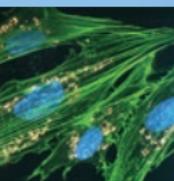


7th International Symposium

Interface Biology of Implants (IBI)



5-7 June 2024
Rostock/Warnemünde
Germany

www.ibi-symposium.org



pics: Anika Jönitz-Hienicke/Universitätsmedizin Rostock



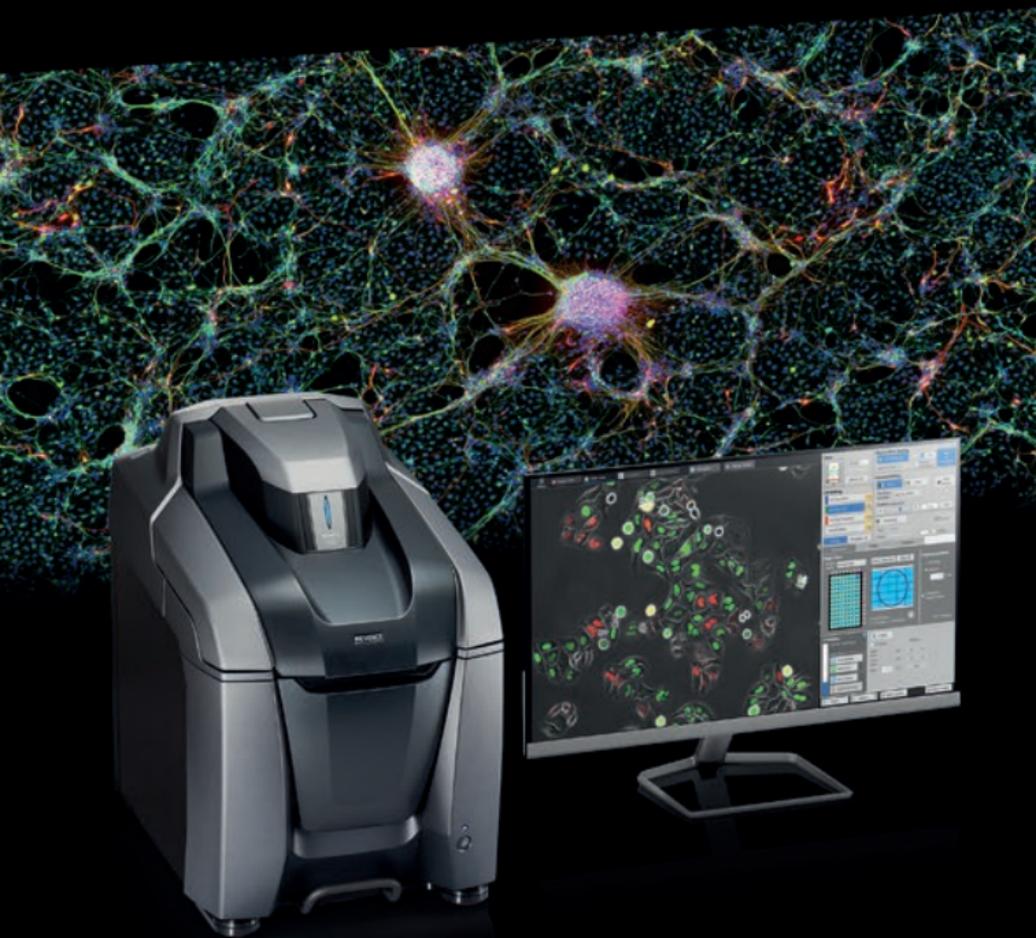
Compact Fluorescence Microscope

BZ-X Series



Visit us at the Lunch Symposium.
More information here:

www.keyence.de/bz_ibi



**No dark room required with the
fully electronic fluorescence microscope**

Organisation and Imprint	4
Welcome Note	5
Scientific Programme	
Wednesday, 5 June	6
Thursday, 6 June	8
Friday, 7 June	13
Posters	17
Social Programme	21
Sponsors	22
General Information	22
Index of Presenting Authors and Chairs	24

Key

KL	Keynote Lecture
O	Oral presentation
RP	Rapid fire poster presentation
P	Poster

Design/Layout

Layout	Conventus Congressmanagement & Marketing GmbH
Print	printworld.com GmbH Messering 5 01067 Dresden
Editorial Deadline	06 May 2024

ORGANISATION AND IMPRINT

Venue

Kurhaus Warnemünde
Seestraße 18
18119 Rostock/Warnemünde/DE

Date

5–7 June 2024

Website

www.ibi-symposium.org



Conference chairs

Prof. Dr. Rainer Bader
Biomechanics and Implant Technology Research Laboratory
Department of Orthopedics
Rostock University Medical Center

PD Dr. Kirsten Peters
Department of Cell Biology
Center for Medical Research (ZEMFO)
Rostock University Medical Center

Scientific committee

Dr. Revathi Appali (Rostock/DE)
Prof. Dr. Rainer Bader (Rostock/DE)
Dr. Olga Hahn (Rostock/DE)
Dr. Paul Johan Høl (Bergen/NO)
PD Dr. Anika Jonitz-Heincke (Rostock/DE)
PD Dr. Kirsten Peters (Rostock/DE)
Dr. Henrike Rebl (Rostock/DE)
Dr. Susanne Stähle (Rostock/DE)
Dr. Franziska Wendt (Rostock/DE)

Conference language

The conference language is English.

Conference organisation

Conventus Congressmanagement & Marketing GmbH
Carl-Pulfrich-Straße 1 | 07745 Jena, Germany
ibi-symposium@conventus.de | www.conventus.de



Dear colleagues,

We are pleased to welcome you to the 7th Symposium Interface Biology of Implants in Rostock, which is traditionally held in the “Kurhaus Warnemünde” on the beautiful coast of the Baltic Sea.

This symposium will again bring together scientists from different disciplines to steer the innovations in the studies of cell behaviour and tissue development through biomaterials. This research requires collaboration between a wide range of disciplines including materials science, physics, chemistry and life sciences. Therefore, the background of the addressed audience is multidisciplinary. High-profile speakers will present their latest research on the generation of bioactive materials and the cellular responses. In addition to material development and interaction, a further focus of the symposium is on „material-induced immunomodulation“, and „complex in vitro models for biomaterial testing“.

Furthermore, in cooperation with the Collaborative Research Centres 1270 ELAINE, we are pleased to announce a satellite programme on “biophysical stimulation for tissue regeneration”.

The application of bioactive implants in different fields of medicine has considerably increased over recent years. However, with the growing number of implants it has also become obvious that there is a limiting factor to translate regenerative implants into the clinician understanding of the molecular interactions between living tissue and the implant material which is required.

We hope you will enjoy your time in Rostock/Warnemünde where we are sure that we will celebrate a meeting to remember.

Kirsten Peters & Rainer Bader

14:00–15:45 Session 1 – Biophysical Stimulation for Tissue Regeneration

Chair Jose Aguilar Cosme (Manchester/GB)
Nadja Engel (Rostock/DE)

14:00 Use of electrical stimulus to influence mesenchyme
KL 1 cell activity *in vitro*
Jose Aguilar Cosme (Manchester/GB)

14:30 Impact of deep brain stimulation on neuronal
O 1 network mechanisms in generalised dystonia
Fabiana Santana Kragelund (Rostock/DE)

14:45 The Role of PTHrP for the Mechanoresponse of
O 2 Mesenchymal Stromal Cell-Derived Chondrocytes
Justyna Buchert (Heidelberg/DE)

15:00 Electrical stimulation of degenerative and non-
O 3 non-degenerative chondrocytes for articular cartilage
regeneration
Janine Waletzko-Hellwig (Rostock/DE)

15:15 Quantitative imaging based on deep learning reveals
O 4 fat infiltration in nerve-damaged muscles not to be
triggered by electrical stimulation
Jan-Philipp Praetorius (Jena/DE)

15:30 Blood Vessels Regeneration using Magnetic Fields
O 5 Ana Manjua (Eindhoven/NL)

15:45–16:15 Coffee break

16:15–18:30 Session 2 – Innovative Biomaterials for Tissue Regeneration I

Chair Andres Garcia (Atlanta/US)
Rainer Detsch (Erlangen/DE)

16:15 Laser patterning of 3D printed near-beta
0 6 Ti-13Nb-13Zr alloy for guided response of human bone marrow stromal cells
Annett Gebert (Dresden/DE)

16:30 Dual chitosan hydrogel and polylactic acid microparticle
0 7 biomaterial system for enhanced antimicrobial efficacy against *Staphylococcus aureus* infection
Lauren Priddy (Mississippi State/US)

16:45 Developing a Glycocalyx-inspired Polyelectrolyte
0 8 Multilayer Model to establish Intermediate Water Structures for anti-thrombogenic Biomaterials
Julia Marie Börke (Heilbad Heiligenstadt/DE)

17:00 Osseous integration of newly established porous
0 9 3D polyamide- ϵ -caprolactone scaffolds
Katrin Susanne Lips (Giessen/DE)

17:15 Repair of full-thickness osteochondral defects with
0 10 printed absorbable zinc-biogel scaffolds
Holger Jahr (Aachen/DE)

17:30 Micro- and nanostructuring of polymer-based
0 11 biomaterials for regenerative medicine
Annika Thormann (Halle/DE)

17:45 Osteogenic potential of molybdenum doped
0 12 mesoporous bioactive glass nanoparticles
Qaisar Nawaz (Erlangen/DE)

18:00 Innovating TPU Scaffolds: A Green Synthesis Approach
0 13 for Nonisocyanate Polyurethanes in Cardiac Tissue Engineering
Wolfdietrich Meyer (Potsdam/DE)

18:15 Investigation of the ultra-structure of bone around Mg implant
0 14 alloys and the impact on the mechanical properties
Florian Wieland (Geesthacht/DE)

SCIENTIFIC PROGRAMME | WEDNESDAY, 5 JUNE

18:30–19:00 Break

19:00–19:45 Keynote lecture

Chair Joachim Rychly, Rainer Bader, Kirsten Peters (Rostock/DE)

19:00 Bioengineered Hydrogels for Regenerative Medicine
KL 2 Andres Garcia (Atlanta/US)

19:45–21:45 Welcome reception

SCIENTIFIC PROGRAMME | THURSDAY, 6 JUNE

09:00–09:15 Opening of the conference

09:00 Welcome notes of the conference chairs
Kirsten Peters, Rainer Bader (Rostock/DE)

09:05 Welcome note of the Dean of the Rostock University Medical
Center
Emil C. Reisinger (Rostock/DE)

09:15–10:45 Session 3 – Innovative Biomaterials for Tissue
Regeneration II

Chair Aldo R. Boccaccini (Erlangen/DE)
Susanne Stählke (Rostock/DE)

09:15 Tissue regeneration approaches using ion releasing
KL 3 bioactive glasses
Aldo R. Boccaccini (Erlangen/DE)

09:45 Innovative Plasma-Enhanced Collagen Coating for
O 15 Improved Implant Performance
Evelyn Knappe (Freiberg/DE)

- 10:00 Drug delivery systems for polycaprolactone-based
O 16 growth factor releasing implants
Henning Menzel (Braunschweig/DE)
- 10:15 Bone-mimicking degradable jawbone replacements
O 17 for application in load-bearing critical bone defects
Matthias Ahlhelm (Dresden/DE)
- 10:30 Synergistic Design of a Multi flexible Bioink Platform
O 18 for Advanced Drop on Demand Bioprinting
Rainer Detsch (Erlangen/DE)

10:45–11:15 Coffee break

11:15–12:45 Session 4 – Cell-Biomaterial-Interaction I

Chair Sebastian Lickert (Zurich/CH)
Henrike Rebl (Rostock/DE)

11:15 How blood clotting initiates the first steps in the
KL 4 healing response
Sebastian Lickert (Zurich/CH)

11:45 Spontaneous *in vivo* repopulation of decellularized
O 19 porcine vena cava grafts
Maria Stefania Massaro (Pilsen/CZ)

12:00 Superior hemocompatibility of genetically modified
O 20 porcine pericardium for aortic valve prosthesis
fabrication
Claudia Dittfeld (Dresden/DE)

12:15 The microarchitecture of 3D-printed ceramic scaffolds
O 21 orchestrates bone healing on the cellular level
Franz Weber (Zurich/CH)

12:30 Enhancing soft and hard tissue integration of
O 22 titanium implants with laser-textured designer
surface topographies
Markus Rottmar (St. Gallen/CH)

12:45–13:30 Lunch break

13:30–14:15 Lunch symposium Keyence Deutschland GmbH
State of the Art Microscopy Technologies for tissue
regeneration and biomaterial testing

14:15–14:35 Rapid fire poster presentations I
Chair Kirsten Peters (Rostock/DE)

RP 1 3D-Printed Zinc Alloys as Biodegradable Implant
Materials
Barbara Illing (Tübingen/DE)

RP 3 Influence of metallic particles and TNF- α on the
NLRP3 inflammasome in human osteoblasts
Marie-Luise Sellin (Rostock/DE)

RP 4 Chitosan-Quercetin Complex: Osteogenic Induction
in Mouse MSCs and Fracture Healing in a Zebrafish
Osteoporosis Model
Swathi Sudhakar (Chennai/IN)

RP 5 Nanodiamond-functionalized titanium surfaces for
the formation of a vital oral soft tissue structure
Katharina Ekat (Rostock/DE)

RP 6 Implementation of 3D perfusion bioreactors for
stem cell colonization of bone scaffolds for chairside
applications
Nadja Engel (Rostock/DE)

RP 7 Electroactive oxidized Alginate-Gelatin-PEDOT
hydrogels for 3D Printing
Lisa Schöbel (Erlangen/DE)

14:35–15:15 Poster session in the Wintergarten
(please refer to page 17–20)

15:15–16:45 Session 5 – Cell-Biomaterial-Interaction II
Chair Román Perez Antoñanzas (Barcelona/ES)
Kirsten Peters (Rostock/DE)

15:15 Different biomaterial-based strategies to promote
KL 5 vascularization
Román Perez Antoñanzas (Barcelona/ES)

15:45 Study of the dynamics of cell-matrix interactions and
O 23 mechanics in photopolymerized 3D fiber networks
Sylvie Coscoy (Paris/FR)

16:00 Decellularized porcine liver: Spontaneous *in vivo*
O 24 recellularization
Vladimira Moulisova (Plzen/CZ)

16:15 Fibronectin Conformations after Electrodeposition
O 25 onto 316L Stainless-Steel Substrates Influenced
Early-stage Osteoblasts' Behavior
Mathilde Hindié (Neuville sur Oise/FR)

16:30 Gas bubbles, osteopromotion, and adipogenesis:
O 26 Decoding the multifaceted cellular response of bone
to biodegradable magnesium implants *in vivo*
Heithem Ben Amara (Gothenburg/SE)

16:45–17:15 Coffee break

17:15–19:15 Session 6 – Material-induced Immunomodulation

Chair Stefan Rose-John (Kiel/DE)
Anika Jonitz-Heincke (Rostock/DE)

17:15 The role of Interleukin-6 in immune modulation
KL 6 Stefan Rose-John (Kiel/DE)

17:45 In vitro investigation of osteoblasts and
O 27 macrophages behavior on anatase-coated titanium
Leila Mohammadnejad (Tuebingen/DE)

18:00 Immune-instructive polymers for tissue regeneration
O 28 and wound healing
Amir Ghaemmaghami (Nottingham/GB)

18:15 Poly (Glycidyl Ether) Coatings as Functional Materials
O 29 for Immunomodulation
Andrea Cosimi (Berlin/DE)

18:30 Impact Of High Hydrostatic Pressure Treatment On
O 30 Cytokine Milieu And Its Consequences On Cancer
Cell Behavior
Julia Kristin Brach (Aachen/DE)

18:45 Effects of different metal ions on polarization and
O 31 cytokine production in human macrophages
Annett Klinder (Rostock/DE)

19:00 Rational engineering of glycosaminoglycan-based
O 32 dickkopf-1 scavengers to improve bone regeneration
Juliane Salbach-Hirsch (Dresden/DE)

20:00–23:00 Social evening – Hotel Neptun | Sky-Bar

09:00–10:30 Session 7 – Advanced Methods for Characterisation of Biomaterial-Tissue-Interface I

Chair Bernhard Hesse (Berlin/DE)
Annett Klinder (Rostock/DE)

09:00 3D-characterisation of the biomaterials-tissue
KL 7 interaction on the micron length-scale using
synchrotron-imaging
Bernhard Hesse (Berlin/DE)

09:30 CI electrode insertion force in human cadaveric ears
O 33 at different insertion speeds
Dana Dohr (Rostock/DE)

09:45 Time-dependent, selective serum protein adsorption
O 34 on degradable Mg-based biomaterials
Heike Helmholz (Geesthacht/DE)

10:00 Evaluating the correlation between *in vitro* and *in vivo*
O 35 biological responses to Ca-modified surfaces:
a proteomic study
Julio Suay (Castellón/ES)

10:15 Immunomodulatory effects on mesenchymal stem cells
O 36 mediated by extracellular vesicles from
different macrophage phenotypes
Jincy Philip (Gothenburg/SE)

10:30–11:00 Coffee break

- 11:00–12:30 Session 8 – Advanced Methods for Characterisation
of Biomaterial-Tissue-Interface II
- Chair Rainer Bader (Rostock/DE)
Janosch Schoon (Greifswald/DE)
- 11:00 Design and Synthesis of Bioactive Material via
0 37 Two-Photon Polymerization for Studying Cell Interaction
with Microenvironment
Vincent Semetey (Paris/FR)
- 11:15 High hydrostatic pressure (HHP) reduces Implant-based
0 38 serological chronic inflammation markers in an
in vivo rat-model
Christopher Pohl (Greifswald/DE)
- 11:30 In Vitro Testing Method for Evaluation of Ion
0 39 Emission from Biomaterials
Vadym Voropai (Magdeburg/DE)
- 11:45 Biotribological Functionality – Evaluating Cartilage
0 40 Interaction with Additive Manufactured and
Non-Metal Partial Implants
Rosa Maria Nothnagel (Wiener Neustadt/AT)
- 12:00 Enzyme-triggered drug delivery system for
0 41 peri-implantitis prevention
Nelly Senze Nnane (Braunschweig/DE)
- 12:15 Low immunogenic decellularized biomaterials
0 42 Huaqiong Li (Wenzhou/CN)
- 12:30–13:30 Lunch break

- 13:30–13:50 **Rapid fire poster presentations II**
Chair Anika Jonitz-Heincke (Rostock/DE)
- RP 2 Fat meets metal – Response of subtoxic concentrations of various metal ions on adipose-derived mesenchymal stem/stromal cells
Olga Hahn (Rostock/DE)
- RP 8 Evaluation of nanogold and magnetic beads for immuno-labeling of cell surfaces in scanning electron microscopy (SEM)
Maximilian Promberger (Rostock/DE)
- RP 9 Proteomic Analysis of Bone Using Mass Spectrometry
Annika Topitsch (Freiburg/DE)
- RP 10 Application of voltage matrix from the cochlear implant electrode array to predict cochlear coverage
Lichun Zhang (Rostock/DE)
- RP 11 Development of a 3D-bioreactor system for *in vitro* endothelialization analysis of cardiovascular stents
Lucas Tetzlaff (Rostock/DE)
- RP 12 The impact of quercetin-coated implants to promote osseointegration
Julio Suay (Castellón/ES)
- 13:50–14:30 **Poster session in the Wintergarten**
(please refer to pages 17–20)

14:30–16:30 **Session 9 – Complex *in vitro* Models for Biomaterial Testing**
 Chair Thomas Hartung (Baltimore/US)
 Olga Hahn (Rostock/DE)

14:30 **Complex *in vitro*-Models for Preclinical Testing of**
 KL 8 **Biomaterials**
 Thomas Hartung (Baltimore/US)

15:00 Bacteriophage delivery from collagen-based to treat
 O 43 bacterial infections in bone
 Leonie Schlicht (Dresden/DE)

15:15 Macrophage-based *in vitro* model for compatibility
 O 44 testing of biomaterials
 Anja Germann (Sulzbach/DE)

15:30 Inhibition of the macrophage response to
 O 45 *Staphylococcus aureus* infection after exposure to
 arthroprosthetic metal ions
 Janosch Schoon (Greifswald/DE)

15:45 *In Vitro* Effects of Metal Ions on iPSC-derived Cardio-
 O 46 myocytes – Chrome and Cobalt Ions Representing
 Typical Metal Implant Corrosion Products
 Marie Heilen (Rostock/DE)

16:00 Integrative Evaluation of Corrosion Characteristics
 O 47 of Orthopedic Implants: a Novel Approach
 Combining Potentiostatic Measurements and
 Microscopic Analysis
 Adrian Buchholz (Magdeburg/DE)

16:15 3D bioprinted glioblastoma models for preclinical studies
 O 48 Thomas Freitag (Rostock/DE)

16:30–16:45 **Poster Award & Closing**
 16:30 Announcement of poster award

16:45 Closing of the symposium

- RP 1 3D-Printed Zinc Alloys as Biodegradable Implant Materials
Barbara Illing (Tübingen/DE)
- RP 2 Fat meets metal – Response of subtoxic concentrations of
various metal ions on adipose-derived mesenchymal
stem/stromal cells
Olga Hahn (Rostock/DE)
- RP 3 Influence of metallic particles and TNF- α on the
NLRP3 inflammasome in human osteoblasts
Marie-Luise Sellin (Rostock/DE)
- RP 4 Chitosan-Quercetin Complex: Osteogenic Induction
in Mouse MSCs and Fracture Healing in a Zebrafish
Osteoporosis Model
Swathi Sudhakar (Chennai/IN)
- RP 5 Nanodiamond-functionalized titanium surfaces for
the formation of a vital oral soft tissue structure
Katharina Ekat (Rostock/DE)
- RP 6 Implementation of 3D perfusion bioreactors for stem cell
colonization of bone scaffolds for chairside applications
Nadja Engel (Rostock/DE)
- RP 7 Electroactive oxidized Alginate-Gelatin-PEDOT hydrogels
for 3D Printing
Lisa Schöbel (Erlangen/DE)
- RP 8 Evaluation of nanogold and magnetic beads for
immuno-labeling of cell surfaces in scanning
electron microscopy (SEM)
Maximilian Promberger (Rostock/DE)
- RP 9 Proteomic Analysis of Bone Using Mass Spectrometry
Annika Topitsch (Freiburg/DE)

- RP 10 Application of voltage matrix from the cochlear implant electrode array to predict cochlear coverage
Lichun Zhang (Rostock/DE)
- RP 11 Development of a 3D-bioreactor system for *in vitro* endothelialization analysis of cardiovascular stents
Lucas Tetzlaff (Rostock/DE)
- RP 12 The impact of quercetin-coated implants to promote osseointegration
Julio Suay (Castellón/ES)
- P 1 Development of an advanced hen's egg chorioallantoic membrane system for biomaterial and pharmaceutical ingredient *in vivo*
Stefan Siewert (Rostock/DE)
- P 2 Incorporation of cobalt ions into polymer films to study ion release of metallic implants
Thomas Eickner (Rostock/DE)
- P 3 Electrical Stimulation of Human Stem Cells: Optimization of Parameter Thresholds Using an Extended Experimental Setup with Alternating Current Monitoring
Laura Lembcke (Rostock/DE)
- P 4 Enhancing Bone Cell Activities on Biomimetic Calcium Phosphate Substrates through Biophysical Stimuli: Insights into the Voltage-Frequency Relationship
Rainer Detsch (Erlangen/DE)
- P 5 Application of an FSI-based model for the prediction of cell differentiation on a mechanically stimulated structured hydrogel scaffold
Pedram Azizi (Rostock/DE)

- P 6 The influence of electrical stimulation on the membrane fluctuation of osteoblast-like cells
Franziska Dorn (Rostock/DE)
- P 7 Biomaterials Engineering Assisted by Low-energy Non-thermal Electron Beam Technology
Nic Gürtler (Dresden/DE)
- P 8 Amino Groups in Biomaterial Coatings Influence the Cell Response
Susanne Stählke (Rostock/DE)
- P 9 Plasma deposited thin film coatings with improved biocompatibility and antibacterial properties
Thomas Schmitt-John (Steinhagen/DE)
- P 10 Effects of intraoperative cochlear implant electrode conditioning on impedances and electrically evoked compound action potentials
Florian Herrmann Schmidt (Rostock/DE)
- P 11 Modification of PEEK for biomedical application
Marie Hubalek Kalbacova (Liberec/CZ)
- P 12 *In vivo*-evaluation of bone substitute scaffolds colonized with human stem cells using a 3D
Vivien Engel (Rostock/DE)
- P 13 Development of a 2.5D-mucosa model to study the dental implant/soft tissue interface
Friederike Kaiser (Dresden/DE)
- P 14 Biomimetic osteogenic differentiation in spheroid cultures to study biomaterial cytocompatibility
Holger Jahr (Aachen/DE)
- P 15 The possible role of microphysiological systems in biomaterial testing
Frank Schulze (Greifswald/DE)

- P 16 Functionalization of biocompatible metallic glasses through surface micro-/nano-patterning
Mariana Calin (Dresden/DE)
- P 17 Biomechanically Stable and Piezoelectric Ti6Al4V-Barium Titanate Scaffolds for Bone Tissue Engineering
Abdullah Riaz (Rostock/DE)
- P 18 On the stability and physico-chemical properties of nitrogen-rich hydrocarbon-based plasma polymer coatings for the improvement of cell-adherent surface properties
Frank Hempel (Greifswald/DE)
- P 19 Osteogenic potential and mechanical behaviour of functionally graded gyroid structures
Henrike Rebl (Rostock/DE)
- P 20 Surface modification of drug delivery catheters by laser structuring
Annika Thormann (Halle/DE)
- P 21 Implant-associated metal ions affect biofilm formation and antibiotic susceptibility of *Staphylococcus epidermidis* and *Staphylococcus aureus* strains
Tomas Fiedler (Rostock/DE)

Welcome reception – Wednesday, June 5

The Welcome Reception takes place at the conference venue, the Kurhaus Warnemünde – it is one of the closest buildings to the beach.

With its beautiful backyard, the maritime climate and its beach promenade nearby, it allows interesting conversations between colleagues, old friends and new acquaintances. Appetisers will be served.

Time 19:45–21:45
 Venue Kurhaus
 Warnemünde
 Fee 0 EUR



© Rawpixel.com | 395377318 | shutterstock

Social evening – Thursday, June 6

We invite you to join a memorable evening at the “Sky-Bar” in the Hotel NEPTUN. Celebrate the 7th International Symposium Interface Biology of Implants together with your colleagues and friends.

Enjoy the exclusive setting of the highest bar in Mecklenburg-Vorpommern – a breathtaking view.

At a height of 64 meters, you can enjoy the most beautiful view of the Baltic Sea beach, the white sailing boats and large ships entering Warnemünde harbour. A pleasant time with good food awaits you in this special maritime atmosphere.

The “Sky-Bar” is only a short walk away from the conference venue.



Time 20:00–23:00
 Venue Sky-Bar, Hotel Neptun
 Seestraße 19
 18119 Rostock/
 Warnemünde
 Fee Regular 65 EUR
 Student 45 EUR

© Hotel Neptun Warnemünde

SPONSORS

Main sponsor

Keyence Deutschland GmbH



Sponsors

Carl Zeiss Microscopy Deutschland GmbH

LLS ROWIAK LaserLabSolutions GmbH

Retsch GmbH

Exhibitors

DOT GmbH

Keyence Deutschland GmbH

The symposium is funded by the German Research Foundation (DFG).



GENERAL INFORMATION

Registration

Please register online via www.ibi-symposium.org.

Conference fees	until June 4
Regular	590 EUR
Student	320 EUR
Industry	640 EUR
Welcome reception	
Regular/Student/Industry	0 EUR
Social evening	
Regular/Industry	65 EUR
Student	45 EUR

Abstract book

All abstracts presented at the symposium will be published online in a citable form.

Poster award

A poster award will be selected from all posters presented. The winner will be announced in the Closing ceremony on Friday, June 7, 4:30pm.

Poster sessions

All posters should be mounted on Wednesday, 5 June until 3:00pm and removed on Friday, 7 June until 4:00pm. Posters should be prepared in size DIN A0 portrait (width: 84,1 cm x height: 118,9 cm) and not laminated. Mounting materials will be provided.

Retsch®

MILLING SIEVING ASSISTING



SOLUTIONS FOR IMPLANT BIOLOGY

Our ball mills and cutting mills are perfectly suited for pulverizing samples like bones or ceramics.

The Planetary Ball Mill PM 300 features:

- | Batch-wise processing of up to 2 x 220 ml sample
- | Variable speed from 50 to 800 rpm
- | Loss-free size reduction down to the submicron range
- | Programmable breaks e.g. for cooling
- | Ceramic grinding jars available



LEARN MORE.

www.retsch.com

part of **VERDER**
scientific

INDEX OF PRESENTING AUTHORS AND CHAIRS

A

Ahlhelm, M.	9
Azizi, P.	18

B

Bader, R.	8, 14
Ben Amara, H.	11
Börke, J. M.	7
Brach, J.K.	12
Buchert, J.	6
Buchholz, A.	16

C

Calin, M.	20
Coscoy, S.	11
Cosimi, A.	12
Cosme, J. A.	6

D

Detsch, R.	7, 9, 18
Dittfeld, C.	9
Dohr, D.	13
Dorn, F.	19

E

Eickner, T.	18
Ekat, K.	10, 17
Engel, N.	6, 10, 17
Engel, V.	19

F

Fiedler, T.	20
Freitag, T.	16

G

Garcia, A.	7, 8
Gebert, A.	7
Germann, A.	16
Ghaemmaghmi, A.	12
Gürtler, N.	19

Index of Presenting Authors and Chairs

H

Hahn, O.	15, 16, 17
Hartung, T.	16
Heilen, M.	16
Helmholz, H.	13

Hempel, F.	20
Hesse, B.	13
Hindié, M.	11
Hubalek Kalbacova, M.	19
I	
Illing, B.	10, 17
J	
Jahr, H.	7, 19
Jonitz-Heincke, A.	12, 15
K	
Kaiser, F.	19
Klinder, A.	12, 13
Knappe, E.	8
L	
Lembcke, L.	18
Li, H.	14
Lickert, S.	9
Lips, K. S.	7
M	
Manjua, A.	6
Massaro, M. S.	9
Menzel, H.	9
Meyer, W.	7
Mohammadnejad, L.	12
Moulisova, V.	11
N	
Nawaz, Q.	7
Nnane, N. S.	14
Nothnagel, R. M.	14
P	
Perez Antoñanzas, R.	11
Peters, K.	8, 10, 11
Philip, J.	13
Pohl, C.	14
Praetorius, J.-P.	6
Priddy, L.	7
Promberger, M.	15, 17

INDEX OF PRESENTING AUTHORS AND CHAIRS

R

Rebl, H.	9, 20
Reisinger, E. C.	8
Riaz, A.	20
Rose-John, S.	12
Rottmar, M.	9
Rychly, J.	8

S

Salbach-Hirsch, J.	12
Santana Kragelund, F.	6
Schlicht, L.	16
Schmidt, F. H.	19
Schmitt-John, T.	19
Schöbel, L.	10, 17
Schoon, J.	14, 16
Schulze, F.	19
Sellin, M.-L.	10, 17
Semetey, V.	14
Siewert, S.	18
Stählke, S.	8, 19
Suay, J.	13, 15, 18
Sudhakar, S.	10, 17

T

Tetzlaff, L.	15, 18
Thormann, A.	7, 20
Topitsch, A.	15, 17

V

Voropai, V.	14
-------------	----

W

Waletzko-Hellwig, J.	6
Weber, F.	9
Wieland, F.	7

Z

Zhang, L.	15, 18
-----------	--------

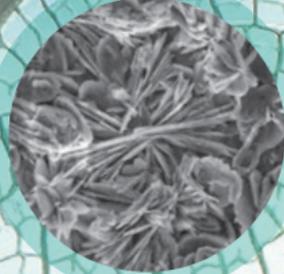
DOT

medical implant solutions

High-tech surfaces in the service of health

Made in Rostock

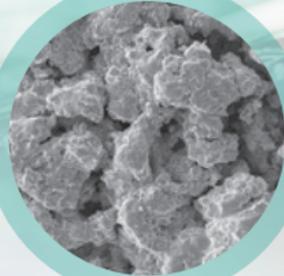
BONIT®



PVD



TPS



dot-coating.de

Accelerate your experiment startup



ZEISS Axio Observer with AI assisted Sample Finder

AI Sample Finder fully automates sample placement, focus adjustment and ROI identification. Even with low-contrast samples, reduce the time to image from minutes to just seconds and start your experiment right away.



zeiss.com/sample-finder

Seeing beyond