Subject: Cristina Barrias' application to the ESB Council – Elections 2021

Dear ESB members,
Dear colleagues,

It is a great honor to be nominated as a candidate for a second term as a member of the European Society for Biomaterials (ESB) Council.

The ESB has played a pivotal role in shaping my scientific journey and has long been my preferred forum for discussing research progress and exploring new ideas. I have been a dedicated ESB member since 1999 and an active participant in most of the annual conferences since then.

In 2021, I applied for a position on the ESB Council to contribute to the advancement and strengthening of our society. Since my election, I have served as the Journal Liaison Officer, facilitating communication between the ESB and the editorial team of Biomaterials Science (BS), the official journal of the society, published by the Royal Society of Chemistry. In this role, I have worked alongside the BS team to enhance member engagement and increase the visibility of our community, namelly through the publication of a dedicated ESB special issue, showcasing selected works from the annual conference. Looking ahead, we aim to expand the scope of this special issue to further elevate the visibility of our members, providing them with an even greater opportunity to highlight their research in the BS journal.

In September 2023, I had the privilege of taking on the role of Vice President of the ESB. It has been a pleasure to work alongside such exceptional and inspiring colleagues on the Council. I believe my experience and dedication are valuable assets to the ESB, and I am highly motivated to continue the work we have started. By applying for a second term, I aim to further strengthen member engagement within our society and expand its visibility, as well as the impact of the biomaterials field, at both the European and international levels

I sincerely appreciate the trust you have placed in me over the past four years, and I would be grateful for your support in the coming term.

Yours sincerely,

Porto, March 12, 2025

Cristina Barrias, Ph.D.
BeMIC Research Group Coordinator
Member of the Directors of INEB
i3S Integrative Research Program Coordinator (Host Interactions & Response)

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Cristina C. Barrias

Born in 1973, in Porto-Portugal

ORCID: http://orcid.org/0000-0002-8178-6134

Scopus Author ID: https://www.scopus.com/authid/detail.uri?authorId=9250507300

Google Scholar: https://scholar.google.com/citations?user=zyC8NFYAAAAJ&hl=pt-PT

PhD in Engineering Sciences (2005), Post-graduation in Biomedical Engineering (1999), Graduation in Chemical Engineering (1997), University of Porto

Member of ESB since 1999

CURRENT POSITIONS

- Principal Investigator and head of the Bioengineered 3D Microenvironments Group at i3S-Instituto de Investigação e Inovação em Saúde (www.i3s.up.pt), University of Porto.
- Invited Associate Professor at ICBAS-Abel Salazar Institute of Biomedical Sciences, University of Porto.
- Vice-Director of INEB-Instituto the Engenharia Biomédica, University of Porto.

COMMISSIONS OF TRUST

- Elected member of the ESB Council: Journal Liaison Officer since 2021 and Vice-President since 2023.
- Managing Editor of Materials Today Bio, Associate Editor of Frontiers in Bioengineering and Biotechnology: Preclinical Cell & Gene Therapy, Editorial Board of J. Applied Biomaterials & Functional Materials, Member of the Advisory Board of Cell Biomaterials.
- Member of reviewing panels: e.g., Expert Reviewer for EU programs such as ERC, Pathfinder Challenge, HORIZON-MSCA-PF; and for research funding institutions from several countries, e.g., FCT (Portugal), FNRS (Belgium), ANR and IFRO (France), LIT (Austria), GWIS-Graduate Women in Science Fellowships.
- Participation in several international networks (e.g. Doctoral network TOP-GUT, several COST Actions: CA16122, CA16119, CA18216, CA18125, CA23110 and CA23146).

MAIN AREAS OF RESEARCH

My group specializes in engineering bioinspired 3D microenvironments to direct cell/matrix assembly, utilizing molecularly designed biomaterials and microtissues/organoids as building blocks. Our primary goal is to recapitulate human tissue/organ morphogenesis, regeneration, and disease progression, by modulating and elucidating the role of microenvironmental cues, including matrix-derived signals, in these processes. A major research focus is on engineering microvascular networks, which are essential for sustaining tissue function, mediating repair, and shaping disease outcomes. This knowledge is ultimately leveraged to advance regenerative medicine strategies and to develop sophisticated 3D in vitro models for dissecting biological mechanisms and screening new therapeutics.

PUBLICATIONS, COMMUNICATIONS & AWARDS

To date, published 103 peer-reviewed articles in leading international journals in the Biomaterials and Tissue Engineering fields and 9 book chapters. Holds an h-index of 40 (>5000 CIT, Scopus, Mar 12, 2025). Has been an invited speaker at over 100 national/international conferences and has contributed to 270+ scientific communications at meetings. Received several distinctions, including the European Biomaterials & Tissue Engineering Doctoral Award from ESB (2006).

RESEARCH PROJECTS AND POST-GRADUATE TRAINING

- Over 3,1 M€ external funding obtained so far. Has participated in 44 national/international projects (14 as PI/Co-PI). At present, participates in 5 projects funded by Horizon Europe, La Caixa Foundation, FCT, and ON.
- Supervises/has supervised 9 post-docs, 20 PhD students, 33 MSc students and several research trainees.

Cristina Barrias

ΠΑΝΕΠΙΣΤΗΜΙΟ ΚΡΗΤΗΣ

ΤΜΗΜΑ ΕΠΙΣΤΗΜΗΣ ΚΑΙ ΜΗΧΑΝΙΚΗΣ ΥΛΙΚΩΝ

UNIVERSITY OF CRETE

DEPARTMENT OF MATERIALS SCIENCE AND ENGINEERING

Dr. Maria Chatzinikolaidou, FBSE, FTERM, FIAMBE
Professor of Biomaterials in Bioengineering
Department of Materials Science and Engineering
Laboratory of Biomaterials in Tissue Engineering
University Campus Voutes, University of Crete, GR-70013 Heraklion, Greece
https://www.materials.uoc.gr/el/general/personnel/mchatzin.html
and collaborating Faculty Member at
Institute of Electronic Structure and Laser (IESL), Foundation for Research and Technology Hellas (FORTH)
N. Plastira 100, GR-71110 Heraklion, Greece
Email: mchatzin@materials.uoc.gr

Heraklion, 10 March 2025

Re: Application as candidate for the European Society for Biomaterials (ESB) Council

Dear Colleagues,

I hereby apply for a position and I would welcome the opportunity to participate on the ESB Council to create more and significant biomaterials-based interactions at the European and global level. I have the required biomaterials expertise and the leadership experience necessary to meaningfully contribute to the ESB Council.

My research spans from the development of biomaterials and biofabrication of scaffolds for tissue engineering applications (including bone, cartilage, dental, cardiovascular, skin) and the validation of their in vitro and in vivo biocompatibility, functionality and biomechanical characteristics. I would be pleased to put my communication, leadership and organizational skills to work for the ESB Council.

I am a collaborative team player and motivated to support ongoing and new activities that aim to foster professional interactions of biomaterials scientists and engineers together with clinicians, industrial partners, and regulatory representatives. As a recognized role model for women in biomaterials science and engineering, I would be delighted, through the ESB Council, to expand the inclusive community of biomaterials to all European countries and beyond, strengthen networking opportunities between researchers in the field, and offer mentorship to our early career community, advancing the overall goals of the Council.

The expansion of new multidisciplinary research and its translation to clinical and industrial activities in the biomaterials field demonstrates a strong community with a clear need for a communication and dissemination forum worldwide. Through my current service as a Member of the Steering Committee of the International College of Fellows of Biomaterials Science and Engineering (term 2024-2028), I highly value the synergy and benefits of broad collaborations.

Should you require any further information, please do not hesitate to contact me.

Sincerely,

Maria Chatzinikolaidou

Short biography – Dr. Maria Chatzinikolaidou

Dr. Maria Chatzinikolaidou, FBSE, FTERM, FIAMBE, is a Professor of Biomaterials in Bioengineering and Head of the Laboratory for Biomaterials in Tissue Engineering at the Department of Materials Science and Engineering at the University of Crete, and affiliated faculty member at the Foundation for Research and Technology-Hellas (FORTH). She received her B.Sc. in Chemistry from the University of Essen, Germany and her doctoral degree in Biochemistry from the same university in 2004.

Her research activities focus on the development of biomaterials and scaffolds for tissue engineering applications including bone, cartilage, dental, cardiovascular, skin, and the validation of their *in vitro* and *in vivo* biocompatibility, functionality and biomechanical characteristics. She applies cutting edge material processing technologies including electrospinning, 3D printing and bioprinting for the biofabrication of scaffolds, constructs and complex physiological and pathological models. Her work has led to the development of novel orthopaedic and dental biomaterials and medical devices, and tunable biomaterial platforms that control specific physiological processes for tissue engineering and regenerative medicine, using the fundamentals of biological sciences and engineering. She is the author of over 100 publications, 4 book chapters, 4 patents on osteoinductive implants and >190 peer-reviewed conference abstracts (ORCID: https://orcid.org/0000-0002-2749-2506).

She is a Fellow in Biomaterials Science and Engineering (FBSE, elected 2020) of the International Union of Societies for Biomaterials Science and Engineering (IUS-BSE), Member of the Steering Committee of the International College of Fellows of BSE (elected 2024 for the term 2024-2028), International Fellow of Tissue Engineering and Regenerative Medicine (FTERM, elected 2023), Fellow of the International Academy for Medical and Biological Engineering (FIAMBE, elected 2024), and Member of the Governing Council of the International Academy of Medical and Biological Engineering (IAMBE) for the term 2025-2027 (elected 2024). In 2023 she has been elected European Orthopaedic Research Society (EORS) Ambassador for Greece. She served as vice president of the executive board of the Hellenic Society for Biomaterials in the terms 2015-2018 and 2022-2025. She served as chair of the 28th Conference of the European Society for Biomaterials (ESB 2017) held in Athens, and program chair of the TERMIS-EU 2019 conference held in Rhodes in Greece. She has been assigned chair of the EORS annual conference in 2027 to be held in Greece. She is an editorial board member in journals related to research on Biomaterials, Tissue Engineering, and Biomedical Engineering. She teaches Biomaterials, Tissue Engineering, Molecular Cell Biology and Biochemistry courses in undergraduate and Master's programs at the University of Crete and other Universities in Greece for more than 17 years, and is Erasmus+ departmental coordinator promoting students and staff mobility. She has attracted significant funding from national and international sources for her research, while she serves as evaluator in national and international funding agencies, including the European Commission.

Sincerely,

Maria Chatzinikolaidou

Davos, March 2025.

Dear ESB Members,

Ever since I started my career in Biomaterials, ESB has always been enormously important for me. Of many conferences I have been lucky to attend, and many Societies I have been engaged with, ESB has always been the place where I really felt at home, scientifically and personally.

I have had the incredible honour to serve in the ESB council since 2021, and to organize the ESB2023 conference, which I hope many of you have fond memories of.

My ties to the ESB are also institutional. Our former Institute vice Director, Prof. Dr. Berton Rahn was one of the ESB fathers and he helped to organise the fourth ESB meeting in Davos, back in 1984 and also in Davos in 1993, together with our present director Prof. Geoff Richards.

Therefore, with my permanence in the ESB council would connect the past and future of the Society.

In the last few years ESB has undertaken giant steps in several aspects, including a much better visibility and web platform, a very active section of young scientists, and a stronger accent on diversity and gender balance, which I fully support. It is my intention to continue in this direction sustaining and consolidating these positive changes. I also feel that the changing world presents further challenges and opportunities. I would like ESB to help fill the gap between education and profession, to be the place where industry can find scientists, and the place where scientists can find industry. I believe our community could give more prominence to lab sustainability, artificial intelligence, and even to circular economy, and that these emerging sectors will create job opportunities for the younger members of our Society. I am also a strong believer of Excellence in Scientific Research and Education, which must remain at the core of the ESB values, and I am firmly convinced about the importance of scientific collaboration, which our society supports in an irreplaceable manner. Since I am group leader I have had about 15 nationalities in my team, and I have been part to numerous international research projects covering all EU areas, China, South Korea, United States, South America, and counting. I think I can say that I am an open person with the ability to manage conflicting opinions in a rational and diplomatic manner.

Being elected would give me the chance to further contribute to the ESB council bringing my experience to the benefit of the Society which has been fundamental for making me a better biomaterials scientist.

For all these reasons I would like you to give me the chance to be part of the ESB council.

Your Sincerely,

Matteo D'Este

CV of Matteo D'Este

Matteo graduated with a MSc in **Physical Chemistry** in 2002 and he earned his PhD in Chemical Sciences at the University of Padova (Italy) with a research project in **Theoretical Chemistry**.

After the PhD graduation he started working **as a researcher in the pharmaceutical industry**, where he became interested in naturally occurring biopolymers, and their chemical modification and use as medical devices and medicinal products. During his time in industry, among other projects Matteo was involved in developing a hydrogel-based class III medical device from scratch. For this product he developed the chemistry of the production process, obtained a patent now granted worldwide, contributed to the development of analytical methods and quality aspects, regulatory dossier with achievement of CE mark, and clinical studies. This product is currently available on the market. Additionally, he gained experience in engineering/industrial aspects related to GMP production scale-up, GMP production of pilot-scale batches for clinical trials, process validation and in project management.

After almost 5 years in industry, he joined the **AO Research Institute Davos**, Switzerland in March 2011 as Research Scientist, working with David Eglin, Mauro Alini and Geoff Richards. This move gave him the opportunity to start his path in Biomaterial fundamental and translational Research. Between 2017 and 2018, Matteo spent half a year as **Visiting Scholar** at the Department of Bioengineering of the **University of Pennsylvania,** Polymeric Biomaterials Laboratory of Prof **Jason Burdick**.

Since 2020, Matteo is **Principal Investigator** and **Leader of the Biomedical Materials Focus Area** at the AO Research Institute Davos, committed to the design of advanced biomaterials and the development of manufacturing technologies to achieve improved patient care and outcome in musculoskeletal disorders. From the same year, Matteo is **Adjunct Professor** at the Laval University, Quebec City, Canada.

Matteo's core competencies include biopolymer modification, 3D printing/bioprinting, immunomodulation, electrospinning of hydrogel-based stimuli-responsive nanofibers, tissue engineering of the musculoskeletal system for fundamental and translational research, musculoskeletal infection and drug delivery, medical devices development, and teamwork with multidisciplinary international teams. He has been task leader of numerous H2020 European projects, and he has been Principal Investigator of the Swiss – French bi-lateral project INDEED, aimed a 3D bioprinting of intervertebral disc models of physiology and disease.

Matteo has supervised around 50 students and guest scientists at AO, and he teaches Biomaterials for Musculoskeletal Repair and Advanced Hydrogels at the **ETH Zürich**.

Matteo is author of 6 patents and around 70 papers. Besides ESB, he is member of the Executive Committee of the Swiss Society for Biomaterials and Regenerative Medicine, TERMIS, and the International Society for Biofabrication. He is reviewer for major journals in the field of Biomaterials and Tissue Engineering and for European national funding agencies.

Other Interests:

Matteo enjoys staying physically active spending time in the nature. Matteo is genuinely passionate about jazz and, as who participated to the last ESB conference knows, he plays saxophone.

Matteo D'Este

APPLICATION LETTER – MARIA GRAZIA RAUCCI

Dear ESB colleagues,
I am here reaching you out to let you know that I have decided to submit my candidacy for re-election to the ESB Council. I would like to extend my service to the ESB board with the objective to strengthen the open and interactive environment of our community where knowledge exchange flows and collaborations thrive. By continuing the work started during my first mandate to help different research communities connect, I hope we all open to new perspectives and foster innovation in biomaterials science.

Indeed, since 2021, when I had the honor of being elected to the ESB Council and take the role of Liaison Officer for the Affiliated National Societies, I have worked to improve the visibility of the Society. In particular, for the first time in the ESB history, I have been organizing a series of periodic webinars throughout the year with the aim to connect our members and exchange knowledge beyond our annual conference. As far as the latter is concerned, since my election, I have chaired symposia at each of our ESB annual conferences and at the World Congress for Biomaterials 2024 in Daegu. I am also proud to have brought together the national biomaterials societies supporting their Presidents and related scientific communities in the promotion of their research. Aware of the need to expand our horizons to other scientific communities, I am in the process of organizing webinars with the European Orthopedic Research Society (EORS) and a joint symposium with the Chinese Society for Biomaterials (CSBM). These events are crucial not only to promote collaboration and networking, but also to provide young researchers with a broader perspective on the latest advances in research approaches in biomaterials science and their potential clinical applications.

All these initiatives have been possible because of my own professional network that I have been patiently built throughout many years, worldwide; you can appreciate the width of this network in my CV. As my career progressed, I became more active in encouraging them to contribute to the ESB Conference sessions and workshops of which I was the chair. A 22-years trajectory has seen me join the ESB's membership in 2003, first as a young delegate presenting posters and oral contributions, later being a member of the local organizing committee of the ESB2005 conference held in Sorrento (Italy), finally as a proud elected member of the ESB Council (2021).

My motivation for promoting all the knowledge exchange initiatives mentioned above derived from my belief that the ESB is more than just a scientific society; it is a dynamic and welcoming platform where research scientists can expand their knowledge, connect with experts from other disciplines and develop collaborations that lead to research fundamental to health issues of global socioeconomical significance. In particular, it is my deep belief that our annual ESB conference has become a key moment for researchers of all ages who want to take, with passion and determination, these challenges.

It is therefore that with much enthusiasm that I would continue to serve you all and kindly ask your vote to be confirmed as a member of ESB council for a second mandate.

Thank you for considering my candidacy and for the trust you have given me in the last four years.

Yours sincerely,

Maria Grazia Raucci

Institute of Polymers, Composites and Biomaterials IPCB
National Research Council of Italy
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Maria Grazia Raucci

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Dr. Maria Grazia Raucci is a Senior Research Scientist at the Institute of Polymers, Composites, and Biomaterials (IPCB-CNR). She earned her M.Sc. in Biological Sciences in 2001 from the Second University of Naples and her Ph.D. in Chemical Engineering of Materials and Production – Biomaterials in 2005 from the University of Naples "Federico II." Her doctoral research focused on developing novel biomaterials for tissue engineering and regenerative medicine. During her Ph.D., she was a visiting researcher at Guy's, King's, and St. Thomas' Dental Institute in London, where she investigated the biocompatibility of antibacterial materials for bone and dental tissue applications. In 2011, she became a Permanent Research Scientist at IPCB (formerly IMCB) and, since 2014, has served as the Scientific Coordinator of the Tissue Engineering & Cell Culture Laboratory at IPCB Naples/Portici. In 2022, she was appointed Scientific Responsible of the IPCB unit at the University of Salento. Additionally, she is a Qualified Associate Professor in Bioengineering and Materials Science and Technology. Throughout her career, Dr. Raucci has carried out research at several international institutions. As a visiting scientist at the University of Brighton, she worked on the synthesis of peptides and semi-dendrimers for biomaterial bioactivation. Under the CNR Short Term Mobility Program, she conducted research at the Universidade Federal do Rio Grande do Sul in Porto Alegre, Brazil, where she developed innovative antibacterial and antibiofilm materials using ionic liquids to overcome antibiotic resistance and nanoparticle-related challenges. At Sichuan University, she contributed to the development of advanced injectable materials for cancer treatment, evaluating their efficacy through in vitro and in vivo animal models. Dr. Raucci has been the scientific coordinator for IPCB-CNR in the Horizon 2020 MSCA-RISE project, conducting part of her research at the NERCB Institute of Sichuan University. With widespread expertise in material design, development, and in vitro biological studies, she is actively involved in numerous national and European projects, including NANORESTART and MEFISTO, as well as bilateral collaborations with institutions such as CINVESTAV in Mexico, ANSA in Azerbaijan, and MOST in China. In the past five years, she has been granted as the national coordinator of PRIN programs and has led research tasks for several high-profile projects. These include the CIRO Project – Campania Imaging Infrastructure for Research in Oncology, the National Center for Gene Therapy and RNA-Based Drugs, the ASTROTALK Project funded by the U.S. Air Force Office of Scientific Research, the Science for Peace and Security (SPS) Programme under NATO, the PNRR M6/C2 Project funded by the European Union, ERC-Proof of Concept – PHOSMED, and the HORIZON-EIC-2022-PATHFINDEROPEN-01 – BIOACTION project.

Since 2021, she has been Council Member of the Italian Society for Biomaterials (SIB). Dr. Raucci has been a member of the Council of European Society for Biomaterials (ESB), serving as the Liaison Officer for National Affiliated Societies. Capitalizing on her wide collaborative networking, she has been able to bring many scientists into a range of ESB's dissemination activities chairing numerous conference sessions, national and international workshops, and regular periodic webinar series; a first-time initiative of the society. She has authored over 100 peer-reviewed journal articles, six book chapters, and three patents, in addition to approximately 150 conference abstracts presented at national and international events, as well as 20 invited lectures.

Sincerely,
Dr. Maria Grazia Raucci
Senior Research Scientist, IPCB-CNR

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Liliana Moreira Teixeira, Ph.D.

Associate Professor (Tenure-track, UHD2)
Dept. of Bioengineering Technologies
Scientific Lead of Organ-on-Chip Center Twente
Email: l.s.moreirateixeira@utwente.nl

Enschede, March 11th, 2025

Subject: Application letter for the position of ESB Council member

Dear European Society of Biomaterials Council,

With a deep-rooted passion for advancing biomaterials research, I am honored to submit my application for a position on the ESB Council. My extensive experience in the field, particularly in the development of biomimetic platforms for various tissues, with a strong emphasis on musculoskeletal applications, aligns well with the Society's mission to foster scientific excellence and innovation in biomaterials research.

Throughout my career, I have dedicated myself to pioneering biomaterial-based solutions that bridge the gap between engineering and biology to enhance healthcare outcomes. My research has focused on designing and developing bioinspired platforms that closely mimic native tissue environments, addressing critical challenges in musculoskeletal regeneration. By integrating innovative biomaterials with advanced biofabrication techniques, I have contributed to the creation of highly functional in engineered tissues and *in vitro* models that support translational research in this field.

My commitment to the ESB community has been demonstrated through my prior service as the Communication and Dissemination Liaison at the Young Scientists Forum of the ESB (YSF-ESB), where I played a key role in promoting knowledge exchange and collaboration among early-career researchers. This experience has equipped me with valuable insights into the Society's operations, as well as a strong network within the biomaterials research community.

If granted the opportunity to serve on the ESB Council, I will leverage my expertise and experience to further the Society's objectives by fostering interdisciplinary collaborations, enhancing outreach initiatives, and supporting researchers in their professional development. I am eager to contribute to shaping the future of biomaterials research and ensuring that the ESB continues to be a driving force in this dynamic and impactful field.

I appreciate your consideration and look forward to the possibility of contributing to the ESB Council.

Sincerely,

Liliana Sofia Moreira

Curriculum Vitae - Liliana Moreira Teixeira

Personal information:

Full Name: **Liliana Sofia Moreira Teixeira Leijten**
Date of birth: 10th of April of 1982; Nationality: Portuguese

Current Position:

Associate professor, UHD2, full-time, tenure-track - Department of Advanced Organ Bioengineering and Therapeutics, University of Twente, The Netherlands (2024-Present)

- Developing stratified organ-on-chip platforms for targeted healthcare solutions.
- Implementing gender- and age-specific in vitro models for efficient therapies.

Academic Experience:

- **Assistant Professor (UD1 & UD2)**, University of Twente (2019-2024)
  - Research on micro-physiological systems, next-gen organ-on-chip technologies, biodetection on-chip.
- **Assistant Professor (UD2)**, Utrecht University (2019-2020)
  - Developed multi-organ/tissue micro-physiological systems for chronic disease modeling.
- **Senior Postdoctoral Researcher**, University of Twente & Utrecht University (2018-2019)
  - Led projects on multi-tissues-on-chip for chronic diseases.
- **Senior Postdoctoral Researcher**, Maastricht University (2016-2018)
  - Focus on self-organizing cell micro-tissues and organ-on-chip development.
- **Postdoctoral Fellow**, Wyss Institute, Harvard Medical School (2015-2016)
  - Developed vascularized bone marrow-on-a-chip models for screening therapies.

Education:

- **PhD, Biomedical Engineering**, University of Twente, The Netherlands (2007-2011)
- **MSc, Biomedical Engineering**, University of Porto, Portugal (2005-2007)
- **BSc, Applied Biology**, University of Minho, Portugal (2001-2005)

Awards & Recognitions:

- Aspasia Award, NWO (2021)
- Cells Tissues Organs Young Investigator Award (2020)
- DSM Science & Technology Award (2012)
- Multiple Best Abstract & Poster Awards (2010-2008)

Teaching:

- Teaching Course Coordinator & Lecturer: Microphysiological Systems, Biomedical Materials Engineering, Advanced Anatomy & Physiology (2023-Present)
- University Teaching Qualification (UTQ/BKO), Maastricht University (2019)

Leadership & Trust positions:

- Vice-Chair, Ethics Committee TNW/ET, University of Twente (2024-Present)
- Board Member, European Organ-on-Chip Society (EUROoCS) (2023-Present)
- Co-coordinator of the hDMT Bone-on-Chip Group (2022-Present)
- Founder & Scientific Lead, Organ-on-Chip Center Twente (2020-Present)
- Advisory/Editorial Board Member: e.g., Biofunctional Materials, *Lab on a Chip Technologies, In Vitro Models*
- Member of the Young Academy of University Twente, The Netherlands (2021-Present)
- **Elected ESB-YSF board member (European Society for Biomaterials - Young Scientist Forum - 2018-2022)**

Research focus: Biomaterials, tissue engineering, organ-on-chip technologies, biomimetic models, regenerative medicine, and personalized healthcare solutions.

For your consideration, regarding my application for the position of ESB Council member.
The undersigned,

Liliana Sofia Moreira Teixeira

Liliana Moreira Teixeira, Ph.D.

Associate Professor (Tenure-track, UHD2)
Dept. of Bioengineering Technologies
Scientific Lead of Organ-on-Chip Center Twente

UPPSALA
UNIVERSITET

Cecilia Persson
Professor

BioMaterial Systems Group Leader
Division of Biomedical Engineering
Department of Materials Science and Engineering
Uppsala University

Visiting address:
Lägerhyddsvägen 1
752 37 Uppsala, Sweden

Phone: +46 18 471 79 11
cecilia.persson@angstrom.uu.se

13th March 2025

To Whom It May Concern:

I hereby apply to become a member of the ESB Scientific Council. I am eager to contribute to the European Society and I aim to bring the perspective of the Scandinavian Society for Biomaterials (ScSB) and vice versa, as its past President (2019-2023), and through my continued contact with the society. I will also be the host of the ESB 2027 meeting in Uppsala, Sweden.

I have a European MSc in Materials Engineering, and over 20 years ago, as a master student in Barcelona I was inspired to become a researcher in biomaterials science by one of our European IUSBSE fellows as well as ESB Klaas de Groot awardee Prof. Maria Pau Ginebra, who has continued to inspire me ever since. After a stint at the Rizzoli Orthopedic Institute in Bologna, I did my PhD at the University of Leeds in Spine Biomechanics, and since its completion I have been a biomaterials researcher at Uppsala University, where I became full professor in 2018. I have combined materials science with mechanical and biological engineering to develop new biomaterials, implants as well as models of the interaction between materials and host tissue. Diving into the unknown has been facilitated by a strong will, interest and belief, which I apply to tasks I take on and people I take in.

At Uppsala University, I have built a strong environment in additive manufacturing (AM) – I am currently the Director of the *AM4Life Competence Centre*, gathering 35 partners from academia, industry and healthcare sector, as well as *WISE Additive*, a national research technology platform on AM for sustainable materials science. Indeed, my current research focuses on the development of biomaterials for and through AM.

I have maintained my European network as well as expanded it, and I am active in many international collaborations, and can bring a large network to the society. I also have experience with starting a medtech company and bringing a new biomaterial from research idea all the way to clinical trials.

In summary, what I hope to bring to the ESB is a direct connection to ScSB, a seamless 2027 meeting, a large network in several competence fields, expertise in additive manufacturing of biomaterials, and action!

Yours faithfully,

Prof. Cecilia Persson
Uppsala University

CV – Prof. Cecilia Persson

Div. Biomedical Engineering, Dept. Materials Science and Engineering, Uppsala University

Director, AM4Life Competence Centre in Additive Manufacturing for the Life Sciences

Scientific Director, WISE Additive National Research Technology Platform

Date of birth: December 24, 1980; *Nationality:* Swedish*; Parental leave:* 23 months, 3 children.

Previous positions

2018 -	**Professor**, Dept. Materials Science and Engineering, Uppsala University, Sweden
2015 – 2018	**Assoc. Prof.**, Dept. Engineering Sciences, Uppsala University, Sweden
2011 – 2015	**Ass. Prof.** (tenure track), Dept. Engineering Sciences, Uppsala University, Sweden
2009 – 2011	**Researcher**, Dept. Engineering Sciences, Uppsala University, Sweden
2006 – 2009	**PhD student**, iMBE, University of Leeds, UK.
2005 – 2006	**Researcher**, Istituto Ortopedico Rizzoli, Bologna, Italy.

Education

2015, Docentship in Engineering Science, spec. Materials Science. Uppsala University, Sweden

2009, PhD in Mechanical Engineering, spec. Spine Biomechanics (EU Marie Curie Fellow). Institute of Medical and Biological Engineering (iMBE), University of Leeds, UK

2004, European MSc in Materials Engineering, spec. Biomaterials (European Triple Degree). Luleå University of Technology (SE); EEIGM, Lorraine University of Technology (F); and Technical University of Catalonia (ES). Thesis at Istituto Ortopedico Rizzoli (IT), examined at UPC (ES).

Ongoing grants / projects as main applicant (>25 M€; Group turnover 1.6M€ / year)

2025-2027: **PI,** *AI for AM - towards more resource-efficient development of additively manufactured light-weight alloys*, WISE ap-2, 180k€, WISE, KAW Foundation; 2024-2033: **Scientific Director**, *WISE Additive - A National Research Technology Platform for Additive Manufacturing*, 4.5 M€ (1.8 M€ UU), WISE, KAW Foundation; 2023-2028: **PI,** *Rare-earth-free magnesium alloys enabled by AM*, 374 k€, WISE ap-1, KAW Foundation; 2022-2026: **PI,** *Tailored Mg-based Alloys for Bone Replacement*, 380k€, Swedish Research Council; 2020-2029: **Director**, *AM4Life Competence Centre in Additive Manufacturing for the Life Sciences*, >20 M€, Sweden's Innovation Agency – 35 partners from academia, industry and healthcare.; 2020-2025: **PI,** *Neutron scattering assisted development of AM of Mg alloys*, 465 k€, SSF.

Previous grants / projects: Main applicant >24.5M€, from e.g. Swedish Research Council, Knut and Alice Wallenberg Foundation, Swedish Foundation for Strategic Research, Sweden's Innovation Agency, EU (e.g. MSCA ITN), EIT.

Other activities of relevance

Scientific Awards*:* The Scandinavian Society for Biomaterials Research Award (2024); The Royal Society of Sciences Thuréus Prize (2022); 100-list of the Royal Swedish Academy of Engineering Sciences, AM4Life (2022); Göran Gustafsson Foundation Big Prize (2017); Göran Gustafsson Foundation Small Prize (2014); UU Inno: Attractive Innovation Project (2017,2023). ***Innovation Awards (examples):*** Peter Egardt Award for Entrepreneurship and Innovation (2019); Bona Postulata Award, Inossia AB (co-founded spin-off company, 2018).

Invited talks: *Upcoming*: ScSB Award Talk, Vanajanlinna, May 2025; BIOMAT Plenary Talk, Arcachon, June 2025, ESB Keynote Talk, Turin, September 2025. *Recent:* '3D-printed metallic bone – leveraging key aspects of additive manufacturing for sustainable implant solutions', Plenary Talk at the MedTech Days, Gothenburg, 2024; 'Additive manufacturing of Mg alloys', Advanced Functional Materials Conference, Kolmården, 2024; 'Additive manufacturing in the Life Sciences', University of Bologna, 2023.

Reviewing activities: Funding proposals to Swedish, German and Spanish Research Councils, EU (MSCA IFs, ERC StG), etc. Tenure track employment evaluations at 4 universities. Scientific committee and reviewer for international conferences (e.g. **ESB – 2027 Host**, EUROMAT, TERMIS). 16 PhD examination committees. Journal reviews: publons.com/a/1272665/. Associate Editor Advanced Composites and Hybrid Materials, Springer Nature, IF 23 (2025).

Assignments of trust (examples): Scientific Council Member, IMDEA Materials Institute, Spain (2025-); Steering Group Member, Linköping University Additive Manufacturing Centre (2024-); Section Dean Engineering, Uppsala University (2021-2023); **President Scandinavian Society for Biomaterials** (2019-2023); Chair of the board AM@Å, UU (2019-); PhD Educational Board UU (2017-2020)

Teaching: Course responsibility since 2011 in Materials Science and Additive Manufacturing.

Current and former students and postdocs

Nr of current and former PhD students: **30**; 17 as main supervisor and 13 as co-supervisor. Post-docs: **12.** MScs: **15+**

Bibliometrics

136 peer-reviewed, international journal papers: 53% as first or last author. Citations: 4427; **H-index: 37**, H_{10}:100. Google Scholar profile: https://scholar.google.se/citations?user=ARzHcV4AAAAJ&hl=en

National University of Science and Technology POLITEHNICA Bucharest
Advanced Polymer Materials Group

Bucharest, 12.03.2025

Prof Izabela Stancu's nomination to European Society for Biomaterials Council

To Whom It May Concern:
Via this letter I confirm my application to be a **member of the European Society for Biomaterials Council**.

As detailed in my CV, I actively supported the Young Scientist Forum (YSF) at the ESB (2009-2017) where I held the position of Secretary and then YSF representative in the ESB Educational Committee (2014-2016). Also, I enthusiastically contributed to the expansion of YSF through new YSF national chapters, I was involved in the communication with national representatives and in the organization of elections and YSF events and I acted as member of the international scientific committees at ESB conferences.
In 2007, I joined the Romanian Society for Biomaterials (SRB) as a member, and soon after I was actively involved as a co-founder of the YSF national chapter (2008), then as Secretary of the SRB (2010-2012) and later Vice President of the SRB (2012-2016). In these positions I collaborated with the SRB board members to support initiatives leading to the development or improved functioning of the field of biomaterials and biomaterials applications, organizing and attending national and international scientific and technical activities, establishing and maintaining professional relationships with national and international actors and strongly collaborating with the ESB.

During the last 10 years I dedicated myself to strengthening the Romanian biomaterials research and education, contributing to the evolution of research teams in biomaterials and biomedical field mainly through the significantly development of the research infrastructure in our university and demonstrating a strong engagement with members of the national and European societies for biomaterials. I offered support to young researchers and students and collaborated with senior academics and industry representatives. I tried to actively promote the ESB events and activities, and I am a strong believer in the importance of a coherent European development of research and education for the new generation of Biomaterials specialists.

As presented in my CV, I am full professor and Vice Dean of the Faculty of Medical Engineering in the National University for Science and Technology Politehnica of Bucharest, position that allows me to be actively involved in the education, mentoring, and professional guidance of a significant number of undergraduate and postgraduate Biomaterials and Biomedical engineering students. I have directly supervised the research projects of more than 100 students and co-supervised more than 80 Erasmus students. I saw them evolving into successful researchers or industry specialists/engineers in Romania and abroad. With this application, I reaffirm my commitment to contributing my expertise, experience, passion, and ideas to new ESB projects, ensuring a productive and meaningful continuation.
After my recent experience as national representative in the group on the joint risk assessment of Biotechnologies, at the European Commission, and with the experience of National Representative for Bioeconomy for Health Group at The Health and Bioeconomy Cluster - ROHEALTH, I think it is critical to share a coherent vision, collaborating with the funding and strategic decisional factors at the European Commission for the appropriate consideration of our research topics.

In this context I hope my application for the ESB Council will be accepted. I would like to thank you for your support and for giving me this privilege.

Sincerely yours,
Izabela Stancu

Full Professor (Habil.) Izabela-Cristina Stancu
National University of Science and Technology Politehnica of Bucharest
Vice Dean Research and International Relations, Faculty of Medical Engineering
Professor, Faculty of Chemical Engineering and Biotechnology
Team Leader, the Advanced Polymer Materials Group
Email: izabela.stancu@upb.ro

Professor Izabela-Cristina Stancu (izabela.stancu@upb.ro)
Full Professor (Habil.) of Biomaterials-Tissue Interface Phenomena & Bioactivation at the National University of Science and Technology Politehnica Bucharest (NUSTPB)
Faculty of Chemical Engineering and Biotechnology
Vice Dean of Research, International Relations, Career Development, Industry liaison at Faculty of Medical Engineering, NUSTPB
Team Leader in Advanced Polymers Materials Group (APMG), NUSTB

Field of Professional Activity: For 21 years, Professor Stancu's research aimed the engineering, (bio)fabrication and advanced characterization of bioinspired cell-instructive scaffolds and surfaces based on hydrogels and nanomaterials for bone repair and regeneration, peripheral nerve regeneration, wound healing, antimicrobial formulations, in a strong collaboration with national and European partners.

Education & formation:

University Politehnica of Bucharest	Dipl. Engineer, Chemical Engineering/ Organic Chemistry	2000
University Politehnica of Bucharest	PhD in Chemistry	2004
University Angers	PhD in Biological and Medical Engineering	2004
Dresden University of Technology	Marie Curie Postdoctoral fellow	2005-2006
Ghent University	Postdoctoral Researcher	2006-2007
University Politehnica of Bucharest	Postdoctoral Researcher	2010–2013

Professional experience:

- Since 2017, Full professor of Biomaterials-Tissue Interface Phenomena; Biofunctionalization for Tissue Engineering and Regenerative Medicine, University Politehnica Bucharest
- 2016 - 2019, Vice Dean, Erasmus+ responsible, Faculty of Medical Engineering, University Politehnica Bucharest
- Since 2020, Habilitation in Chemical Engineering
- Since 2016, Project Team leader Advanced Polymers Materials Group (APMG), University Politehnica Bucharest
- 2016-2020, University Politehnica Bucharest, Technical Responsible INOVABIOMED – Center for Innovative Manufacturing Solutions for Smart Biomaterials and BIOMEDICAL Surfaces, project, ID: P_36_611 | 145/26.10.2016, European funds (2016-2020)

Awards and Honours:

- 2024 Advanced Energy and Materials "Nicolae Vasilescu Karpen" Award, Romanian Research Gala 2024 Edition (group member, award for APMG research group, leader Prof. Horia Iovu, https://www.mcid.gov.ro/gala-cercetarii-romanesti/)
- 2023 host of a mobility within the Racquel LeGeros Award 2023
- 2022 Special prize, Stratified porous scaffolds for the personalized treatment of difficult wounds and obtaining procedure, International Exhibition of Inventions and Innovations ,,TRAIAN VUIA", Timișoara, 08-10.10.2022, Timisoara, Romania
- 2016 Award for „The most relevant contribution in the field of biomaterials in Romania" Romanian Society for Biomaterials
- 2008 SRB Scholarship (Medical Ortovit Scholarship)
- 2010-2020 over 20 national UEFISCDI prizes for research results in biomaterials
- 2002 PhD Scholarship Plan État – Région Pays de la Loire, University Angers

Leadership Roles and Membership in Biomaterials Research:

- 2023-2024: national representative in the group on the joint risk assessment of Biotechnologies, European Commission
- Member International Scientific Committee e.g. BPC2025 Brașov, BPC2023 Bucharest, CESB2024 Nurenberg, BiomMedD'2014
- Member International Advisory Committee e.g. ESB2023, ESB2021; ESB2018; Advanced Materials for Biomedical Applications, 2014, Ghent, Belgium
- Since 2021, National Representative for Bioeconomy for Health at The Health and Bioeconomy Cluster - ROHEALTH
- 2014-2016, Member Education Committee /European Doctoral Award/European Society for Biomaterials (ESB)
- 2010-2016, Secretary/Vice President/Romanian Society for Biomaterials (SRB)
- 2008-2012, (Co-)Establisher & National representative of Romanian Young Scientist Forum (YSF)- SRB
- 2009-2017, Secretary of Young Scientists Forum (YSF) - European Society for Biomaterials (ESB)
- Conference & Symposia organiser e.g. Conference Chair - Workshop Young Scientists Joining Forces for Excellence in Biomaterials Research, May 2015, Bucharest; Conference Co-chair 7th International Conference "Biomaterials, Tissue Engineering & Medical Devices" BIOMMEDD'2016, Constanta, 2016; Young Scientist Forum BiomMedD'2010 Sinaia, BIOMMEDD'Bucuresti 2008, BiomMedD'2012, Young Scientist Forum ESB2010, focusing on biomaterials education, scientific writing, career, and collaborative projects for young researchers.

Supervision and Mentorship: Currently, Prof Stancu is supervising and co-supervising 7 PhD, 10 MSc and 7 BSc students. Since 2004, she has successfully co-supervised 10 PhD and supersized 21 MSc students, 51 BSc students and more than 80 Erasmus+ students. From 2018 Prof Stancu acts as tutor for Smart Biomaterials and Applications master progr. She acts as scientific advisory board member (GEROM/Univ. Angers), evaluation committees member and opponent at PhD theses (KTH Royal Institute of Technology, Univ Bergen, Univ degli Studi di Genova, University Ghent)

Publications: list at https://scholar.google.com/citations?user=A1FfmKYAAAAJ ; ORCID: http://orcid.org/0000-0003-0685-3947 .

Expert MSCA, FWO, UEFISCDI; CNSC/UEFISCDI scientific officer

Research grants: Prof Stancu's research activities are supported by the Romanian Executive Agency for Higher Education, Research, Development and Innovation Funding, Research Council of Norway, and European Union funding and industrial collaboration (in the last 4 years ~700 000 €). In addition, 2016-2020, INOVABIOMED ~13 500 000 € for research infrastructure

FACULTY OF SCIENCES

DEPARTMENT OF ORGANIC AND MACROMOLECULAR CHEMISTRY
POLYMER CHEMISTRY AND BIOMATERIALS GROUP

Sandra Van Vlierberghe
Professor Doctor

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Ghent University
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9000 Ghent
Belgium

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ESB council

Ref.: Letter of application of the nominee

Dear ESB council members,

Via this way, I would like to apply for the ESB council elections 2025. During the past years, I have been active in polymer-based biomaterial development of which some developments resulted in IP filing and spin-off launches (one on bioinks for biofabrication purposes – BIO INX (https://bioinx.com/) - and one on a gelatin-based filler serving breast reconstruction – 4Tissue (https://www.4tissue.com/)). I therefore have experience both with research and translational aspects of biomaterials. I am currently supervising 22 PhD students and 5 post-docs. In addition, I am active as board member of several national (Belgian Society for Tissue Engineering, Ghent Advanced Therapies and Tissue Engineering) biomaterial-related initiatives and I am former EU-TERMIS council member (2 terms). During my past term serving on the ESB council - initially as ESB communication officer and conference liaison officer - we initiated the make-over of the ESB website which now incorporates interesting features to showcase the expertise and background of all ESB members. In addition, a search engine was introduced providing the possibility to our community to efficiently identify potential partners to participate in e.g. collaborative projects. Last year, I took up the role as ESB secretary and via this way, I would like to express my interest to continue in this role and serve a second term on the council. During the past year, together with the ESB President, we have strengthened international ties by reaching out to e.g. the Chinese Society for Biomaterials and I am convinced that we should further intensify

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POLYMER CHEMISTRY AND BIOMATERIALS GROUP

collaborations across the globe. I believe that my ongoing international collaborations (Prof. Shin, South-Korea; Prof. Lim, Australia; Prof. Taylor, US; etc.) will form a solid base to realize this. I also very much look forward to brainstorm about and launch new initiatives in support of the ESB community. Together with Prof. Bloemen and Prof. Geris, I am also hosting the Annual ESB Congress in 2026 in Antwerp (Belgium) since I always have very much enjoyed attending ESB conferences – ESB in 2005 Sorrento was in fact the first international conference I attended as a PhD student. In the past, I have also been very active in YSF (first as national chapter representative and afterwards as spokesperson).
ESB has given me countless opportunities for collaboration and has also fostered meaningful friendships. As an inclusive community, it has been a privilege to be part of it, and I hope to continue contributing in my current role on the council.

Yours sincerely,

Sandra Van Vlierberghe

Summary CV - Sandra Van Vlierberghe

Family name, First name: Van Vlierberghe, Sandra
Researcher unique identifier (ORCID): 0000-0001-7688-1682
Date of birth: 10/07/1981
Nationality: Belgian

Affiliation:
Polymer Chemistry & Biomaterials Group
Centre of Macromolecular Chemistry
Department of Organic and Macromolecular Chemistry
Ghent University
Krijgslaan 281, S4-Bis
9000 Ghent
Belgium
Email: Sandra.VanVlierberghe@ugent.be
Phone: 003292644508
*URL for website:*https://pbmugent.eu/

Professional Background:

- PhD Sciences, Chemistry "*Cell-interactive biopolymer-based hydrogels designed for tissue engineering*" (2008, Department of Organic and Macromolecular Chemistry, Ghent University, Belgium, Supervisor Prof. Em. E. Schacht)
- Research Professor and Group Leader, Polymer Chemistry & Biomaterials Group, Ghent University (Belgium) (since 2017)
- Guest Professor at Vrije Universiteit Brussel (10%)
- Invited Professor at U. Lille (France) (2016-2017)

Research Contributions:

- Expert in photo-crosslinkable (bio)polymers and advanced 3D printing techniques for tissue engineering and regenerative medicine
- Published over 300 Web of Science papers in (bio)materials- and polymer-related journals such as Biomaterials, Acta Biomaterialia, Biomaterials Science, Biomaterials Research, Advanced Materials, Advanced Functional Materials, etc.
- h-index of 53 (WoS) with >11,000 citations
- Supervises 22 PhD students (plus 25 defended PhDs) and 5 postdoctoral researchers
- Edited 3 books, authored 7 book chapters (5 invited), and presented at >30 international conferences as an invited/keynote/plenary speaker

Entrepreneurship & Industry Impact:

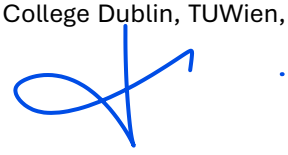
- Co-Founder and scientific advisor of BIO INX, commercializing bioinks for 3D bioprinting (Startup of the Year 2023 by 3Dnatives)
- Co-Founder and scientific advisor of 4Tissue, developing photo-responsive gelatin for breast reconstruction

Recognitions & Leadership:

- Jean Leray Award (2017), European Society for Biomaterials
- Chair of the European Society for Biomaterials Annual Conference in 2026 (Antwerp, Belgium)
- Member of multiple editorial boards and evaluator for international research funding bodies
- Secretary of European Society for Biomaterials (ESB); Board member of Fernand Lazard Foundation, Beautiful After Breast Cancer Foundation; Treasurer of Belgian Polymer Group; Secretary of Belgian Society for Tissue Engineering; Former council member of EU-TERMIS.

Collaborations:

- Active collaborations with leading global institutions (Trinity College Dublin, TUWien, Hanyang Univ., Osaka University, UC Berkeley, ULaval and others)



Helmholtz-Zentrum
hereon

Helmholtz-Zentrum Hereon | Max-Planck-Straße 1 | 21502 Geesthacht, DE

To all Members of the ESB

Institut für
Metallische Biomaterialien
Institute of
Metallic Biomaterials

www.hereon.de

Leitung | Director
Prof. Dr. rer.nat.
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regine.willumeit@hereon.de

Application for Election to the ESB Council –
Prof. Dr. Regine Willumeit-Römer

Dear Members of the ESB,

It is with great enthusiasm that I submit my application for the election to the ESB Council. With a longstanding dedication to biomaterials research and a strong commitment to fostering collaboration and innovation, I am eager to contribute to the strategic development of the ESB and support its mission.

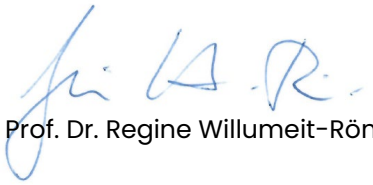
I hold a degree in physics and a habilitation in biochemistry from Hamburg University and have been actively engaged in biomaterials research for nearly two decades. My expertise spans from antimicrobial agents to the development of degradable metallic implants and my work has been disseminated through more than 300 publications and involvement e.g. in the coordination of several biomaterials-related European Marie Skłodowska-Curie Networks. In my current roles as Acting Scientific Director of the Helmholtz-Zentrum Hereon and Professor at the Faculty of Engineering at Kiel University, I strive to bridge fundamental research with innovative applications that benefit both academia and industry.

Beyond my research, I have been deeply involved in scientific community activities. I have played a key role in the German Society for Biomaterials (DGBM), including organizing the DGBM Annual Meeting in Hamburg, and I serve as a member of the Review Board for Biomaterials of the German Science Foundation (DFG). My engagement with the ESB community has been longstanding, with active participation in ESB meetings and European collaborations that drive scientific progress and interdisciplinary partnerships.

If elected, I will bring a clear vision for strengthening the ESB's impact by promoting knowledge exchange, supporting young researchers, and fostering stronger industry-academia collaborations — an area that is central to my work at Hereon. I am eager to contribute my experience, leadership, and passion to the ESB Council and help shape the future of our field.

I would be honored to have your support in this election and welcome any opportunity to discuss my candidacy further. Please find my resume attached for your review.

Sincerely,



Prof. Dr. Regine Willumeit-Römer

Resume Prof. Dr. Regine Willumeit-Römer

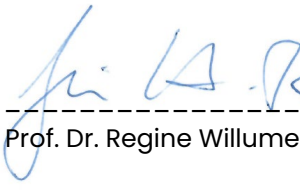
I obtained a PhD in physics for the structural characterization of ribosomes (University of Hamburg) by utilization of spin-dependent neutron scattering, an approach which gave me the chance to also work at CERN, Geneva, Switzerland. My habilitation and *venia legendi* in biochemistry about the structure-function relationship in ribosomes were also obtained from the University of Hamburg. While working at the Helmholtz-Zentrum Hereon (former Helmholtz-Zentrum Geesthacht, HZG) and being appointed professor for structural biology in Hamburg, I became Head of the Department "Macromolecular Structure Research" at the Helmholtz-Zentrum Hereon. My field of research broadened from ribosomal structure research towards membrane active peptides, so-called peptide antibiotics. This was the bridge towards implant research, which has been my central research topic for the last two decades until today. While antimicrobial coatings of permanent metallic implants from Titanium had been in the focus of the first few years as Head of Department, research on biodegradable Magnesium-based implant materials took over. I extended my investigations from material design and optimization of the degradation of the materials by including especially the biological impact of metal ions on complex cell culture systems and small animal studies. Multimodal and correlative imaging of material and tissue is – among other sources – the basis for the latest development: the inclusion of simulation, modeling and AI for digital implant research.

I have published 369 peer-reviewed papers (H-Index 59, WoS March 2025), supervised 40 PhD students and coordinated several large European projects, e.g. three Marie Skłodowska-Curie training networks for different aspects of biomaterials research.

Since 2014 I have been full Professor at the University of Kiel, Faculty of Engineering, for the field "Biological Interfaces of Implants". In 2015, I became Director of the "Institute of Metallic Biomaterials" at Hereon and in 2024, I was promoted to the Acting Scientific Director of the Helmholtz-Zentrum Hereon.

I am an active member of the German Society for Biomaterials (DGBM) and was secretary of the Society from 2010–2016. As member of the DGBM board I represented the DGBM in several ESB board meetings. I have been and I still am on several SABs of national or international institutions working on biomaterial development. In 2024, I was elected member of the Review Board for Biomaterials of the German Research Foundation (DFG).

Hamburg, 09.03.2025



Prof. Dr. Regine Willumeit-Römer