

**Prof. Dr. Aleksandr Ovsianikov**

Head of the Research Group 3D Printing and Biofabrication  
at the TU Wien (Technische Universität Wien)  
Founder and CSO of UpNano GmbH  
Vienna, Austria

E-Mail: [Aleksandr.Ovsianikov@TuWien.ac.at](mailto:Aleksandr.Ovsianikov@TuWien.ac.at)  
[Aleksandr.Ovsianikov@UpNano.com](mailto:Aleksandr.Ovsianikov@UpNano.com)

WWW: <https://www.tuwien.at/koop/amt/Ovsianikov>  
<https://www.upnano.com>

ORCID: [0000-0001-5846-0198](https://orcid.org/0000-0001-5846-0198)  
<https://www.linkedin.com/in/aleksandr-ovsianikov-58187712>



I am active in research on biomaterials, tissue engineering and biofabrication for over 15 years now. As a PhD student I had an honor to attend one of the first meetings preceding the ISBF - the International Conference on Bioprinting and Biofabrication (2009 Bordeaux, France) and have been engaged in the field ever since. Our review “Bioink properties before, during and after 3D bioprinting”, published in cooperation with scientists from Belgium and USA, still enjoys sustained listing as one of the most read articles in the journal of Biofabrication. Among the more recent highlights, published in collaboration with scientific groups active in this domain, is an opinion article “Breaking the resolution limits of 3D bioprinting” published in Trends in Biotechnology and “3D Bioprinting in Microgravity: Opportunities, Challenges, and Possible Applications in Space” perspective published in Advanced Healthcare Materials. Together with Prof. Vladimir Mironov and Prof. James Yoo we have initiated and edit a living book project “[3D Printing and Biofabrication](#)” published by Springer in close cooperation with the Tissue Engineering and Regenerative Medicine International Society ([TERMIS](#)).

The major research topics of my team at the TU Wien include Biofabrication, High-Definition Bioprinting, Photosensitive Bioinks, Tissue Engineering and Organ-on-a-Chip Development. I have been awarded prestigious Starting Grant in 2012, Proof of Concept Grant in 2016 and a Consolidator Grant in 2017 from the European Research Council ([ERC](#)) for projects aimed at these topics. Our spin-off company [UpNano](#) commercialized the first laser-based bioprinter with subcellular resolution and has also been [supporting](#) the International Society for Biofabrication financially for a few years now. In addition to ISBF, I am a member of the Austrian Cluster for Tissue Regeneration, European Society for Biomaterials, TERMIS and the Institute of Electrical and Electronics Engineers. In addition, I am a member of ESA (European Space Agency) Topical Team on “3D Bioprinting of living tissue for utilisation in space exploration and extraterrestrial human settlements”.

As a member of ISBF BOD and External Affairs Committee I have been actively promoting the field by reading lectures and giving invited talks and organizing ISBF-endorsed biofabrication sessions at international meetings. For example, I am an active member of a thematic group Biofabrication at TERMIS and co-organized symposia at TERMIS World Congress 2021 (Maastricht, Netherlands), upcoming TERMIS AP 2023 (Hong Kong) and submitted proposals for TERMIS World Congress 2024 (Seattle, USA). Furthermore, our symposia proposals were accepted for the upcoming ESB meeting 2023 (Davos, Switzerland) and World Biomaterials Congress 2024 (Daegu, Korea).

At the 2022 ISBF annual meeting in Italy I have initiated, organized and chaired a highly successful [founders' session](#) featuring the talks and a panel discussion from the Biofabrication pioneers.

To summarize, my background fits well the ISBF aims to promote advances in Biofabrication research, as well as the interaction between different disciplines, scientific organizations and communities. I am confident that my scientific enthusiasm and organizational skills would be a valuable asset for the ISBF. In case my application is successful, I will be happy to join one of the ISBF committees or assume another responsible position. By becoming the member of the ISBF board I am hoping to actively contribute to the further success of this organization and the biofabrication community as a whole.