

## BIOGRAPHY

### LJILJANA FRUK



Ljiljana is an Associate Professor of Bionano Engineering at the Department of Chemical Engineering and Biotechnology. She studied chemistry at the University of Zagreb, obtained PhD in biospectroscopy from University of Strathclyde, Glasgow (2000-2004), and worked on DNA structuring and enzyme reconstitution as a Humboldt and Marie Curie fellow at the University of Dortmund, Germany (2004-2008). Prior to joining Department of Chemical Engineering and Biotechnology, she led a research group at Karlsruhe Institute of Technology (Germany, 2009-2014).

Her research is focused on design of biocompatible hybrid materials for use in photocatalysis/sustainable manufacturing, and nanomedicine, particularly for drug delivery to hard-to-treat cancers, and early detection of cancer. Her group pioneered use of photo-click chemistry for nanomaterial functionalization and development of organic contrast agents for aged (senescent cells).

Ljiljana is an active science popularizer, art-science curator, and the co-author of the field-establishing *Molecular Aesthetics* book (MIT Press 2013), and the first textbook on Bionanotechnology (Cambridge University Press 2021). She is one of the co-founders of Senesys Bio, Cambridge spin out working on development of therapies for aged (senescent cells).