Short biography:

Esma Ismailova is a Professor in Bioelectronics at MINES Saint-Étienne, part of the Institut Mines-Télécom in France. She obtained a PhD in Chemistry and Chemical Physics from the University of Strasbourg, France, in 2009. Her doctoral work was supported by a CIFRE fellowship with STMicroelectronics, focusing on photosensitive materials for the next generation of microelectronics. She earned her Habilitation to Supervise Research (HDR) in engineering sciences in 2018. She worked as a postdoctoral researcher at the Laboratory for Organic Electronics at Cornell University (USA), where she explored interfaces between biology and organic electronics. Since 2012, she has been a permanent faculty member of the Bioelectronics Department (BEL) at the Centre Microélectronique de Provence, MINES Saint-Étienne, where she leads the "Bioelectronic Textiles and wearable devices" research group, which focuses on integrating organic electronic materials into textiles for health monitoring and wearable sensing systems. Her research interests include designing smart devices and fabrics that can sense physiological signals. Her work bridges materials science, microfabrication, and healthcare technology, aiming to produce implantable and wearable systems that can continuously and ergonomically monitor health. Projects under her leadership include developing smart bioelectronic devices that enable multimodal health data collection, essential to advance preventive medicine and personalised health monitoring.