

Tsukuru Minamiki Ph.D. (Japan)

Research Scientist, Health and Medical Research Institute, National Institute of Advanced Industrial Science and Technology (AIST), Japan

PRESTO Researcher, Japan Science and Technology Agency (JST), Japan

Tsukuru Minamiki was born in 1990 in Hokkaido, Japan. He received his Ph.D. in organic materials science from Yamagata University (Japan) under the direction of Professor Shizuo Tokito in 2016. He started his academic carrier as a JSPS Postdoctoral Research Fellow at the University of Tokyo, working with Associate Professor Tsuyoshi Minami. He has been a Research Scientist at National Institute of Advanced Industrial Science and Technology (AIST) since 2018. He has also been a PRESTO Researcher at Japan Science and Technology Agency (JST) since 2021. His major research topics are the development of on-site chemical sensing platforms based on molecular assembly/recognition chemistry (2-5) and molecular electronics (1,6).

Research interest: To prevent the outbreak and spread of infections, it is crucial to perceive the health status of each person. Toward this end, this project aims for the realization of a “daily” medical examination by developing an on-site multi-sensing device for the simultaneous determination of various biomarkers. The aim of one of his research motivations is to establish the fundamental technology for effective prevention of future pandemics through the development of the sensing platform to supplement infection surveillance and manage personal health at home.

Selected publications:

1. Minamiki T, et al., **Comms. Mater.** 2021 ; Vol. 2 : 8.
2. Minamiki T, et al., **Sensors** 2020 ; Vol. 20 : 2228.
3. Minamiki T, et al., **ChemistryOpen** 2020 ; Vol. 9 : 573.
4. Minamiki T, et al., **ACS Appl. Mater. Interfaces** 2020 ; Vol. 12 : 15903.
5. Minamiki T, et al., **Anal. Methods** 2019 ; Vol. 11 : 1155.
6. Minamiki T, et al., **Anal. Sci.** 2019 ; Vol. 35 : 103.