

DR. ALAIN WAGNER,
Directeur de Recherche, CNRS, Illkirch Cedex France
University of Strasbnourg
UNISTRA – Laboratoire de conception et application de molecules bioactives

## PRESENTATION TITLE: Bioconjugation and more in the field of Antibody Drug Conjugate

**ABSTRACT:** Continuous success of antibody drug conjugates put on the market demonstrates the considerable therapeutic potential of this approach. However, it also reveals huge opportunity for improvement and innovation. Many of these rely on the understanding and control tight of chemical bond forming and bond breaking processes in defined biological environment. In this context, we have carried studies with the aim to reach better ADC by to improving bioconjugation efficacy, controlling payload liberation and combining payloads with complementary mode of actions. Examples of our strategies, findings and current thought will be presented.

**BIOGRAPHY:** Alain Wagner is Director of Research at the CNRS and heads the BioFunctional Chemistry team of the UMR 7199 at the Faculty of Pharmacy in Strasbourg. He is interested in manipulating living systems through the use, in situ, of chemical reactions capable of operating in complex biological media. His work particularly focusses on development of cleavable linkers and payloads with new or combined mode of action for safer Antibody Drug Conjugate (ADC). Alain also pioneer a microfluidic technology allowing for the analysis and sorting of large population of single cells on the basis of their secretory activity. In 2021 Alain co-founded MicroOmiX s start-up developing advanced single cell R&D in the field of antibody and cell-based product development. Combining research and technology transfer Alain is author of more than 160 peer reviewed publications, inventor of 30 patents and co-founder of 5 start-ups.