Caroline Tokarski

Professional achievements: Since 2006 Caroline Tokarski is assistant Professor in Lille University. She has defended her habilitation for research direction in 2012. In this framework, she leads local, national and international projects with academic and industry organizations. Beyond her teaching responsibilities, she is the study Director of the Bioanalytics' specialty of the Chemistry and Biology Master (since 2010). Since 2008, she leads jointly the Proteomic platform of Lille (IBISA label) and she is the scientific responsible of the Lille TGE FT-ICR platform. Since 2012, she is the head of the USR CNRS 3290 unit MSAP. In 2012, Caroline Tokarski was nominated member of the CNRS national committee (section 12); and in May 2014, she was nominated member of the Institut universitaire de France. Her research works were awarded by the French Chemical Society (Analytics division, 2011).

Current scientific activity: Her research activities focus on methodological developments for analysis of proteins, lipids and carbohydrates from native or transformed biological samples. A first part of her activities proposes new analytical tools for proteomics as highly sensitive protein stains or gel electrophoresis matrix adapted to separation of proteins with particular physico-chemical properties. A second part of her activities is related to methodological developments based on very high resolution FT-ICR mass spectrometer. She developed a new analytical method allowing for the first time the precise identification of proteins and triacylglycerols from historical samples, but also the identification of their biological origins and their modifications linked to ageing and environment. This methodology is actually used in the world-famous museums (e.g. Harvard Art Museum). Otherwise, her collaboration work is focused on identification of complex biological structures or characterization of proteins from non-sequenced species.