**Visible light photoredox catalysis as a tool for organic synthesis**

We develop new catalytic methods that engage novel reactivity concepts to enable the rapid generation of complex organic molecules using e.g. novel enantioselective processes, especially organocatalytic reactions with chiral phosphoric acids as well as cinchona alkaloid derivatives.\[1-3\] We are Furthermore, we study novel processes using photoredox catalysis.\[4\] In this Liebig Lecture, I will discuss novel photoredox domino processes allowing to access in a single synthetic operation to complex and highly functionalized building blocks, useful in organic synthesis.\[5\]


Géraldine Masson obtained her PhD in 2003 from the Joseph Fourier University (Grenoble), working with Dr. Sandrine Py and Prof. Yannick Vallée After a Marie Curie postdoctoral stay with Prof. Jan van Maarseveen and Prof. Henk Hiemstra at the University of Amsterdam (Holland), she was appointed as CNRS researcher in the group of Prof. Jieping Zhu at the Institut de Chimie des Substances Naturelles (Gif-sur-Yvette) in 2005, before initiating her independent career in 2011. Geraldine was promoted to Director of Research in 2014 and is currently Head of the Exploratory Chemistry department at ICSN. She was awarded the Diverchim Prize in 2011 (Prize for Innovation), the CNRS bronze medal in 2013 and Japan Society for Promotion of Science (JSPS) Fellowship in 2016.