

February 19-20, 2019  
Prague, Czech RepublicEstelle Banaszak Léonard et al., J Org Inorg Chem 2019, Volume: 5  
DOI: 10.21767/2472-1123-C1-020

## CAN INNOVATIVE CHEMICAL TECHNOLOGIES IMPROVE RADICAL CHEMISTRY?

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Radical chemistry is of great interest in many chemical areas, such as medicinal chemistry, material chemistry or polymers, or even formulation, in order to understand and prevent radical disorders. However, despite the lasting interest in performing radical syntheses, the use of innovative techniques for a more eco-friendly approach remains occasional. We will focus on examples showing how natural products can undergo radical transformations under innovative techniques. It will be shown that the combination of uncommon energetic devices with greener solvent can shorten reaction times, or even promote the envisioned reaction. By using aromatic aldehydes, (un)modified amino acids or fatty acids, the molecules from such radical processes can be used in a wide range of applications. Biocides, surfactants, electron-transfer materials or even synthons are real options for molecules valorization.

### Biography

Estelle Banaszak-Léonard has received her PhD from Lorraine University in Polar Organometallic Field. Then, she moved to Birmingham (UK) University for her first Postdoctoral position, followed by a second one in Le Mans University, where she began to study azobenzenes for the CNRS Center. Since 2008, she is serving as an Assistant Professor in ESCOM/TIMR in Compiègne and in charge of the Organic Team from 2017.

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