

**CIRCULAR CHEMISTRY, STERIC ATTRACTION AND PHOTOINDUCED  
SINGLE-ELECTRON TRANSFER:  
NEW ADVENTURES IN MAIN-GROUP CHEMISTRY**

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In this lecture, I will introduce Circular Chemistry as a new concept,<sup>[1]</sup> discuss the 12 principles of circular chemistry and highlight these important concepts with appealing examples aiming at making chemical processes and production cycles truly circular.

After this holistic view on chemistry, I will focus on our bottom-up approach using the complete physical organic chemistry toolbox and highlight our new adventures in main-group chemistry for the activation and functionalization of small molecules using steric attraction and photoinduced single-electron transfer.

**REFERENCE**

[1] T. Keijer, V. Bakker, J. C. Slootweg, *Nature Chem.* **2019**, *11*, 190