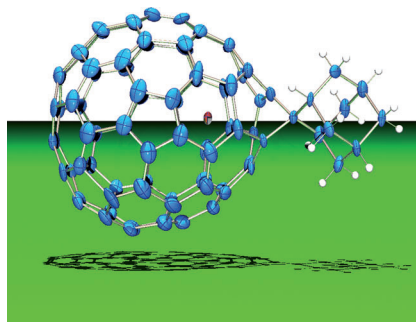


Supramolecular Chemistry

Y. Xie, M. Suzuki, W. Cai, N. Mizorogi,
S. Nagase, T. Akasaka,*
X. Lu* ————— 5142–5145



Highly Regioselective Addition of Adamantylidene Carbene to $\text{Yb}@\text{C}_{2v}(3)\text{-C}_{80}$ to Afford the First Derivative of Divalent Metallofullerenes



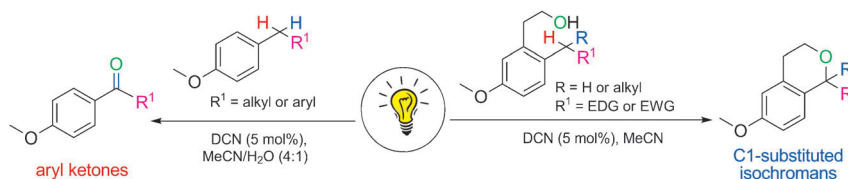
Divalent effect: The compound shown is the sole product in the cycloaddition reaction of adamantylidene carbene with $\text{Yb}@\text{C}_{2v}(3)\text{-C}_{80}$, and is the first derivative of a divalent metallofullerene. An unexpected strain-induced addition pattern and remarkable alterations of the metal position in response to exohedral modification are observed, thus illustrating there is an interplay between the divalent metal ion and the fullerene cage.

C–H Activation

G. Pandey,* S. Pal, R. Laha – 5146–5149



Direct Benzylic C–H Activation for C–O Bond Formation by Photoredox Catalysis



Power of light: 1,4-dicyanonaphthalene (DCN) and light directly activates benzylic C–H bonds for intra- and intermolecular C–O bond formation. Arylalkyls have also

been transformed directly into aryl ketones using water as a source of oxygen. EDG = electron-donating group, EWG = electron-withdrawing group.

DOI: 10.1002/anie.201302562

50 Years Ago ...

Angewandte Chemie International Edition was first published in 1962, the mother journal first in 1888. In this monthly flashback, we feature some of the articles that appeared 50 years ago. This look back can open our eyes, stimulate discussion, or even raise a smile.

Fluorination was already popular 50 years ago, and two Communications on this topic were published in the same issue. P. Sartori discussed how the electrofluorination of gases that are insoluble in liquid HF could be achieved at atmospheric pressure by forcing the gases through the electrolyte from below. Propane, ethane, methane, and hydrogen sulfide were all electrofluorinated by using this procedure to give mixtures of products. Oskar Glemser, Herbert Roesky, and Karl-Heinz Hellberg reported the reaction of chromium

powder with elemental fluorine at high temperature and pressure to produce chromium(V) fluoride and chromium(VI) fluoride as bright-red and lemon-yellow solids, respectively. The compositions of the solids were determined by analyzing the products resulting from hydrolysis. Roesky is in the top two authors who have published the most manuscripts in *Angewandte Chemie* from 1946–2012 (see the recent Review by François Diederich: *Angew. Chem. Int. Ed.* **2013**, 52, 2714).

The Reviews section contained contributions by Herrmann Schmalzried on solid-state reactions between ionic crystals, including oxides, halides, and sulfides, and by Fritz Kröhnke on synthesis using pyridinium salts. The electronic properties of pyridinium cations make them ideal for use in a range of syntheses, including those of quinolizine rings, indole-3-carboxylic acids, and triarylpyrimidines.

[Read more in Issue 5/1963](#)