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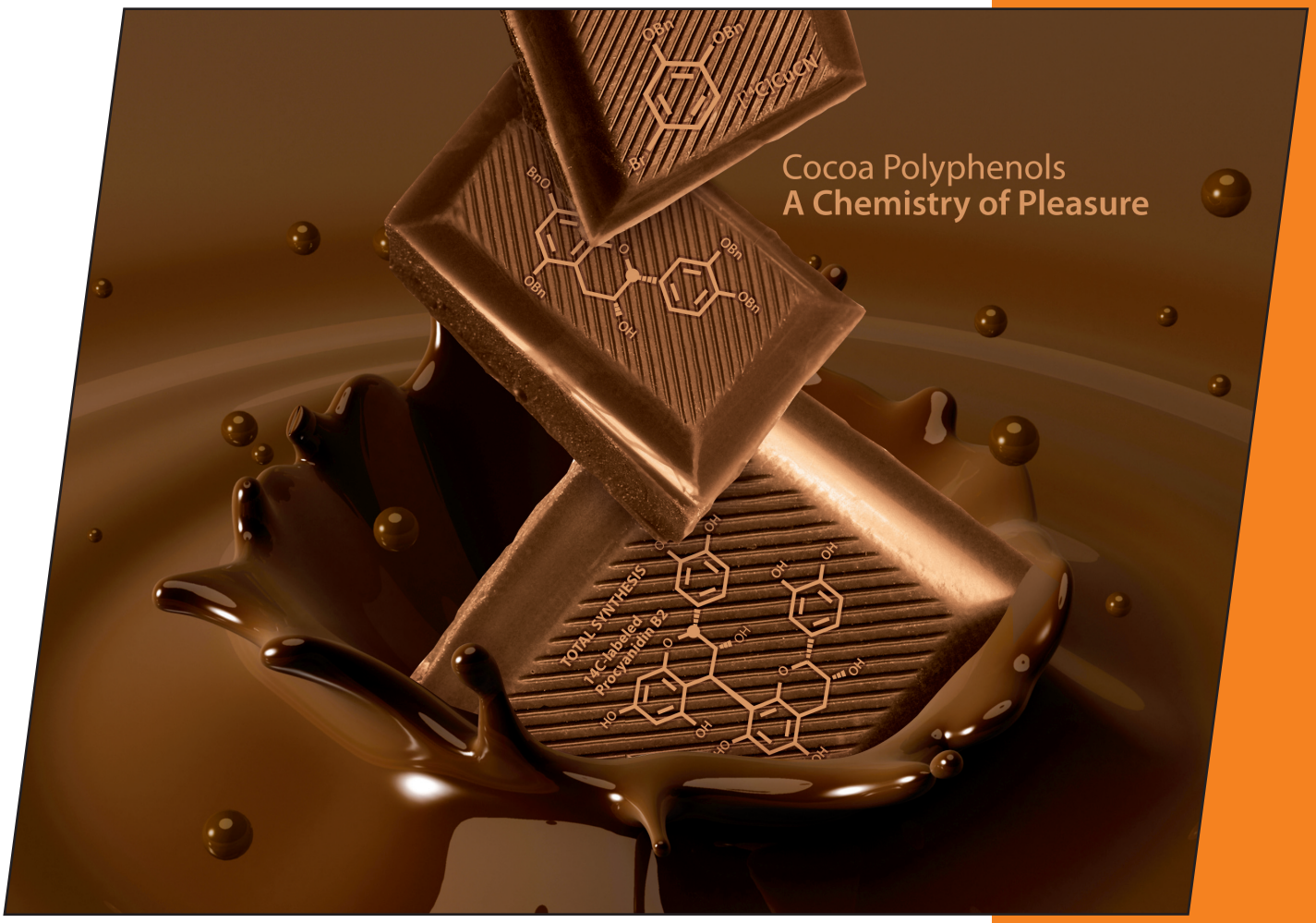

Cover Picture

Denis Barron et al.

First Total Synthesis of ^{14}C-Labeled Procyanidin B2

Microreview

James R. Green

(Cycloheptyne)dicobalt Complexes in Organic Synthesis

WILEY-VCH

INDEX ISSUE

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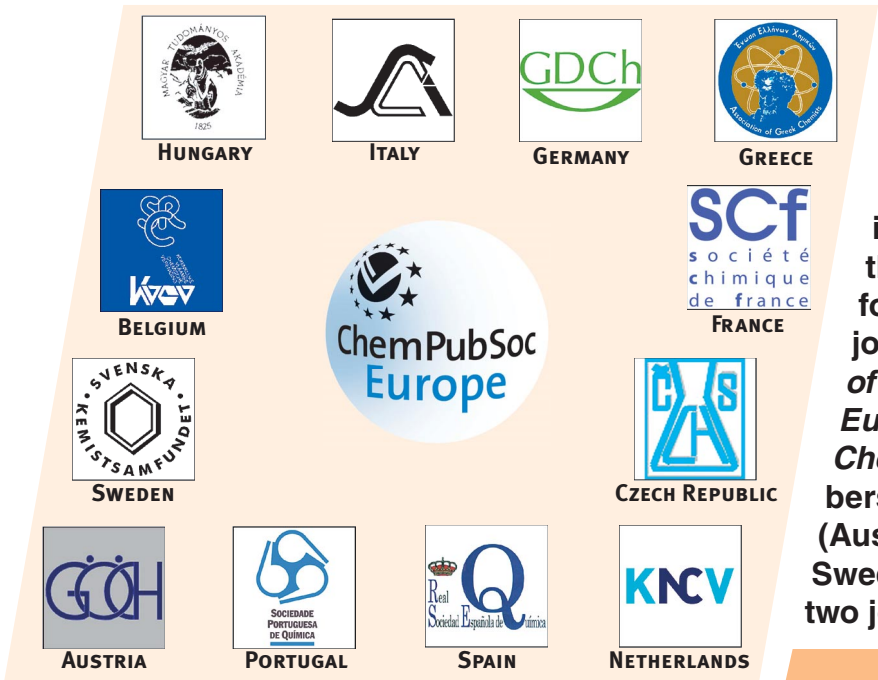

A union formed by chemical societies in Europe (ChemPubSoc Europe) has taken the significant step into the future by merging their traditional journals, to form two leading chemistry journals, the *European Journal of Inorganic Chemistry* and the *European Journal of Organic Chemistry*. Three further members of ChemPubSoc Europe (Austria, Czech Republic and Sweden) are Associates of the two journals.

COVER PICTURE

The cover picture shows the key steps of the first asymmetric total synthesis of procyanidin B2, one of the major dietary polyphenols present in cocoa and chocolate. During the last decades, the health benefits of foods consumed for pure pleasure have received much recognition. Many biological studies have evidenced the beneficial health effects of procyanidins. However, the absorption and metabolism of procyanidins is still not fully understood, and some aspects are still controversial. In order to strengthen this knowledge, the first total synthesis of procyanidin B2 was developed and applied to the preparation of a regioselectively radiolabeled analogue incorporating a ^{14}C label at the 2-position of the upper C-ring moiety. This enantioselective synthesis was achieved in 14 "hot" steps, involving as key steps the Sharpless dihydroxylation of an elaborated alkene, a stereoselective intramolecular cyclization and the condensation of two (−)-epicatechin units. The radiolabelled procyanidin B2 obtained through this reaction pathway will be used in bioavailability studies. Details are discussed in the article by D. Barron et al. on p. 6069ff. The authors acknowledge Tonic Life Communications for the design of the cover page and the European Union 6th Framework project "FLAVO" for partial support of this research work.