In this Synlett Cluster, we are delighted to celebrate new developments by highlighting some new ‘metathesis reactions beyond olefins’ reported by leading authors in this field of research. The diversity of bonds (e.g., C–S, C–O, C=O, M–X) involved in this cluster as well as the diversity of applications considered (organic synthesis, organometallic synthesis, polymer chemistry and supramolecular chemistry) clearly highlight the untapped potential of this research area.

Metathesis beyond Olefins

Trithioorthoester exchange

Trithioorthoester metathesis

Acetal metathesis

H. Naka

A. Naraoka

S. A. Miller

A. G. Pemba

M. von Delius

R. L. E. Furlan

Bill Morandi
Guest Editor
ETH Zurich, Switzerland

Benjamin List
Editor-in-Chief
Max-Planck-Institut für Kohlenforschung, Germany
RuCl/I

Cl/I

N

N

Cl/I

+ –

easy to produce but ill defined

valuable catalyst

AgCl (1.1 equiv)

DCM, RT

5 gram scale

K. Grela

A. Kajetanowicz

T. Lambert

G. Oss

T. V. Nguyen

MeS

S

S

Me

Two C-S Bonds Cleavage

Y. Kawashima

Y. Masuya

M. Tobisu

N. Chatani

T. Kodama

iodonium-catalyzed carbonyl–olefin metathesis

Carbonyl-olefin metathesis

[3+2]X+

hydrazine catalyzed