Ahmad El-Awa, Mohammad N. Noshi, Xavier Mollat du Jourdin, and Philip L. Fuchs.

Evolving Organic Synthesis Fostered by the Pluripotent Phenylsulfone Moiety (Chem. Rev. 2009, 109, 2315.)

Page 2345. Regretfully, a wrong version of Scheme 91 was inserted in the final manuscript. Please consider the following scheme as the final version of Scheme 91:

Scheme 91

Related text should read (p 2345, Lines 10–18):

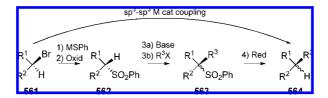
To circumvent the aforementioned lack of reactivity, vinyl sulfones 462, 546, and 554 were converted to vinyl phosphonates 548, 549, 555, and 556 in 69-82% yield using Noshi's conditions (Scheme 85; cf. $511 \rightarrow 516$). Interestingly, ozonolysis of 555 and 556 in CH₂Cl₂/MeOH does not provide aldehyde-methyl esters 559 and 560 but rather gives the easily isolable aldehyde—acyl phosphonates 557 and 558 in near quantitative yield, consistent with the greater stability of acylphosphonates 169 relative to acyl sulfones.

The numbering change caused by the modification above alters the numbering in text and Schemes 92 and 93 as follows.

Related text should read (p 2345 Lines 24–27, p 2346 Lines 1–7):

For example, conversion of generic bromide 561 to phenyl sulfone 562, C-C bond formation to 563, followed by reductive cleavage to 564 has failed to exploit the pluripotency of the phenylsulfone. The overall operation requires an introduction/ removal of the activating function simply to install a single C-C bond (probably without stereochemical control). This limitation is especially obvious in the 21st century, where synthesis of 564 from 561 would likely be achieved by a single metalcatalyzed stereocontrolled operation (Scheme 92).

Scheme 92



Related text should read (p 2346, Lines 8–10):

The cumulative power of the sulfur functionality is nicely illustrated in the synthesis of enantiopure lactone 567 (Scheme 93).

Scheme 93

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