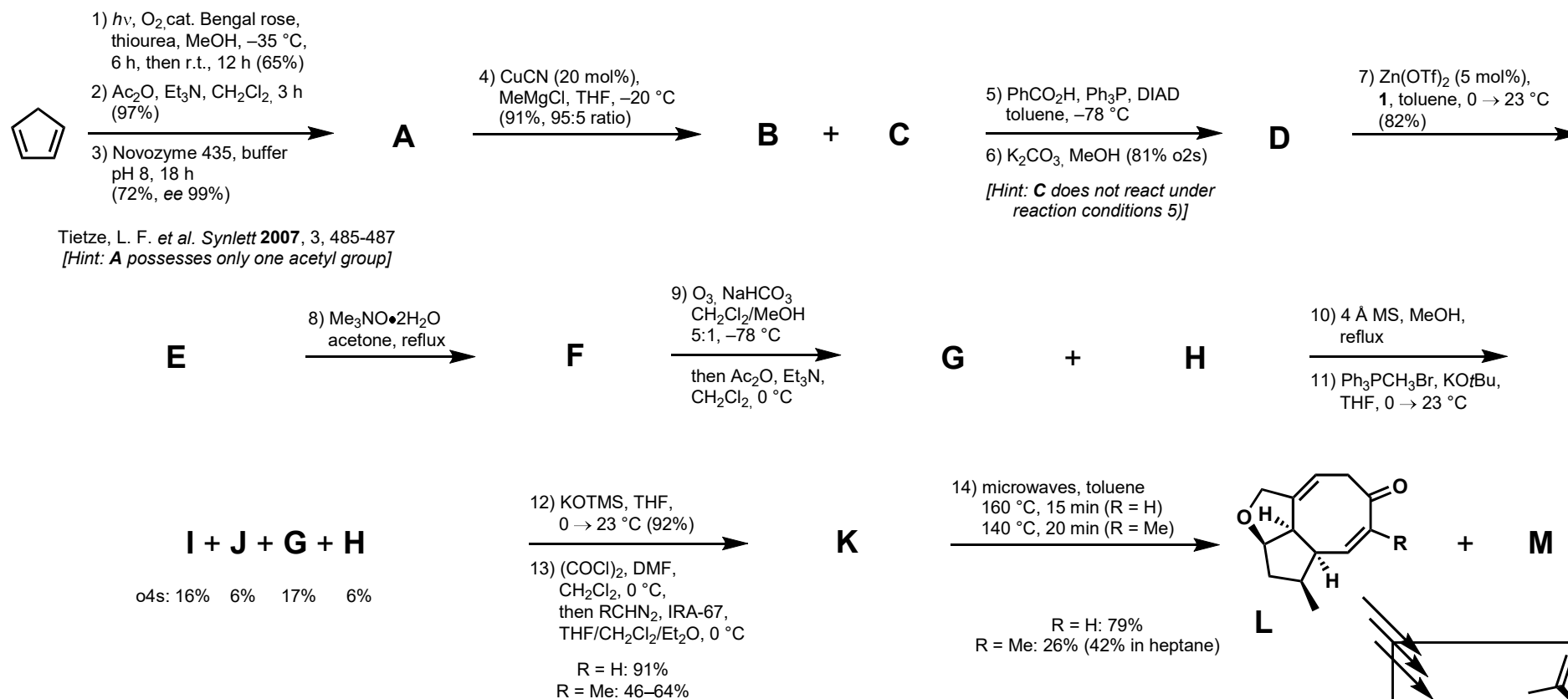


Wolff/Cope Approach to the AB Ring of the Sesterterpenoid Variocolin

06.06.2018

M. R. Krout, C. E. Henry, T. Jensen, K.-L. Wu, S. C. Virgil, B. M. Stoltz, *J. Org. Chem.* **2018**, DOI: 10.1021/acs.joc.7b02972



Two different mechanisms operate competitively with high substrate dependence to give **L** or **M**. The authors speculated that solvent polarity was a plausible parameter to explore (see table).

How would you explain the correlation between solvent polarity and reaction outcome?

[Hint: consider the reactivity of compound **K**]

entry	solvent	dielectric constant (ϵ)	L : M
1	MeCN	37.5	1:4
2	DCE	10.4	1:2.8
3	THF	7.58	1:1.1
4	EtOAc	6.02	1:1.3
5	toluene	2.38	1.1:1
6	1,4-dioxane	2.21	1:1.7
7	methylcyclohexane	2.02	3:1
8	heptane	1.92	3:1

