

Wednesday, Nov. 14, 2007



the man

Edwin Vedejs

Biography

- Born 1941, Riga Latvia
- 1950, Moved to United States
- B.S. 1962, University of Michigan
- Ph. D. 1966, University of Wisconsin (H. Muxfeldt)
- Postdoctoral Fellow 1966-67, Harvard (E.J. Corey)
- University of Wisconsin faculty 1967-1998
- University of Michigan 1999 - present



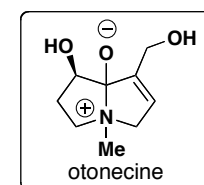
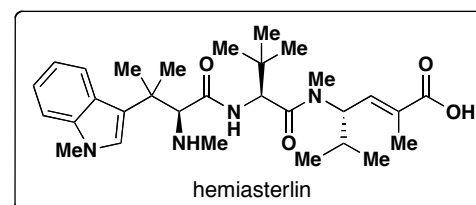
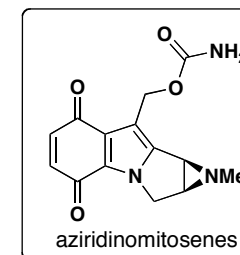
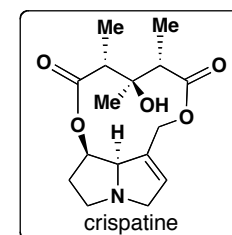
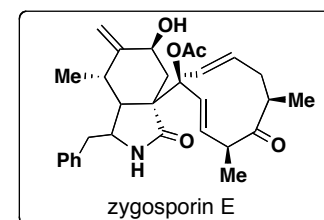
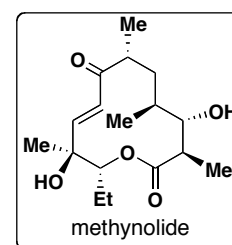
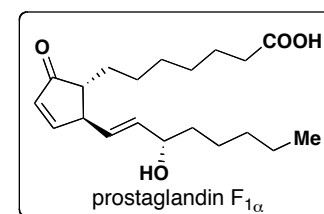
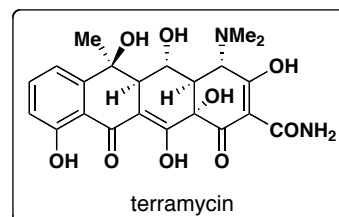
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Honors and Awards

- NSF Fellow 1962-1966
- AFOSR Postdoctoral Fellow, 1966-67
- Lilly Grantee 1970-71
- Sloan Fellow, 1971-1973
- University of Wisconsin Romnes Fellow, 1984
- Alexander von Humboldt Senior Scientist Award, 1984
- Professore a Contratto, University of Bologna, Italy, 1988
- Helfaer Professor, 1991-1996
- Pharmacia & Upjohn Teaching Award, 1996 (Chemistry Dept. UW)
- Robert M. Bock Professor, 1997-98
- Paul Walden Medal, Riga Technical University 1997
- Moses Gomberg Professor of Chemistry, University of Michigan, 1999-
- Chair, ACS Organic Division, 2003
- H. C. Brown Award for Creative Research in Synthetic Methods, 2004
- Grand Medal of the Latvian Academy of Sciences, 2005

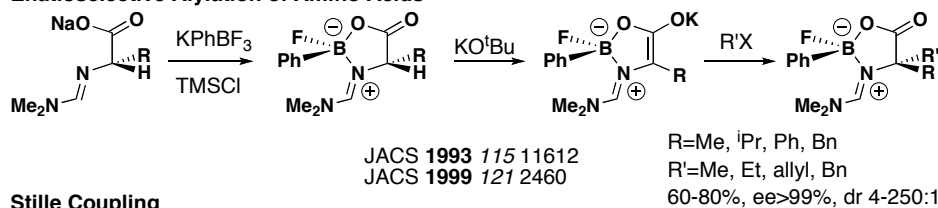


c.v. courtesy of BOS 2006

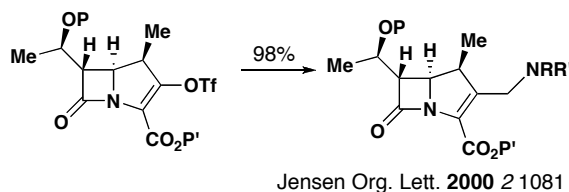
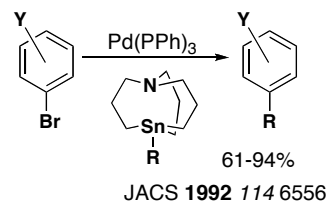


Wednesday, Nov. 14, 2007

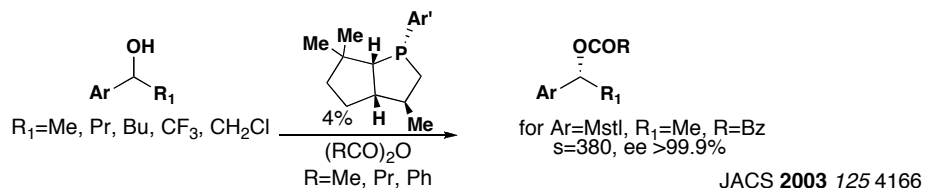
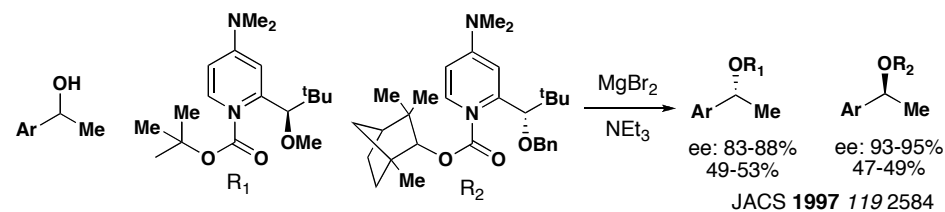
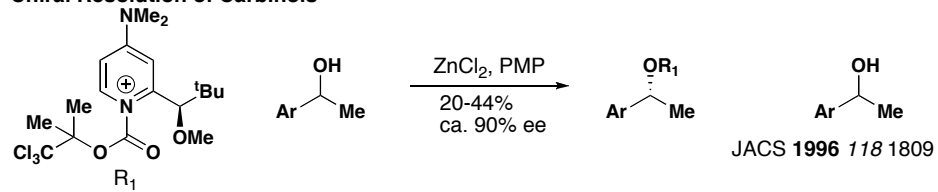
Enantioselective Alkylation of Amino Acids



Stille Coupling

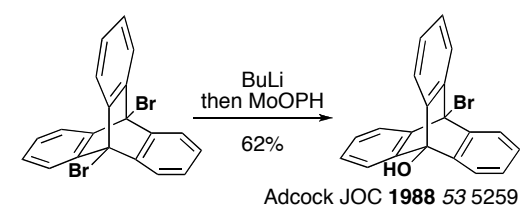
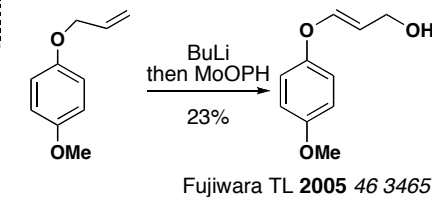
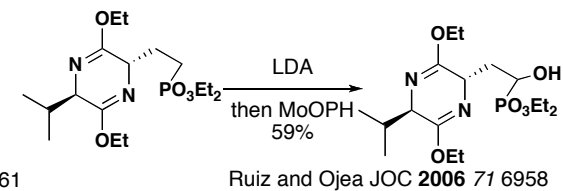
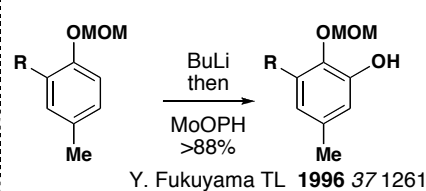
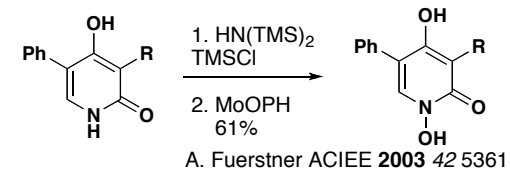
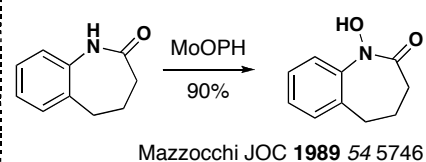
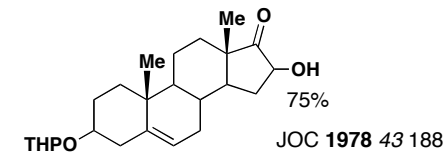
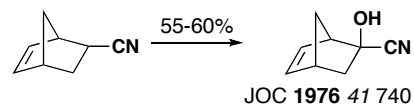
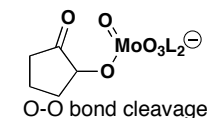
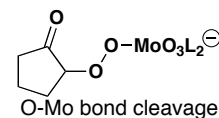
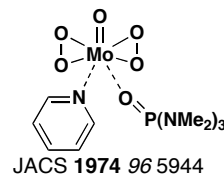


Chiral Resolution of Carbinols

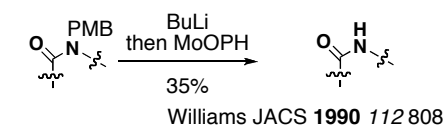


"to pronounce this abbreviation correctly, one must recall that there are five O's in MoOPH"
- E. Vedejs

MoOPH

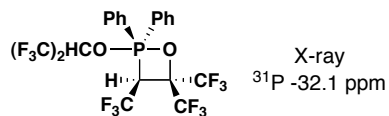
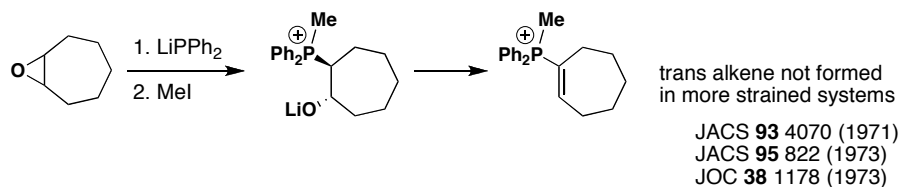
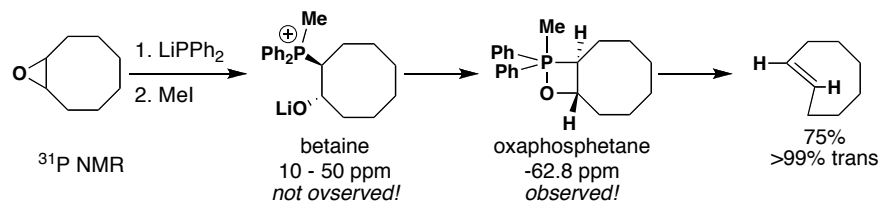


"Additional attempts to deprotect...by dissolving metal reduction, catalytic hydrogenation, acidic solvolysis, boron tribromide, boron trichloride, DDQ oxidation, and photooxidation all met with complete failure to provide even a trace of the desired deprotected compounds."



Wednesday, Nov. 14, 2007

Olefin Inversion by the Phosphorus Betaine Method

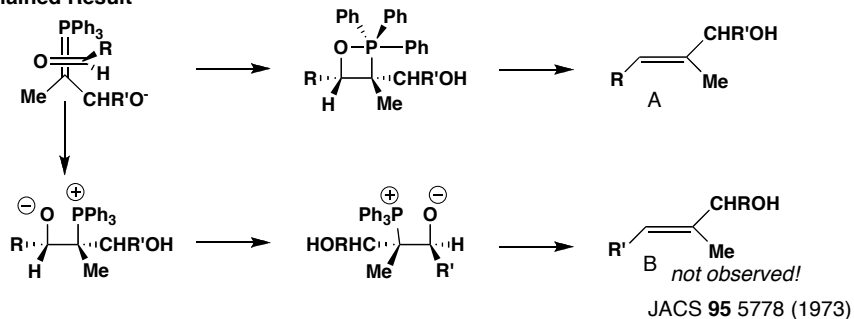


F. Ramirez, *et al.* JACS 90, 6726 (1968)

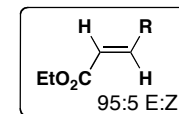
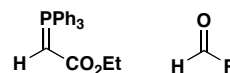
absence of solvent polarity effects on the *cis*: *trans* ratio

food for thought:
 why does the addition of lithium halide salts decrease *cis* selectivity in the Wittig?

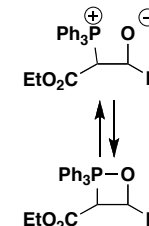
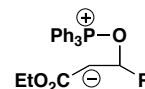
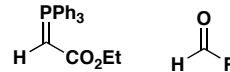
Unexplained Result



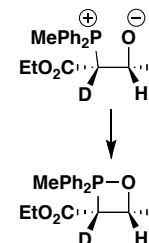
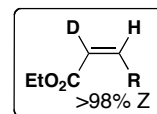
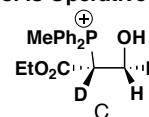
Consider the Wittig Reaction:



Initial Rationale

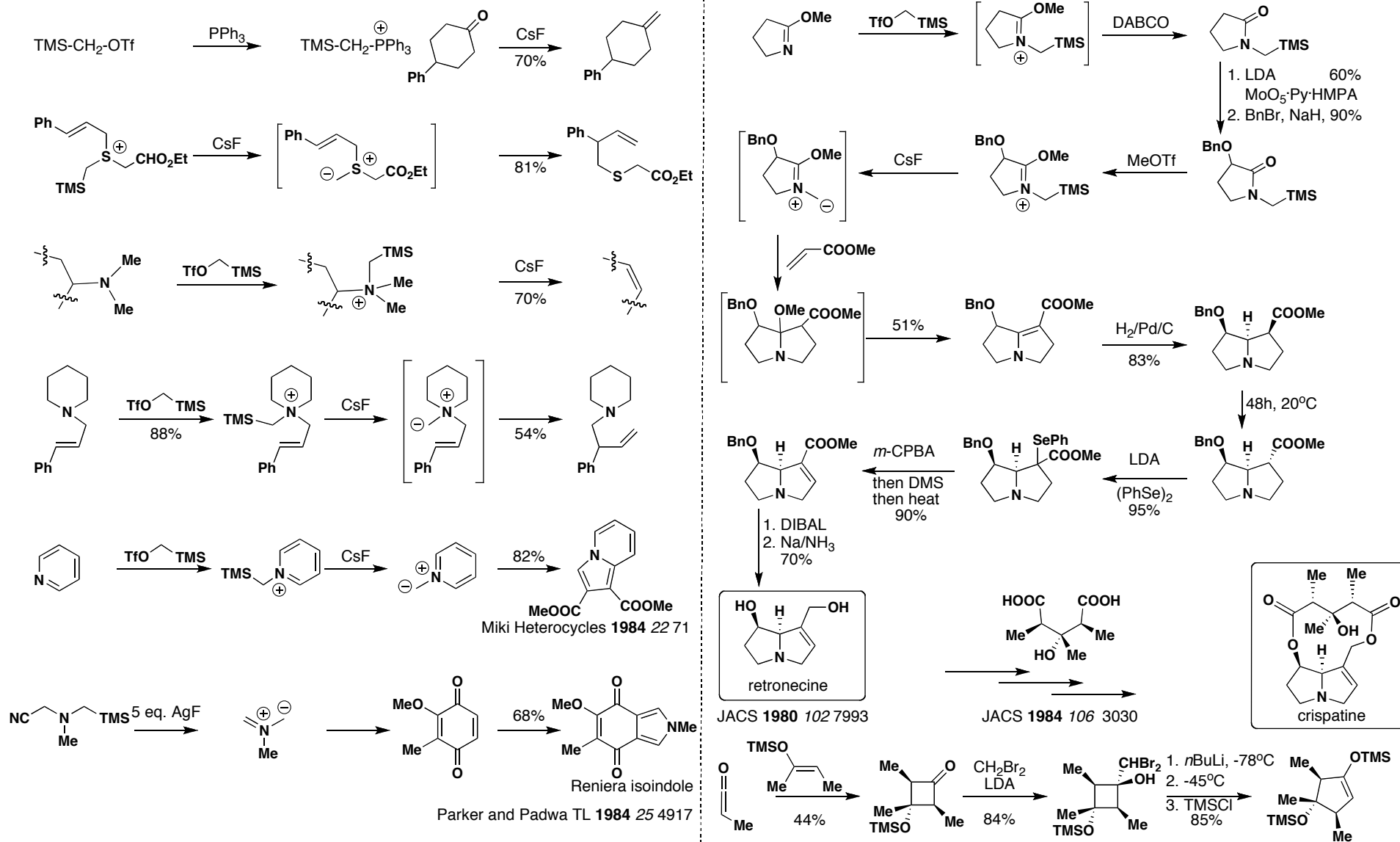


Kinetic Control is Operative

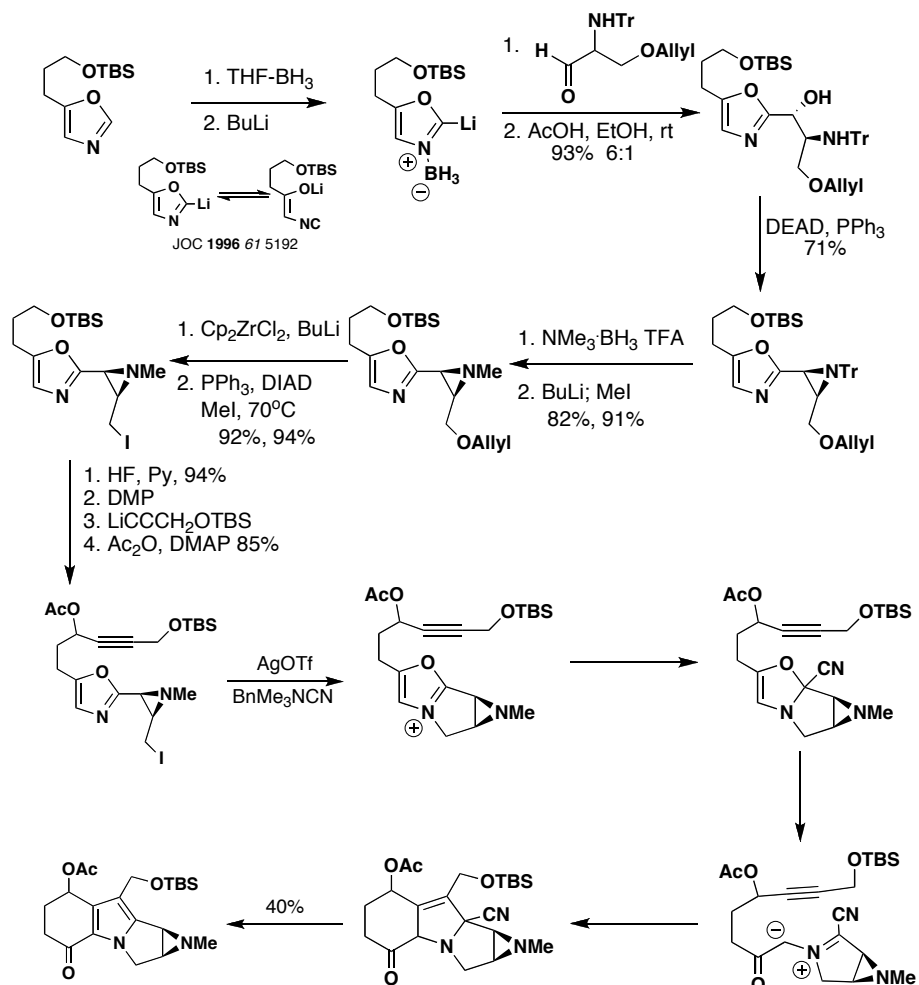


JOC 1987 52 4637
 JACS 1989 111 586
 JACS 1990 112 390

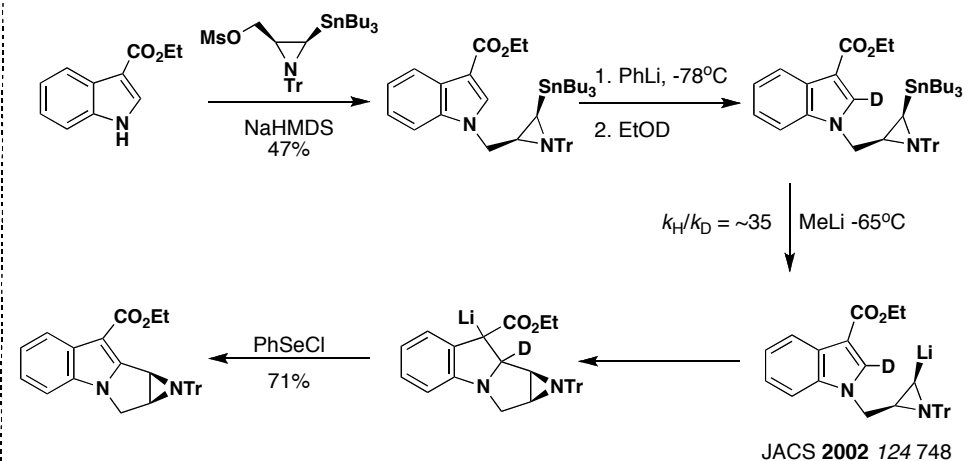
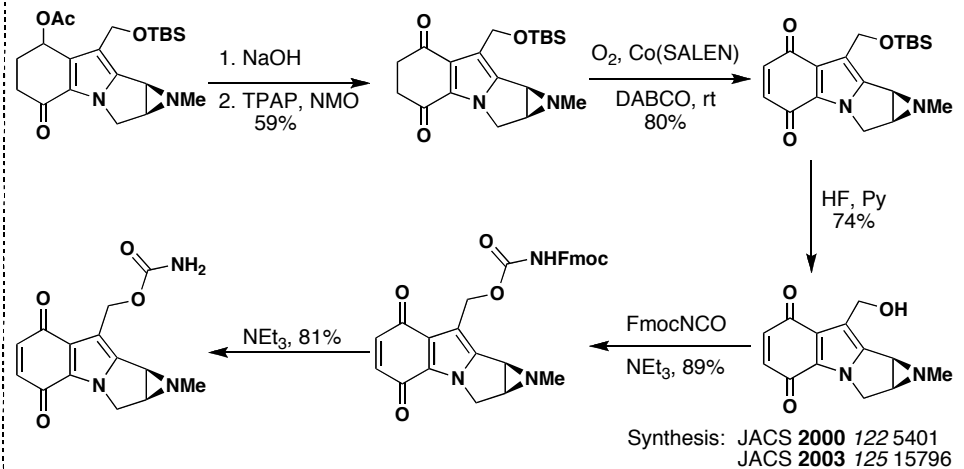
Wednesday, Nov. 14, 2007



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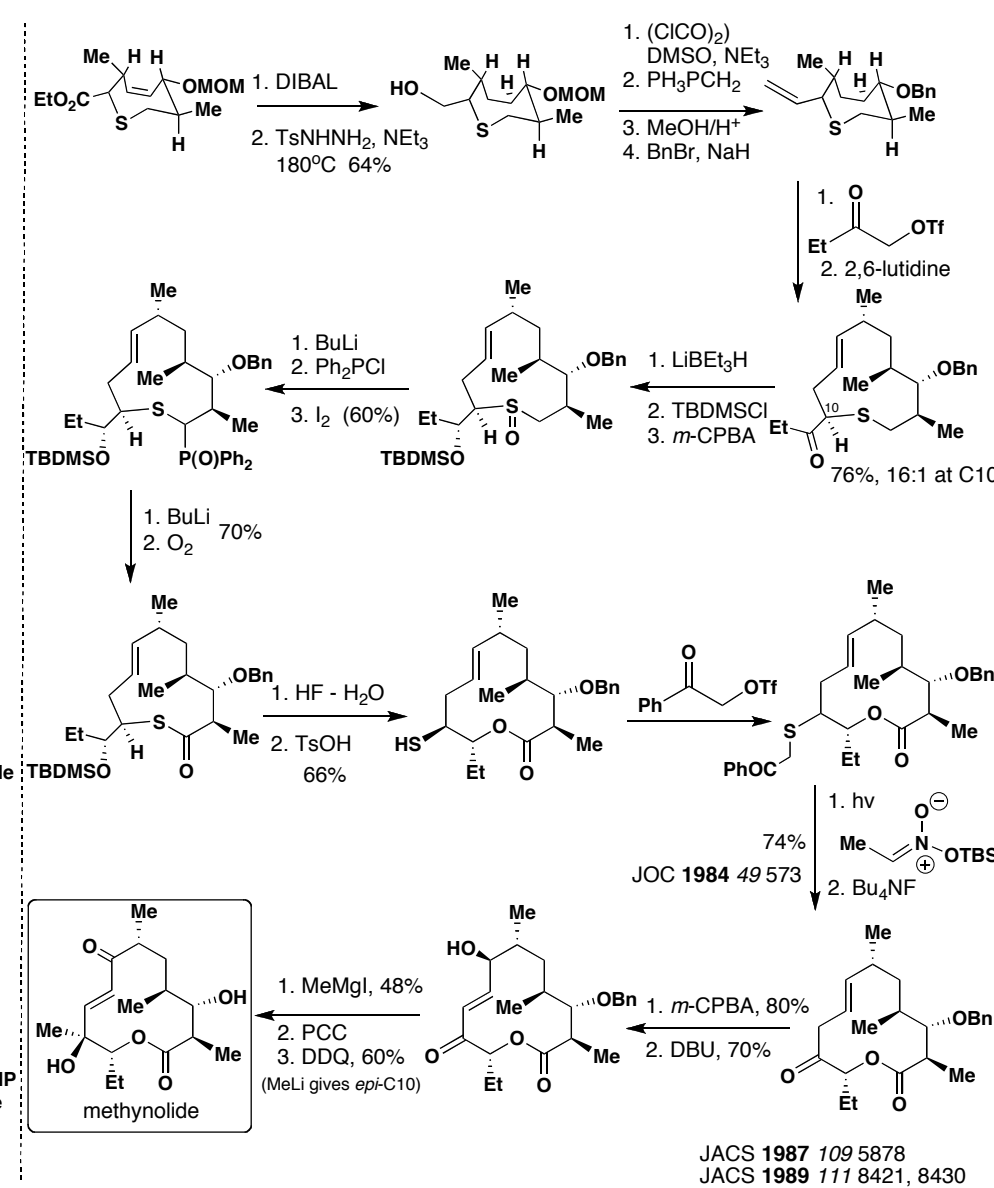
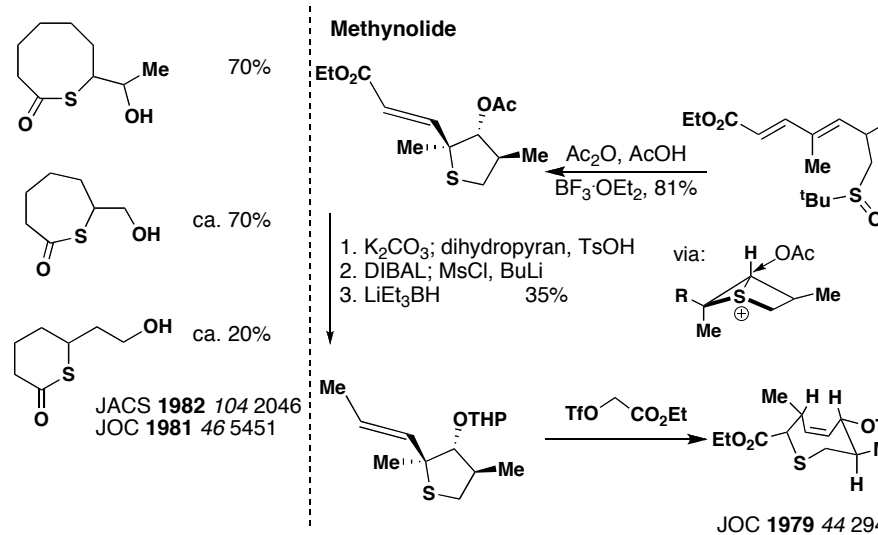
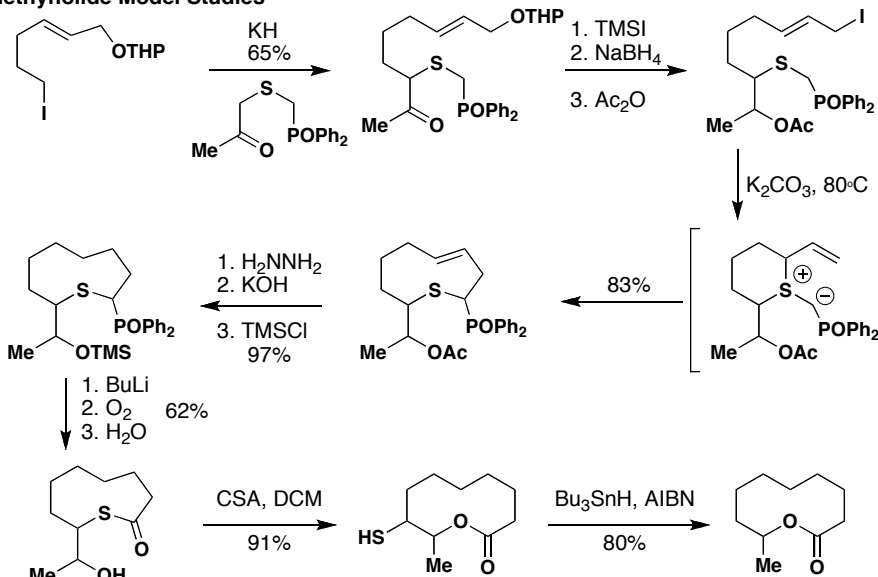
Oxazoline Route to Azomethine Ylides
 JACS 1986 108 6433
 JACS 1988 110 3238



See also Shenvi's 2004 Group Meeting:
 "Deuterium Isotope Effect in Natural Product Synthesis"

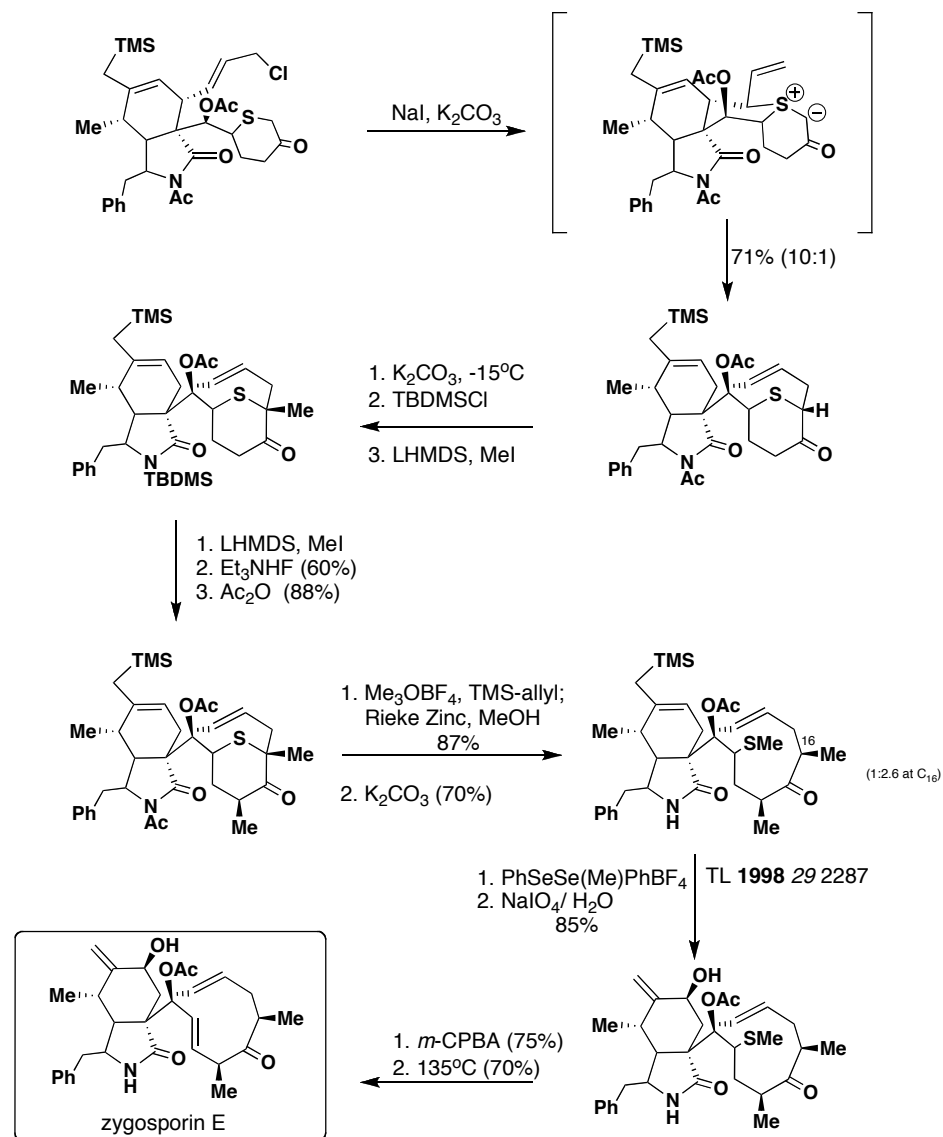
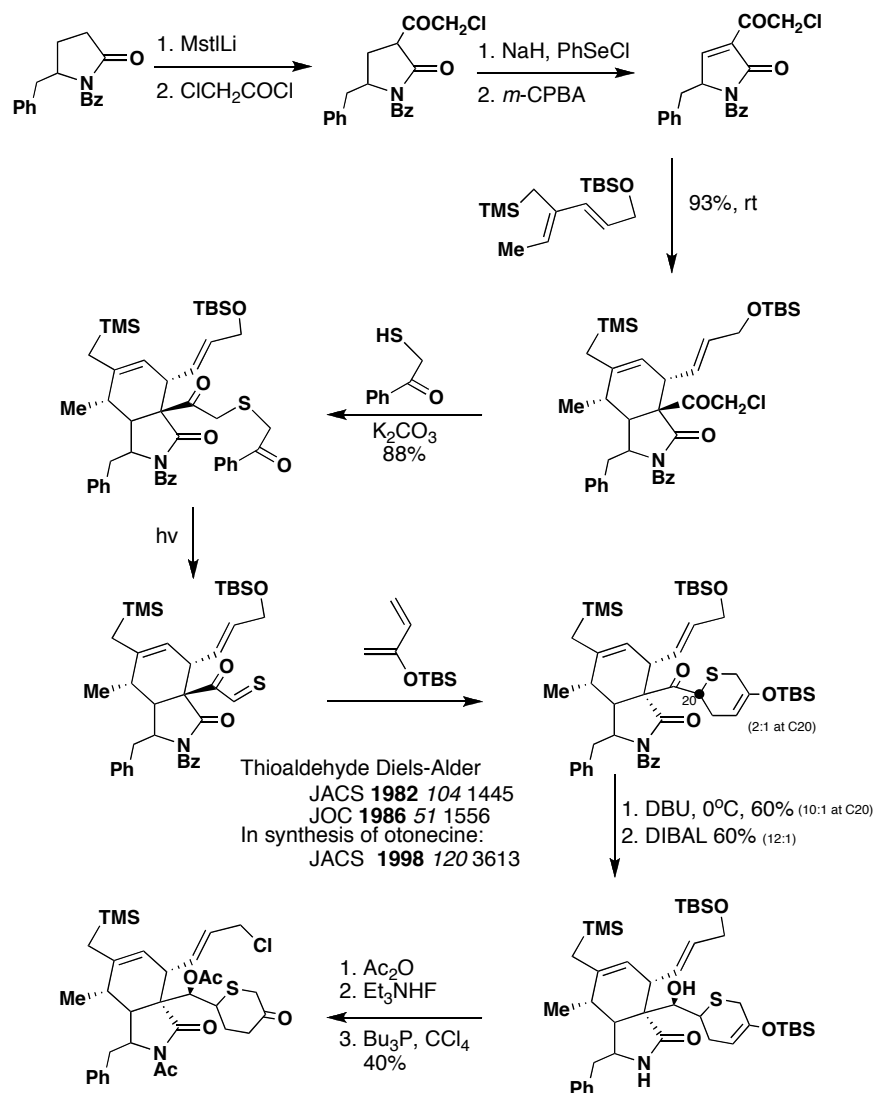
Wednesday, Nov. 14, 2007

Methynolide Model Studies



JACS 1987 109 5878
JACS 1989 111 8421, 8430

Wednesday, Nov. 14, 2007



JACS 1984 106 4617
 JOC 1982 47 1534
 JACS 1988 110 4822
 JACS 1990 112 4351, 4357