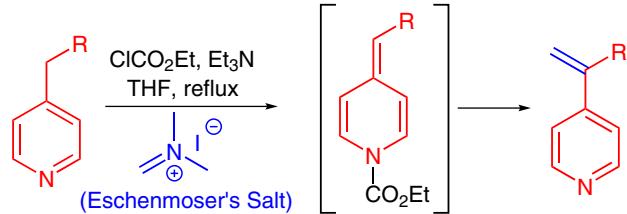


# Synlett

Accounts and Rapid Communications in Chemical Synthesis

December 1, 2022 • Vol. 33, 1873–1952



- One-pot • Metal-free • Open to air
- R = aryl, alkyl, heteroatom • 20 Examples • Up to 96% yield

Direct Methenylation of 4-Alkylpyridines Using Eschenmoser's Salt

G. N. Shivers, S. L. Tun, S. L. McLean, F. C. Pigge

19



Thieme

## Synlett

*Synlett* 2022, 33, 1873–1878  
DOI: 10.1055/a-1904-0582

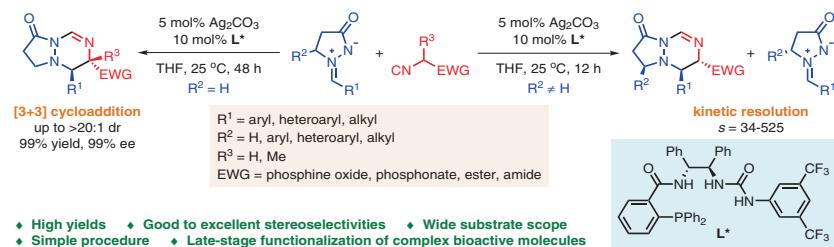
L.-F. Tao  
L. Qian\*  
J.-Y. Liao\*

Zhejiang University,  
P. R. of China

## Catalytic Asymmetric [3+3] Cycloaddition of Activated Isocyanides with Azomethine Imines

## Synpacts

1873



## Synlett

*Synlett* 2022, 33, 1879–1883  
DOI: 10.1055/a-1908-2066

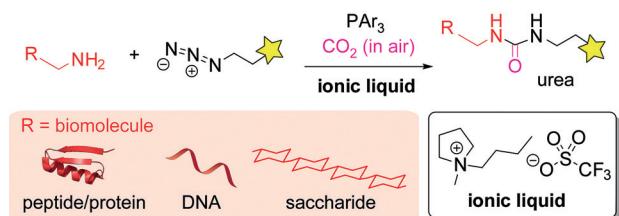
C. P. Uzoewulu  
J. Ohata\*

North Carolina State University,  
USA

## Translation of a Phosphine- and Azide-Based Reaction to Chemical Modification of Biomolecules in Ionic Liquid

## Synpacts

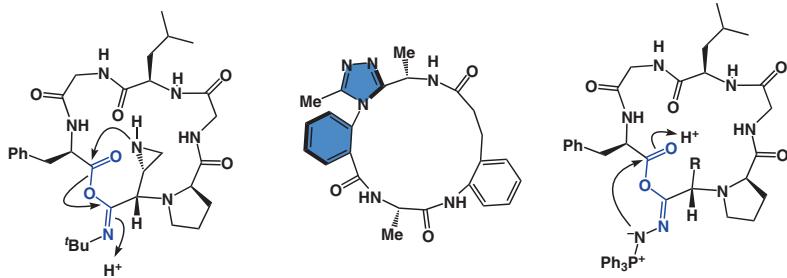
1879



Synlett 2022, 33, 1884–1889  
DOI: 10.1055/a-1892-9671

A. K. Yudin\*

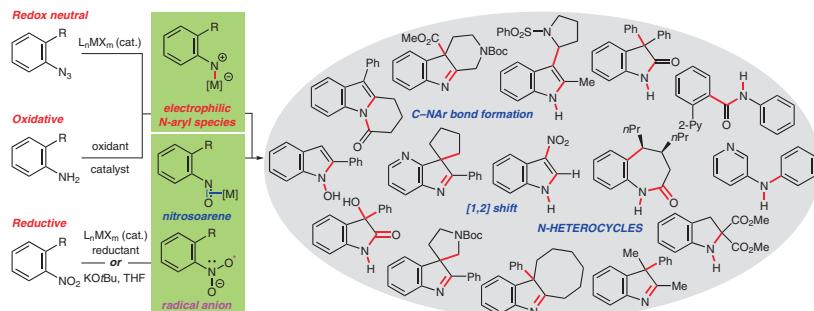
The University of Toronto,  
Canada



Synlett 2022, 33, 1890–1901  
DOI: 10.1055/a-1918-4191

T. G. Driver\*

University of Illinois at Chicago,  
USA



Synlett 2022, 33, 1902–1906  
DOI: 10.1055/a-1916-5335

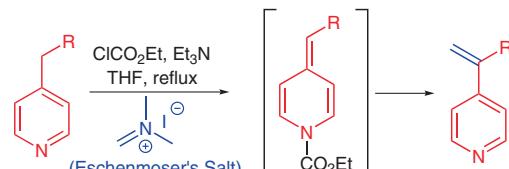
G. N. Shivers

S. L. Tun

S. L. McLean

F. C. Pigge\*

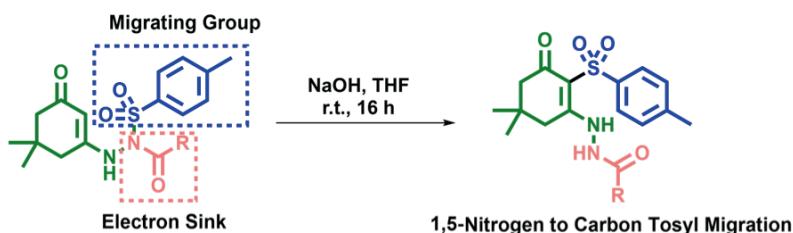
University of Iowa, USA



• One-pot • Metal-free • Open to air  
• R = aryl, alkyl, heteroatom • 20 Examples • Up to 96% yield

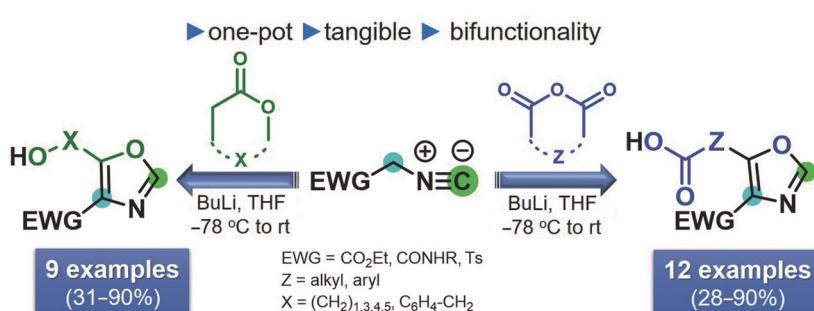
G. S. Mathenjwa  
M. P. Akerman  
M. L. Bode  
C. G. Veale\*

University of Cape Town, South Africa



M. Fragkiadakis  
C. G. Neochoritis\*

University of Crete, Greece

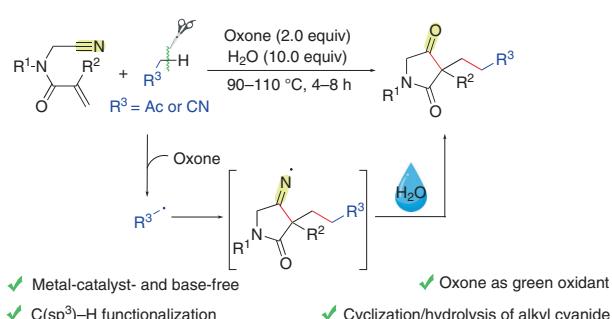


Y.-T. Guan  
J.-Z. Li  
X.-E. Cai  
S.-J. Hu  
J.-H. Zhang  
K.-W. Lei\*

H. Liu\*

W.-T. Wei\*

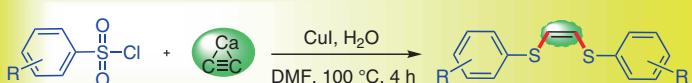
Ningbo University, P. R. of China  
Wenzhou University, P. R. of China



Q. Wang

Z. Wang

Z. Li\*

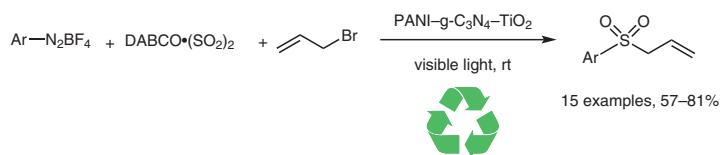
Northwest Normal University,  
P. R. of China

R = H, Me, MeO, <sup>t</sup>Bu,  
F, Cl, Br, CF<sub>3</sub>, etc.

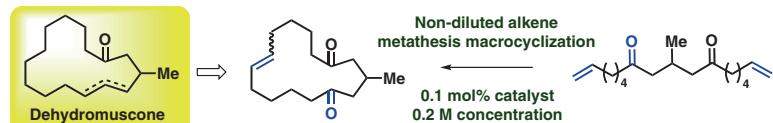
- Inexpensive and easy-to-handle alkyne source
- High stereoselectivity
- Wide functional-group tolerance
- Eighteen examples
- Extension to gram scale

L. Wang\*

L.-f. Zhang

Changzhou Vocational Institute  
of Engineering, P. R. of China

15 examples, 57–81%

F. Garnes-Portolés  
J. Sánchez-Quesada  
E. Espinós-Ferri  
A. Leyva-Pérez\*Universidad Politécnica de  
València-Consejo Superior de In-  
vestigaciones Científicas, Spain

- Industrial Fragrance
- 19% overall yield in 5 linear steps
- Avoiding starting macrocycles
- Key non-diluted macrocyclization reaction (0.2 M) with 0.1 mol% Grela's catalyst

Y. Li

L. Li\*

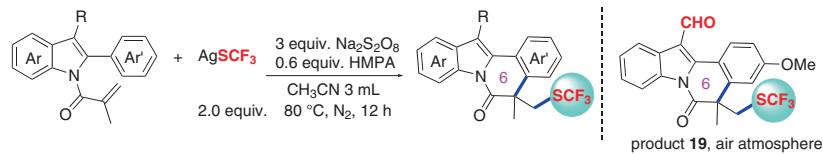
Q. Yan

Y. Ren

X. Li

Z.-Q. Liu\*

Z. Li\*

Hebei University, P. R. of China  
Nanjing University of Chinese  
Medicine, P. R. of China

- broad substrate scope, yields up to 82%
- simple and available reaction conditions
- easy scale-up radical system
- value  $\text{SCF}_3$ -modified *N*-heterocycles

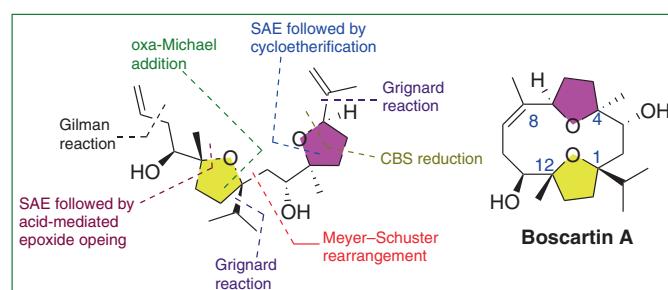
D. Saha

M. H. Sahana

G. H. Mandal

R. K. Goswami\*

Indian Association for the Cultivation of Science, India



J. Jia

Y. Yamaguchi

T. Ueda

H. Yamada

K. Kakiuchi

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Nara Institute of Science and  
Technology (NAIST), Japan