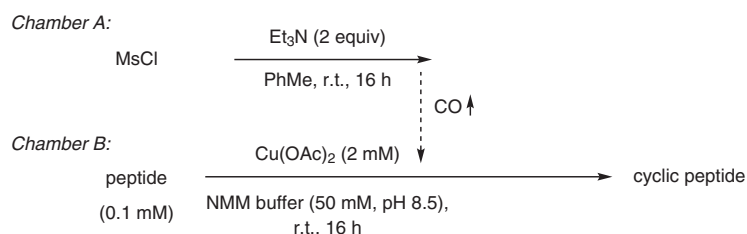
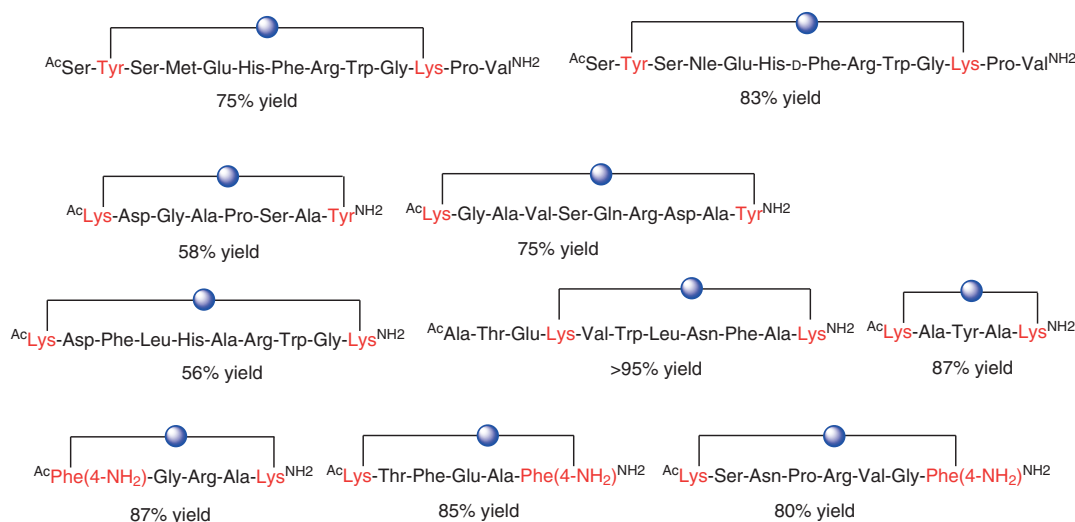


Y. DING, S. S. PEDERSEN, H. WANG, B. XIANG, Y. WANG, Z. YANG, Y. GAO, E. MOROSAN, M. R. JONES, H. XIAO, Z. T. BALL\* (RICE UNIVERSITY, HOUSTON, USA)  
 Selective Macrocyclization of Unprotected Peptides with an ex situ Gaseous Linchpin Reagent  
*Angew. Chem. Int. Ed.* **2024**, e202405344 DOI: 10.1002/anie.202405344.

## Peptide Cyclization at Side Chain of Lys-Lys, Lys-Tyr, and Lys-Phe(4-NH<sub>2</sub>)



### Selected examples:



**Significance:** Cyclic peptides have received increasing attention due to their improved stability and cell permeability, compared to linear peptides. The authors have established a cyclization at the side chain via carbonylation using in situ generated CO.

**Comment:** The cyclization proceeded at the side chain of Lys-Lys, Lys-Tyr, and Lys-Phe(4-NH<sub>2</sub>) regardless of the position of the complex peptide chain in good yields by the help of Cu catalysis.

Category

Peptide Chemistry

Key words

copper catalysis

cyclization

linchpin reagent

Synfact  
of the Month