



Division of the History of Chemistry
American Chemical Society

Citation for Chemical Breakthroughs



For the development of chemical synthesis on a solid matrix,
a new approach to organic synthesis.

R. B. Merrifield *J. Am. Chem. Soc.* 1963, 85, 2149-2154

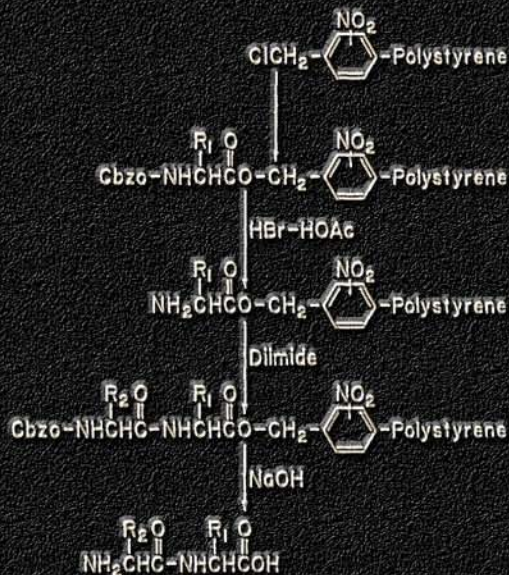
[CONTRIBUTION FROM THE ROCKEFELLER INSTITUTE, NEW YORK 21, N. Y.]

Solid Phase Peptide Synthesis. I. The Synthesis of a Tetrapeptide¹

By R. B. MERRIFIELD

RECEIVED JANUARY 31, 1963

The general concept underlying the new method is outlined in Fig. 1. It depends on the attachment of the first amino acid of the chain to a solid polymer by a covalent bond, the addition of the succeeding amino acids one at a time in a stepwise manner until the desired sequence is assembled, and finally the removal of the peptide from the solid support.



Reprinted with permission. ©1963 American Chemical Society.

Presented to The Rockefeller University
2006