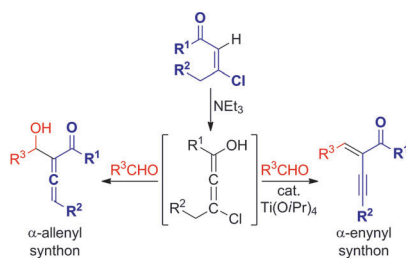


## Synthetic Methods

H. Y. Kim, J.-Y. Li, K. Oh\* — 3736–3740



A Soft Vinyl Enolization Approach to  $\alpha$ -Acylvinyl Anions: Direct Aldol/Aldol Condensation Reactions of (E)- $\beta$ -Chlorovinyl Ketones



**Synthesizing the synthons:** The development of  $\alpha$ -acylvinyl anion synthons has been achieved using direct  $\alpha$ -vinyl enolization of  $\alpha,\beta$ -unsaturated ketones under mild reaction conditions. The synthetic utility of such synthons has been demonstrated in intermolecular aldol and aldol condensation reactions, which provide synthetically useful allenyl ketone and enyne derivatives.

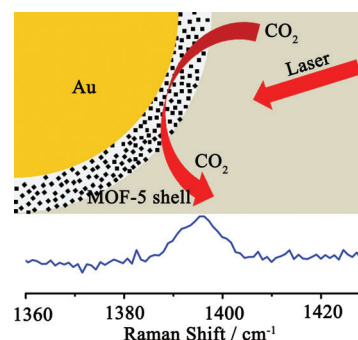
## Functional Nanoparticles

L. He, Y. Liu, J. Liu, Y. Xiong, J. Zheng, Y. Liu,\* Z. Tang\* — 3741–3745



Core-Shell Noble-Metal@Metal-Organic-Framework Nanoparticles with Highly Selective Sensing Property

**Of cores!** Core-shell Au@metal-organic-framework-5 (MOF-5) nanoparticles (NPs), in which a single Au NP core is coated with a uniform MOF-5 shell, were prepared by a facile one-pot method. The diameter of the Au NP core and the thickness of the MOF-5 shell are easily tuned by controlling the reaction conditions. These nanoparticles are selective sensors of  $\text{CO}_2$  in gas mixtures.



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# 50 Years Ago ...

*Angewandte Chemie International Edition* was first published in 1962, the mother journal first in 1888. In this monthly flashback, we feature some of the articles that appeared 50 years ago. This look back can open our eyes, stimulate discussion, or even raise a smile.

**S**hock waves and detonations were the subject of a Review by W. Jost and T. Just. These methods were used to achieve high temperatures and thus permit the kinetic investigation of fast reactions in the gas phase.

Albert Eschenmoser and co-workers reported the esterification of carboxylic acids with aminoacetals of *N,N*-dimethylformamide. A range of amino acid and peptide derivatives were studied and the reaction was assumed to proceed by

alkylation of the carboxylate oxygen atom. Eschenmoser later published two comprehensive Reviews in *Angewandte Chemie* on the origin of biomolecular structures, including Vitamin B<sub>12</sub> and nucleic acids (see *Angew. Chem. Int. Ed.* **1988**, 27, 5 and *Angew. Chem. Int. Ed.* **2011**, 50, 12412).

NMR spectroscopy was used by Heinz A. Staab and co-workers to investigate the tautomeric forms of 4 (or 5)-substituted imidazoles. The magni-

tude of the spin-spin coupling constants of deuterated compounds showed that they exist predominantly in one form. Staab was for many years Director at the Max Planck Institute for Medical Research in Heidelberg, and pioneered the synthesis of rigid phenylacetylene-based macrocycles and cyclophanes (see his recent Obituary: *Angew. Chem. Int. Ed.* **2012**, 51, 12404).

[Read more in Issue 4/1963](#)