Studies on the Mechanism of Action of Pepsin: a Caution

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WE recently described in two communications^{1,2} work on the mechanism of action of pepsin; each paper was based on more than twenty reproducible experiments. We regret to say that current attempts to repeat the work on the substrate-dependant incorporation of methanol into pepsin² have so far been mainly unsuccessful, although a clear reason for this failure has not emerged. In view of the doubts cast on the acyl-enzyme experiments we naturally feel less satisfied with another paper in this field concerned with the formation of amino-enzyme.1 The conclusions regarding the amino-enzyme intermediate² have since received confirmation from the work3 of Godin and Yuan, but in view of the fact that our mechanistic conclusions were drawn from our original work referred to above1,2 we feel that they should be treated cautiously until the experiments have been re-evaluated. (See also the communication by Kitson and Knowles4).

¹ M. Akhar and J. M. Al-Janabi, Chem. Comm., 1969, 859.

M. Akhtar and J. M. Al-Janabi, Chem. Comm., 1969, 1002.
C. Godin and C. Y. Yuan, Chem. Comm., 1970, 84.
T. M. Kitson and J. R. Knowles, Chem. Comm., following communication.