11. A process according to any one of the preceding claims wherein the carbonylatable reactant is a reactive derivative which is dimethyl ether.

12. A process according to claim 11~~12~~ wherein water is present in the carbonylatable reactant feed in an amount of less than 2.5 wt% relative to the amount of dimethyl ether in the feed.

13. A process according to any one of the preceding claims wherein the process is carried out in the presence of hydrogen.

14. A process according to any one of the preceding claims wherein the carbonylation product is methyl acetate and at least a portion of the methyl acetate is hydrolysed to acetic acid.

15. Use of a catalyst which is a mordenite having a silica : X_2O_3 molar ratio of at least 12 : 1 which mordenite has been treated with an aqueous basic solution containing at least one of aluminate and gallate ions to provide improved catalytic activity in a process for the production of at least one carbonylation product selected from acetic acid and methyl acetate which process comprises carbonylating at least one carbonylatable reactant selected from methanol and reactive derivatives thereof with carbon monoxide.