9 A process according to any of claims 1 to 8, wherein the methacrylic acid product is esterified to produce an ester thereof.

10 A method of preparing polymers or copolymers of methacrylic acid or methacrylic acid esters, comprising the steps of

(i) preparation of methacrylic acid in accordance with any of claims 1 to 8;
(ii) optional esterification of the methacrylic acid prepared in (i) to produce the methacrylic acid ester;
(iii) polymerisation of the methacrylic acid prepared in (i) and/or the ester prepared in (ii), optionally with one or more comonomers, to produce polymers or copolymers thereof.

11 A method according to claim 10, wherein the methacrylic acid ester of (ii) above is selected from C1-C12 alkyl or C2-C12 hydroxyalkyl, glycidyl, isobornyl, dimethylaminoethyl and tripropyleneglycol esters.

~~12 Polymethylmethacrylate (PMMA) homopolymers or copolymers formed from the method of any of claims 10 or 11.~~

13~~2~~ A process for the production of methacrylic acid comprising:-
providing a source of a pre-acid selected from aconitic, citric and/or isocitric acid;
performing a decarboxylation and, if necessary, a dehydration step on the source of pre-acid by exposing the source thereof in the presence or absence of base catalyst

to a sufficiently high temperature to provide itaconic, mesaconic and/or citraconic acid; and
a process according to any of claims 1-8 to provide methacrylic acid.

143 A process according to any of claims 1 to 132, wherein the concentration of the dicarboxylic acid reactant(s) is at least 0.1M.

154 A process according to any of claim 1 to 143, wherein the concentration of the catalyst in the reaction mixture is at least 0.1M.

165 A process for the production of methacrylic acid by the base catalysed decarboxylation of at least one dicarboxylic acid selected from itaconic, citraconic or mesaconic acid or mixtures thereof, wherein the decarboxylation is carried out in the temperature range between 240 and 290°C and the dicarboxylic acid(s) reactant(s) are exposed to the reaction conditions for a time period of at least 80 seconds.