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(54) Title: PROCESS FOR PREPARATION METHACRYLATED DECM

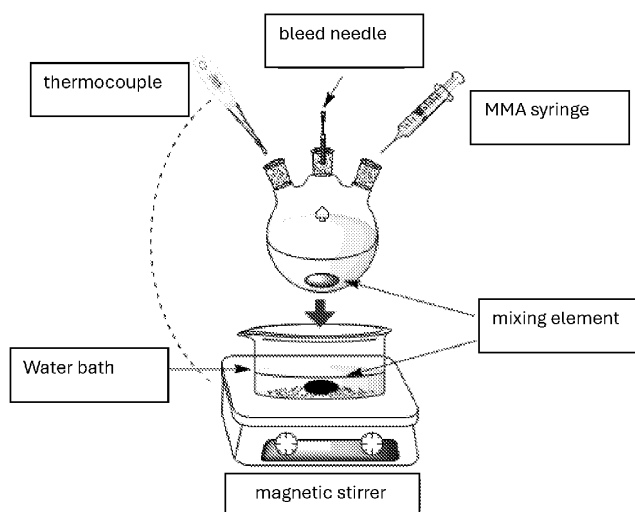


Fig. 1

(57) Abstract: Process for methacrylation of dECM comprising placing a carbonate buffer with a concentration of 1M in the reaction vessel and heating to a temperature of 50 °C, adding dECM to the carbonate buffer to obtain a dECM solution with a concentration of 4% (w/v), sterilizing this solution by irradiation with radiation UV for 15 minutes, adding methacrylic anhydride in an amount of 0.5 mL/1g dECM and reacting at 50 °C for 1 h, then adding a phosphate-buffered saline solution to obtain a 5-fold dilution of the mixture, placing the obtained solution in dialysis tube, and then placing the dialysis tube in deionized water, this stage is carried out at a temperature of 40 °C for no longer than 4 days, after completing this stage, the solution contained in the dialysis tubes is transferred to aluminum trays and then placed at a temperature -80 °C for at least 3 hours, then the frozen solution is freeze-dried under the following conditions: shelf temperature 10 °C, pressure 0.1 mba, freeze-drying time 48 hours. The invention also relates to methacrylated dECM obtained by the above method and to the use of methacrylated dECM obtained by the above method in the bioprinting process.

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