



**EFFECTS OF GAMMA-RAY STERILIZATION ON HIGH MOLECULAR WEIGHT PMMA FOR
BIOMEDICAL APPLICATIONS**

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Medical grade poly (methyl methacrylate) (PMMA) has been used over many years for a variety of medical applications such as artificial joints, dentures, bone cement and fillers for cosmetic purposes. One of the main, and oldest, usages is for intraocular lenses to treat cataracts. For this application, the polymer must be of high purity with no significant traces of residual monomer. To that end, new methods of polymer sterilisation are being explored. This presentation investigates how Advanced Triple Detection GPC can be used to study the effect of irradiation at doses typically used for sterilization.