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(57) Abstract :
The invention addresses the environmental issue of cigarette butt pollution by providing a method for producing bioplastics from used cigarette butts. Cigarette butts, estimated at around 4 trillion globally, cause waterway clogging and provide surfaces for microorganism growth. This process utilizes the cellulose acetate in cigarette butts, converting it into bioplastics through a series of chemical treatments involving readily available laboratory chemicals. The resulting bioplastics can serve as sustainable packaging materials, offering an eco-friendly alternative to polyethylene and contributing to the development of a circular economy. Accompanied Drawing [FIGS. 1-2]

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