Extruder Prototype Polymers in Combination with Keratin

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This research is very important because it focuses on the fact, to establish routes for technology transfer, through sustainable actions to the design and manufacture of a prototype electrochemical action, which grinds and extrusa integrally PET or LDPE in combination with keratin, obtained from broiler feathers by alkaline hydrolysis and acid copolymerized with polilácticoPLA- During the work the primary, secondary and other recycling will be promoted, this involves the conversion of plastic waste into articles and physically identical to the original material chemical properties. This is done with thermoplastics such as PET, LDPE, HDPE, PS, PVC, which have the ability to be consolidated at low temperatures, without any change in its structure in their molecules. Polyethylene terephthalate, PET or PETE, is a thermoplastic polymer polyester resin with a melting point between 250-260 0 C, is used in synthetic fibers, beverage containers and food. The low density polyethylene LDPE (polymer grade). It is a thermoplastic material that softens waxy 80-130 0 C, is an excellent electrical insulator and has very good resistance to chemicals. The electromechanical device that crushes, which extrusa compact and bio-synthetic materials, complies in all respects with the premise ot technology transfer and has the ability to transform waste materials, which are highly polluting nature.

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