Polymer blending is one of the fastest growing areas of polymer technology. It’s easy and relatively cheap way to generate new materials with desirable properties [1,2]. It is also good alternative for troublesome synthesis of block copolymers, among them aliphatic copolyesters.

In the last decade, much attention has been focused on blends of biocompatible and biodegradable polymers such as poly(ɛ-caprolactone) (PLC) and polylactide (PLA), especially due to their potential biomedical applications [1,3,4].

In this study the preparation and selected properties of blends based on PCL and PLA have been investigated. Their biocompatibility, biodegradability and the presence of components exhibiting significantly different properties (rigid PLA and elastic PCL) allow anticipating the shape memory effect (SME) of the materials, and therefore their numerous future applications in medicine.

The samples of binary blends with different content of commercial PCL and PLA and/or polymers synthesized by SnOct₂ catalysed ring opening polymerization of respective monomers were prepared by solution casting. Selected properties, particularly thermal ones and the presence of shape memory effect of obtained materials were investigated.