Leading research facilities of STU SLOVAK UNIVERSITY OF TECHNOLOGY IN BRATISLAVA

## LABORATORY OF POLYMER MATERIALS

## Description of main activities:

Materials of biopolymers and polymers from renewable raw materials – biomaterials for medical applications, dermatological agents, drug carriers, packaging materials, fibres and textile materials of biopolymers and polymers from renewable raw materials. Development of new materials based on poly (E-caprolactone), starch, chitin and chitosan, cellulose, polyhydroxybutyrate and polylactic acid.

## Equipment available:

- Fluid mixer,
- A twin-screw co-rotational segmental extruder with granulation,
- Chill-roll line for cast monofilms,
- Chill-roll unit for cast three-layer A-B-A films production,
- Line for the three-layer blown A-B-A film production,

- Line for the production of extruded profiles of the L and JOKL types and hoses,
- BOY 60E injection press,
- Melt fibre spinning line,
- Blow moulding of hollow products extrusion blow moulding technology,
- Vacuum forming,
- Hydraulic press,
- Line for plasma-surface for finishing of printed products,
- DSC calorimeter,
- DMA analyser,
- Climate chamber,
- Measuring the permeability of gases and vapours,
- Measuring the impact strength by Sharpy method,
- Measuring of melt flow index,

- Fully equipped capillary rheometer Göttfert 75,
- JEOL 7500F Scanning Electron Microscope.

## CONTACT

:::: S T U

Faculty of Chemical and Food Technology STU in Bratislava Radlinského 9 812 37 Bratislava 1

Slovak Republic Prof. Ing. Pavel Alexy, PhD.

pavol.alexy@stuba.sk

Prof. Ing. Ivan Hudec, PhD. ivan.hudec@stuba.sk

Dr.h.c. Prof. Ing. Dušan Bakoš, DrSc. dusan.bakos@stuba.sk







JEOL 7500F Scanning Electron Microscope

