

## TABLE OF CONTENT

1. <i>Gaspar-Cunha A., Covas José A., Costa M. Fernanda P., Costa Lino:</i> Optimization of single screw extrusion.....	7
2. <i>Gaspar-Cunha A., Covas José A., Sikora Janusz:</i> Modelling the effect of grooved barrels on the performance of single screw extruders.....	22
3. <i>Covas José A., Gaspar-Cunha A.:</i> Modelling of flow and heat transfer, mixing and morphology development in plasticating single screw extrusion of polymer systems.....	43
4. <i>Dulebová Ludmila, Covas José A.:</i> Effect of nanoclay on properties of polymer nanocomposites.....	65
5. <i>Dulebová Ludmila, Rudawska Anna, Gaspar-Cunha A.:</i> The mechanical properties of low-density polyethylene with nanofiller .....	79
6. <i>Głogowska Karolina, Majewski Lukasz:</i> The effect of addition of nanotubes to the thermal properties and processing polyethylene.....	91
7. <i>Majewski Łukasz, Głogowska Karolina:</i> The analysis of the impact of a compatibilizer on the homogenisation of a LDPE/HNTs nanocomposite.....	102
8. <i>Gajdoš Ivan, Spišák Emil, Greškovič František, Sikora Janusz:</i> Calculation of long fibers breaking and distribution in injection molded parts with CAE analysis.....	118
9. <i>Stasiek Andrzej, Raszkowska-Kaczor Aneta, Bogucki Marcin:</i> Co-rotating twin screw extrusion polypropylene/talc composition.....	129
10. <i>Krasinskyi Volodymyr, Suberlyak Oleh, Zemke Viktoria, Klym Yurii, Gajdos Ivan:</i> Review on the processing and properties of nanocomposites based on the mixtures of polypropylene and modified polyamide.....	148
11. <i>Levytskyi Volodymyr, Khromiak Ulyana, Skorokhoda Volodymyr, Levytska Khrystyna, Melnyk Yurii:</i> Technological aspects of obtaining and properties of polyvinylpyrrolidone copolymers and composites.....	16
12. <i>Moravskyi Volodymyr, Dziama Iryna, Masyuk Andrii, Kucherenko Anastasia, Grytsenko Oleksandr, Dulebová Ludmila:</i> Technology of metallization of powder-like polymers raw materials.....	175