

Universitatea Transilvania din Braşov
Facultatea de Ştiinţa şi Ingineria Materialelor
Departamentul Ingineria Materialelor şi Sudură

Tematica propusă pentru admiterea la doctorat Septembrie 2019

Domeniu de doctorat: Inginerie Materialelor

Conducător de doctorat: Prof. dr. ing. Mircea Horia Țierean

Tematică: Cercetări privind reducerea inflamabilității materialelor polimerice

Problemele care vor fi tratate:

- arderea polimerilor;
- mecanisme de ignifugare – inhibitori de flacără pentru material polimerice;
- toxicitatea fumului produs la arderea polimerilor care conțin aditivi ignifugi.

Bibliografie recomandată:

1. Fire-Safe Polymers and Polymer Composites, U.S. Department of Transportation, 2004, <http://www.tc.faa.gov/its/worldpac/techrpt/ar04-11.pdf>
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3. Cubleşan V., Propagarea arderii la materialele combustibile solide în interiorul incintelor, Teză de doctorat UTCB, 2011, <https://www.docdroid.net/q6ww/teza-doctorat-valentin-cublesan.pdf>
4. Szolnoki B., Development of novel flame-retarded epoxy resins and their composites, PhD thesis, Budapest University of Technology and Economics, 2014, https://repozitorium.omikk.bme.hu/bitstream/handle/10890/1388/tezis_eng.pdf?sequence=3&isAllowed=y
5. Chen J., Gao X., Review on the Fundamentals of Polymer Combustion and Flammability Characteristics for Hybrid Propulsion, Journal of Polymer and Biopolymer Physics Chemistry, 2(4), 2014, <http://pubs.sciepub.com/jpbpc/2/4/4/index.html>
6. Van Wabeeke L., Flame retardant plastics: a general review, International Polymer Science and Technology, Vol. 29, No. 2, 2002, <http://www.polymerjournals.com/pdfdownload/848369.pdf>
7. Chivas C., Bertrand J.P., Malvaux C., Marlair G., Tack K., Smoke toxicity from combustion products based on polymers containing flame retardant additives, The flame retardants Conference 2006, Feb 2006, Londres, United Kingdom. pp.59-69. ffineris-00976169f, <https://hal-ineris.archives-ouvertes.fr/ineris-00976169/document>