



COST ACTION GREENERING – DATA COLLECTION

First name, Family Name: Karolina Fila

Type (Academic or Industrial): Academic

Country: Poland

Leadership position in the COST: MC Substitute on CA18224

Working Group in which you are involved: WG1 or WG3

E-mail: karolina.fila@poczta.umcs.lublin.pl

Laboratory/Company:

Department of Polymer Chemistry, Institute of Chemical Sciences, Faculty of Chemistry, Maria Curie-Skłodowska University in Lublin, M. Curie-Skłodowska Sq. 5, 20-031 Poland

Laboratory/Company info:

The largest higher education institution in Eastern Poland; 11 faculties in Lublin plus the UMCS branch campus in Puławy; Over 80 programmes on offer taught in Polish and English; Over 21 000 (1600 international) students.

Link to the home page of the Laboratory/Company:

<https://www.umcs.pl/en/>

<http://www.polimery.umcs.lublin.pl/index.php>

Fields of expertise:

- Sulfur-containing polymers (e.g. polythio(meth)acrylates);
- Synthesis of new monomers, polymers, bio-based composite materials;
- Thermal and mechanical characterization of polymers (TGA, DSC, DMA method);
- Synthesis of new polymers in different forms: microspheres, bulk, powders or films;
- Spectroscopic characterization of new materials (FT-IR, ¹H and ¹³C NMR).

5 Main publications or patents:

- **K. Fila**, M. Grochowicz, B. Podkościelna, Thermal and spectral analysis of copolymers with sulfur groups, *Journal of Thermal Analysis and Calorimetry*, 133 (2018) 489-497.
- M. Goliszek, B. Podkościelna, **K. Fila**, A.V. Riazanova, S. Aminzadeh, O. Sevastyanova, V.M. Gun'ko, Synthesis and structure characterization of polymeric nanoporous microspheres with lignin, *Cellulose*, 25 (2018) 5843-5862.
- M. Goliszek, B. Podkościelna, O. Sevastyanova, **K. Fila**, A. Chabros, P. Pączkowski, Investigation of accelerated aging of lignin-containing polymer materials, *International Journal of Biological Macromolecules*, **123** (2019) 910–922.
- M. Goliszek, M. Sobiesiak, **K. Fila**, B. Podkościelna, Evaluation of sorption capabilities of biopolymeric microspheres by the solid-phase extraction, *Adsorption*, **25**(3) (2019) 289-300.



- **K. Fila**, Y. Bolbukh, M. Goliszek, B. Podkościelna, M. Gargol, B. Gawdzik, Synthesis and characterization of mesoporous polymeric microspheres of methacrylic derivatives of aromatic thiols, *Adsorption*, **25**(3) (2019) 429-442.

Collaborations:

Institute of Sorption and Problems of Endoecology, Naumov St 13, 03164 Kiev, Ukraine;
C2MA - IMT Mines Alès, 6 avenue de Clavières 30100 Alès, France.

Facilities:

- Thermal analyzer STA with analyzed simultaneously gaseous products evolved from the sample at the time of heating by the on line coupled Fourier transform infrared spectrometer FT-IR;
- Differential scanning calorimetry (DSC);
- Dynamic mechanical analyzer (DMA);
- FT-IR spectrophotometer.