



Polymer analytics performed by top scientists for you!

Dear polymer scientist or developer,

I am proud to present you the possibility to perform polymer analysis at the renowned Bulgarian Academy of Science, a research institution founded in 1869 in Sofia.

Since Bulgaria now is an EU member, the institutes of the BAS are very eager to cooperate with the industry in other EU countries.

Especially for endeavors that not only involve simple analysis but rather an investigation of a polymer, the Institute of Polymer Chemistry at the BAS is a very competent partner.

This price list is intended for the analysis of one or a small number of samples. Should a more regular analysis of polymers, or an investigation into larger series of polymers be your intention, feel free to contact me for a tailor-made offer.

Currently, the Institute of Polymers is investing in new, state of the art equipment. Already now, the Institute is provided with some rather unique equipment like an analytic ultracentrifuge. Soon, the range of possibilities will be extended by a polymer TGA + MS (performed on the decomposition gases of the sample). This technique can offer insights in the composition of unknown polymer mixtures or copolymers.

Apart from analysis, preparation of polymers and extruded blends is also an option. The Polymer Institute is specialized in polymers with hetero-atoms like phosphor in the backbone. If desired, also pilot production is available on a scale of 50 – 600 l at a spin-off company.

The scientists are used to work with industrial partners and the need for confidentiality is fully understood.

The BAS is represented by the company CSI of Dutchman dr. ir. Richard Smits, who lives in Sofia and who is active in guiding and coaching external projects at the BAS. IBDD acts as an account manager in The Netherlands for CSI.

Do not miss the great opportunities at the BAS: why not call right now to learn more?



Investigation	Prices (Excl. VAT 21%)*
1. Differential Scanning Calorimetric analysis (DSC) Perkin Elmer DSC-8500 price is determined by the time required for the analysis and the necessary supplies	147 Euro for 1 analysis, 87 Euro for each additional sample
2. Thermo Gravimetric Analysis (TGA) Perkin Elmer DSC-4000 price is determined by the time required for the analysis and the necessary supplies TGA+MS on the decomposition gases (available Q4 2013)	147 Euro for 1 analysis, 87 Euro for each additional sample 175 Euro for 1 analysis, 125 Euro for each add. sample
3. IR spectroscopy Fourier Transformation Infrared spectrometer Shimadzu IRAffinity-1 with MIRacle Attenuated Total Reflectance Attachment Interpretation of spectra	77 Euro for 1 analysis, 37 Euro for each additional sample 107 Euro per hour
4. UV spectroscopy Beckman Coulter DU 800	97 Euro for 1 analysis, 37 Euro for each additional sample
5. Analysis by ultracentrifuge Beckman Coulter ProteomeLab XL-I	147 Euro per hour
6. Rheology of polymer solutions, pastes and hydrogels in rotational and oscillation mode Universal rheometer RheoStress 600, Thermo Haake	97 EUR /sample
7. Oxygen Index by ASTM D2863 (Minimum Oxygen Concentration to Support Candle-Like Combustion of Plastics) Modul FTA Instrument, Stanton Redcroft	137 Euro for 1 analysis, 87 Euro for each additional sample
8. Mechanical tests <ul style="list-style-type: none"> • Determination of tensile properties (by ISO), including tensile modulus, elongation at break and tensile strength at break • Determination of tensile strength by impact Note: These prices are for single series of tests with standard test pieces submitted by the customer. <ul style="list-style-type: none"> • Preparation of a series of test pieces 	297 EUR 87 EUR 197 EUR
9. Preparation of polymeric compositions by mixing extruder - single sample up to 5 kg (material provided by customer)	397 EUR
10. Intrinsic viscosity	237 Euro for 1 analysis, 197 Euro for each additional sample
11. NMR analysis Interpretation of spectra	Prices are determined on the basis of actual time used One-dimensional spectra 217 EUR / h Two-dimensional spectra 347 EUR / h 107 EUR / h

*Prices are valid for companies in the Netherlands and include VAT and all service costs.

*Prices are subject to changes. Actual prices can be confirmed by contact with Niels Flach, 06-43856016, info@nielsflach.nl - Date of this price list: April 2, 2013

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