# *ANNEX II + III:* TECHNICAL SPECIFICATIONS + TECHNICAL OFFER

**Contract title: Laboratory equipment for the purposes and functioning of the scientific laboratories of the BLUE GROWTH Research centre at “Prof. D-r Asen Zlatarov” University of Burgas**

**Lot 3 Supply of Laboratory equipment for polymer analysis for the purposes of the Water Pollution Monitoring and Aquatic Ecosystem Modelling Labs**

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**Publication reference:** CB005.3.12.001 - LP – Supply 3

**Columns 1-2 should be completed by the contracting authority**

**Columns 3-4 should be completed by the tenderer**

**Column 5 is reserved for the evaluation committee**

Annex III - the contractor's technical offer

The tenderers are requested to complete the template on the next pages:

* Column 2 is completed by the contracting authority shows the required specifications (not to be modified by the tenderer),
* Column 3 is to be filled in by the tenderer and must detail what is offered (for example the words ‘compliant’ or ‘yes’ are not sufficient)
* Column 4 allows the tenderer to make comments on its proposed supply and to make eventual references to the documentation

The eventual documentation supplied should clearly indicate (highlight, mark) the models offered and the options included, if any, so that the evaluators can see the exact configuration. Offers that do not permit to identify precisely the models and the specifications may be rejected by the evaluation committee.

The offer must be clear enough to allow the evaluators to make an easy comparison between the requested specifications and the offeredspecifications.

| **1.**  **Item number** | **2.**  **Specifications required** | **3.**  **Specifications offered** | **4.**  **Notes, remarks,  ref to documentation** | **5.**  **Evaluation committee’s notes** |
| --- | --- | --- | --- | --- |
| **1.** | **System for analysis of polymers and plastic micro particles – 1 pc**  Entirely automated. Visual image with high resolution ans spectral identification in the infrared area. Fast speed scanning of one point with ATR module.  Fast and qualitative identification of microparticles up to 2 µm within minutes.  The equipment should include a computer system for control and management of the analyzer meeting the requirements of the producer.  The system should work with consumables accessible at the market.  Full spectral range of 1800 - 980 cm-1 of the infrared area of the electromagnetic spectrum. A blowing clean and dry air system for the optics of the system for analysis of polymers and micro particles.  4 520 ATR-FTIR spectra library of polymers, plastics, polymer additives, plastifiers and packing materials.  The equipment should be guaranteed for at least 2 year against any manufacturing and assembly defects. Spare parts and service must be guaranteed for 10 years after the end of the warranty period. |  |  |  |
| **2.** | **UPS – 1 pc**  Line voltage and frequency (V, Hz): 100~240 VAC 50~60 Hz  Maximum power consumption VA: 236  Maximum power consumption W: 213 |  |  |  |
| **3.** | **Portable FTIR spectrometer for polymert analysis – 1 pc**  DTGS detector spectral range: 4500–650 cm-1  resolution: 4–16 cm-1  ATR-FTIR spectra of polymer and additives library (ATR Polymers and Polymer Additives), specifically formatted for use of portable FTIR.  The equipment should be guaranteed for at least 2 year against any manufacturing and assembly defects. Spare parts and service must be guaranteed for 10 years after the end of the warranty period |  |  |  |