Attachment No. 2 to the procurement No. DZP.382.3.12.2024

**DESCRIPTION OF THE SUBJECT MATTER OF THE PROCUREMENT (DSMP)/DESCRIPTION OF THE SUBJECT MATTER OF THE PROCUREMENT OFFERED BY CONTRACTOR**

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| Description of the subject matter of the procurement | **Description of the subject matter of the procurement offered by contractor** |
| Field Microprofiling System specification:  The system must include a multimeter device with a suitable sensors package, a software suite for data analysis and export, and a motorized stage with a stand for field experiments and automatization. The specification of elements is below:  Multimeter:   * must have dimensions no bigger than 350 x 300 x 150 (W x D x H) mm and weigh no larger than 9 kg; * must be dust and water resistant/splashproof (including connections); * must have up to 8 measurement channels for a combination of pA, mV and temperature measurements; * must be able to perform pA measurements within a range from below +/- 5000 pA to not exciding +/- 5 μA; * must be able to perform mV measurements in a range lower than +/- 5000 mV * must be able to measure temperature in a range from -10 °C to 100 °C * must allow to control the movement of the motorized stage independently in vertical and horizontal orientation (z and x axis; programmable); * must be able to perform sampling at a minimal rate of 5 samples/sec; * must have a build-in datalogger with the ability to export data and a display that allows to review of the data during measurement also in the field experiments; * must be able to operate in wide temperature ranges – at least from: -10 °C to 50 °C; * must be compatible with Clark type sensors for precise measurements with microscale resolution; * must be able to measure a wide range of parameters including oxygen and trace oxygen, hydrogen, electric potential, pH, redox potential, H2S, SO4, NO, N2O and temperature, based on sensors used; * must be programmable allowing automatic profile measurement; * must have fast response time of the multimeter controls (below 50 ms); * must be able to conduct experiments without an external power supply for a minimum of 12 h at ambient conditions;   Sensors package:   * must be compatible with the multimeter; * must have all cables and adaptors required for connecting to the multimeter; * must have an outer diameter of sensor tip no larger than 150 μm; * must include sensors for measuring oxygen, pH, redox potential, electric potential, and sulfide; * must include a chamber for calibration of sensors; * must include reusable sensor’s protection caps; * must include appropriate calibration kits for sensors   Acquisition software:   * must be compatible with the multimeter and must allow to collect and analyze data; * must have an ability to export data for third-party software suites (in at least one of formats: txt, csv, tsv)   Field Stand:   * must have water resistant (splashproof) stand for mounting the sensors for use in laboratory and field conditions that allow to mount motorized stage; * must have corrosion-protected stand to mount motorized stage on; * stand must have an adjustable mounting option; * stand dimensions must be no bigger than 20 x 30 cm (W x D) and must have a height between 50 – 75 cm; * stand weight must be no bigger than 20 kg   Motorized stage for sensors mounting:   * must be water resistant; * must be no bigger than 55 x 10 x 5 cm (W x D x H); * must weigh no more than 5 kg; * must be compatible with the multimeter and be automatically controlled by the multimeter in a vertical axis; * must be possible to mount it securely on the Field Stand; * must have a minimal length of profile of 15 cm and step resolution between 5 - 15 μm; * must have ability to mount a minimum of 6 sensors on the motorized stage with a micromanipulator for precise adjustment of the sensor position; |  |

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*(date and signature of the person authorized to represent the contractor)*