# Wydział Inżynierii Nateriałowej



## INQUIR Nr 45/WIM/PU/2020

### 1. NAME AND ADDRESS OF THE CONTRACTING AUTHORITY

Warsaw University of Technology Faculty of Materials Science and Engineering 02-507 Warsaw, 141 Woloska Street VAT No.: PL 525 000 58 34

## 2. OBJECTS OF THE CONTRACT

Instrument for electrical conductivity measurements

## 3. SPECIFICATION OF THE OBJECTS OF THE CONTRACT

The instrument for electrical conductivity measurements of solid-state samples (sheets with a known thickness) should be capable of measuring and calculating:

- electrical conductivity,
- sheet resistance,
- electrical resistivity.

The device should meet the following specification:

- setup for four-point probe measurement;
- current range: 1 to 150 mA (or wider);
- voltage measurement range: 1 mV to 10 V (or wider).
- sheet measurement resistance range: 100 m $\Omega$ /sq to 10 M $\Omega$ /sq (or wider);
- conductivity measurement range: 1 mS/m to 100 MS/m (or wider), and at least 1 mS/m to 5 S/m for 1mm thick sample;
- built-in source-measure unit;
- convenient for carrying out repeatable measurements capable to control measurement location, export/import files with saved measurement settings;
- maximum sample thickness: up to 2 mm (or more)
- robust sample substrate/holder for stable fixation of the sample during the test (dedicated substrates included will be beneficial);
- gold-plated probes;
- system of measurement probes providing good electrical contact with a sample surface, and non-destructive testing i.e. preventing damage to delicate samples, cracking, creating holes or dimples on the surface;
- operation controlled by a personal computer (PC) with Microsoft Windows 7 64 bit or newer;
- connection and communication with the personal computer via USB/Ethernet interface without requiring the installation of additional interface cards;
- full kit of software enabling all measurement capabilities of the instrument, controlling the instrument, performing repeatable measurements, as well as acquisition, processing, graphic visualization in real time, and export of measurement data (file formats .txt or .csv will be preferable);
- compact, space-saving dimensions: length <20 cm, depth <25 cm;
- input voltage: 230VAC (single phase), european (EU) type plug;
- user manual in English or Polish;
- free and minimum 2-year warranty.

Politechnika Warszawska

Dział Zamówień Publicznych ul. Wołoska 141 02-507 Warszawa tel. +48 (22) 234 87 25 marianna.wroblewska@pw.d u.pl

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### 4. **REQUIREMENTS**

- Realization deadline: max. 4 weeks form date of the purchase order;
- The delivery will be confirmed with acceptance protocol signed by Supplier and Contractor;
- The invoice can be issued after signing of the acceptance protocol;
- The payment will be done within 14 days upon receipt of the invoice;
- Product will be delivered to Warsaw University of Technology, Faculty of Materials Science and Engineering, Wołoska 141, room 302, Warsaw 02-507, Poland.

### 5. DEADLINE, PLACE AND MANNER OF SUBMISSION OF OFFERS

Offers must be submitted not later than 17.08.2020 until 4 p.m. Offers must be submitted in electronic form to the address: <u>zp30@pw.edu.pl</u>, <u>Karol.Cwieka@pw.edu.pl</u> Offers should be prepared in Polish or English. Contact Person: Karol Ćwieka, **e-mail** Karol.Cwieka@pw.edu.pl , **tel** (+48) 22 234 87 48

#### 6. ADDITIONAL INFORMATIONS

- 1) In order to ensure the comparability of all offers, the Contracting Authority reserves the right to contact the appropriate Tenderers in order to supplement or clarify the offers.
- **2)** After selecting the Contractor, the Contracting Authority reserves the right to negotiate the terms of the contract.
- 3) The Ordering Party reserves the right to respond only to the selected offer.
- **4)** This offer does not constitute an offer in accordance with art. 66 of the Civil Code, as well as it is not an announcement within the meaning of the Public Procurement Law.
- 5) The invitation is not a procurement procedure within the meaning of the Public Procurement Law and does not affect the Employer's commitment to accept any of the offers. Warsaw University of Technology The Faculty of Materials Science and Engineering reserves the right to cancel the order without choosing any of the submitted offers.
- 6) The Contracting Party stipulates that the overall offered price is public information within the meaning of the Act on access to public information and if the bidder reserves it as a trade secret or business secret, his offer will be rejected.
- 7) The Employer does not pay advances for the task. Payment is made after delivery / service.
- 8) The contracting authority can not to be held liable for any costs or expenses incurred in connection with the preparation and delivery of the offer.
- 9) Offers that will be received after the deadline will not be considered.
- **10)** The Ordering Party reserves the right to negotiate the terms of the order, as well as to annul the proceedings at any stage, without giving any reason and to cancel the order without giving reasons for the resignation.
- 11) The administrator of your personal data contained in the submitted offers and processed in the verification of offers is Warsaw University of Technology with its registered office in Warsaw 00- 661, ul. Plac Politechniki 1, (hereinafter: the Employer). Contact to the Data Protection Officer: iod@pw.edu.pl

Prodziekan Wydziału Inżynierii Materiałowej Politechniki Warszawskiej

dr hab. inż. Jerzy Robert Sobiecki, prof. PW

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Warsaw 10.08.2020