

Institute of Metallurgy and Materials Science  
Polish Academy of Sciences  
25 Reymonta St., PL-30059 Krakow, Poland  
VAT no: 6750001857  
[www.imim.pl](http://www.imim.pl), e-mail: [g.kulesza@imim.pl](mailto:g.kulesza@imim.pl)

## Inquiry No. ZO/30/BRIK/2020

Of 12<sup>th</sup> October 2020

**Involves: certification of 2 laminated PV cells (ILAC)**

### 1. PURCHASER

Institute of Metallurgy and Materials Science  
Polish Academy of Sciences  
25 Reymonta St., PL-30059 Krakow, Poland  
VAT no: 6750001857

### 2. ORDER DESCRIPTION

The subject of the order is: **certification of 2 laminated PV cells according to IEC 60904 standard with ILAC certificate**. The offer should exhibit the parameters described below:

2.1. Certification of laminated PV cells for the purposes of research work in the project "Self-cleaning, PV panels on the flexible substrate integrated with the acoustic screen and the smart monitoring system" - FLEXPVSCREEN. Project co-financed by the National Center for Research and Development and PKP Polskie Linie Kolejowe S.A. BRIK joint venture under sub-measure 4.1.1 "Strategic research programs for the economy".

2.2. Specification of measurements:

Characterization of 2 laminated PV cells according to IEC 60904 provided by **laboratory with ILAC MRA accreditation only**

- Certified samples: two PV cells laminated as a typical module in the glass-EVA-cell-EVA-backsheet system 1) monocrystalline 156 mm x 156 mm, 2) polycrystalline 156 mm x 156 mm
- Measurement of spectral response on cell level in the range of 300 nm to 1200 nm
- Image of 2 PV cells (mini-module) with electroluminescence camera
- Precision measurement to determine the I/V characteristic and electrical parameters of 2 PV cells (mini-modules) under standard test condition (STC), including spectral mismatch correction based on data of spectral response measurement.
- The uncertainty of measured short circuit current ( $I_{sc}$ ) must be  $\pm 1,5\%$  or better
- The uncertainty of measured power ( $P_{MPP}$ ) must be  $\pm 1,5\%$  or better
- Report from ILAC certified Laboratory must be included

*Projekt Samoczyszczące, wydajne panele fotowoltaiczne na podłożu elastycznym zintegrowane z ekranem akustycznym i inteligentnym systemem monitorowania*

Projekt dofinansowany przez Narodowe Centrum Badań i Rozwoju oraz PKP Polskie Linie Kolejowe S.A.  
Wspólne przedsięwzięcie BRIK w ramach poddziałania 4.1.1 „Strategiczne programy badawcze dla gospodarki”



2.3. Additionally is required:

**Confirmation of the possibility of issuing a certificate of PV module parameters in accordance with ILAC procedures due to the standard ISO/IEC 17025:2017**

### 3. SUPPLY

3.1 Place of delivery of the contract subject:

**Institute of Metallurgy and Materials Sciences**

**Polish Academy of Sciences**

**Photovoltaic Laboratory**

**22 Krakowska St. PL-43340 Kozy, Poland**

3.2 The proposed price must include the cost of delivery of the subject to the address mentioned in point 3.1

### 4. METHOD OF THE OFFER PREPARATION

4.1 The offer must be made in the offer form, which constitutes Appendix No. 1 to the presented inquiry.

4.2 The offer must be sealed by the Company stamp (only in case, when the Bidder sends the offer by traditional mail).

4.3 The offer must contain a date of the offer preparation.

4.4 The offer must contain Bidder's registered office address, e-mail address, telephone number and VAT number.

4.5 The offer must provide total product price net and total product price gross, including delivery costs, custom duties and any additional costs.

4.6 The offer must be signed by the Bidder (only in case, when the Contractor sends the offer by traditional mail). The price must be given in PLN (Polish Zloty) or EUR (euro currency) in numbers and in words. If it is a difference between price in numbers and price in words, the correct value will be that given in words.

### 5. THE PLACE AND THE DATE OF THE OFFER SUBMISSION

5.1 The offer should be sent via email to the following address: [g.kulesza@imim.pl](mailto:g.kulesza@imim.pl) not later than **20<sup>th</sup> October 2020** till 12:00.

5.2 The offers submitted after the deadline mentioned above **will not be considered**.

5.3 A Bidder may make changes in the offer or withdraw its offer, before the deadline for submission of offers.

5.4 During the evaluation of offers, the Purchaser may request the Bidders explanations concerning the content of submitted offers.

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## 6. DATE OF PERFORMANCE OF THE ORDER

The order must be completed by: **three weeks after submitting an order**

## 7. OFFER EVALUATION

The Purchaser will assess valid offers based on the following criteria:

No.	Criterion Name:	Weight:
1	Price	100 %

Points will be counted according to the following formula:

Criterion no.	Formula
C	Price Number of points C = (C min / C ex) where: - C min – the lowest gross price among all valid offers submitted in the tender procedure - C ex – gross price given in the examined offer

## 8. ADDITIONAL INFORMATION

8.1 For additional information please contact **Grażyna Kulesza-Matlak, Ph.D.** e-mail: [g.kulesza@imim.pl](mailto:g.kulesza@imim.pl) or **Associate Professor, Kazimierz Drabczyk, D.Sc., Ph.D.** e-mail: [kazimierz.drabczyk@wp.pl](mailto:kazimierz.drabczyk@wp.pl)

8.2 The Purchaser DOES NOT ALLOW to submission of partial or replacement offers.

8.3 The Bidder remains bound by the offer for a period of 30 days.

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Appendix No.1  
to the Inquiry No. ZO 30/BRIK/2020  
of 12<sup>th</sup> October 2020

## OFFER FORM

COMPANY NAME: .....

ADDRESS: .....

TEL./E-MAIL .....

VAT no. ....

**Institute of Metallurgy and Materials Science**  
**Polish Academy of Science**  
**25 Reymonta St., PL-30059 Krakow, Poland**

By joining the tender procedure No. ZO/30/BRIK/2020, I offer the delivery of **2 laminated PV cells certificates** which is the subject of this request on the terms set out above:

Net price ..... PLN (In words: .....  
..... PLN)

Gross price ..... PLN (In words: .....  
..... PLN)

Place, ....., date .....

.....  
*signature and stamp of the authorized person  
to represent the Bidder*

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**IMIM PAN – LIDER PROJEKTU**

At the same time I declare that:

1. I declare that I have read the description of the subject of the order contained in this request for quotation, I do not raise any objections to its content and I have obtained the information necessary to prepare the offer.
2. In case of choosing my offer by IMMS PAS, I undertake to sell and deliver the subject of the order to the headquarters of the IMMS Photovoltaic Laboratory, 22 Krakowska St., PL-43340 Kozy, Poland.
3. I declare that the price given in the offer includes all costs of the subject of the order.
4. I declare that the price given in the offer will not change for the duration of the offer and for the duration of the contract.
5. I declare that I am not a related personally or by capital to the Purchaser.
6. I declare that I am authorized to perform the activities covered by the subject of the contract.
7. I declare that I have the knowledge and experience necessary to perform the activities covered by the subject of the contract.
8. I declare that I am not in arrears payment of social security and health insurance contributions due to the Social Insurance Institution.
9. I declare that I am not in arrears payment with the Tax Office.
10. I declare that I am in a financial and economic situation ensuring the correct performance of the contract.
11. I declare that I meet the conditions set out in the request for proposal and declare that I acknowledge and apply them.
12. I agree to publicly disclose my participation in the tender procedure

.....  
*signature and stamp of the authorized person  
to represent the Bidder*

**Projekt Samoczyszczące, wydajne panele fotowoltaiczne na podłożu elastycznym  
zintegrowane z ekranem akustycznym i inteligentnym systemem monitorowania**

**Projekt dofinansowany przez Narodowe Centrum Badań i Rozwoju oraz PKP Polskie Linie Kolejowe S.A.  
Wspólne przedsięwzięcie BRİK w ramach poddziałania 4.1.1 „Strategiczne programy badawcze dla gospodarki”**



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