TENDER DOSSIER

Pursuant to the Public Contracts Act No. 137/2006, Coll., Section 44 as Amended (hereinafter referred as "the Act") for the **Above-the-Limit Public Contract** for a Delivery Supplied in an Open Tender Procedure entitled:

Delivery of a High-Resolution Analytical Scanning Electron Microscope including Sample Preparation Equipment for the NTIS Project

Contracting Authority: University of West Bohemia in Pilsen







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Public Contract Title:	Delivery of a High-Resolution Analytical Scanning Electron
	Microscope including Sample Preparation Equipment for
	the NTIS Project

Contracting Authority:	University of West Bohemia in Pilsen
Address:	Univerzitní 8, 306 14 Pilsen, Czech Republic
ID No.:	49777513
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Person Authorized to Act on Behalf

of the Contracting Authority: Doc. Ing. František Vávra, CSc.

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The Contracting Authority follows the law as well as the Contractor Selection Guidelines of the Operational Programme Research and Development for Innovation (hereinafter referred to as "OP RDI") enclosed as Annex No. 2 to the Guidelines for OP RDI Applicants and Beneficiaries, as amended, in order to assign this Public Contract.

If the term "Bidder" is used in the Tender Dossier, it will also apply to situations where the Public Contracts Act uses the term "Supplier" as well.

The Tender Dossier is prepared in the Czech and English languages. In case of conflict of the two language versions, the Czech version will take precedence.

Project Title:	New Technologies for Information Society (NTIS)
Project Number:	CZ.1.05/1.1.00/02.0090

1 SPECIFICATION OF THE SUBJECT MATTER OF THE PUBLIC CONTRACT

1.1 **Subject matter of the Public Contract**

- 1.2 The scope of this Public Contract is the delivery of one analytical scanning electron microscope operating in the high vacuum mode, including an energy-dispersive detector, wavelength-dispersive spectrometer, modular cathodoluminescence system enabling the spectral analysis of the cathodoluminescence effect, a sample preparation system using the "ion-milling" method, a system for decontamination of organic elements on the sample surface, a sample preparation system for the TEM (Transmission Electron Microscope) applications and sample preparation by sputter coating, and the related software and hardware products (see the "Equipment").
- 1.3 The required (minimum) specification of the subject matter of the Public Contract is specified in Annex No. 1 to the Tender Dossier: Equipment Technical Parameters.
- 1.4 Delivery of the Equipment to its place of delivery, its installation and assembly, calibration and commissioning including verification of its flawless operation, delivery of technical documents and user manuals (either in Czech or English language, in hard or electronic copies), demonstration of all the required functions and parameters are integral parts of the Contract delivery. The subject matter of the Contract must be equipped with relevant full-fledged software including the number of licenses specified in Annex No. 1 to the Tender Dossier (in order to provide for the SW and HW compatibility).
- 1.5 Once the Equipment is duly delivered and commissioned, the Supplier will train the service personnel of the Contracting Authority 40-hour training agenda designed for 3 (three) members of service staff (the agenda will include operation of the Equipment, all its components and software). Due to the complexity of the Equipment operation, the Supplier will provide free of charge additional training of the service







personnel operating the Equipment in the place of delivery of the Public Contract three months after the official delivery and acceptance of the Public Contract delivery, this 20-hour training will be provided to 3 (three) members of staff.

- 1.6 Other conditions applicable to the delivery of the Equipment are also specified in the Draft Purchase Contract (hereinafter also referred to as "the Contract") enclosed as Annex no. 7 to the Tender Dossier.
- 1.7 The subject of the Public Contract must be new, fully functional and complete and must be equipped with full-fledged software enabling its proper use.

1.8 **Classification of the subject matter of the Public Contract according to CPV:**

38511000-0	Electron microscopes
38511100-1	Scanning electron microscopes
38430000-8	Detection and analysis apparatus

Term of delivery of the Public Contract

The term of delivery of the Public Contract is specified in the Draft Contract enclosed as Annex no. 7 to the Tender Dossier.

1.10 Place of the Public Contract Delivery

University of West Bohemia in Pilsen, Univerzitní 22, Pilsen, Czech Republic.

1.11 Anticipated value of the Public Contract

Anticipated value of the Public Contract (excluding VAT): EUR 1,000,000.-

In case the Bidder submits a Bid exceeding EUR 1,100,000.- (excluding VAT), the Bidder shall be disqualified from the Tender for a failure to meet the Tender requirements. There is no higher funding at the disposal of the Contracting Authority.

2 CONDITIONS AND REQUIREMENTS APPLICABLE TO THE BID PREPARATION

2.1 The Bids are submitted in writing in a duly sealed envelope. The Contracting Authority recommends that the envelope is sealed with a stamp indicating the name of the bidding company and a stamp or signature of a statutory body of the Bidder or a representative authorized to act on behalf of the Bidder. The envelope must bear the name of the Tender:

"Do not open – Public Tender: Delivery of a High-Resolution Analytical Scanning Electron Microscope including a Sample Preparation Equipment for the NTIS Project".







The address for mailing notices pursuant to the Act, section 71, subsection 6 or 7 must also be indicated on the envelope.

- 2.2 The Bids must be delivered by date 2014-03-17 time 12:00 at the latest, to the address of the Contracting Authority, i.e. University of West Bohemia in Pilsen, Univerzitní 8, 306 14 Pilsen, Czech Republic (the Mail Room opening hours 7:00 a.m. 2:00 p.m.). No other delivery will be considered proper delivery of the Bid. The Contracting Authority is not equipped with electronic systems that would make possible electronic submission of the Bids.
- 2.3 The Bid (the Tender Cover Page) must contain identification data of the Bidder: name of the company, legal form, registered office, identification number of the entity, if the legal entity is registered, and name of the company, or name and surname, place of business, or permanent address, identification number, if allocated, of a natural person. The Contracting Authority also recommends that the Bidder specifies a person authorized to act on behalf of the Bidder, or a person authorized to represent the Bidder, and a mailing address for exchanging of written notices between the Bidder and Contracting Authority.
- 2.4 The Bid must be prepared either in Czech or English language and must contain documents and information demonstrating compliance with the qualification criteria.
- 2.5 The Bid must contain the Draft Contract signed by a person demonstrably authorized to act on behalf of the Bidder, or for the Bidder, the text of the Contract must correspond to the text in Annex no. 7 to this Tender Dossier. The Bidder is only authorized to insert the missing data, i.e. in the yellow highlighted fields. No other changes are permitted in the Contract. In case the Draft Contract (including its annexes) is not duly signed by the Bidder, the Bid submitted by the Bidder will be excluded and the Bidder will be disqualified from the Tender.
- 2.6 In accordance with the section 68, subsection 3 of the Act, the Bid must also contain the following:
 - a) A list of statutory bodies or members of statutory bodies that were employed by the Contracting Authority, held a position or had a similar relationship with the Contracting Authority in the three years prior to the deadline for submitting the Bids;
 - b) In case the Bidder is a joint stock company a list of shareholders the total nominal value of whose shares exceeds 10% of the share capital, the list will be issued in the time period for submitting the Bids;
 - c) The Bidder's statement that they have not entered into and will not enter into any prohibited agreement as specified by a separate regulation in connection with the Public Contract.

A template of the document to be used to provide the evidence above is enclosed as Annex no. 6 to this Tender Dossier.

2.7 The Contracting Authority sets a 180-day Bid validity period. The Bid validity period commences immediately after the deadline for submission of the Bids and ends on







the day when the Contracting Authority selects the best Bid, or when the Contracting Authority decides to cancel the Tender. The Bid validity period is extended for the Bidders with whom the Contracting Authority may enter into a Contract in accordance with the law until the Contract is signed pursuant to section 82, subsection 4 of the Act, or until the Tender is cancelled.

- 2.8 The Bidder will submit the Bid in two copies, one of the copies will be marked as the "Original" and the other one as the "Copy". The Bidder is responsible for the "Original" and the "Copy" being identical. In case of inconsistencies between the "Original" and "Copy", the "Original" will take precedence. The Contracting Authority recommends that all sheets of the document are bound together in order to prevent any removal of the sheets from the Bid document. All copies will be well readable; there will be no strikeouts or overwriting.
- 2.9 The Contracting Authority recommends that all pages of the Bid, or of its individual copies, are numbered in an uninterrupted ascending order.
- 2.10 The Contracting Authority recommends that if the Bid is submitted as a joint Bid by more Bidders (a joint Bid), the Bidders will appoint one person in the Bid authorized to represent the Bidders in contacts with the Contracting Authority in the course of the Tender (a written authorization of the person will be enclosed).
- 2.11 The Bidder will also submit an electronic version of the Bid on a CD/DVD in the *.pdf format (a scanned copy), the Draft Contract will also be submitted in the MS Office or compatible format. In case of inconsistencies between the electronic version on the CD/DVD and the hard copy version, the hard copy marked as the "Original" will take precedence.
- 2.12 The Contracting Authority recommends that the Bid is structured as follows:
- 2.12.1 Contents the contents must contain all the below specified chapters of the Bid structured as required with relevant numbers of sheets or pages.
- 2.12.2 Tender Cover Page the following information will be specified on the tender cover page: Public Contract title, basic identification data of the Contracting Authority and the Bidder (including personnel authorized to act on their behalf), the bid price for the Public Contract structured as specified in the Tender Dossier, information relating to evaluation criteria date and signature of the person authorized to act on behalf of the Bidder or for the Bidder. A cover page template is enclosed as Annex No. 2 to the Tender Dossier.
- 2.12.3 Documents demonstrating compliance with the qualification criteria the Contracting Authority recommends that the Bidder structures these as specified in chapter 3 herein, see also Annex no. 3 and 4 to the Tender Dossier.
- 2.12.4 Declaration on word of honour confirming non-existence of a conflict of interests, the template is enclosed as Annex No. 5 to the Tender Dossier.







- 2.12.5 Documents pursuant to article 2.6 of the Tender Dossier in accordance with section 68, subsection 3 of the Act; see Annex no. 6 to the Tender Dossier.
- 2.12.6 Draft Contract (including its annexes) signed by a person authorized to act on behalf of the Bidder or for the Bidder as drafted in Annex No. 7 to the Tender Dossier.
- 2.13 The Contracting Authority will respond to questions in writing pursuant to section 49, subsection 2 of the Act. The request for additional information must be delivered to the address of the Contracting Authority to the attention of the contact person. The written request must be delivered to the Contracting Authority 6 (six) business days before the deadline for submission of the Bids at the latest. The Contracting Authority will provide additional information in accordance with the section 49, subsections 2 to 4 of the Act.

3 **QUALIFICATION OF THE BIDDER**

- 3.1 The qualification criteria pursuant to the section 50 et sequentes will be met by the Bidder that:
 - a) Will comply with the basic qualification criteria pursuant to section 53 of the Act,
 - b) Will comply with the professional qualification criteria pursuant to section 54 of the Act,
 - c) Will submit a declaration on word of honour to demonstrate their economic and financial eligibility to deliver the Public Tender,
 - d) Will comply with the technical qualification criteria pursuant to section 56 of the Act.

3.2 Deadline for demonstrating compliance with the qualification criteria

The Bidder must demonstrate their qualifications by the deadline for submission of the Bids specified in article 2.2 herein.

3.3 **Basic qualification criteria**

The basic qualification criteria will be met by a Bidder that:

3.3.1 Has not been lawfully convicted of a criminal offence committed for the benefit of an organized crime group, of a criminal offence of participation in an organized crime group, legalisation of proceeds of criminal activity, complicity, accepting bribes, bribery, indirect bribery, fraud, loan fraud, including the cases of preparation for and attempts to participate in such a criminal offence, or the conviction on committing such a criminal offence has been expunged; in case of a legal person, the said criteria must be met by the legal person as well as by its statutory body and all and any member of the statutory body, if the statutory body of the Bidder or a member of the statutory body is represented by a legal person, the criteria must be met by the legal person, if the Bid or application for participation is submitted by a







foreign legal person through its organization unit, the herein specified criteria must be met by the manger of the organization unit as well as by the above specified persons; the Bidder must comply with the said qualification criteria in the Czech Republic as well as in the country of the Bidder's registered address, business or residence;

- 3.3.2 Has not been lawfully convicted of a criminal offence, where the facts of the case are related to the object of business activities of the Bidder under separate legal regulations or where the conviction on committing such a criminal offence has been expunged; in case of a legal person, the said criteria must be met by the legal person as well as by its statutory body and all and any member of the statutory body, if the statutory body of the Bidder or a member of the statutory body is represented by a legal person, the criteria must be met by the legal person as well as its statutory body and all and any members are statutory body is represented by a legal person, the criteria must be met by the legal person as well as its statutory body and all and any members of the statutory body of such a legal person; if the Bid or application for participation is submitted by a foreign legal person through its organization unit, the herein specified criteria must be met by the manger of the organization unit as well as by the above specified persons; the Bidder must comply with the said qualification criteria in the territory of the Czech Republic as well as in the country of the Bidder's registered address, business or residence;
- 3.3.3 Has not engaged in unfair competition practices, in the form of bribery, under separate legal regulations in the preceding three years (pursuant to section 49 of the Commercial Code);
- 3.3.4 Has not been subject to insolvency proceedings involving its assets, in which a declaration of bankruptcy has been issued in the preceding three years, or the insolvency petition has not been rejected due to a lack of assets on the part of the supplier to cover the costs of insolvency proceedings, or the pending bankruptcy process has not been cancelled because of the supplier's insufficient property or the supplier has not gone into receivership under separate legal regulations;
- 3.3.5 Is not being wound up;
- 3.3.6 Has no outstanding tax arrears registered in tax records, either in the Czech Republic or in the country of the registered office, place of business or residence of the supplier;
- 3.3.7 Has no outstanding arrears in respect of payments and penalties of public health insurance, either in the Czech Republic or in the country of the registered office, place of business or residence of the supplier;
- 3.3.8 Has no outstanding arrears in respect of payments and penalties of the social security insurance and contribution to the State employment policy, both in the Czech Republic and in the country of registered office, place of business or residence of the supplier;
- 3.3.9 Has not been lawfully disciplinarily punished, nor has become a subject of a lawful disciplinary measure under separate legal regulations in the preceding three years, if demonstration of expertise according to separate legal regulations is required pursuant to section 54 (d) of the Act; the same applies to an authorized representative acting on behalf of the Bidder in respect to these activities, and to any other persons responsible for the activity of the supplier;
- 3.3.10 Is not listed in the register of suppliers banned from participating in the performance of public contracts;







3.3.11 Has not been subject to a penalty lawfully imposed on the supplier for allowing illegal work under separate legal regulations (the Employment Act No. 435/2004, Coll., section 5(e), as amended) in the preceding three years.

3.4 Demonstration of the basic qualification criteria

The Bidder demonstrates compliance with the basic qualification criteria by submitting:

- a) An extract from the Register of Criminal Offences (articles 3.3.1 and 3.3.2);
- b) A document issued by the relevant tax authority concerning the declaration on word of honour with regard to excise duty (article 3.3.6);
- c) A document issued by the relevant social security authority (article 3.3.8);
- d) A declaration on word of honour (articles 3.3.3 to 3.3.5, 3.3.7, 3.3.9 to 3.3.11 of the Tender Dossier the declaration on word of honour template is enclosed as Annex No. 3 to the Tender Dossier, this template also includes the declaration concerning the excise tax as specified in article 3.3.6).

3.5 Professional qualification criteria

The professional qualification criteria will be met by a Bidder that shall submit:

- a) An **extract from the Commercial Register**, if it has been registered, or an extract from another register, if registered;
- b) A document evidencing that the Bidder is authorized to pursue business activities pursuant to special legislation in the extent corresponding to the subject of the Public Contract, i.e. especially a document evidencing existence of a relevant trade license: unqualified notifiable trade – Production, Trade and Services not listed in the Schedules 1 to 3 of the Trade Licensing Act.
- **3.6 Declaration on word of honour evidencing economic and financial eligibility** The Supplier will submit a **declaration on word of honour confirming their economic and financial eligibility to deliver the Public Contract**; the declaration template is enclosed as Annex No.4 to the Tender Dossier.

3.7 Technical qualification criteria

The technical qualification criteria will be met by a Bidder that shall submit:

- 3.7.1 In accordance with the Act, section 56, section, 1(a) a list of major contracts performed by the Supplier over the past three years, being identical or similar to the subject of this Public Contract, i.e. especially in the area of delivery of scanning electron microscopes. The Bidder must demonstrate at least 1 (one) completed delivery worth minimum EUR 350,000 excluding VAT. Enclosed to the list must be the following:
 - a) A certificate issued or signed by a public contracting authority, if the goods were provided to a public contracting authority;







- b) A certificate issued by another entity if the goods was provided to an entity other than a public contracting authority; or
- c) A contract entered into with another entity and a document evidencing the delivery of the goods, if the certificate under the section a) cannot be obtained from this entity for reasons on their part.

The certificate issued by the customers to confirm the major contracts must contain at least the following information:

- a) Identification of the contract and name of the customer;
- b) Declaration that the contract value exceeded EUR 350,000 excl. VAT;
- c) Term of delivery (day/year).

For the avoidance of any doubts the Contracting Authority specifies, that the Bidder is not obliged to specify the precise major contract value (payment for the delivery), the minimum amount required by the Contracting Authority will suffice. For the purposes of this article, the specified period of the past three years will be considered from the deadline for submission of the Bids.

3.7.2 Description of the goods to be delivered pursuant to section 56, subsection 1(e) of the Act. The Bidder will be obliged to demonstrably provide a technical description of the goods to be delivered. The Bidder will enclose colour photographs (for example, a catalogue or a brochure) of the proposed Equipment including a detailed technical specification of the goods, documenting the compliance with all technical criteria specified in the Annex No. 1 to the Tender Dossier. The Contracting Authority agrees that this document may be submitted in English, although the rest of the Bid will be submitted in Czech.

3.8 Compliance with the qualification criteria

- 3.8.1 The Bidder will always demonstrate compliance with the qualification criteria by submitting regular copies of the relevant documents (exception being declarations on word or honour that must be dated and signed by a person who has been demonstrably authorized to act on behalf of the Bidder or for the Bidder). Before signing the Contract, the Contracting Authority will be entitled to request submission of originals or certified copies of the documents demonstrating the compliance with the qualification criteria.
- 3.8.2 The documents demonstrating compliance with the basic qualification criteria and a copy of an extract from a commercial register must not be older than 90 calendar days on the day when the bid is submitted.

3.9 Demonstrating compliance with the qualification criteria via subcontractors

If the qualification is demonstrated as a qualification provided by a subcontractor, the Bidder will be obliged to submit a contract entered into with the subcontractor evidencing the subcontractor's commitment to provide the fulfilment required for the Bidder to deliver the Public Contract, or to provide things or rights that the Bidder will be entitled to use and



exercise in order to perform the Public Contract, at least within the extent of the subcontractor's qualifications evidenced pursuant to the Public Contracts Act section 50, subsections 1(b) and (d), documents demonstrating the subcontractor's compliance with the basic qualification requirement pursuant to the Act, section 53, subsection 1(j) and of the professional qualification requirement pursuant to the Act, section 54(a). The Bidder must not employ the subcontractor to provide for the fulfilment of the qualification criteria pursuant to the Act section 54(a).

3.10 Joint delivery of the Public Contract by several suppliers

If the subject of the Public Contract is to be delivered jointly by several Bidders and the Bidders submit a joint Bid, each of the Bidders will be obliged to provide evidence of their compliance with the basic qualification criteria pursuant to section 50, subsection 1(a) of the Act, and of the professional qualification criteria pursuant to section 54, subsection (a) of the Act in extenso. The qualifications pursuant to the section 50, subsection 1(b) and (d) of the Act must be demonstrated jointly by all the Bidders. The Bidders must also submit an agreement containing a commitment that all of those Joint Bidders will be jointly liable vis-à-vis the Contracting Authority and to third parties in respect of any legal relationships established in the context of the Public Contract, for the entire term of the public contract implementation as well as throughout the duration of other liabilities arising from the Public Contract.

3.11 Demonstrating compliance with the qualification criteria by foreign bidders

Unless implied otherwise by a separate legal regulation, a foreign Bidder will evidence the compliance with the qualification criteria in a way required by the law of the country of its registered office, place of business or residence, as required by the Public Contracts Act and the Contracting Authority. If the required document is not issued pursuant to the laws of the country of the registered office, place of business or residence of the foreign Bidder, the foreign Bidder will be obliged to execute a written declaration on word of honour to declare the compliance with the relevant qualification requirement. If the obligation that is to be evidenced as one of the qualification criteria is not specified in the country of the registered office, place of the foreign Bidder, the Bidder will execute a declaration on word of honour to declare the foreign Bidder will execute a declaration on word of honour to declare the foreign Bidder.

In accordance with section 51, subsection 7 of the Act, the documents evidencing compliance with the qualification criteria will be submitted exclusively either in Czech or English language by the Bidder. For all other documents in other than the Czech or English language a certified translation into either Czech or English will always be required. This obligation does not apply to documents in the Slovak language.

The foreigner Bidder must comply with the qualification criteria also in relation to the territory of the Czech Republic. The documents demonstrating compliance with the basic qualification criteria valid in the Czech Republic will be demonstrated as follows by the foreigner Bidder:







Qualification criteria	Required evidence
	Extract from the Register of Criminal Offences
	The extract from the Register of Criminal Offences can be obtained from the Register of Criminal Offences:
Section 53, subsection 1 a) and b) of the Public Contracts Act	(Rejstřík trestů), address: Praha 4, Soudní 1, postal code: 140 66 http://portal.justice.cz/Justice2/Soud/soud.aspx?o=203&j=213&k=2 027&d=9354
	For legal persons, the Bidder will submit an extract from the Register of Criminal Offences for the legal person as well as for all members of its statutory body.
Section 53,	Declaration on Word of Honour
subsection 1 c), d), e) and f) of the Public Contracts Act	The mandatory template document of the Declaration on Word of Honour enclosed as Annex no. 3 to the Tender Dossier. The Declaration on Word of Honour must be dated and signed by a person demonstrably authorized to act on behalf of the Bidder.
Section 53,	Certificate issued by the relevant tax authority
subsection 1 f) of the Public Contracts Act	The certificate can be obtained from the Tax Authority for Prague 1: Finanční úřad pro Prahu 1, address: Praha 1, Štěpánská 28, postal code: 112 33
	http://www.statnisprava.cz/rstsp/adresar.nsf/i/10486
	Declaration on Word of Honour
Section 53, subsection 1 g) of the Public Contracts Act	The mandatory template document of the Declaration on Word of Honour enclosed as Annex no. 3 to the Tender Dossier. The Declaration on Word of Honour must be dated and signed by a person demonstrably authorized to act on behalf of the Bidder.
	Certificate issued by the relevant Social Security Authority
Section 53,	The certificate can be obtained from the Social Security Authority for Prague 8:
subsection 1 h) of the Public Contracts Act	Pražská správa sociálního zabezpečení, územní pracoviště pro Prahu 8, address: Praha, Trojská 1997/13a, postal code: 182 00
	http://www.cssz.cz/cz/kontakty/krajska-a-okresni- pracoviste/praha/uzemni-pracoviste-praha-8.htm







Section 53,	De
subsection 1 i) to k) of the Public Contracts	The Ho
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eclaration on Word of Honour

he mandatory template document of the Declaration on Word of onour enclosed as Annex no. 3 to the Tender Dossier. The eclaration on Word of Honour must be dated and signed by a erson demonstrably authorized to act on behalf of the Bidder.

Information about the documents used in the Czech Republic to demonstrate the qualification is available to the foreign Bidders on the European Commission website:

http://ec.europa.eu/markt/ecertis/login.do.

Due to the strict requirements for the accuracy and completeness of documents evidencing compliance with the basic qualification criteria in the Czech Republic, foreigner Bidders are advised to use services offered for example by Czech attorneys-at-law, legal and consulting companies, or importers, the contacts may be found on the internet.

3.12 Demonstrating compliance with the qualification criteria by submitting an extract from the List of Qualified Suppliers

The Bidder shall be entitled, in accordance with the provisions of Section 127 of the Act, to demonstrate compliance with the qualification criteria by submitting an extract from the List of Qualified Suppliers which demonstrates compliance to the extent to which the documents proving the fulfilment of these professional qualifications cover the requirements of the Contracting Authority for their demonstration. Qualification requirements exceeding the scope of data specified in the extract from the List of Qualified Suppliers shall be evidenced by the Bidder in a way detailed in the Qualification Section of the Tender Dossier. The extract from the List of Qualified Suppliers shall not be older than three (3) months as of the last day of the period within which the qualification criteria shall be demonstrated

3.13 Demonstrating compliance with the qualification criteria by submitting a certificate

The Bidder shall be entitled, subject to the conditions specified in section 134 of the Act, to demonstrate compliance with the qualification criteria by submitting a **valid certificate** to the Contracting Authority issued within the System of Certified Suppliers which demonstrates compliance to the extent to which the documents proving the fulfilment of the relevant qualifications cover the requirements for their demonstration as specified below. The qualification requirements detailed by the Contracting Authority exceeding the scope of data specified in the certificate shall be evidenced by the Bidder by submitting other relevant documents or in a way detailed in the Qualification Section of the Tender Dossier (see article 3 herein).

3.14 Effects of the failure to meet the qualification criteria

The Supplier failing to meet the qualification criteria as required, or failing to meet the requirement specified in the section 58 of the Act, will be disqualified from the Tender by the Contracting Authority.







4 METHOD OF THE BID CALCULATION

- 4.1 The Bidder will be obliged to specify the total Bid price for the entire Public Contract delivery.
- 4.2 The Bidder will show the total bid price (excluding the value added tax) in euro (EUR) on the Tender Cover Page and also in the Draft Contract as the purchase price. The Tender Cover Page and the Draft Contract are integral parts of the Tender Dossier. The bid price shown on the Tender Cover Page must be identical with the purchase price shown in the Draft Contract.
- 4.3 The purchase price will be determined as the highest acceptable, maximum price that cannot be exceeded, it will include all fees and all additional costs incurred in connection with the performance of the Public Contract (i.e. transportation and warehouse charges, costs of the approval process, required testing, declaration of properties or conformity¹;, certificates and attests, transfer of rights, insurance, possible taxes and charges that the Bidder may be obliged to pay in any form according to any applicable laws valid abroad etc.).

5 PAYMENT CONDITIONS

5.1 Payment and invoicing terms and conditions are specified in the Draft Contract enclosed as Annex no. 7 to the Tender Dossier.

6 GENERAL TERMS AND CONDITIONS

- 6.1 The general terms and conditions are specified in the Draft Contract enclosed as Annex no. 7 to the Tender Dossier.
- 6.2 The Draft Contract must be signed by the person authorized to act on behalf or for the Bidder; an original or a certified copy of the authorization must be enclosed to the Draft Contract returned by the Bidder. If the Draft Contract (including its annexes) is not duly signed by the Bidder, the Bid submitted by the Bidder will be excluded and the Bidder will be disqualified from the Tender.

7 EVALUATION CRITERIA

- 7.1 The Bids will be evaluated pursuant to the Act, section 78, subsection 1(a) and section 79 according to the evaluation criterion "the most economically advantageous Bid".
- 7.2 The Contracting Authority will evaluate the Bids in accordance with the below evaluation sub-criteria taking into consideration the weight of these criteria:

¹ Pursuant to the Regulation of the European Parliament and of the Council no. 305/2011.







EVALUATION SUB-CRITERION	WEIGHT
1) Bid price (excluding VAT)	55%
2) Equipment Technical Parameters	45%

Re 1) Bid price (excluding VAT)

The Contracting Authority will evaluate the total bid price (excluding VAT) for the Public Contract delivery shown on the Tender Cover Page, the bid price must be identical with the purchase price specified in the Draft Contract. The Bid containing the lowest Bid price of all the submitted Bids will receive 100 points, all the other Bids containing higher Bid price will be awarded points as follows:

The lowest Bid price of all the Bids × 100

The evaluated Bid price

The assigned points will be multiplied by 0.55 (i.e. the weight of the evaluation criterion).

Re 2) Equipment Technical Parameters

In terms of this evaluation sub-criterion, the selected Equipment Technical Parameters will be evaluated as follows:

Equipment Technical Parameters	Evaluation
Substrate height for insertion into the vacuum prechamber for sample replacement (mm)	5 points: ≥ 29 mm
	2 points: < 29 mm, ≥ 25 mm
	0 points: < 25 mm
Segment number of the draw-out BSE (Back- scattered Electron) detector for optimal 3D	5 points: 5 segments
display of the sample surface structure without having to tilt it	0 points: < 5 segments
Location of an anti-contamination cold trap in the objective lens for maximum reduction of the	3 points: in objective lens
microscope optics contamination	0 points: outside objective lens
Number of possible apertures for the sample image optimization in the TE (Transmitted	5 points: ≥ 3
Electrons) mode in the bright field (BF)	0 points: < 3
Simultaneous display in the bright (BF) and dark (DF) fields during STEM	5 points: YES
	0 points: NO
Number of regulation steps for the gradual	3 points: ≥ 100 steps







suppression of the SE signal component contribution with the sample being displayed using signals from SE only, mixture of SE and LA-BSE or LA-BSE and HA-BSE	1 point: < 100 steps, ≥ 50 steps
	0 points: < 50 steps
The maximum number of displayed points of the SEM image in the microscope SW	3 points: ≥ 19 Mpixels
	1 point: < 19 Mpixels
Phase identification during EDS data acquisition	4 points: YES
	0 points: NO
Utilization of a sealed xenon counter with a window made of a light element used in WDS	5 points: YES
for calibration requirement minimizing	0 points: NO
Simultaneous EDS and EBSD map acquisition with full resolution	2 points: YES
	0 points: NO
Unlimited number of licences for the EDS and EBSD software	5 points: YES
	0 points: NO
SE - "Secondary Electrons"	

SE - "Secondary Electrons"

TE - "Transmitted Electrons"

BSE - "Backscattered Electrons"

LA-BSE - "Low Angle Backscattered Electrons"

HA-BSE - "High Angle Backscattered Electrons"

BF - "Bright Field"

DF - "Dark Field"

EDS - "Energy-Dispersive Detector"

EBSD - "Electron Backscatter Diffraction"

7.3 The Bidder will show specific values applicable to the individual Equipment Technical Parameters on the Tender cover Page. The Bidder will assign points to the presented values according to the above chart and the final value of the evaluation sub-criterion "Equipment Technical Parameters" will be determined as the sum of the assigned points.

The Bid receiving the highest number of points for the "Equipment Technical Parameters" evaluation sub-criterion shall receive 100 points; all the other Bids receiving a lower number of points for the "Equipment technical parameters" sub-criterion will be awarded points as follows:

> Value of the evaluation sub-criterion "Equipment Technical Parameters" of the evaluated Bid x 100

The highest number of points awarded for the "Equipment Technical Parameters" of all Bids

The awarded points will be multiplied by 0.45 (i.e. weight of the evaluation criterion).







7.4 The overall evaluation will be calculated as the sum of points awarded with regard to the two evaluation sub-criteria. The winner will be determined by ranking the Bidders based on the number of points, the higher the number of points, the better the position.

8 ADDITIONAL REQUIREMENTS

- In the bid, the Bidder is obliged to specify which parts of the Public Contract delivery 8.1 are intended to be performed as subcontracts; identification details must be provided for each of the subcontractors.
- The Contracting Authority reserves the right to verify correctness of the information with 8.2 third persons and the Bidder must cooperate with the Contracting Authority as required in this respect.
- 8.3 The Contracting Authority does not permit any alternative Bids.
- The Contracting Authority reserves the right to cancel the Public Tender pursuant to 8.4 section 84, subsection 2(e) of the Act, if there is no funding to support the project, of which this Public Contract is a part, allocated from the state budget.

ACCESS TO TENDER DOSSIER 9

The whole text of the Tender Dossier will be published at the Contracting Authority's profile from the date when the Public Tender is publicly announced in the Bulletin for Public Tenders at the following address:

https://profilzadavatelezapadoceskauniverzitavplzni49777513.allycon.eu.

The Preliminary Notice was published in the Bulleting for Public Tenders on 7th October 2013 at: http://www.vestnikverejnychzakazek.cz/cs-CZ/Form/Display/440898.

10 **OPENING OF THE ENVELOPES CONTAINING BIDS**

The envelopes will be opened on 2014-03-17 at 13:00 hours at the registered address of the Contracting Authority in the room UU 207, address Univerzitní 22, Pilsen, Czech Republic. All Bidders that submitted their Bids before the deadline for submitting the Bids and other persons specified by the Contracting Authority can participate in the envelope opening procedure. For organizational and capacity reasons, only one person can be present to represent each Bidder during the envelope opening. The Bidders' representatives will authorize themselves by powers of attorney issued by the persons authorized to act on behalf of or for the Bidders.







11 LIST OF ANNEXES:

Annex No. 1:	Equipment Technical Parameters
Annex No. 2:	Tender Cover Page
Annex No. 3:	Declaration on Word of Honour Evidencing Compliance with the Basic Qualification Criteria (template)
Annex No. 4:	Declaration on Word of Honour Evidencing Economic and Financial Eligibility (template)
Annex No. 5:	Declaration on Word of Honour Evidencing Non-Existence of Conflict of Interests (template)
Annex No. 6:	Documents Pursuant to Section 68, Subsection 3 of the Act (template)
Annex No. 7:	Draft Purchase Contract
Annex No. 8	Authorization of the Dean of the Faculty of Applied Sciences of University of West Bohemia in Pilsen to Act on Behalf of the Public University

On behalf of the Contracting Authority:

augt.

Doc. Ing. František Vávra, CSc. Dean, Faculty of Applied Sciences authorized to act on behalf of the University







Annex No. 1 to the Tender Dossier

Equipment Technical Parameters

The equipment shall consist of the components specified below, shall meet the following minimal technical parameters, and shall enable at least the following functions:

1. Scanning electron microscope (FE-SEM) operating in the high vacuum mode:

- Electron gun with ZrO/W Schottky emitter with a guaranteed service life of at least 6,000 hours with potential guarantee of this service life without additional costs in the bid price;
- Electron beam stability better than 1% for at least 8 hours;
- Image resolution:
 - >SE (Secondary Electrons) mode at 30 kV at least 1.0 nm;
 - SE mode (at 1 kV) at least 1.6 nm;
 - >BSE (Backscattered Electrons) mode at 30 kV at least 3.0 nm;
 - ➤TE (Transmitted Electrons) at least 1.0 nm;
- Zoom range at least 25 to 800 000 times for standard 127 x 95 mm photograph;
- The accelerating voltage range at least from 0.1 to 30 kV (with maximum 0.1 kV steps)
- Electron beam 1 pA 200 nA (at 15 kV) and more than 300 nA (at 30 kV);
- Independent regulation of the accelerating voltage and sensor current;
- Automatic functions:
 - ➤Automatic focus;
 - Automatic sigmatism regulation;
- Detectors:
 - ➢Out-lens SE detector;
 - ➢In-lens SE detector;
 - >Draw-out semiconductor BSE detector with at least 4 segments;
 - Draw-out detector of transmitted electrons (TE) with display in both the bright (BF) and dark (DF) fields;
- Capacity of a simultaneous scanning of SE and BSE, and SE and TE images at all accelerating voltages;
- System reducing potential contamination of the electron optics coming from the sample cold trap;
- Field of view of at least 4 mm at 25 times zoom;
- Table for samples eucentric-type with motorization in 5 axes in the range of:
 - ➤X-axis at least 100 mm
 - ≻Y-axis at least 100 mm
 - ➤Z-axis at least 35 mm
 - ≻Rotation 360°
 - ≻Tilt at least from -3°to 70°,
- Sample replacement prechamber with the following minimum dimensions 150 mm diameter and 25 mm height;
- Fully automated vacuum pumping system;







- Vacuum of at least 10⁻⁴ Pa shall be maintained in the sample chamber using turbomolecular pump with a rotor laid in magnetic bearings, and oil-free primary air pump;
- Vacuum of at least 10⁻⁷ Pa shall be maintained in the electron gun using an ion pump;
- Objective lens aperture adjustable into several positions with an easy and simple replacement during functional electron beam flow;
- Infrared camera enabling monitoring of processes inside the sample chamber;
- Faraday cup for current measurement through the sample;
- Capacity to observe and store images larger than 15 Mpixels in the TIFF, BMP and JPG formats;
- Capacity to obtain 3D images and quantitative topographic data about the sample surface without having to tilt it;
- Control of all SEM parameters using a computer system with relevant software (at least 1 (one) license), at least 24" flat monitor, DVD-RW, USB interface and a network card.

2. Energy-Dispersive Detector (EDS):

- EDS hardware and software fully integrated with SEM (EDS and SEM control using one mouse and a keyboard);
- Detector usage with nitrogen-free cooling (SDD "Silicon Drift Detector" technology);
- Detector surface area of at least 30 mm²;
- Resolution at least 129 eV (for the Kα Mn line);
- Element detection starting from beryllium (Be) and heavier elements;
- Upload speed higher than 300,000 cps ("counts stored per second");
- Equipped control computer system with software (at least one licence) supporting the EDS spectrometer, data analysis and recording, and providing at least:
 - X-ray spectrum scanning (both quantitative and qualitative);
 - o At certain point;
 - On the surface of the whole displayed area or area selected by the operator;
 - Along any selected line;
 - Determination of element composition for elements selected by the operator in a certain area (at least 25 elements simultaneously);
 - Complete spectrum scan for each display point (pixel) in the selected area on the selected surface with resolution of at least 1024x1024 pixels;
 - Electron reflection registration;
 - >Automatic and manual quantitative analysis (with automatic line identification);
 - Background modelling;
 - ➤Quantitative analysis;
 - >Nonstandard analysis;
 - PROZA and ZAF correction systems and matrix correction for thin sections of the TEM;
 - Set of standards (at least 50 standards of metals and minerals).







3. Wavelength-dispersive spectrometer (WDS):

- Highly sensitive system with energy range of at least 160 eV to 12 keV;
- Automatic WDS setting using information from EDS;
- Automatic WDS calibration;
- Full WDS integration into a software application working with EDS, including automatic WDS validation of the EDS peak identification.

4. EBSD (Electron Backscatter Diffraction) system – shall consist of the following parts:

- Specialized CCD (charge-coupled device) camera for image scanning with resolution of at least 640x480 pixels and indexing speed more than 600 fps;
- Interface for connection to SEM enabling SEM control from the EBSD system;
- The system must enable simultaneous scanning of the EBSD and EDS maps (spectral quantitative maps containing complete x-ray spectrum for each pixel);
- Phosphorus screen for EBSD image recording;
- Software (at least one licence) enabling:
 - Scanning of electron and EBSD images;
 - >Control of all detector parameters (integration, "pixel binning")
 - >Automatic indexing using the Hough transform;
 - ➢OIM mapping type;
 - Presentation of EBSD data in Euler space (ODF, MODF);
 - Capacity to analyse multiple-phase materials (at least 4 phases);
 - ➢Grain boundary mapping with their reconstruction possibility;
 - Phase identification (together with the EDS analysis);
 - Presentation of the analysed phase results.

5. The EDS, WDS and EBSD systems shall be made by one manufacturer and use the same software platform

- 6. Modular cathodoluminescence (CL), enabling a spectral analysis of the cathodoluminescence effect:
 - Achromatic parabolic mirror operating in the minimal range of 200 to 2000 nm, including:
 - >Motorized mechanism for the mirror draw-in/out the SEM tube;
 - Exact positioning system in three axes (X-Y-Z);
 - Flanges for the microscope installation;
 - Working distance 15 mm at maximum;
 - Digital system for the electron beam control;
 - Spectral analysis capacity monochromator with focal length of at least 120 mm located outside the microscope and equipped with:
 - >At least two diffraction gratings;
 - >At least one output for a detector;
 - ➤Motorized carousel with filters;
 - Necessary junction optical module connecting the CL signal to the monochromator using fibre optic;
 - PMT detector with the range of at least 200 to 850 nm;







- System control software enabling the operator to obtain monochromatic CL images (maps) with at least one licence.
- Adapter for the CL installation onto the microscope chamber;
- Possible future addition of other types of spectrographs and detectors for the hyperspectral measurement.

7. Modular source of X-ray radiation with multi-capillary optics for SEM/EDS:

- X-ray source with micro focusing and the maximum focal spot size of 65 um;
- Capillary optics and installation adapter for the microscope chamber;
- Control electronics and power supply source;
- Software for the operating parameter setting and the X-ray source screen control with one licence;
- Software for the spectrum processing and evaluation, and the qualitative and quantitative sample analyses with at least one licence;
- Adapter for the installation of the modular source of X-ray radiation onto the microscope chamber.

8. Sample preparation system using the "ion-milling" method:

- Argon ion source;
- Type with three electrodes;
- Accelerating voltage at least from 0 to 6 kV;
- Discharge current at least from 0 to 500 μA;
- Minimum sample size diameter 50 mm, height 25 mm;
- Sample tilt in the range of 0 to 90°,
- Argon flow control using a mass flow meter;
- Module for sample cross-section treatment;
- Integrated optical microscope for process state observation;
- Table for sample compatible with the SEM chamber for easier sample transport.

9. System for decontamination of organic elements on the sample surface:

- Independent system for sample decontamination using UV radiation and ozone or a similar solution integrated in the microscope chamber;
- Table for sample compatible with the chamber of the scanning microscope for easy sample transport in case an independent decontamination system is used;
- Possibility of sample insertion in vacuum in case an independent decontamination system is used.

10. Sample preparation system for the TEM applications:

- Sample preparation for the TEM applications (thin sections) using argon ions;
- Ion beam energy control by changing the accelerating voltage from 0.1 to 8.0 kV;
- Sample table rotation control adjustable from 1 to 6 revolutions per minute;
- Sample holder compatible with the sample holder in the TEM microscope;
- Built-in microscope with the zoom function zoom for process state observation;
- Sample size at least 2 mm in diameter;
- Oil-free vacuum pumping system.







11. System for sample preparation by sputter coating:

- Sputter coating with carbon and metal (Au);
- Automatic or manual control;
- Pumping using a turbomolecular pump;
- Digital setting of power and sputter coating time;
- Monitor for the sputtered layer thickness monitoring;
- Set of consumables.

For all equipment, the contracting authority requires warranty period of at least 24 months.







Annex No. 2 to the Tender Dossier

TENDER COVER PAGE

BASIC INFORMATION:

Public Contract Title:	Delivery of a High-Resolution Analytical Scanning Electron Microscope including Sample Preparation Equipment for the NTIS Project
Contracting Authority:	University of West Bohemia in Pilsen
Registered Address:	Univerzitní 8, 306 14 Plzeň, Czech Republic
ID No.:	49777513
Tax ID No.:	CZ49777513
Person Authorized to Act	
on Behalf of the Contractin	ng
Authority:	Doc. Ing. František Vávra, CSc.
	Dean, Faculty of Applied Sciences authorized to act on behalf of the University

Bidder	
Name / business name	[to be completed by the Bidder]
Place of business / registered office	[to be completed by the Bidder]
ID No.:	[to be completed by the Bidder]
Tax ID No.:	[to be completed by the Bidder]
Person Authorized to Act	
on behalf of the Bidder:	[to be completed by the Bidder]
Bank:	[to be completed by the Bidder]
Authorized Representatives:	[to be completed by the Bidder]







BID PRICE (EXCLUDING VAT):

Subject	Price in EUR excl. VAT
Delivery of a High-Resolution Analytical Scanning Electron Microscope including a Sample Preparation Equipment	

TECHNICAL INFORMATION – EVALUATION CRITERION 2) EQUIPMENT TECHNICAL PARAMETERS:

Equipment Technical Parameters	Unit	Proposed value ²
Substrate height for insertion into the vacuum prechamber for sample replacement (mm)	mm	[<mark>to be completed by the</mark> Bidder]
Segment number of the draw-out BSE (Back-scattered Electron) detector for optimal 3D display of the sample surface structure without having to tilt it	Number of segments	[to be completed by the <mark>Bidder</mark>]
Location of an anti-contamination cold trap in the objective lens for maximum reduction of the microscope optics contamination	-	Select the one that applies: In the objective lens / Out of the objective lens
Number of possible apertures for the sample image optimization in the TE (Transmitted Electrons) mode in the bright field (BF)	Number of possible apertures	[to be completed by the Bidder]
Simultaneous display in the bright (BF) and dark (DF) fields during STEM	-	YES/NO
Number of regulation steps for the gradual suppression of the SE signal component contribution with the sample being displayed using signals from SE only, mixture of SE and LA- BSE or LA-BSE and HA-BSE	Number of steps	[to be completed by the Bidder]

² The Bidder will specify parameters of the equipment (in the yellow highlighted fields) in the requested units of measure and will delete what does not apply.







The maximum number of displayed points of the SEM image in the microscope SW	Mpixels	[to be completed by the Bidder]
Phase identification during EDS data acquisition	-	YES/NO
Utilization of a sealed xenon counter with a window made of a light element used in WDS for calibration requirement minimizing	-	YES/NO
Simultaneous EDS and EBSD map acquisition with full resolution	-	YES/NO
Unlimited number of licences for the EDS and EBSD software	-	YES/NO

Date [to be completed by the Bidder]

[Name of the company + signature of an authorized representative - to be completed by the Bidder]







Annex No. 3 to the Tender Dossier

Declaration on Word of Honour Evidencing Compliance with the Basic Qualification Criteria

Pursuant to the Public Contracts Act No. 137/2006, Coll., as amended

(Hereinafter referred to as "the Act")

I hereby declare on my word of honour that:

Pursuant to Section 53, subsection	1 (c): - In the preceding three years, the supplier has
	not engaged in unfair competition practices, in the form of bribery, under separate legal regulation (section 49, of the Commercial Code);

Pursuant to Section 53, subsection 1 (d): - In the preceding three years, the supplier has not been subject to insolvency proceedings involving its assets, in which a declaration of bankruptcy has been issued, or the insolvency petition has not been rejected due to a lack of assets on the part of the supplier to cover the costs of insolvency proceedings; or the pending bankruptcy process has not been cancelled because of the supplier's insufficient property; or the supplier has not gone into receivership under separate legal regulations;

Pursuant to Section 53, subsection 1 (e): - The supplier is not being wound up;

- Pursuant to Section 53, subsection 1 (f): The supplier has no outstanding tax arrears relating to the excise tax registered in tax records, either in the Czech Republic or in the country of the registered office, place of business or residence of the supplier;
- Pursuant to Section 53, subsection 1 (g): The supplier has no outstanding arrears in respect of payments and penalties of public health insurance, either in the Czech Republic or in the country of the registered office, place of business or residence of the supplier;
- Pursuant to section 53, subsection 1 (i): In the preceding three years, the supplier has not been lawfully disciplinarily punished, nor has the supplier become a subject of a lawful disciplinary





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measure under separate legal regulations, this applies to cases where demonstration of professional qualifications under separate legal regulations is required pursuant to section 54(d); the same applies to an authorized representative, and to any other persons responsible for the activity of the supplier;

- Pursuant to Section 53, subsection 1 (j): The supplier is not listed in the register of suppliers banned from participating in the performance of public contracts;
- Pursuant to Section 53, subsection 1 (k): In the preceding three years there has been no penalty lawfully imposed on the supplier for allowing illegal work under separate legal regulations (section 5(e), subsection 3 of the Employment Act no. 435/2004, Coll., as amended).

Date [to be completed by the Bidder]

[Name of the company + signature of an authorized representative - to be completed by the Bidder]







Annex No. 4 to the Tender Dossier

Declaration on Word of Honour Evidencing Economic and Financial Eligibility

Public Contract Title:	Delivery of a High-Resolution Analytical Scanning Electron Microscope including Sample Preparation Equipment for the NTIS Project
Contracting Authority:	University of West Bohemia in Pilsen
Registered Address:	Univerzitní 8, 306 14 Plzeň, Czech Republic
ID No.:	49777513
Tax ID No.:	CZ49777513

I hereby declare on my word of honour that the Bidder [to be completed by the Bidder], registered address [to be completed by the Bidder], is economically and financially eligible to supply the said Public Contract in accordance with the Public Contracts Act No. 137/2006, Coll., Section 50, subsection 1 (c).

Date [to be completed by the Bidder]

Name of the company + signature of an authorized representative - to be completed by the Bidder]







Annex No. 5 to the Tender Dossier

DECLARATION ON WORD OF HONOUR EVIDENCING NON-EXISTENCE OF CONFLICT OF INTERESTS

Public Contract Title:	Delivery of a High-Resolution Analytical Scanning Electron	
	Microscope including Sample Preparation Equipment for the NTIS Project	

Contracting Authority:	University of West Bohemia in Pilsen
Registered Address:	Univerzitní 8, 306 14 Plzeň, Czech Republic
ID No.:	49777513
Tax ID No.:	CZ49777513

The Bidder hereby declares on the word of honour that there exist no circumstances resulting in the conflict of interest as stipulated in the Tender Dossier for the Public Tender herein, in particular:

- a) The Bidder has not participated in the preparation of this Tender Dossier;
- b) No employee of the Contracting Authority, or a member of the project implementation team, or a person participating in the preparation or implementation of the given Tender as a contractor have participated in the preparation of the Bid submitted by the Bidder;
- c) The Bidder's Bid has not been prepared together with a person who is an employee of the Contracting Authority, member of the project implementation team or person participating in the preparation or implementation of the given Tender as a contractor;
- d) No Contracting Authority's employee, member of the project implementation team or person participating in the preparation or implementation of the given Tender as a contractor is a sub-supplier to the Bidder.

Date [to be completed by the Bidder]

..... [Name of the company + signature of an authorized representative - to be completed by the Bidder]







Annex No. 6 to the Tender Dossier

Documents Enclosed pursuant to the Public Contracts Act, Section 68, Subsection 3

Public Contract Title:	Delivery of a High-Resolution Analytical Scanning Electron Microscope including Sample Preparation Equipment for the NTIS Project
Contracting Authority:	[to be completed by the Bidder]
Registered Address:	[to be completed by the Bidder]

ID No.: [to be completed by the Bidder]

The Bidder submits the following list of statutory bodies or members of statutory bodies that were employed by the Contracting Authority, held a position, or had any similar relationship with the Contracting Authority in the three years prior to the deadline for submitting the Bids:

[TO BE COMPLETED BY THE BIDDER]

The Bidder submits a list of its shareholders the total nominal value of whose shares exceeds 10% of the registered capital as of the date of submitting the Bids:

[TO BE COMPLETED BY THE BIDDER; if the Bidder is not a joint stock company, this field will remain empty]

The Bidder hereby declares that it has not entered and will not enter into any prohibited agreement as specified by special legal regulations, or pursuant to the Protection of Competition and Amendments to Some Laws Act no. 143/2001 Coll., as amended, in relation to the Tender.

Signature of the Bidder / person authorized to act on behalf of the Bidder:

Date [to be completed by the Bidder]

Name of the company + signature of an authorized representative - to be completed by the Bidder]







Annex no. 7 to the Tender Dossier

PURCHASE CONTRACT

Entered into Pursuant to the Civil Code, Act no. 89/2012, Coll., section 2079 et sequentes and section 2358 et sequentes, as amended, and the Copyright Act, Act no. 121/2000, Coll., as amended

Contracting Parties:	
University of West Bohemia in Pilsen	
Address:	Univerzitní 8, 306 14 Plzeň, Czech Republic
ID no.:	49777513
Tax ID no.:	CZ49777513
Person authorized to act	
on behalf of the Purchaser:	Doc. Ing. František Vávra, CSc.,
	Dean of the Faculty of Applied Sciences, authorized to act on behalf of University of West Bohemia
Bank:	Komerční banka a.s., Plzeň-město
Account no.:	4811530257/0100
On one part as the Purchaser (hereinafter	referred to as "the Purchaser")
and	
[to be completed by the Bidder – name of	of the company
Registered office:	[to be completed by the Bidder]
ID no.:	[to be completed by the Bidder]
Tax ID no.:	[to be completed by the Bidder]
Acting through/represented by:	[to be completed by the Bidder]
Registered in:	[to be completed by the Bidder]
Bank:	[to be completed by the Bidder]

On the other part as the Seller (hereinafter referred to as "the Seller")

Account no.:

Entered into this Purchase Contract (hereinafter referred to as the "Contract") on the hereinbelow day, month and year:

[to be completed by the Bidder]



I. Introduction

- This Purchase Contract is entered into based on the result of the Public Tender entitled "Delivery of a High-Resolution Analytical Scanning Electron Microscope including a Sample Preparation Equipment for the NTIS Project" (hereinafter referred to as "the Public Contract"). The Purchaser, as the Contracting Authority) selected the offer submitted by the Seller as the best bid.
- 2. The Seller confirms that they have become fully acquainted with the scope and nature of the thing that is subject of the purchase and relates to the subject matter of the Public Contact, and that they are aware of all technical, qualitative and other conditions and have the capacities and expertise needed to deliver the Contract.
- 3. The Seller explicitly confirms that they have studied all the Purchaser's documents and instructions received by the date of execution of this Contract as well as instructions contained in the requirements that the Purchaser defined for the Public Contract, that the Seller has found these requirements to be appropriate, that the purchase price and the method of the Contract delivery contain and take into consideration all the above specified conditions and circumstances

II. Object of Sale

- Pursuant to the terms and conditions of this Contract, the Seller undertakes to supply 1 (one) analytical scanning electron microscope operating in the high vacuum mode, including an energy-dispersive detector, wavelength-dispersive spectrometer, modular cathodoluminescence system enabling the spectral analysis of the cathodoluminescence effect, a sample preparation system using the "ion-milling" method, a system for decontamination of organic elements on the sample surface, a sample preparation system for the TEM (Transmission Electron Microscope) applications and sample preparation by sputter coating, and the related software and hardware products (hereinafter also referred to as "the object of sale" or "the Equipment"). The object of sale is specified in Annex no. 1 to this Contract, "Equipment Technical Parameters and Related Obligations of the Seller".
- 2. The object of sale must be delivered in the agreed quantity, quality and design to the agreed place in the agreed time. The supplied object of sale must be also suitable and fully employable for the agreed purpose of its use as specified in this Contract, and in terms of its use not specifically described in this Contract, it must be suitable and fully employable for the purpose it is usually used for. The Seller undertakes to comply with other related obligations under this Contract and transfer the ownership right to the object of sale on the Purchaser.
- 3. Delivery of the Equipment to its place of delivery, its installation and assembly, calibration and commissioning including testing of its flawless operation, delivery of drawings indicating the location and connection of the Equipment to the existing infrastructure, delivery of technical documents and user manuals (either in Czech or English language,







in hard or electronic copies), demonstration of all the required functions and parameters are integral parts of the Contract delivery. The Equipment must be equipped with relevant full-fledged software including the licenses specified in Annex no. 1 to the Contract (in order to provide for the SW and HW compatibility).

- 4. Once the Equipment is duly delivered and commissioned, the Seller will provide to the service personnel of the Purchaser a basic training a 40-hour training agenda designed for 3 (three) members of staff (the agenda will include operation of the Equipment, all its components and software). Due to the complexity of the Equipment operation, the Seller will provide free of charge additional training of the service personnel operating the Equipment in the place of delivery of the Contract three months after the official delivery and acceptance of the delivery, this 20-hour training will be provided to 3 (three) members of staff.
- 5. The object of sale will be new, fully functional, and complete and will be equipped with full-fledged software enabling its proper use.
- 6. The Purchaser undertakes to accept the delivered object of sale and to pay to the Seller the price stipulated in this Contract under the conditions specified herein.

III. Price and Payment Conditions

- 1. The purchase price results from the price bid submitted by the Seller calculated for the purposes of the Public Tender.
- 2. The purchase price will be paid by the Purchaser to the Seller in several payments via Documentary Letter of Credit opened by the Purchaser that the Seller will be advised of upon delivery and acceptance of partial deliveries specified in this Contract.
- 3. The total purchase price for the entire object of sale is EUR [to be completed by the Bidder] in words: [to be completed by the Bidder] EUR excluding VAT (hereinafter referred to as "the Purchase Price").
- 4. In accordance with the VAT Act no. 235/2004, Coll., as amended, the Purchase Price is determined excluding VAT; the VAT may be added to the Purchase Price and the Purchaser will be obliged to pay the VAT, or declare or return in any form pursuant to the VAT Act no. 235/2004, Coll., applicable on the date of taxable supply.
- 5. The Purchase Price will be determined as the highest acceptable, maximum price that cannot be exceeded, it will include all fees and all additional costs incurred in connection with the performance of the delivery (i.e. transportation and warehouse charges, costs of the approval process, required testing, declaration of properties or conformity¹, certificates and attests, transfer of rights, insurance and possible taxes and charges that the Seller may be obliged to pay in any form according to any applicable laws valid abroad etc.). The Seller is not entitled to charge any other amounts for the performance of the herein Contract.
- 6. The Purchase Price will be paid by the Purchaser as follows:

¹ Pursuant to the Regulation of the European Parliament and of the Council no. 305/2011.







The Purchaser will open a Documentary Letter of Credit (L/C) for import for the Seller and the total Purchase Price will be paid for the benefit of the Seller in four (4) instalments. The Seller will cooperate with the Purchaser as necessary to open the Letter of Credit. The Documentary Letter of Credit for import will be open based on a Request to Open a Letter of Credit containing the following conditions:

Purchaser's bank (issuing bank):	Komerční banka, a.s., ID: 453117054, address: Na Příkopě 33, postal code 114 07 Praha, Czech Republic
Seller's bank (advising bank):	[to be completed by the Bidder]
Letter of Credit amount:	The total Purchase Price
Currency:	EUR (Euro)
Letter of Credit date:	Without undue delay, no later than 20 days after the Contract is signed with the Seller
Type of payment:	Upon presentation
Subcontracts:	Permitted

The total Purchase Price will be paid in four (4) instalments by means of the Documentary Letter of Credit:

- 1. 30% of the total purchase price following the submission of the complete technical documentation for the raster electron microscope to the Purchaser by the Seller based on the following documents:
 - Invoice (one original and one additional copy);
 - One original copy of a document confirming delivery and acceptance of the technical documents for the microscope signed by authorised representatives of both Contracting Parties. This document will be marked as "Partial Acceptance Protocol no. 1".
- 2. 30% of the total Purchase Price following a functional test of the raster electron microscope after it is delivered to the Purchaser based on the following documents:
 - Invoice (one original and one additional copy);
 - One original copy of a document certifying the functional test of the microscope signed by authorised representatives of both Contracting Parties. This document will be marked as "Partial Acceptance Protocol no. 2".
- 3. 30% of the total Purchase Price following a functional test of the entire Equipment after it is delivered to the Purchaser based on the following documents:
 - Invoice (one original and one additional copy);
 - One original copy of a document certifying the functional test of the entire Equipment signed by authorised representatives of both







Contracting Parties. This document will be marked as "Partial Acceptance Protocol no. 3".

- 4. 10 % of the total purchase price following the due delivery of the Equipment and proper assembly of the Equipment supplied by the Seller, commissioning of the Equipment including demonstration of all the required functions and parameters, and basic training of the employees/staff members of the Purchaser that will operate the Equipment to the extent detailed in the Tender Dossier based on the following documents:
 - Invoice (one original and one additional copy);
 - One original copy of the Acceptance Protocol signed by authorised representatives of the two Contracting Parties. This document will be marked "Final Acceptance Protocol". The Final Acceptance Protocol will be issued independently on the provision of the free of charge training of the Purchaser's staff pursuant to article II.4 herein.

The Letter of Credit will be valid for seven (7) months from the date when the Contract is signed with the Seller. The costs associated with opening of the Letter of Credit (costs of the bank opening the Letter of Credit) will be paid by the Purchaser (applicant). Costs not associated with the bank opening the Letter of Credit will be paid by the Seller (beneficiary).

7. A tax document – the invoice must contain all elements of a proper accounting and tax document pursuant to the relevant legislation, namely – yet not exclusively – of the Value Added Tax Act no. 235/2004, Coll., as amended. The Purchaser will be entitled to return an invoice missing the relevant elements to the Seller to be amended before its due date, and the Purchaser will not be in delay with the payment in such a case. The payment period will start again after the duly amended or corrected invoice is sent to the Purchaser.

IV. Place of Delivery and Acceptance of the Equipment

- 1. The Seller undertakes to deliver the object of sale (including its assembly, commissioning, service personnel training etc.) over to the place of delivery, i.e. University of West Bohemia in Pilsen, Univerzitní 22, Plzeň, Czech Republic, during the working hours of the Purchaser between 8:00 a.m. and 4:00 p.m., unless stipulated otherwise by the Contracting Parties.
- 2. The Final Acceptance Protocol will be made out to certify the delivery and acceptance of the object of sale, i.e. the delivery of the object of sale (including its assembly, commissioning, service personnel training etc.), the Protocol will be signed by authorized representatives of both Contracting Parties. The Purchaser will not be obliged to accept any object of Sale demonstrating any defect or unfinished parts. Together with the object of sale, the Seller is also obliged to provide to the Purchaser documents needed for the proper hand-over and subsequent operation of the object of sale, and the delivery of these documents is a condition for the object of sale to be accepted by the Purchaser.




V. Term of Delivery

1. The Seller undertakes to start delivering the object of sale on the effective date of the Contract and duly complete the delivery of the object of sale within six (6) months after the effective date of the Contract at the latest.

VI. Transfer of Ownership Title and the Risk of Damage of the Object of Sale

1. The ownership title to the object of sale is transferred to the Purchaser on the day the object of sale is duly delivered by the Seller and accepted and its acceptance is certified by the signed Final Acceptance Protocol. The risk of damage of the object of sale is also transferred to the Purchaser at the same time.

VII. Guarantee

- 1. The Seller provides to the Purchaser a quality guarantee for the object of sale delivered pursuant to this Contract, the guarantee period will be 24 months.
- 2. The guarantee period starts on the day the object of sale is duly delivered by the Seller and accepted by signing the Final Acceptance Protocol.
- 3. The Purchaser is obliged to inform the Seller, by phone or in writing at the following address of the Seller: [to be completed by the Bidder], of any defects as soon as they are identified. Claims mailed by the Purchaser on the last day of the guarantee period will also be considered duly raised claims.
- 4. The Seller undertakes to carry out guarantee repairs without undue delay and free of charge no later than 5 (five) calendar days after a claim is raised by the Purchaser, unless stipulated otherwise by the Contracting Parties. If the nature of the defect permits, the Seller will be obliged to remove the defect in the place of delivery. If this is not possible, the Seller will remove the defect in the Seller's facility.
- 5. The Seller will carry out the guarantee repairs free of charge and without delay depending on the nature of the Equipment defect, no later than 30 calendar days after the claim is raised, unless stipulated otherwise by the Contracting Parties.
- 6. In this respect the Seller acknowledges that the work to remove the defects may start on business days between 8:00 a.m. and 4:00 p.m., unless stipulated otherwise by the Contracting Parties.
- 7. The Contracting Parties will certify removal of the claimed defect by a protocol certifying the removal of the defect. The guarantee period will be extended by the period lapsed between the date of the guarantee claim and the day of defect removal.

VIII. Licensing Provisions

1. The Seller grants to the Purchaser a non-exclusive license without any time and territorial limits together with the software delivered as part of the object of sale as specified in







Annex no. 1 to this Contract. The compensation for the granted licenses is included in the Purchase Price specified in Article III herein.

- 2. The Seller guarantees that the delivered object of sale is not subject to any rights of third parties that would prevent signing of this Contract and proper use of the object of sale by the Purchaser, in particular the industrial property rights.
- 3. The Seller declares that it is authorized to enter into this Contract and that there are no limitations imposed by third parties, natural or legal persons. The Seller declares that the object of sale including the delivered software are not subject to any rights of third parties pursuant to the Copyright Act no. 121/2000, Coll., as amended, or any other regulations. Should the rights of the Purchaser under this Contract be limited by a third party, or should a third party prevent the Purchaser from proper exercise of these rights, the Seller undertakes to immediately prevent such behaviour at its own expense and to compensate the Purchaser for incurred damage (material and non-material).

IX. Termination of the Contract

- 1. This Contract can be terminated:
 - a) By a written agreement of the Contracting Parties;
 - b) By withdrawal from the Contract for reasons stipulated in the Contract or specified by the law.
- 2. A Contracting Party may terminate this Contract for a gross violation of the Contract by the other Party. In particular, the following will be considered a gross violation of this Contract:
 - a) The Purchaser's failure to pay the Purchase Price in accordance with this Contract within 60 days after the due date of a relevant invoice;
 - b) The Seller's failure to duly deliver the object of sale (or its part) on the agreed date entitling the Seller to the payment of the purchase price (or its part) based on a relevant invoice;
 - c) The Seller's failure to supply object of sale possessing the properties declared by the Seller in this Contract or properties arising from this Contract;
 - d) The Seller's failure to provide correct information or documents indicative of the actual situation in the Bid submitted to the Public Tender, which have or could have affected the result of the Tender.
- 3. Should one of the Parties fail to comply with other contractual conditions (such as proper performance of guarantee repairs), the other Party will be entitled to terminate the Contract, if the defaulting Party fails to meet its obligations during extended reasonable period granted to the Party for the purpose.
- 4. A Party must withdraw from the Contract in writing without undue delay after learning of the violation.
- 5. Should a Party withdraw from the Contract, the Contracting Parties will be obliged to settle their obligations and receivables as specified by the law or in the Contract within 30 days of the effective date of the withdrawal, or by a stipulated date.







6. Should the Purchaser terminate the Contract for a gross violation of the contractual obligation by the Seller, the Seller will be obliged to pay to the Purchaser possible incurred damage (material and non-material).

X. Penal Obligations

- Should the Seller fail to meet its Contractual obligation, in particular, should the Seller be in default with the delivery of the object of sale (incl. its assembly, commissioning, service personnel training etc.), i.e. should the Seller fail to deliver the object of sale (or its part) by the stipulated date, the Seller will be obliged to pay to the Purchaser a contractual penalty of 0.05% of the total Purchase Price for every started day of such delay.
- 2. Should the Seller fail to meet the specified (or otherwise stipulated) term for the performance of the guarantee repair, the Seller will be obliged to pay to the Purchaser a contractual penalty of 0.05% of the total Purchase Price for each individual failure for every day of the delay.
- 3. Should the Seller be in delay with the start of removal of the defects reported by the Purchaser, the Seller will be obliged to pay to the Purchaser a contractual penalty of 0.05% of the total Purchase Price for each individual failure and for every started day of the delay.
- 4. The obliged Party must settle the contractual sanction (contractual penalty) to the entitled Party within 15 calendar days of receipt of the relevant calculation submitted by the other Contracting Party at the latest.
- 5. Payment of the contractual penalties in accordance with this Contract does not prejudice the Contracting Party's right to claim damages (material and non-material) caused by the other Party's failure to meet its obligation giving rise to the penalty.
- 6. The Purchaser will be entitled to offset any contractual penalty due from the Seller against invoiced amounts.

XI. Other Provisions

1. The Seller acknowledges that, pursuant to the Financial Control in Public Administration Act no. 320/2001, Coll., section 2 (e), as amended, the Seller is a person obliged to cooperate in exercising financial control. A controlling body of the Operational Programme RDI will be authorized to perform an audit and access those parts of the bid, Contract and relating documents that are subject to protection according to special legal regulations (such as trade secrets, proprietary information) for a period of three years after the operational programme is closed, provided that the requirements defined by the law (for example, the State Control Act no. 552/1991, Coll., Section 11 (c) and (d) and Section 12, subsection 2 (f), as amended) are met. The controlling body of the Operational Programme RDI is similarly authorized to perform an audit at the Seller's subcontractors (see Annex no. 2 to the Guidelines for OP RDI Applicants and







Beneficiaries: <u>http://www.msmt.cz/strukturalni-fondy/spolecne-prilohy-prirucek-pro-</u>zadatele-a-prijemce-op-vavpi-3).

2. The Seller will be obliged to properly maintain all documents relating to the execution of the object of sale (including accounting books) for at least three years after the OP RDI project is closed, i.e. at least until 2021. During the same time period, the Seller will be obliged to provide requested information and documents to the agents of bodies authorized to audit projects performed under OP RDI and will be obliged to create conditions for these personnel to be able to carry out the audit of the project implementation and cooperate in the audit.

XII. Communication

- 1. All communication or other acts of the Contracting Parties pursuant to this Contract will be addressed to the hereinbelow representatives of the Contracting Parties either in Czech or in English language.
- 2. Should this Contract require a written statement by the Parties to communicate or act, the notice will be sent via provider of postal services to the address of the relevant Contracting Party to the attention of the herein specified representative of the Contracting Party.
- 3. Should this Contract require a certain statement or act of the Contracting Parties to be made in writing by a certain deadline, such deadline will be met, if the statement or act will be delivered electronically to the e-mail of the representative of the other Contracting Party in accordance with the Contract, if the statement or information about the act is sent consequently via provider of postal services to the address of the relevant Contracting Party within three business days.
- 4. Representatives of the Parties

The Seller declares that the following person was authorized to act in his/her name in the matters relating to the performance of this Contract:

Name:	[to be completed by the Bidder]
E-mail:	[to be completed by the Bidder]
Phone:	[to be completed by the Bidder].

The Purchaser declares that the following person was authorized to act in his/her name in the matters relating to the performance of this Contract:

Name:	Ing. Radomír Čerstvý
E-mail:	cerstvy@kfy.zcu.cz
Phone:	+420 377 632 227

5. These representatives, however, have no authority to sign any amendments to the Contract.







XIII. Closing Provisions

- 1. This Contract is governed by the Czech law. Matters not expressly stipulated in the Contract are governed by the relevant provisions of the Civil Code, Act no. 89/2012, Coll., as amended. Any disputes arising from this Contract or relating to this Contract will be resolved by a Czech court of the relevant jurisdiction in the place of registered address of the Purchaser.
- 2. This Contract is made out in four identical copies, each of which is valid as original. Each of the Contracting Parties will receive two identical copies.
- 3. This Contract may only be altered or amended by written amendments numbered in ascending uninterrupted order and signed by both Contracting Parties.
- 4. This Contract becomes valid and effective on the date it is entered into, i.e. on the date it is signed by authorized representatives of both Contracting Parties.
- 5. Should any of the Parties be unable to duly perform the Contract due to a reason on its part, the Party will be obliged to inform the other Party about the fact without undue delay and initiate a discussion between representatives of the Purchaser and the Seller.
- 6. Annexes to the Contract form its integral part:

Annex no. 1: Equipment Technical Parameters

Annex no. 2: Authorization of the Dean of the Faculty of Applied Sciences of University of West Bohemia in Pilsen to Act on Behalf of the Public University

7. The Contracting Parties declare that they have read the Contract before signing, and agree with its content; in witness thereof both Contracting Parties attach their signatures.

In [by the Bidder] date [by the Bidder]

In date

.....

On behalf of the Seller [by the Bidder]

On behalf of the Purchaser Doc. Ing. František Vávra, CSc., Dean of the Faculty of Applied Sciences authorized to act on behalf of the University







Annex no. 1 to the Purchase Contract

Equipment Technical Parameters

1. Scanning electron microscope (FE-SEM) operating in the high vacuum mode:

- Electron gun with ZrO/W Schottky emitter with a guaranteed service life of at least 6,000 hours with potential guarantee of this service life without additional costs in the bid price;
- Electron beam stability better than 1% for at least 8 hours;
- Image resolution:
 - SE (Secondary Electrons) mode at 30 kV at least 1.0 nm;
 - SE mode (at 1 kV) at least 1.6 nm;
 - >BSE (Backscattered Electrons) mode at 30 kV at least 3.0 nm;
 - TE (Transmitted Electrons) at least 1.0 nm;
- Zoom range at least 25 to 800 000 times for standard 127 x 95 mm photograph;
- The accelerating voltage range at least from 0.1 to 30 kV (with maximum 0.1 kV steps)
- Electron beam 1 pA 200 nA (at 15 kV) and more than 300 nA (at 30 kV);
- Independent regulation of the accelerating voltage and sensor current;
- Automatic functions:
 - Automatic focus;
 - >Automatic sigmatism regulation;
- Detectors:
 - ➢Out-lens SE detector;
 - ➢In-lens SE detector;
 - >Draw-out semiconductor BSE detector with at least 4 segments;
 - Draw-out detector of transmitted electrons (TE) with display in both the bright (BF) and dark (DF) fields;
- Ability of a simultaneous scanning of SE and BSE, and SE and TE images at all accelerating voltages;
- System reducing potential contamination of the electron optics coming from the sample cold trap;
- Field of view of at least 4 mm at 25 times zoom;
- Table for samples eucentric-type with motorization in 5 axes in the range of:
 - ➤X-axis at least 100 mm
 - ≻Y-axis at least 100 mm
 - ➤Z-axis at least 35 mm
 - ≻Rotation 360°
 - ➤Tilt at least from -3° to 70°,
- Sample replacement prechamber with the following minimum dimensions diameter of 150 mm and height of 25 mm;
- Fully automated vacuum pumping system;
- Vacuum of at least 10⁻⁴ Pa shall be maintained in the sample chamber using turbomolecular pump with a rotor laid in magnetic bearings, and oil-free primary air pump;







- Vacuum of at least 10⁻⁷ Pa shall be maintained in the electron gun using an ion pump;
- Objective lens aperture adjustable into several positions with an easy and simple replacement during functional electron beam flow;
- Infrared camera enabling monitoring of processes inside the sample chamber;
- Faraday cup for current measurement through the sample;
- Ability to observe and store images larger than 15 Mpixels in the TIFF, BMP and JPG formats;
- Ability to obtain 3D images and quantitative topographic data about the sample surface without having to tilt it;
- Control of all SEM parameters using a computer system with the required software (at least one license), at least 24" flat screen, DVD-RW drive, USB interface and a network card.

2. Energy-Dispersive Detector (EDS):

- EDS hardware and software fully integrated with SEM (EDS and SEM control using one mouse and a keyboard);
- Detector usage with nitrogen-free cooling (SDD "Silicon Drift Detector" technology);
- Detector surface area of at least 30 mm²;
- Resolution at least 129 eV (for the Kα Mn line);
- Element detection starting from beryllium (Be) and heavier elements;
- Upload speed higher than 300,000 cps ("counts stored per second");
- Equipped control computer system with software (at least one licence) supporting the EDS spectrometer, data analysis and recording, and providing at least:
 - X-ray spectrum scanning (both quantitative and qualitative);
 - At certain point;
 - On the surface of the whole displayed area or area selected by the operator;
 - Along any selected line;
 - >Determination of element composition for elements selected by the operator in a certain area (at least 25 elements simultaneously);
 - Complete spectrum scan for each display point (pixel) in the selected area on the selected surface with resolution of at least 1024x1024 pixels;
 - Electron reflection registration;
 - >Automatic and manual quantitative analysis (with automatic line identification);
 - Background modelling;
 - ➤Quantitative analysis;
 - >Nonstandard analysis;
 - PROZA and ZAF correction systems and matrix correction for thin sections of the TEM;
 - > Set of standards (at least 50 standards of metals and minerals).

3. Wavelength-dispersive spectrometer (WDS):

Highly sensitive system with energy range of at least 160 eV to 12 keV;







- Automatic WDS setting using information from EDS;
- Automatic WDS calibration;
- Full WDS integration into a software application working with EDS, including automatic WDS validation of the EDS peak identification.
- 4. EBSD (Electron Backscatter Diffraction) system shall consist of the following parts:
 - Specialized CCD (charge-coupled device) camera for image scanning with resolution of at least 640x480 pixels and indexing speed more than 600 fps;
 - Interface for connection to SEM enabling SEM control from the EBSD system;
 - The system must enable simultaneous scanning of the EBSD and EDS maps (spectral quantitative maps containing complete x-ray spectrum for each pixel);
 - Phosphorus screen for EBSD image recording;
 - Software (at least one licence) enabling:
 - Scanning of electron and EBSD images;
 - >Control of all detector parameters (integration, "pixel binning")
 - >Automatic indexing using the Hough transform;
 - >OIM mapping type;
 - Possibility to present EBSD data in Euler space (ODF, MODF);
 - >Possibility to analyse multiple-phase materials (at least 4 phases);
 - >Grain boundary mapping with their reconstruction possibility;
 - Phase identification (together with the EDS analysis);
 - Presentation of the analysed phase results.
- 5. The EDS, WDS and EBSD systems shall be made by one manufacturer and use the same software platform
- 6. Modular cathodoluminescence (CL), enabling a spectral analysis of the cathodoluminescence effect:
 - Achromatic parabolic mirror operating in the minimal range of 200 to 2000 nm, including:
 - >Motorized mechanism for the mirror draw-in/out the SEM tube;
 - >Exact positioning system in three axes (X-Y-Z);
 - >Flanges for the microscope installation;
 - Working distance 15 mm at maximum;
 - Digital system for the electron beam control;
 - Spectral analysis ability monochromator with focal length of at least 120 mm located outside the microscope and equipped with:
 - >At least two diffraction gratings;
 - >At least one output for a detector;
 - ➢ Motorized carousel with filters;
 - Necessary junction optical module connecting the CL signal to the monochromator using fibre optic;
 - PMT detector with the range of at least 200 to 850 nm;
 - System control software enabling the operator to obtain monochromatic CL images (maps) with at least one licence.
 - Adapter for the CL installation onto the microscope chamber;







• Must enable future addition of other types of spectrographs and detectors for the hyperspectral measurement.

7. Modular source of X-ray radiation with multi-capillary optics for SEM/EDS:

- X-ray source with micro focusing and the maximum focal spot size of 65 um;
- Capillary optics and installation adapter for the microscope chamber;
- Control electronics and power supply source;
- Software for the operating parameter setting and the X-ray source screen control with one licence;
- Software for the spectrum processing and evaluation, and the qualitative and quantitative sample analyses with at least one licence;
- Adapter for the installation of the modular source of X-ray radiation onto the microscope chamber.

8. Sample preparation system using the "ion-milling" method:

- Argon ion source;
- Type with three electrodes;
- Accelerating voltage at least from 0 to 6 kV;
- Discharge current at least from 0 to 500 µA;
- Minimum sample size diameter 50 mm, height 25 mm;
- Sample tilt in the range of 0 to 90°,
- Argon flow control using a mass flow meter;
- Module for sample cross-section treatment;
- Integrated optical microscope for process state observation;
- Table for sample compatible with the SEM chamber for easier sample transport.

9. System for decontamination of organic elements on the sample surface:

- Independent system for sample decontamination using UV radiation and ozone or a similar solution integrated in the microscope chamber;
- Table for sample compatible with the chamber of the scanning microscope for easy sample transport in case an independent decontamination system is used;
- Possibility of sample insertion in vacuum in case an independent decontamination system is used.

10. Sample preparation system for the TEM applications:

- Sample preparation for the TEM applications (thin sections) using argon ions;
- Ion beam energy control by changing the accelerating voltage from 0.1 to 8.0 kV;
- Sample table rotation control adjustable from 1 to 6 revolutions per minute;
- Sample holder compatible with the sample holder in the TEM microscope;
- Built-in microscope with the zoom function zoom for process state observation;
- Sample size at least 2 mm in diameter;
- Oil-free vacuum pumping system.

11. System for sample preparation by sputter coating:

- Sputter coating with carbon and metal (Au);
- Automatic or manual control;







- Pumping using a turbomolecular pump;
- Digital setting of power and sputter coating time;
- Monitor for the sputtered layer thickness monitoring;
- Set of consumables.

Information concerning the evaluation sub-criterion 2) as specified in the Seller's Bid must be identical with information specified on the Tender Cover Page, see Annex no. 2 to the Tender Dossier based on which the Purchase Contract is being concluded:

Sub-criterion	Unit of measure	Proposed Value ²
Substrate height for insertion into the vacuum prechamber for sample replacement (mm)	mm	[to be completed by the Bidder]
Segment number of the draw-out BSE (Back-scattered Electron) detector for optimal 3D display of the sample surface structure without having to tilt it	Number of segments	[to be completed by the Bidder]
Location of an anti-contamination cold trap in the objective lens for maximum reduction of the microscope optics contamination	-	The Bidder will choose one that applies: In the objective lens / out of the objective lens
Number of possible apertures for the sample image optimization in the TE (Transmitted Electrons) mode in the bright field (BF)	Number of possible apertures	[to be completed by the Bidder]
Simultaneous display in the bright (BF) and dark (DF) fields during STEM	-	YES/NO
Number of regulation steps for the gradual suppression of the SE signal component contribution with the sample being displayed using signals from SE only, mixture of SE and LA-	Number of steps	[to be completed by the Bidder]

² The Bidder will specify parameters of the equipment (in the yellow highlighted fields) in the requested units of measure and will delete what does not apply.







BSE or LA-BSE and HA-BSE		
The maximum number of displayed points of the SEM image in the microscope SW	Mpixels	[to be completed by the Bidder]
Phase identification during EDS data acquisition	-	YES/NO
Utilization of a sealed xenon counter with a window made of a light element used in WDS for calibration requirement minimizing	-	YES/NO
Simultaneous EDS and EBSD map acquisition with full resolution	-	YES/NO
Unlimited number of licences for the EDS and EBSD software	-	YES/NO

The Seller expressly declares that the Equipment representing the object of sale meets the above-specified technical parameters and functions and is identical with the Bid submitted by the Seller to the Public Tender preceding signing of the Purchase Contract.

Date [to be completed by the Bidder]

.....

[Name of the company + signature of an authorized representative (to be completed by the Bidder]

AMNEX No. 8

POVĚŘENÍ

(v souladu se zák. č. 262/2006 Sb.; zákoník práce, ve zvění pozdějších předpisů, zák. č. 111/1998 Sb., o vysokých školách, ve zvění pozdějších předpisů; zák. č. 137/2006 Sb., o veřejných zakázkách, ve zvění pozdějších předpisů)

Západočeská univerzita v Plzni, IČO: 49777513, se sídlem Plzeň, ul. Univerzitní 8/2732, PSČ: 306-14, jednající doc. PaedDr. Ilonou Mauritzovou, Ph.D., rektorkou, tímto

pověřuje

v souladu (i) s Rozhodnutím rektora č. 25R/2012 - Organizačním řádem Západočeské univerzity v Plzni ze dne 28.08.2012, ZCU 028615/2012, (ii) se zák. č. 111/1998 Sb., o vysokých školách; (iii) Statutem Západočeské univerzity v Plzni ze dne 20.12.2012 a (iv) zák. č. 111/1998 Sb., o vysokých školách, ve znění pozdějších předpisů,

ke dni 1.8.2013

jméno: FRANTIŠEK příjmení: VÁVRA narozen dne: 22. dubna 1949, bytem: Alej Svobody 52, 323 00 Plzeň, funkce: děkan Fakulty aplikovaných věd, zaměstnance Západočeské univerzity v Plzni, zejména k:

2.

zajištění všech úkonů souvisejících s organizací, koordinací a výkonem činností při zadávání veřejných zakázek ve smyslu zák. č. 137/2006 Sb., o veřejných zakázkách, ve znění pozdějších předpisů, v rámci Operačního programu Výzkum a vývoj pro inovace,

k podpisu všech právních úkonů souvisejících se zadáváním veřejných zakázek ve smyslu zák. č. 137/2006 Sb., o veřejných zakázkách, ve znění pozdějších předpisů, v rámci Operačního programu Výzkum a vývoj pro inovace, projekt NTIS, CTPVV.

V Plzni, dne 17. července 2013

doc. PaedDr. Ilona Mauritzová, Ph.D., rektorka ZČU

Uvedené pověření přijímám:

Milligh.

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doc. Ing. František Vávra, CSc., děkan FAV