

Contracting Authority:
INSTITUTE OF BIO-ORGANIC CHEMISTRY
POLISH ACADEMY OF SCIENCES
ul. Noskowskiego 12/14
61-704 Poznan

Specification of Essential Terms of Contract

Open Tender

**Tender procedure of a value greater than the amounts specified
in the provisions issued pursuant to Article 11(8)
of the Public Procurement Law of 29 January 2004
(Consolidated text in the Journal of Laws of 2019, item 1843)**

**DELIVERY OF A HIGH-PERFORMANCE
DIFFRACTOMETER EQUIPPED WITH A FOUR-
CIRCLE KAPPA GONIOMETER AND A SURFACE
DETECTOR FOR RECORDING SCATTERING OF X
RADIATION TO THE SPECIFIC LOCATION
INDICATED BY THE CONTRACTING AUTHORITY**

Poznan, January 2020

I. DESCRIPTIVE PART

1. Name and contact address of the Contracting Authority

Institute of Bioorganic Chemistry of the Polish Academy of Sciences

Contact address: ul. Noskowskiego 12/14, 61-704 Poznań

Phone: + 48 61 852 85 03, Fax: + 48 61 852 05 32

Website: www.ibch.poznan.pl

2. Contract award procedure

An open tender, pursuant to Article 39 et seq. of the Act of 29 January 2004 Public Procurement Law (consolidated text in the Journal of Laws 2019, item 1843), hereinafter referred to as the PPL Act.

3. Specification of contract subject

Delivery together with installation and commissioning of a high-performance diffractometer equipped with a four-circle kappa goniometer and a surface detector used to record X-radiation scattering by single crystals in studies in the field of crystallography of biological molecules and crystallography of small molecules for the Laboratory of Protein Engineering, Institute of Bioorganic Chemistry of the Polish Academy of Sciences, described in detail in the Technical Specification of the contract, contained in Part IV of the ToR (hereinafter referred to as the Technical Specification).

The scope of the contract also includes:

- a) provision of the equipment operating instructions in Polish or English;
- b) two-day application training for the Contracting Authority's employees in operating the equipment after installation
- c) granting the guarantee and providing the guarantee service - detailed requirements concerning the guarantee are contained in item 16 of the ToR;

It is required that the system offered in the bid has a wide range of applications for testing such molecules as proteins, RNA and low molecular weight compounds. The system must be capable of testing very small and/or weakly dispersed crystals. As the equipment will be used in very demanding scientific projects, it must guarantee the highest accuracy, precision and reliability of X-ray diffraction data. Therefore, the brightness, stability and reliability of the X-ray source and the sensitivity, dynamic range as well as the signal-to-noise characteristics of the X-ray area detector and the availability of a range of flexible and powerful tools in the data collection and analysis software are key elements taken into account during the evaluation.

The delivered product must be brand new, i.e. not used before the delivery date, except for the use necessary to test its correct functioning.

On the bid submission date the manufacturer must not plan to withdraw the diffractometer from production or sale.

The diffractometer must be ready to use without the need to install additional instruments and must be equipped with a sufficient number of cables necessary for the proper functioning of the instruments and allowing it to be connected to standard power sockets, unless otherwise specified in the technical specification.

10.1 CPV code: 38530000-9 (diffraction apparatus)

3.1 Submission of partial bids

The Contracting Authority does not allow submission of partial bids. Economic Operators are required to submit a complete bid for all the elements specified in Part IV of the ToR - Product Specification.

3.2 Submission of equivalent bids

If in the ToR or attachments to the ToR the Contracting Authority has indicated proper names of technology, trademarks, patents or origin, sources or a specific process which characterizes products supplied by a particular Economic Operator, if this could lead to preference or elimination of some Economic Operators or products, the Contracting Authority allows submission of equivalent bids. Proper names of technologies, trademarks, patents or origin, source or specific process that characterizes products indicated in the ToR have been used only as an example and are intended to indicate the expected standards regarding the minimum technical parameters of expected materials, equipment and solutions. An equivalent bid will be understood as a bid with technical parameters of strength, quality, and performance not worse than the description indicated by the Contracting Authority in the description of the product that should be offered under the contract. The parameters indicated by the Contracting Authority are minimum parameters. The term "parameters" will be understood as functionality, intended use, colours, structure, materials, shape, size, safety, strength, etc. Therefore, the Contracting Authority permits offering materials with other trademarks, patents or origin, but not with properties and functionalities other than those specified in the ToR. If the Contracting Authority used standards, approvals, technical specifications and reference systems referred to in Article 30 sections 1-3 of the PPL Act in its ToR, these should be understood as examples. Pursuant to Article 30 section 4 of the PPL Act, the Contracting Authority allows in each case the use of equivalent solutions described in the ToR. Whenever a standard is indicated in these ToR or in the attachments to the ToR, it should be assumed that the term 'or equivalent' is used in relation to it.

The Economic Operator invoking equivalent solutions pursuant to the provisions of Article 30 section 5 of the PPL Act must demonstrate that the supplies offered in the bid meet the conditions specified by the Contracting Authority to no lesser extent.

Relevant documents confirming equivalence must be attached to the bid. In such a case the Economic Operator must submit a specification of the product offered under the contract, specifying other equivalent elements (properties) than those required by the Contracting Authority (e.g. **by bolding or underlining the proposed equivalent product**). Additionally, documents confirming the equivalence of the solution provided in the bid should be attached and the differences should be clearly described.

If the Economic Operator does not submit documents on the use of other materials and instruments in the bid, it will be understood that the materials, instruments and solutions proposed in the description

of the product supplied under the contract have been included in the calculation of the bid price and the performance of the contract.

3.3 Expected orders referred to in Article 67 section 1 item 7.

The Contracting Authority does not plan to award contracts referred to in Art. 67 section 1 item 7.

3.4 Submission of variant bids

The Contracting Authority will not accept any variant bids.

3.5 Framework agreements

The Contracting Authority will not conclude any framework agreement.

3.6 Provisions concerning electronic auction

The Contracting Authority will not hold any electronic auction.

4. Order completion date

The product under the contract must be delivered, installed and commissioned with the training of the Contracting Authority's employees **within six months of the date of conclusion of the contract by the Parties.**

5. Conditions for participation in the procedure

5.1 The contract award may be sought by Economic Operators who

- 1) are not subject to exclusion;
 - 2) meet the conditions of participation in the procedure related to
 - a) competence or rights to pursue a specific professional activity, provided that this results from separate regulations,
 - b) the economic or financial situation,
 - c) technical or professional capacity
- specified by the Contracting Authority in the public contract notice and the ToR.

5.2 Determination of the conditions of participation in the procedure:

- 1) The Contracting Authority does not specify the condition for participation in the procedure referred to in item 5.1.2) letter a) of ToR.
- 2) The Contracting Authority does not specify the condition for participation in the procedure referred to in item 5.1.2.b) of ToR.
- 3) The condition concerning technical or professional capacity is fulfilled if the Economic Operator demonstrates that during the last three years before the deadline for submission of bids, and if the period of business activity is shorter - during this shorter period, it has

performed at least two contracts consisting in a supply covered by the contract, i.e. supply of an X-ray diffractometer, with the value of each such supply amounting to the gross amount of at least PLN 2,100,000.00.

- 5.3 In the case of Economic Operators applying jointly for the award of the contract, none of them may be subject to exclusion from the procedure.

Conditions for participation referred to in item 5.2 should be met jointly by all Economic Operators, with the proviso that the condition for participation referred to in item 5.2(3) must be met by at least one of these Economic Operators.

- 5.4 In order to confirm the fulfilment of conditions for participation in the procedure, where appropriate and for a specific contract or part thereof, the Economic Operator may rely on the technical or professional capacities of other entities, regardless of the legal nature of the legal relationship with it.

- 5.5 The Economic Operator who relies on the technical or professional capacities of other entities must prove to the Contracting Authority that in performing the contract he will have at his disposal the necessary resources of those entities, in particular by presenting an undertaking by those entities to place at his disposal the necessary resources for performance of the contract.

- 5.6 The Contracting Authority will assess whether the technical or professional capacities made available to the Economic Operator by other entities allow the Economic Operator to demonstrate the fulfilment of conditions for participation in the procedure and will examine whether there are grounds for exclusion referred to in Article 24 section 1 items 13-22 and section 5 items 1 and 8 of the PPL Act. If the technical or professional capacities of the entity referred to in item I.5.4 of the ToR do not confirm that the Economic Operator meets the conditions for participation in the procedure or there are grounds for exclusion of such entities, the Contracting Authority demands that the Economic Operator within the deadline specified by the Contracting Authority:

- 1) replace this entity with another entity or entities or
- 2) undertake to perform personally the relevant part of the contract, if he demonstrates technical or professional capacities referred to in item I.5.2.3) of the ToR.

- 5.7 The Contracting Authority demands from the Economic Operator who relies on the capacities of other entities on the principles specified in Article 22a of the PPL Act to present the documents listed in item I.6.1 and 6.3 from 1-7 and item I.6.5 of the ToR - if applicable, within the scope of the available resources, if applicable.

- 5.8 Economic Operators who are not subject to exclusion from the procurement procedure in the circumstances referred to in Article 24 section 1 items 12-23 of the PPL Act, Article 24 section 5 item 1 and 8 of the PPL Act may participate in the procedure.

- 5.9 The Economic Operator who is subject to exclusion pursuant to Article 24 section 1 items 13 and 14 and 16-20 or Article 24 section 5 item 1 and 8 of the PPL Act, may present evidence that the measures taken by him are sufficient to prove his reliability, in particular to prove repair of damage caused by a crime or fiscal offence, financial compensation for damage suffered or

repair of damage, exhaustive explanation of the facts and cooperation with law enforcement authorities and taking specific technical, organizational and human resources measures which are adequate to prevent further crimes or fiscal offences or improper conduct of the Economic Operator. The provision referred to in the first sentence does not apply if the Economic Operator, being a collective entity, has been forbidden to compete for the award of the contract by a final court judgment and the period of validity of this prohibition specified in this judgment has not expired.

In the cases referred to in Article 24 section 1 item 19, before excluding the Economic Operator, the Contracting Authority will provide the Economic Operator with an opportunity to prove that his participation in the preparation of the procurement procedure will not distort competition. The Contracting Authority will indicate in the protocol the manner of ensuring competition.

Based on:

- Article 24 section 5 item 1 of the PPL Act, the Contracting Authority will exclude from the procurement procedure the Economic Operator with respect to whom liquidation has been opened, in the arrangement approved by the court the restructuring procedure provides for satisfaction of creditors by liquidation of his assets or the court ordered liquidation of his assets pursuant to Article 332 section 1 of the Act of 15 May 2015 - Restructuring Law (consolidated text in the Journal of Laws of 2019, item 243, as amended) or whose bankruptcy was declared, except for the Economic Operator who, after the declaration of bankruptcy, concluded an arrangement approved by a valid court decision, if the arrangement does not provide for satisfaction of creditors by liquidation of the bankrupt's assets, unless the court ordered liquidation of its assets under Article 366 section 1 of the Act of 28 February 2003 - Bankruptcy Law (consolidated text in the Journal of Laws of 2019, item 498 as amended);
- Article 24 section 5 item 8 of the PPL Act, the Contracting Authority will exclude from the procurement procedure the Economic Operator who has violated the obligations concerning payment of taxes, fees or contributions for social or health insurance, which the Contracting Authority is able to prove by appropriate means of evidence, except for the case referred to in section 1 item 15, unless the Economic Operator has paid the due taxes, fees or contributions for social or health insurance together with interest or fines or has concluded a binding agreement on payment of these amounts.

6. List of statements or documents to be provided by the Economic Operator in order to confirm that there are no grounds for exclusion from the procedure and in order to confirm the fulfilment of conditions for participation in the procedure.

6.1 For the purpose of confirming lack of grounds for exclusion from the procedure referred to in item I 5.1 and to confirm meeting the conditions for participation in the procedure referred to in item I 5.2, the Economic Operator will be obliged to provide the Contracting Authority with the following statements and documents (within the time limits specified in these ToR):

- statement of the Economic Operator constituting a preliminary confirmation of fulfilment of the conditions for participation in the procedure defined in these ToR and lack of grounds for exclusion, submitted on the form of the European Single Procurement Document (hereinafter referred to as "ESPD"), the template for which is specified in the

Commission Implementing Regulation (EU) 2016/7 of 5 January 2016 laying down a standard form for the European Single Procurement Document (Official Journal of the European Union, series L 2016, No. 3, p. 16).

ESPD should be submitted together with the bid. Otherwise being null and void, ESPD will be drawn up by the Economic Operator in an electronic form (in an electronic form bearing a qualified electronic signature) in accordance with the rules described in the ToR.

- 6.2 In order to confirm that the Economic Operator meets the condition of participation in the procedure concerning technical or professional capacities, the Contracting Authority will request from the Economic Operator a list of deliveries made, and in the case of periodical or continuous services also rendered, within the last 3 years before the deadline for submission of bids, and if the period of business activity is shorter - within this shorter period, together with their value, subject, dates of performance and entities, to whom the deliveries have been made, and enclosing evidence stating whether the deliveries have been made or are being made properly, such evidence being references or other documents issued by the entity for the benefit of whom the deliveries have been made, and in the case of periodical or continuous services, that they are being made, and if for a justified reason of objective nature the Economic Operator is not able to obtain such documents - a statement by the Economic Operator; in case of periodical or continuous services, references or other documents confirming their proper performance should be issued not earlier than 3 months before the deadline for submission of bids.

An executed contract will be understood as:

- a) contracts commenced and completed within the last 3 years before the deadline for submission of bids (and if the period of activity is shorter - within this shorter period)
- b) contracts completed in the above period, which could have started earlier than in the above period.

If, for a justified reason, the Economic Operator cannot submit the documents required by the Contracting Authority referred to above, the Contracting Authority will allow the Economic Operator to submit other relevant documents in order to confirm that the conditions for participation in the procedure concerning technical or professional capacities are met.

- 6.3 In order to confirm that there are no grounds for excluding the Economic Operator from the procedure, the Contracting Authority will request the following documents:

- 1) information from the Krajowy Rejestr Karny [National Criminal Register] within the scope defined in Article 24 section 1 items 13, 14 and 21 and Article 24 section 5 items 5 and 6 of the PPL Act, issued not earlier than 6 months before the deadline for submission of bids;
- 2) certificate issued by the competent head of the tax office within the scope defined in Article 24 section 5 item 8 of the PPL Act confirming that the Economic Operator is not in arrears with payment of taxes, issued not earlier than 3 months before the deadline for submission of bids, or any other document confirming that the Economic Operator has concluded an agreement with the competent tax authority on payment of these taxes together with possible interest or fines, in particular has obtained an exemption, deferral or

division into instalments of overdue payments or suspension of the whole execution of the decision of the competent authority;

- 3) a certificate issued by the competent local organisational unit of the Zakład Ubezpieczeń Społecznych [Social Insurance Institution] or the Kasa Rolniczego Ubezpieczenia Społecznego [Agricultural Social Insurance Fund] to the extent specified in Article 24 section 5 item 8 of the PPL Act, or any other document confirming that the Economic Operator is not in arrears with payment of social or health insurance contributions, issued not earlier than 3 months before the deadline for submission of bids, or any other document confirming that the Economic Operator has concluded an agreement with the competent authority on payment of these social or health insurance contributions, together with possible interest or fines, in particular, he has obtained an exemption, deferral or division into instalments of overdue payments or suspension of full execution of the decision of the competent authority;
- 4) an extract from the relevant register or from the central register and information on business activity, if separate provisions require an entry in the register or registry, in order to confirm that there are no grounds for exclusion under Article 24 section 5 item 1 of the PPL Act (attach the document to the bid or if it is possible to download the document from publicly available and free of charge databases – indicate the source address);
- 5) Economic Operator's statement that no final court verdict or final administrative decision on arrears in payment of taxes, fees or social or health insurance contributions has been issued against him or - in the case of such a verdict or decision - documents confirming payment of these overdue amounts together with possible interest or fines or conclusion of a binding agreement on payment of these overdue amounts (with reference to the ground for exclusion described in Article 24 section 1 item 15 of the PPL Act);
- 6) statement of the Economic Operator on the absence of a decision against him as a preventive measure of the ban on competing for public contracts (with reference to the condition of exclusion described in Article 24 section 1 item 22 of the PPL Act);
- 7) Economic Operator's statement of not being in arrears with payment of local taxes and fees referred to in the Act of 12 January 1991 on local taxes and fees;

The Contracting Authority will invite the Economic Operator whose bid has been awarded the highest score to submit within the specified time limit, not shorter than 10 days, the documents indicated in item I.6.2. and I.6.3 sub-items 1-7. The documents should be valid as of the date of their submission as designated by the Contracting Authority.

- 6.4 Immediately after the opening of bids the Contracting Authority will publish on its website the information referred to in Article 86 section 5 of the PPL Act. Within 3 days from the date of publishing the above information on the website, the Economic Operator will provide the Contracting Authority with a **statement of membership or non-membership in the same capital group** referred to in Article 24 section 1 item 23 of the PPL Act. Upon submission of the statement, the Economic Operator may present documents or information confirming that relations with another Economic Operator do not lead to distortion of competition in the

procurement procedure. In the case of Economic Operators applying jointly for the award of the contract, the statement will be submitted by each of such Economic Operators.

- 6.5 The Economic Operator may rely on technical or professional capacities (conditions specified in item I.5.2 sub-item 3 of other entities, regardless of the legal nature of the relations between him and them. In such a situation the Economic Operator must prove to the Contracting Authority that in executing the contract he will have at his disposal the necessary resources of these entities, in particular by presenting the undertaking of these entities to make available to him the necessary resources for the execution of the contract. The document confirming the undertaking of the third party should express unambiguously the willingness to make available an appropriate resource to the Economic Operator who is applying for the contract, i.e. indicate what kind of resource it concerns, specify its type, scope, time of making it available and other circumstances resulting from the specific nature of a given resource. The document presented must be unambiguous as to: (1) the scope of resources of another entity available to the Economic Operator; (2) the manner of using the resources of another entity by the Economic Operator in the performance of the public contract; (3) the scope and period of participation of another entity in the performance of the public contract; (4) whether the entity on which the Economic Operator relies as regards the conditions of participation in the procedure concerning education, professional qualifications or experience will provide services to which the indicated capabilities relate (a template constitutes Attachment No. 4 to the bid).

If the Economic Operator, demonstrating fulfilment of the conditions mentioned in Article 22 section 1b of the PPL Act, relies on resources of other entities under the rules defined in Article 22a section 1 of the PPL Act, the Economic Operator is obliged to submit together with the bid:

- 1) statement of the third party on the fulfilment of the conditions for participation in the procedure (as regards the condition in relation to which it makes its potential available) and no grounds for exclusion submitted on the ESPD form. The ESPD of the third party should be submitted together with the bid, in an electronic form - in an electronic form bearing a qualified electronic signature, by that entity - to the extent that it confirms the circumstances referred to in Article 22 section 1 of the PPL Act. The rules related to sending the ESPD form in the form of an electronic document are described in the ToR,
- 2) statement of a third party or any other document proving that the potential is made available to the Economic Operator by the third party in accordance with item I.5.4 of ToR.

The Economic Operator who, while demonstrating fulfilment of the conditions referred to in Article 22 item 1b of the PPL Act, relies on resources of other entities under the rules defined in Article 22a section 1 of the PPL Act will be obliged to submit the documents listed in item I.6.3 sub-items 1-7 in relation to these entities. The documents listed in item I.6.3 sub-items 1-7 will be submitted by the Economic Operator within the time limit indicated by the Contracting Authority, not shorter than 10 days, specified in the invitation sent by the Contracting Authority to the Economic Operator after the opening of bids pursuant to Article 26 section 1 of the PPL Act.

- 6.6 If the Economic Operator has a registered office or place of residence outside the territory of the Republic of Poland, instead of documents:

- 1) referred to in item I.6.3 sub-items 2, 3 and 4, he will submit a document or documents issued in the country where he has his registered office or place of residence, confirming respectively that (a) no liquidation has been opened in his name or he has not been declared bankrupt, (b) he is not in arrears with the payment of taxes, fees, social security or health insurance contributions, or that he has concluded an agreement with a competent authority on the repayment of such receivables together with any interest or fines, in particular he has obtained a legal exemption, deferral or division into instalments of overdue payments or suspension of the entire execution of the decision of a competent authority,
 - 2) referred to in item I.6.3 sub-item 1, he will submit information from a relevant register or, in the absence of such a register, another equivalent document issued by a competent judicial or administrative body of the country where the Economic Operator has its registered office or place of residence or where the person to whom the information or document relates has its place of residence, within the scope defined in Article 24 section 1 items 13, 14 and 21 of the PPL Act
- 6.7 The documents referred to in item I.6.6 sub-item 1) letter a) and in item I.6.6 sub-item 2) above should be issued no earlier than 6 months before the deadline for submission of bids. The documents referred to in item I.6.6 sub-item 1) letter b) above should be issued not earlier than 3 months before the deadline for submission of bids.
- 6.8 If in the country where the Economic Operator has its registered office or place of residence or where the person to whom the document refers has its place of residence, the documents referred to in item I.6.6 are not issued, they will be replaced by a document containing, respectively, the Economic Operator's statement, indicating the person or persons authorized to represent him, or a statement of the person to whom the document was to apply, made before a notary public or before a judicial, administrative or professional or business self-government body competent for the Economic Operator's registered office or place of residence or the place of residence of that person. Provisions of item I.6.7. will apply accordingly.
- 6.9 In case of doubts concerning the document submitted by the Economic Operator having its registered office or place of residence outside the territory of the Republic of Poland, the Contracting Authority may apply to the competent authorities of the country where the Economic Operator has its registered office or place of residence or the place of residence of the person whom the document concerns for the necessary information concerning the document.
- 6.10 The Economic Operator having a registered office within the territory of the Republic of Poland, with reference to a person having a place of residence outside the territory of the Republic of Poland, to whom the document referred to in item I.6.3 sub-item 2 applies, will submit the document referred to in item I.6.6 sub-item 2 within the scope defined in Article 24 section 1 items 14 and 21 of the PPL Act. If in the country where the person to whom the document was to apply has a place of residence, such documents are not issued, they will be replaced by a document containing a statement by that person submitted before a notary public or before a judicial, administrative or professional or economic self-government body competent in respect of the place of residence of that person. The provisions of section I.6.7 first sentence will apply.

- 6.11 If in the documents submitted in order to confirm the fulfilment of the conditions for participation in the procedure any values are given in a foreign currency, the Contracting Authority will accept the average exchange rate published by the National Bank of Poland on the date of publication of the contract notice in the Official Journal of the European Union for the conversion of the amount expressed in a currency other than Polish zloty into Polish zloty, and if no such rate was published on a given day, the last rate published.
- 6.12 In the case of a bid of Economic Operators jointly applying for the contract award (consortium):
- a) the companies (names) of all Economic Operators jointly applying for the contract award should be indicated in the bid form;
 - b) the bid must be signed in such a way that it legally binds all Economic Operators jointly applying for the contract award. The person signing the bid must have the legal power of representation. The authorisation must result from the power of attorney attached to the bid - the text of the power of attorney should precisely define the scope of the authorisation;
 - c) ESPD is submitted by each Economic Operator jointly applying for the contract award. These documents confirm that each Economic Operator satisfies the conditions for participation in the procedure and that there are no grounds for exclusion. The statement of Economic Operators jointly applying for the award of the contract submitted on the ESPD form should be submitted before the deadline for submission of bids and should be submitted in an electronic form (submitted in an electronic form and bearing a qualified electronic signature) by each of them to the extent that they confirm the fulfilment of the conditions for participation in the procedure and the absence of grounds for exclusion. The rules related to sending the ESPD in an electronic form are described in the ToR;
 - d) documents referred to in item 6.3 sub-items 1-7 must be submitted by each of the Economic Operators jointly applying for the contract award;
 - e) in the case of using the experience of the entire consortium (entities jointly applying for the contract award), the experience of the consortium member should be understood as only the scope of work actually carried out by the consortium member. If a single member of a consortium wishes to refer to the experience of the entire consortium, it should use the support of the other members of the consortium under Article 22a of the PPL Act;
 - f) all Economic Operators jointly applying for the contract award will be jointly and severally liable for the performance of the contract;
 - g) Economic Operators jointly applying for the contract award appoint a proxy to represent them in the procurement procedure or to represent them in the procedure and conclude the contract;
 - h) the Contracting Authority may, within the framework of joint and several liability, require each or all Economic Operators to perform the contract in its entirety by the leader or all Economic Operators jointly applying for the contract award.
- 6.13 In the case of Economic Operators operating in the form of a civil partnership, the provisions on the bid submitted by Economic Operators jointly applying for the contract award (consortium)

will apply accordingly, with the proviso that the reply to the Contracting Authority's request to submit the documents referred to in item I.6.1 and I.6.3 will include (1) a certificate of the competent head of the tax office confirming that the Economic Operator is not in arrears with the payment of taxes, issued not earlier than 3 months before the deadline for submission of bids, or any other document confirming that the Economic Operator has entered into an agreement with the competent tax authority on payment of such overdue amounts together with any interest or fines, in particular, it has obtained an exemption, deferral or division into instalments of overdue payments provided for by law, or suspension in full of the execution of the decision of a competent authority, and (2) a certificate from a competent local organizational unit of the Zakład Ubezpieczeń Społecznych [Social Insurance Institution] or the Kasa Rolniczego Ubezpieczenia Społecznego [Agricultural Social Insurance Fund] or other supporting document, that the Economic Operator is not in arrears with payment of social or health insurance contributions, issued not earlier than 3 months before the deadline for submission of bids, or any other document confirming that the Economic Operator has entered into an agreement with a competent authority on payment of these overdue amounts, together with possible interest or fines, and in particular has obtained the release, deferral or division into instalments of overdue payments or suspension of the entire execution of the decision of the competent authority - separately for each partner and separately for the company.

- 6.14 The Contracting Authority informs whom it may concern that pursuant to §2 section 7 of the Ordinance of the Minister of Development of 26 July 2016 on types of documents which may be requested by the Contracting Authority from the Economic Operator in the procurement procedure (Journal of Laws of 2016, item 1126, as amended), if the information provided by the Economic Operator in the European Single Procurement Document corresponds to the scope of information required by the Contracting Authority by requesting documents, the Contracting Authority may withdraw from requesting such documents from the Economic Operator.
- 6.15 If it is necessary to ensure an appropriate course of the procurement procedure, the Contracting Authority may, at each stage of the procedure, call upon Economic Operators to submit all or some statements or documents confirming that they are not subject to exclusion and meet the conditions for participation in the procedure, and if there are reasonable grounds to believe that the statements or documents submitted previously are no longer valid, to submit current statements or documents.
- 6.16 The documents or statements referred to in the Ordinance of the Minister of Development of 26 July 2016 on the types of documents which may be requested by the Contracting Authority from the Economic Operator in the procurement procedure (Journal of Laws of 2016, item 1126, as amended), listed in this chapter of the ToR, will be submitted in the original in the form of an electronic document or an electronic copy of a document or a certified true copy of the original.
- 6.17 Certification of true copies of the original will be made by the Economic Operator, an entity whose capacity or situation is relied on by the Economic Operator or Economic Operators jointly applying for the contract award, respectively, with regard to documents which concern each of them.

Certification of the electronic copy of a document or statement referred to in item 6.16 is made with a qualified electronic signature. If the Economic Operator provides an electronic copy of a document or statement, affixing it with a qualified electronic signature by the Economic

Operator or by an entity whose capacity or situation the Economic Operator relies on according to the rules specified in Article 22a of the PPL Act is equivalent to certifying the electronic copy of a document or statement as being true copies of the original.

- 6.18 Economic Operators jointly applying for the contract award will appoint a proxy to represent them in the procurement procedure or to represent them in the procedure and to conclude a public procurement contract (the relevant powers of attorney should be attached to the bid in the original, and the text of the power of attorney should precisely define the scope of the power of attorney). Economic Operators jointly applying for the award of the contract will be jointly and severally liable for non-performance or improper performance of the contract.
- 6.19 Before concluding the contract with the Contracting Authority, Economic Operators applying jointly for the contract award will present the agreement regulating their cooperation.

7. Security deposit

The Economic Operator is obliged to provide a security deposit of **PLN 50,000.00**.

The security deposit will be provided for a period of **60 days** calculated from the date of expiry of the bid submission deadline.

The security deposit will be provided (paid) to the Institute of Bioorganic Chemistry of the Polish Academy of Sciences, 61-704 Poznań, ul. Noskowskiego 12/14.

The security deposit should be paid before the deadline for submission of bids.

The security deposit may be provided in one or more of the following forms:

- 1) money,
- 2) bank sureties or sureties of a Spółdzielcza Kasa Oszczędnościowo-Kredytowa [Cooperative Savings and Loan Fund], however, the surety of the fund is always made in cash,
- 3) bank guarantees,
- 4) insurance guarantees,
- 5) sureties granted by entities referred to in Article 6b section 5 item 2 of the Act of 9 November 2000 on the establishment of the Polish Agency for Enterprise Development (consolidated text in the Journal of Laws of 2019, item 310 as amended).

The payment of the security deposit in money will be effective if it is credited to the Contracting Authority's bank account within the specified period.

The security deposit provided in the form of: bank surety, bank guarantee, insurance guarantee or surety granted by entities referred to in Article 6b section 5 item 2 of the Act of 9 November 2000 on the establishment of the Polish Agency for Enterprise Development should result in unconditional obligation of the guarantor to pay the Contracting Authority the full amount of the security deposit, at the first written request of the Contracting Authority within the time limit for binding a bid, in the circumstances specified in Article 46 section 4a and Article 46 section 5 of the PPL Act.

The security deposit must secure the bid throughout the whole period during which the Economic Operator is bound by the bid. A bid of the Economic Operator who fails to pay the bid security deposit or does not secure the bid with an acceptable form of security deposit within the specified time limit, including failure to pay the security deposit pursuant to Article 46 section 3, pursuant to Article 89 section 1 item 7b of the PPL Act, will be rejected.

The text of the bid security deposit must include the following elements:

- 1) name of the guarantee holder (Economic Operator) guarantee/security deposit beneficiary (Contracting Authority), guarantor (bank or insurance institution providing the guarantee/security deposit) and indication of their registered offices,
- 2) determination of the claim to be secured with a guarantee/surety – specification of the subject of the contract,
- 3) the amount of the guarantee/security deposit,
- 4) the obligation of the guarantor/surety provider to pay the amount of the guarantee/surety unconditionally and irrevocably at the first written request of the Contracting Authority in the circumstances specified in Article 46 section 4a of the PPL Act and Article 46 section 5 of the PPL Act,
- 5) provisions on the security deposit term,
- 6) provisions on the expiry time,
- 7) the validity period, covering at least the entire period of validity of the bid plus 14 days to request payment from the guarantee.

The Contracting Authority will return the security deposit to all Economic Operators immediately after selection of the most advantageous bid or cancellation of the bid procedure, except for the Economic Operator whose bid was selected as the most advantageous, subject to Article 46 item 4a of the PPL Act.

The Contracting Authority will return the security deposit to the Economic Operator whose bid was selected as the most advantageous immediately after concluding the public procurement contract and when the performance bond has been provided.

The Contracting Authority will immediately return the security deposit at the request of the Economic Operator who withdrew the bid before the deadline for submission of bids.

If the security deposit was paid in money, the Contracting Authority will return it together with interest resulting from the contract into the bank account where it was kept, reduced by the costs of maintaining the account and bank commission for transferring the money to the Economic Operator's account.

The Contracting Authority will demand that the security deposit be paid again by the Economic Operator to whom the security deposit was returned pursuant to Article 46 item 1 of the PPL Act, if as a result of resolving the appeal, his bid was selected as the most advantageous. The Economic Operator will pay the security deposit within the deadline specified by the Contracting Authority.

The security deposit paid in money will be paid by bank transfer to the bank account of the Institute of Bioorganic Chemistry of the Polish Academy of Sciences in **Bank Gospodarstwa Krajowego Branch in Poznań:**

domestic payments

51 1130 1088 0001 3144 8520 0001

foreign payments

**PL51113010880001314485200001
BIC/SWIFT GOSKPLPW**

in time sufficient for it to be credited to the account of the Institute of Bioorganic Chemistry of the Polish Academy of Sciences at the latest by the deadline for submission of bids.

The security deposit in the non-monetary form should be provided together with the bid in an original an electronic form with a qualified electronic signature of the persons authorized to issue it. The security deposit in the non-monetary form must be drawn up in the Polish language, electronically signed with a qualified electronic signature. The manner in which the security deposit should be provided is described in the User Manual of the miniPortal. The security deposit document must be submitted in the original.

The Contracting Authority does not allow submission of a scan of the document with a qualified electronic signature.

8. The time during which the Economic Operator is bound by the bid

The Economic Operator will be bound by the bid for a period of 60 days from the deadline for submission of bids.

9. Communication with the Contracting Authority by means of electronic communication using the miniPortal and electronic mail:

A. General information

- 1) In the procurement procedure communication between the Contracting Authority and Economic Operators takes place by e-mail, using a miniPortal and e-mail.
- 2) miniPortal: <https://miniportal.uzp.gov.pl/>, ePUAP platform: <https://epuap.gov.pl/wps/portal> are used ONLY for submission/withdrawal and amendment of bids. All other correspondence (questions about the ToR, requests for explanations, requests to supply additional information, as well as documents, explanations, information submitted by the Economic Operator) will be forwarded by e-mail.

- 3) The Contracting Authority will appoint the following contact person to communicate with the Economic Operators: **Monika Urbańska-Kicula**, e-mail address: zampub@ibch.poznan.pl
- 4) The Economic Operator intending to participate in the public procurement procedure must have an account on the ePUAP platform to submit a bid. The Economic Operator having an account on the ePUAP platform must submit a bid using a bid submission, bid amendment or bid withdrawal form.
- 5) The technical requirements necessary to submit a bid are described in the User Manual of the miniPortal (terms of service - link at the bottom of the miniPortal website) and in the ePUAP Platform Regulations. The Economic Operator interested in submitting a bid should read the current technical guidelines contained in the aforementioned User Manual. Joining the procedure is tantamount to acceptance of the terms of use of the miniPortal and ePUAP platform and the above-mentioned User Manual.
- 6) The maximum size of files sent via dedicated forms for bid submission, amendment or withdrawal is 150 MB.
- 7) The date of the bid transfer is the date of its transfer to the ePUAP platform.

The transfer confirmation is the Official Confirmation generated by the ePUAP platform.

To submit a bid, the Economic Operator must have at his disposal: Procedure Identifier (ID), notice number given on the miniPortal and the public key for a given procurement procedure. This information is available on the *List of all procedures* on the miniPortal and can be downloaded together with the ToR on the Contracting Authority's website.

The procedure identifier and the public key are used to encrypt the bid.

The notice number is required when sending a bid via ePUAP platform.

The Contracting Authority does not provide for reimbursement of the costs of participation in the procedure, including the costs incurred for the purchase of a qualified electronic signature.

B. Bid submission

1. The Economic Operator submits a bid via **the bid submission, bid amendment and/or bid withdrawal form** available on the ePUAP platform and also available on the miniPortal. The public key and Procedure ID necessary to encrypt the bid by the Economic Operator is available to the Economic Operators on the miniPortal and together with the ToR on the Contracting Authority's website.

Note: the downloaded public key for encrypting a bid cannot be changed.

In order to properly encrypt a bid, a key in a format downloaded from the miniPortal / from the Contracting Authority's website should be used.

2. The bid must be made in Polish.

The bid must be drawn up otherwise being null and void in an electronic form in a data format: in particular pdf, doc, docx and signed with a qualified electronic signature. The way of submitting the bid, including encryption of the bid, is described in the User Manual on the miniPortal. A bid will be submitted otherwise being null and void with a qualified electronic signature by a person authorized to represent the Economic Operator.

3. The Contracting Authority recommends signing documents in pdf format with PAdES format, and documents in a format other than pdf with XAdES format.
4. All information constituting a business secret within the meaning of the Act of April 16, 1993 on combating unfair competition, which the Economic Operator will reserve as a business secret, will be submitted in a separate file with a marking "Attachment constituting a business secret" and then with the files constituting an open part compressed to one archive file (ZIP).
5. The bid must be accompanied by the European Single Procurement Document in an electronic form bearing a qualified electronic signature and then compressed into a single archive file (ZIP) together with the files constituting the bid.
6. The Economic Operator may, before the expiry of the time limit for submission of bids, modify or withdraw the bid using the submission form or modification form or withdrawal form or a request available on the ePUAP platform and also made available on the miniPortal. The method of bid amendment and withdrawal is described in the User Manual available on the miniPortal. The statement on bid withdrawal/amendment must be made by a person authorized to represent the Economic Operator, if necessary, the statement must be accompanied by a power of attorney.
7. After the deadline for submission of bids, the Economic Operator cannot effectively amend or withdraw a submitted bid.

A bid must be accompanied by the following documents:

POWER OF ATTORNEY to sign the bid otherwise being null and void in an electronic form, bearing a qualified electronic signature by a person(s) authorised to represent the Economic Operator indicated in a proper register, if the bid was not signed by persons authorised to represent the Economic Operator in accordance with the registration document. It is allowed to submit an electronic copy of the power of attorney certified by a notary public in accordance with Article 97 §2 of the Act of 14 February 1991 - Notary Public Act (consolidated text in the Journal of Laws of 2019, item 540)

IF THE SECURITY DEPOSIT IS MADE IN A NON-MONETARY FORM:

If the security deposit is made in a form other than money, the Economic Operator will make it in the form of an electronic original security deposit document, i.e. bearing a qualified electronic signature of the persons authorised to issue it (document issuers) in a format allowing the Contracting Authority to read the document (the Contracting Authority does not allow the security deposit document to be made e.g. in xml format). The security deposit must be sent to

the Contracting Authority before the deadline for submission of bids. The security deposit may be sent together with the bid (compressed to one file). If the bid security deposit is not sent by the Economic Operator together with the bid, e.g. by e-mail, it should be marked in a way that allows for its unambiguous assignment to the procedure.

Third party undertaking:

Third party undertaking or another document confirming that the Economic Operator will have at his disposal the necessary resources to enable proper performance of the contract, if the Economic Operator refers to the resources of other entities. The undertaking will be submitted otherwise being null and void in an electronic form, bearing a qualified electronic signature by a person authorised to represent him/her indicated in the relevant register.

ESPD:

The ESPD document valid at the date of submission of bids must, otherwise being null and void, be submitted in an electronic form bearing a qualified electronic signature. The ESPD documents of the entities submitting a bid jointly and the entities making the potential available must be in an electronic form, bearing a qualified electronic signature by each of these entities to the extent that they confirm the circumstances referred to in Article 22 section 1 of the Act.

C. Communication between the Contracting Authority and Economic Operators (*not applicable to bid submission*)

1. In the procurement procedure, communication between the Contracting Authority and Economic Operators, in particular submission of statements (other than those specified in item B), notices and transmission of information is done via e-mail, to the e-mail address zampub@ibch.poznan.pl.
2. Electronic documents, statements or electronic copies of documents or statements are submitted by the Economic Operator as attachments to e-mail. Electronic documents, statements or electronic copies of documents or statements must be prepared in accordance with the requirements specified in the Regulation of the President of the Council of Ministers of 27 June 2017 on the use of electronic means of communication in public procurement procedures and on making available and storing electronic documents and the Regulation of the Minister of Development of 26 July 2016 on the types of documents which may be requested by the Contracting Authority from the Economic Operator in procurement procedures.

10. Bid preparation

- 10.1 The bid must be drawn up in an electronic form and bear a qualified electronic signature, otherwise it may be invalid. The bid must be drawn up in Polish and signed by an authorised person.
- 10.2 The bid must contain the following documents:

The bid form drawn up in an electronic form otherwise being null and void, bearing a qualified electronic signature;

The statement on subcontracting - in accordance with the regulation specified in Article 36b of the PPL Act - the Contracting Authority demands that the Economic Operator indicate the parts of the contract which it intends to subcontract to subcontractors, together with the names of the subcontractors (if known). Such indication should be specified on the bid form.

ESPD as the Economic Operator's own statement, otherwise being null and void, in an electronic form, bearing a qualified electronic signature,

ESPD for each of the entities on whose resources the Economic Operator relies, otherwise being null and void in an electronic form, bearing a qualified electronic signature, provided that the Economic Operator relies on resources of other entities,

ESPD for each of the Economic Operators jointly applying for the contract award,

The security deposit in the original electronic form with a qualified electronic signature of persons authorized to issue it (when the Economic Operator pays the security deposit in a non-monetary form).

The power of attorney for the attorney appointed by the Economic Operators applying jointly for the contract award should be granted otherwise being null and void in the an electronic form bearing a qualified electronic signature,

Third party undertaking or any other document proving that the potential is made available to the Economic Operator by the third party in accordance with the ToR, if the Economic Operator, while demonstrating the fulfilment of the conditions for participation in the procedure, relies on the capacity or situation of other entities,

Documents which confirm equivalence in the case when equivalent solutions are offered.

10.3 ESPD

In order to confirm that there are no grounds for exclusion from the procedure and to confirm the fulfilment of the conditions for participation in the procedure, the Economic Operator will be obliged to submit to the Contracting Authority a statement made on the form of the European Single Procurement Document (hereinafter referred to as "ESPD"); the ESPD template is set out in the Commission Implementing Regulation (EU) 2016/7 of 5 January 2016 laying down a standard form for the European Single Procurement Document (Official Journal of the European Union L 2016 series No. 3, p. 16).

In order to fill in its own statement in the ESPD form using the ESPD tool, the Economic Operator downloads the file "espd-request.xml" from the Contracting Authority's website and fills in its own ESPD document using the ESPD tool by importing the file "espd-request.xml" into <https://ec.europa.eu/tools/espd/filter?lang=pl>.

The Contracting Authority makes available to Contractors a file, in xml format, generated from the ESPD tool, which forms Attachment No. 2 to the bid.

The ESPD should be submitted together with the bid.

The ESPD should be prepared by the Economic Operator in an electronic form bearing a qualified electronic signature, otherwise being null and void.

The Contracting Authority will allow the formats of transmitted data specified in the Regulation of the Council of Ministers of 12 April 2012 on the National Interoperability Framework, minimum requirements for public registers and exchange of information in an electronic form and minimum requirements for ICT systems (consolidated text in the Journal of Laws of 2017, item 2247), in particular: pdf, .doc, .docx.

The Economic Operator fills in the ESPD document, creating an electronic document. He may use the ESPD tool or other available tools or software to fill in the ESPD and create an electronic document, in particular in one of the above mentioned formats.

The Contracting Authority informs whom it may concern that at the address: <https://ec.europa.eu/tools/espd> the European Commission has made available a tool which enables the Contracting Authority and the Economic Operators to create, fill in and reuse a standard ESPD form (JEDZ/ESPD) in an electronic form (eESPD).

Detailed instructions on how to fill in the ESPD document electronically are available on the website of the Public Procurement Office: https://www.uzp.gov.pl/_data/assets/pdf_file/0015/32415/Instrukcja-wypelniania-ESPD-ESPD.pdf.

After creating or generating an electronic ESPD document, the Economic Operator will sign the aforementioned document with a qualified electronic signature, issued by a qualified trust service provider, being an entity providing certification services - an electronic signature that meets the security deposit requirements specified in the Act of 5 September 2016 on trust services and electronic identification (consolidated text in the Journal of Laws of 2019, item 162 as amended).

- 10.4 Documents or statements prepared in a foreign language must be submitted together with their translation into Polish.
- 10.5 One Economic Operator may submit only one bid.
- 10.6 If the bid contains information constituting a business secret within the meaning of Article 11 item 2 of the Act of 16 April 1993 on combating unfair competition (consolidated text in the Journal of Laws of 2019, item 1010 as amended), then such information must be extracted in the form of a separate file and submitted in accordance with the rules described in these ToR in order for the Contracting Authority to keep the secret. This file is to be clearly marked "Company secrets - do not disclose". The Contracting Authority will not be liable for any preparation of the above file by the Economic Operator which is inconsistent with these ToR. The Economic Operator will submit a relevant reservation on the bid form (part II of ToR) and will prove that the reserved information is a company secret. Otherwise, the entire Bid will be disclosed upon request of any interested person.

- 10.7 Reservation of information which does not constitute a business secret within the meaning of the above mentioned Act when at the invitation of the Contracting Authority the Economic Operator refused to declassify this part of the Bid will result in declassifying by the Contracting Authority the part of the Bid which is not a business secret.
- 10.8 A business secret will be understood as technical, technological, organisational or other information of economic value, which as a whole or in a particular combination and set of its elements is not commonly known to persons usually dealing with this type of information or is not easily accessible to such persons, provided that the person authorized to use or dispose of the information has taken, with due diligence, steps to keep it confidential.
- 10.9 The Contracting Authority will not disclose information constituting a business secret within the meaning of the provisions on combating unfair competition, if the Economic Operator, not later than by the date of submitting a bid or other documents, respectively (if such documents are business secrets), has reserved that they cannot be disclosed and has demonstrated that the reserved information contains business secrets. The Economic Operator cannot reserve the information referred to in Article 86 item 4 of the PPL Act.
- 10.10 The bid must be signed by persons authorized to represent the Economic Operator in accordance with the registration documents or by a person holding a valid power of attorney, which must be attached to the bid. The power of attorney should be granted, otherwise being null and void, in an electronic form with a qualified electronic signature.
- 10.11 The Economic Operator may, before the deadline for submission of bids, modify or withdraw the bid.
- 10.12 The Economic Operator may introduce changes, corrections, modifications and supplements to the submitted bid before the deadline for submission of bids. Any modification of the bid must be prepared according to the rules described in item 9 letter A of the ToR. Bid amendments will be opened when the bid of the Economic Operator who introduced the amendments is opened and after the correctness of the amendment procedure is confirmed, and they will be attached to the bid.
- 10.13 The Economic Operator will bear all costs related to preparation and submission of the bid.
- 10.14 In the case of an incorrect bid submission, the Contracting Authority will not be liable for misdirection or early opening of the bid. Such a bid will not take part in the procedure.

11. Place and date of submission and opening of bids

11.1 General information:

The bid must be received by 2 February 2020, 9.00 am at the latest.

The Contracting Authority will immediately notify the Bidder that the bid has been submitted after the deadline and will return the bid after the deadline for appeal.

12.1 Opening of bids:

The bids will be opened on 2 February 2020 at the **Institute of Bioorganic Chemistry of the Polish Academy of Sciences, ul. Noskowskiego 12/14 in Poznań, room 105 in building B at 12:00 p.m. (entrance from ul. Wieniawskiego 17/19).**

Bids are opened by using the bid encryption application available on the miniPortal and is done by decrypting and opening bids with a private key.

Opening the bids is open to the public.

Bidders may participate in the opening of bids.

Immediately before the opening of bids, the Contracting Authority will specify the amount which it intends to allocate to finance the contract.

During the opening of bids the Contracting Authority will provide the names (companies) and addresses of the Economic Operators, as well as information concerning the price, deadline for completion of the contract, guarantee period and payment terms included in the bids. This information will be provided immediately to Economic Operators who were not present at the opening of bids, upon their request.

Immediately after the opening of bids the Contracting Authority will post on the website information about:

- 1) the amount that it intends to allocate to finance the contract
- 2) companies and addresses of Economic Operators who submitted bids on time
- 3) the price, the time limit for performance of the contract, the guarantee period and the payment conditions contained in the bids.

13. Submission of additional documents, correction, explanation of the bid content

If the Economic Operator fails to submit the statement referred to in Article 25a section 1, statements or documents confirming the circumstances referred to in Article 25 section 1 or other documents necessary to conduct the procedure, the statements or documents are incomplete, contain errors or raise doubts indicated by the Contracting Authority, the Contracting Authority will call for them to be submitted, supplemented or corrected or for explanations to be provided within the time limit indicated by the Contracting Authority, unless, despite submitting, supplementing or correcting them or providing explanations, the Economic Operator's bid is rejected or the procedure would have to be cancelled.

If the Economic Operator fails to submit the required powers of attorney or submits defective powers of attorney, the Contracting Authority will call for such powers of attorney to be submitted within the deadline indicated by the Contracting Authority, unless, despite their submission, the Economic Operator's bid is subject to rejection or it would be necessary to invalidate the procedure.

14. Description of price calculation method

The price of the bid must be given numerically in the Bid form. The Economic Operator must quote a clear and final price in the submitted bid. The provision of a variant price expressed as a price range or containing conditions and reservations will result in rejection of the bid. The bid price must be expressed in Polish zloty. There will be no settlements in foreign currencies. The bid price is not subject to negotiations or changes. The prices must be quoted and calculated to two decimal places (rounding rule - below 0.005 must be rounded down, above and equal must be rounded up). The bid price must include all costs related to the performance of the contract, including costs of delivery of the product under the contract, costs of necessary licences, VAT and performance of all obligations of the Economic Operator, necessary to perform the contract, in accordance with these ToR, the contract, as well as any possible risk resulting from circumstances which could not have been foreseen at the time of submitting the bid. The Economic Operator's failure to include the above in the price quoted by him will not constitute grounds for incurring any additional costs by the Contracting Authority at a later date.

The Contracting Authority accepts that, subject to the next paragraph, the product supplied under the contract is subject to VAT at 23%. If the Economic Operator accepts a different VAT rate, the Economic Operator will be obliged to justify the adopted rate, e.g. by referring to the individual interpretation of the tax authority. Otherwise, providing a different VAT rate or failing to do so will result in the Economic Operator being deemed to have made another mistake in the text of the bid, referred to in Article 87 section 2 item 3 of the PPL Act.

15. Description of the criteria which the Contracting Authority will be guided by when selecting a bid, together with the weighting of these criteria and the method of bid evaluation

The Contracting Authority will select the most advantageous bid on the basis of the bid evaluation criteria specified in the ToR.

15.1 Bid evaluation criteria:

Price (C)	- weight 35%
Desirable requirements (P)	- weight 65%

15.2 Method of bid evaluation:

Bids will be evaluated on points.

In the course of bid evaluation, the bids which are successively examined and evaluated will be awarded points for the above criteria according to the following rules:

$$S = C+P$$

where:

S - total number of points awarded to bid "x"

C - number of points awarded to bid "x" for the "price" criterion

P - number of points awarded to bid "x" for the "desirable requirements" criterion

The score for the "price" criterion will be calculated for the bid according to the following rules:

When evaluating the bid, the Contracting Authority will take into account the gross price quoted for the execution of the contract, according to the following formula:

$$\text{Number of points for criterion "C"} = \frac{C_{\min}}{C(x)} \times 35$$

where:

C - number of points awarded to bid "x" for the criterion "price"

C_{\min} - the lowest "price" among the bids submitted

$C(x)$ - the "price" under examination quoted in bid 'x'

The score for the "desirable requirements" criterion will be calculated for the bid according to the following rules:

- P1 - Radiation enclosure (item 2.2. of the Technical Specification) - 5 points
- P2 - Operation of the instrument regulating the change of beam divergence (item 3.5. of the Technical Specification) - 10 points
- P3 - Cu $K\alpha$ beam (point 3.7. of the Technical Specification) - 10 points
- P4 - Surface X-ray detector - Option for obtaining the best signal to noise/background ratio (item 4.2. of the Technical Specification) - 10 points
- P5 - Detector - pixel size (item 4.6. of the Technical Specification) - 10 points
- P6 - Detector - dynamic range (item 4.8.4. of the Technical Specification) - 10 points
- P7 - Option for read-out time (item 4.8.7. of the Technical Specification) - 10 points
- P8 - Image recording (item 4.8.9. of the Technical Specification) - 10 points
- P9 - Improvement of crystal centring (item 5.7 of the Technical Specification) - 5 points
- P10 - Option for on-site calibration of the diffractometer (item 5.9. of the Technical Specification) - 10 points
- P11 - Optimal data collection and analysis (item 6.5. of the Technical Specification) -10 points

A detailed description of the desirable requirements can be found in section IV of the ToR (Technical Specification)

Number of points for the criterion

$$"P" = (P1+P2+P3+P4+P5+P6+P7+P8+P9+P10+P11) \times 65$$

The bid which receives the highest number of points for all evaluation criteria will be considered the most advantageous.

16. Guarantee

The Economic Operator is obliged to provide a guarantee for the delivered diffractometer according to the following rules:

a) times:

Name	Response time	Repair time	Minimum guarantee period
X-ray diffractometer	24h	2 weeks	5 years

- b) the X-ray diffractometer system must have a guarantee of at least 5 years which will also cover all consumables of the X-ray source during the guarantee period;
- c) the response time to the failure report is understood by the Contracting Authority as the time of arrival of the service personnel at the location indicated by the Contracting Authority where the equipment was delivered, calculated from the time the failure was reported; and where remote support is required, the first log-on time will be equivalent to the response on site.
- d) the repair time is understood by the Contracting Authority as the time counted from the arrival of the service personnel after the failure is reported until the completion of the repair;
- e) the guarantee covers the full cost of repairing the equipment, including the necessary parts, materials and the costs of a specialist;
- f) the guarantee period starts on the day of signing the acceptance report of the product supplied under the contract. A template of the acceptance report is attached as Attachment No. 2 to the draft contract;
- g) during the guarantee period the equipment or its components will be replaced with new ones in case of 2 significant failures. Any damage that makes it impossible for the instrument to operate is considered significant. Replacement of the instrument (or its component) should take place within the deadlines specified in the above table in the column "repair time"; in case of replacing a damaged instrument (or its component) with a new one, the guarantee and service conditions stipulated in the bid will apply. In this case, the guarantee period will run from the beginning.

Other guarantee conditions are indicated in the draft contract.

17. Performance bond

In this procedure the Contracting Authority will not demand from the Economic Operator any performance bond within the meaning of Article 147 PPL Act.

18. Conclusion of the contract and its significant provisions

- 18.1 Pursuant to Article 94 section 1 item 1 of the PPL Act and subject to Article 94 section 2 item 1 letter a) of the PPL Act and Article 183 of the PPL Act, the Contracting Authority will conclude a contract with the selected Economic Operator within not less than 10 days from the date of sending the notice of selection of the most advantageous bid, if such notice was sent by electronic means; or 15 days, if it was sent by other means.
- 18.2 The Contracting Authority will require the selected Economic Operator to conclude a contract compliant with the draft contract, included in Part III of the ToR.
- 18.3 If several entities submit a bid jointly, by the date of concluding the contract the Economic Operator will provide the Contracting Authority with an agreement regulating cooperation between these entities. Failure to meet this requirement will be treated as a refusal to conclude a contract.
- 18.4 If the Economic Operator, whose bid has been selected, refuses to conclude a contract, the Contracting Authority will select the most advantageous bid from among the remaining bids, without reassessing them.
- 18.5 Pursuant to the provisions of Article 144 section 1 item 1 of the PPL Act, the Contracting Authority provides for the possibility to amend the provisions of the concluded public procurement contract in relation to the contents of the bid on the basis of which the Bidder was selected, provided that annex accepted by both Parties is signed, when:
- a) the deadlines for completion of the contract are changed for reasons beyond the control of the Economic Operator or the Contracting Authority, in particular in the case of circumstances of force majeure (e.g. occurrence of a random event caused by external factors which could not be predicted with certainty, in particular directly threatening people's life or health or threatening to cause significant damage) or due to the action of third parties, which must be documented by each of the Parties,
 - b) amendment of the contract in the event of a change in legal provisions, in particular those concerning the protection of personal data, by adapting the content of the contract to the amended legal provisions.
- 18.6 The change of the provisions of the concluded contract is also allowed in the cases listed in Article 144 section 1 items 2) thru 6) of the PPL Act.
- 18.7. The Contracting Authority does not anticipate a change in the gross price in the event of an increase in the VAT rate.
- 18.8 Conditions for making changes:
- 1) The party applying for an amendment to the provisions of the contract is obliged to document the occurrence of the circumstances referred to as the basis for amending the contract.

- 2) The application to amend the provisions of the contract must be made in writing,
- 3) The application referred to in point 2 must contain:
 - a) a description of the amendment proposal,
 - b) the justification for the amendment,
 - c) a description of the impact of the amendment on the conditions of performance of the contract.

The remaining provisions, which will be introduced to the content of the public procurement contract to be concluded, are indicated in the draft contract.

19. Legal remedies

- 19.1 The Economic Operator, as well as another entity, if it has or had an interest in obtaining the contract and has suffered or may suffer damage as a result of violation by the Contracting Authority of the provisions of the Act, will have the right to appeal only against the Contracting Authority's action inconsistent with the provisions of the Act taken in the procurement procedure or failure to take the action which the Contracting Authority is obliged to take pursuant to the Act.
- 19.2 The appeal must be lodged within 10 days from the date of sending the information on the Contracting Authority's actions constituting the basis for its submission, if it was sent in the manner specified in Article 180 section 5 second sentence, or within 15 days if it was sent in a different manner.
- 19.3 An appeal against the content of the contract notice and against the provisions of the Terms of Reference must be lodged within 10 days from the date of publication of the notice in the Official Journal of the European Union or publication of the Terms of Reference on the website.
- 19.4 An appeal against actions other than those specified in items 19.2 and 19.3 must be lodged within 10 days from the date on which the circumstances on the basis of which the appeal was made became known or could have been known when due diligence was observed.
- 19.5 The appeal must be lodged with the President of the Krajowa Izba Odwoławcza [National Appeal Chamber] in writing or in an electronic form, signed with a secure electronic signature verified by means of a valid qualified certificate or equivalent means meeting the requirements for such signature.
- 19.6 The Appellant will send a copy of the appeal to the Contracting Authority before the expiry of the time limit for lodging an appeal in such a way as to enable the Contracting Authority to read the appeal before the expiry of that time limit.

20. Information on the formalities to be completed after the selection of the bid in order to conclude a contract

Before concluding a public procurement contract, the Economic Operator whose bid was considered the most advantageous will be obliged to complete the following formalities:

- 1) submit a schedule of two-day application training, confirmed and accepted by a designated employee of the Contracting Authority.
- 2) submit the consortium agreement to the Contracting Authority if the contract will be performed by Economic Operators applying jointly for the award.

Failure to comply with these formalities will be treated as the Economic Operator's evasion of concluding the public procurement contract.

21. Information clause for persons applying for public contracts

Institute of Bioorganic Chemistry of the Polish Academy of Sciences, as the Contracting Authority, informs whom it may concern that the personal data concerning the Economic Operator and his business activity, persons authorized to represent the Economic Operator in the public procurement procedure and the data concerning the entities which the Economic Operator refers to in this procedure will be processed in accordance with Article 13 of Regulation (EU) 2016/679 of the European Parliament and of the Council of 27.04.2016 on the protection of individuals with regard to the processing of personal data and on the free movement of such data and on the repeal of Directive 95/46/EC, hereinafter referred to as "GDPR". The administrator of personal data is the Institute of Bioorganic Chemistry of the Polish Academy of Sciences in Poznań, address: ul. Z. Noskowskiego 12/14, 61-704 Poznań; REGON 000849327 NIP 777-00-02-062. Personal data is processed on the basis of:

- Article 6 section 1 letter b GDPR for the purpose of taking actions for the benefit of the Economic Operator before concluding a contract for the award of a public contract, the conclusion of that contract, its performance and its settlement;
- Article 6 section 1 letter c GDPR, in order to fulfil the obligations incumbent on the administrator under the provisions of the Public Procurement Law;
- Article 6 section 1 letter f GDPR, in order to fulfil the obligations incumbent on the administrator under the provisions of the Public Procurement Law.

Personal data will be stored during the period of cooperation with the Contracting Authority and for the purpose of archiving the documentation related to the cooperation according to the periods indicated in the detailed regulations or resulting from the rules of financing the public contract. The Economic Operator has the right to access the data and demand its rectification. The Economic Operator has the right to lodge a complaint with the President of the Office for Personal Data Protection, if he considers that the processing of personal data violates the provisions of the GDPR Regulation. The Data Protection Inspector, appointed by the Personal Data Protection Administrator, may be contacted by e-mail at dpo@ibch.poznan.pl, as well as by regular mail at the address: Institute of Bioorganic Chemistry of the Polish Academy of Sciences - Data Protection Inspector, ul. Z. Noskowskiego 12/14, 61-704 Poznań. The provision of personal data by the Economic Operator is voluntary, but necessary for the purposes of establishing and conducting cooperation. The personal data will not be subject to profiling. Personal data may be transferred to other persons and organizational units that cooperate with the Contracting Authority or apply for such cooperation. Furthermore, such data may be

transferred to the authorities competent in matters of public procurement and to public procurement financing bodies; however, it cannot be excluded that they will be entities from outside the European Economic Area, from any country in the world, unless the ban on transferring the data results from separate legal regulations. Personal data may be made available to bodies authorized under the law and subcontracted under a subcontracting agreement concluded in writing to entities cooperating with the Contracting Authority.

The specification has been made by:

- content:

(name and surname) (signature)

- form:

(name and surname) (signature)

APPROVED

Head of Unit
(signature)

II. BID FORM

_____, _____
 (place and date)

I (we) the undersigned, acting on behalf of:

with its registered office in (postal code) _____ (city/town) _____,
 (street/number) _____, phone: _____,
 e-mail: _____, NIP _____,
 REGON _____

in response to the notice of public procurement procedure for the award of a public contract number **PN 483/2020** for the delivery with installation and commissioning of a high-performance diffractometer equipped with a four-circle kappa goniometer and a surface detector used to record X-radiation scattering by single crystals in the study of crystallography of biological molecules and crystallography of small particles for the Laboratory of Protein Engineering, Institute of Bioorganic Chemistry of the Polish Academy of Sciences in Poznań, described in detail in the Technical Specification, contained in Part IV of the ToR, submit this bid and declare that:

1. We offer the execution of the above contract for a fee in the amount:

Name	Qty	Net value [PLN]	Gross value [PLN]
X-ray diffractometer	1 set		

2. We declare that the price specified in the bid is final and will not change until the end of the contract and includes the execution of the entire subject of the contract under the conditions specified in the ToR.
3. We inform the Contracting Authority that we are bound by the bid for the time specified in the ToR, and in case of winning the bid and the conclusion of the contract the conditions set out in the bid will be valid for the entire duration of the contract.
4. We inform the Contracting Authority that we have read the Specification of Essential Terms of Reference and the model contract we accept the provisions contained therein and do not raise any objections to them.

5. We declare that we will deliver the product under the contract to the specified location on the premises of the Contracting Authority, install and commission the product **within _____ from the conclusion of the contract by the Parties (maximum 6 months from the date of conclusion of the contract by the Parties).**

Note:

In the case of failure to specify the time limit for delivery of the product under the contract, the Contracting Authority will accept the maximum period for performance, i.e. 6 months from the date of conclusion of the contract by the Parties.

6. We declare that we offer the following desirable requirements:

P1 - Radiation protection enclosure	<input type="checkbox"/> YES	<input type="checkbox"/> NO
P2 - Operation of the instrument regulating the change of beam divergence	<input type="checkbox"/> YES	<input type="checkbox"/> NO
P3 - Cu K α bundle	<input type="checkbox"/> YES	<input type="checkbox"/> NO
P4 - Surface X-ray detector - Option for obtaining the best signal to noise/background ratio	<input type="checkbox"/> YES	<input type="checkbox"/> NO
P5 - Detector - pixel size	<input type="checkbox"/> YES	<input type="checkbox"/> NO
P6 - Detector - dynamic range	<input type="checkbox"/> YES	<input type="checkbox"/> NO
P7 - Option for read-out time	<input type="checkbox"/> YES	<input type="checkbox"/> NO
P8 - Image recording	<input type="checkbox"/> YES	<input type="checkbox"/> NO
P9 - Improvement of crystal centring	<input type="checkbox"/> YES	<input type="checkbox"/> NO
P10 - Option for on-site calibration of the diffractometer .	<input type="checkbox"/> YES	<input type="checkbox"/> NO
P11 - Optimal data collection and analysis	<input type="checkbox"/> YES	<input type="checkbox"/> NO

7. We declare that the product under the contract will be made by us. However, if it is our intention to subcontract a part of the contract to subcontractors, we represent that they will perform the following part of the contract:

8. We declare that we give _____-month guarantee (minimum 60 months). We undertake to execute the guarantee in accordance with the conditions specified in section I.16 of the ToR. At the same time, we declare that the conditions of the guarantee will be fulfilled in accordance with the provisions of the draft contract (Part III of the ToR).

9. We declare that we agree to the payment of remuneration in accordance with the terms and conditions and within the time limits specified in §3 of the draft contract included in Part III of the ToR.

10. We inform the Contracting Authority that we have read the draft contract and accept its contents without reservation. We accept the content of Article 144 of the PPL Act prohibiting a significant change of the provisions of the concluded contract in relation to the content of the

bid, except for the Option for introducing changes in circumstances indicated by the Contracting Authority in the ToR.

11. We declare that we have lodged a security deposit:

- form and amount of security deposit: _____
- name of the bank and the account number to which the Contracting Authority is to return the security deposit paid in money:

12. We declare that the product(s) delivered will be brand new, i.e. not used before the date of delivery except for the use necessary to test its proper operation.

13. We declare that the delivered product(s) will be ready for use without the need to install additional equipment and will be equipped with a sufficient number of cables necessary for the proper functioning of the equipment and allowing it to be connected to standard power sockets, unless otherwise specified in the technical specification.

14. We declare that on the date of the bid the manufacturer does not intend to withdraw the product(s) offered in the bid from production or sale.

15. We declare that all information which has not been expressly reserved by us as constituting a company secret has not been secured (e.g. by placing this information independently of the bid in a separate envelope or in the case of attaching the information on a password-protected data carrier) and for which we have not demonstrated that it constitutes a company secret, is non-confidential.

16. We provide for the possibility of reporting **failures** _____ **hours a day, from** _____ **to** _____, **Monday thru Friday (min. 8 hours a day from 9.00 to 17.00):**

by e-mail to: _____

17. We declare that we are* a micro or small or medium-sized enterprise:

YES

NO

* tick the appropriate box

Place and date

Stamp and signatures of persons representing the
Economic Operator

Attachment No 1 to the Bid

Detailed description of the technical parameters of the product offered under the public procurement procedure

The instrument offered must provide the flexibility necessary to address the wide range of studies which are envisaged: including proteins, RNA and small molecule materials. Some of the crystals to be studied will be only extremely small and / or otherwise very weakly diffracting crystals. Overall, most demanding applications in crystallography are to be addressed, and the requirement is for the most accurate, precise and reliable X-ray diffraction data. Accordingly, the brightness, stability and reliability of the X-ray source and the sensitivity, dynamic range and signal:noise characteristics of the X-ray area detector and the availability of a range of flexible and powerful tools in the data collection and analysis software are key factors of consideration. It is envisaged that this range of interests would be best served by an instrument of the outline specification below.

M: Mandatory Requirement (Feature not subjected to point evaluation).

D: Desirable Requirement (Subject of point evaluation, as indicated below in evaluation criteria)

Position	Description	Criteria Type	Yes	No	Evaluation Points	Explanation of solution
1	General X-ray Diffractometer System Requirements:					
1.1	System must include a radiation enclosure that meets current EU radiation standards: equipped with interlock safety switches at all user accessible points and conforming to the highest level of X-ray safety standards appropriate for the class of equipment, so fully protecting the users from any accidental exposure to X-rays as well as mechanically moving parts as governed by the EU Machinery Directive.	M			X	
1.2	Radiation enclosure equipped with fully automatically and software-controlled brightness of the cabinet and sample lighting combined with high resolution video imaging of crystals. – 5 points	D1				
1.3	System must be provided with evidence that all equipment is CE marked.	M			X	
1.4	The X-ray diffractometer system must require single phase mains power supply only.	M				
1.5	The X-ray diffractometer system must be mounted on wheels for easy installation and manoeuvrability.	M			X	

2	X-ray Source / Generator System Requirements:					
2.1	The X-ray source must be rotating anode technology and deliver X-rays at the Cu K α characteristic wavelength (1.54 Å)	M				
2.2	For the collection of X-ray diffraction data from the most weakly scattering crystal samples, the rotating anode X-ray source must be coupled with double-bounce, confocal multilayer monochromating and focusing X-ray optics in order to deliver a Cu K α X-ray beam of the highest X-ray brightness and high spectral purity for macromolecular and chemical crystallography data collection.	M				
2.3	The Cu K α microfocus rotating anode X-ray source must be rated up to at least 1,000 W power and the beam diameter (FWHM) at the crystal position must be within the range 120 – 150 μ m, and with maximum divergence of \leq 10 mrad.	M				
2.4	To best enable the collection of data from very long unit cell materials (such as proteins), the Cu K α microfocus rotating anode X-ray source must be fitted with a suitable variable divergence facility .	M				
2.5	----- The variable divergence facility associated with the microfocus Cu K α source is fully-automated (software controlled) and allows the continuous adjustment of the Cu K α X-ray beam divergence over the full range of 10 mrad – 1 mrad. – 10 points	D2				
2.6	For the analysis of the smallest and most weakly-diffracting crystals, the system must deliver a Cu K α X-ray beam with flux density equal to or greater than 1×10^{11} photons / (sec*mm ²) at the crystal sample position.	M				
2.7	----- Cu K α beam with flux density equal to or greater than 2.5×10^{11} photons / (sec*mm ²) at the crystal sample position. – 10 points	D3				
2.8	Internal water cooling of the X-ray source system must be employed in order to best maintain the necessary most stable operating temperature and utmost constant X-ray intensity output.	M				
3	X-ray Area Detector Requirements:					

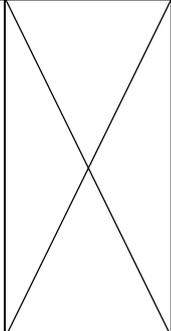
3.1	High sensitivity, low noise X-ray area detector for the optimal measurement of X-ray diffraction data.	M				
3.2	----- For the best signal-to-noise in the diffraction data , the X-ray area detector is a direct detection single photon-counting instrument throughout the whole dynamic range of operation and utilises a semiconductor pixel sensor: therefore without the employment of any X-ray to visible light conversion phosphor, nor any demagnifying fibre-optic taper instrument. (Detection of X-ray photons is direct: i.e. <i>not</i> requiring conversion of the X-ray signal to visible light: since this generates noise in the X-ray conversion.) – 10 points	D4				
3.3	The detector should not be prone to any dark current / background or read-out noise effects.	M				
3.4	The detector characteristics should prevent any ‘rolling shutter geometrical distortion’ in the images.	M				
3.5	Detector must have a pixel size equal to or less than 120 x 120 μm^2 : to allow for precise diffraction spot resolution.	M				
3.6	Detector has a pixel size equal to or less than 100 x 100 μm^2 : to allow for the most precise diffraction spot resolution. - 10 points	D5				
3.7	The active area of the detector must be at least 55 cm^2 : for high coverage and maximised resolution of measurable data.	M				
3.8	The detector must have:					
3.8.1	At least 500,000 available pixels.	M				
3.8.2	A ‘top hat’ point spread function (FWHM) not greater than 1 pixel: so enabling the optimal resolution of nearby Bragg reflection data, from possibly long unit cell (including protein) materials.	M				
3.8.3	At least 16-bit dynamic range : for simultaneous measurement of both weak and strong reflections on the same image, so eliminating the need for repeated measurements.	M				
3.8.4	----- Option for 30-bit dynamic range (or greater): for the optimal simultaneous measurement of both weak and strong reflections on the same image, so eliminating the need for repeated measurements. - 10 points	D6				

3.8.5	Single photon counting count rate capabilities: Local: greater than 1×10^6 photon counts per second per pixel, Global: greater than 5×10^{11} photon counts per second.	M				
3.8.6	Read-out time not longer than 10 msec: to support 'shutterless' mode continuous data-collection, so reducing both noise and the total time duration of data collection.	M				
3.8.7	Option for read-out time not longer than 10 nsecs: to most effectively support 'shutterless' continuous data-collection mode, so minimising both noise and the total time duration of data collection. – 10 points	D7				
3.8.8	At least 50 Hz frame rate capability: in order to accommodate the most strongly diffracting crystals.	M				
3.8.9	Greater than 80 Hz frame rate capability: in order to optimally accommodate the most strongly diffracting crystals. – 10 points	D8				
3.8.10	Energy discrimination: to exclude X-ray fluorescence effects.	M				
3.8.11	Detective quantum efficiency of at least 95% at the Cu K α X-ray wavelength.	M				
3.8.12	No streaking, bloom or afterglow effects.	M				
3.9	The detector must be air-cooled and operate at room temperature, with no chiller requirement: without any compromise in measurement efficiency or detector stability.	M				
4	Goniometer Requirements:					
4.1	The instrument must include a four-circle kappa goniometer to allow the highest efficiency data collection strategies.	M				
4.2	The goniometer must be constructed in such a way that the extended directions of the four rotation axes intersect at one point with an error not greater than ('sphere of confusion' of) 10 μ m diameter.	M				
4.3	The detector carriage, and Theta arm, must be integrated into the system in such a way that the distance from the centre of the crystal sample to the detector face is variable and under computer control, with high accuracy, over a range covering at least 32 – 200 mm.	M				
4.4	The four-circle kappa goniometer must be able to support a load of at least 2.0 kg on the phi axis.	M				

4.5	The goniometer must allow data-collection scan speeds up to at least 10 deg/sec on the Omega axis and 20 deg/sec on the Phi axis.	M				
4.6	The goniometer must be equipped with a colour video camera microscope: to assist in live centring of the crystal and also for the face-indexing of crystals in support of the correction of crystal X-ray self-absorption effects.	M				
4.7	The radiation enclosure is equipped with an internal display monitor: for the highest speed and convenience in centring the crystal on the goniometer. - 5 points	D9				
4.8	There should be a 'collision map' defining the available angular ranges for all of the goniometer axes, and, further, the goniometer must be equipped with comprehensive (hardware and software – supported) detection of any 'collision', with fully automated disablement of the goniometer movement in the case of any collision.	M				
4.9	----- The instrument model can be accurately calibrated on-site, fully automatically: using a stable test crystal which is included. – 10 points	D10				
5	PC and Software Requirements:					
5.1	The diffractometer system must be provided with a powerful control computer with all of the software required for instrument control, data collection, data integration and analysis, etc. Minimal computer requirements as follows: CPU: Intel Core i-7 or more, OS: Windows 10 Pro (64bit) or later, RAM: 8GB, HDD: 250 GB SSD system disc and 1TB data disc, LCD: 24" Full HD (1920 x 1080 resolution), Ethernet adapters: One port on the motherboard and two on the extension cards, keyboard & mouse	M				
5.2	An unlimited number of data integration and analysis software licenses must be provided and the software licenses must be valid for an unlimited period. Thus, importantly, all local (and 'remote') dependents of the equipment must have the capability to analyse data – independently of the instrument laboratory and the 'local' users, on their own PCs, remotely.	M				
5.3	The software must be easy and straightforward to operate and include a rapid limited data-collection / 'connectivity'	M				

	structure-determination tool for initial crystal screening, etc.					
5.4	The software must include an automated 'pre-experiment' tool: for the most effective determination of unit cell and evaluation of crystal quality (resolution limit and mosaicity, etc.). Using this 'pre-experiment' data, the software must then support, fully automatically and most speedily, the determination of the optimised data-collection strategy : - according to some user-input criteria (for instance, the required resolution, multiplicity / redundancy, average I/σ or total overall data-collection time, etc.)	M				
5.5	----- For the optimal collection and analysis of 'micro-diffraction' polycrystalline (or 'powder') diffraction data, the diffractometer hardware and software includes the option of the Gandolfi scan approach: continuous data-collection through simultaneous and coordinated omega and phi scans of the diffractometer. – 10 points	D11				
5.6	Software must include the capability for checking measured unit cell parameters against existing structural databases, such as the CCDC 'CSD', as well as 'local' (CBR, IBC, PAS) unit cell libraries.	M				
5.7	Software must include flexible and most user-friendly tools for the semi-automated processing of images arising from (multiply-) 'twinned' crystal materials, for the analysis of diffuse scattering and data from modulated / incommensurate materials and quasicrystals.	M				
5.8	The software must provide fully automated data-collection and data-reduction pipelines that are fully compatible with the inputs for the currently available state-of-the-art structure solution and refinement packages such as the latest Olex2, SHELX, Win-GX, SIR, Crystals and JANA, etc.	M				
5.9	Software for the fully automated structure solution and refinement of ('small molecule') molecular / crystal structures concurrent with the ongoing data-collection must be included. The structure solution and refinement software package should include direct methods, Patterson methods and dual space methods.	M				

5.10	For remote training and support diagnostics, the instrument must be capable of being controlled remotely via the www – by using a suitable ‘remote desktop’ program or other similar robust software tool.	M				
5.11	software must have the option for images to be saved in a format that is immediately compatible with other alternative data processing programs, without further conversion, for instance including CCP4/MOSFLM, XDS, d*TREK and HKL-2000/3000, etc.	M				
5.12	For the processing of data collected using synchrotron central facilities and other instrumentation, the data analysis software must have the capability to read in (and also to output) images with a range of ‘alien’ formats, in addition to the manufacturers own: for instance including Dectris (cbf), Rigaku d*trek, MARResearch CCD (many formats) and ‘Esperanto’, etc.	M				
5.13	There must be the undertaking that updates to the principal instrument control / data-collection and data analysis software will be provided every 12 months, free of charge, and in perpetuity.	M				
6	Crystal Temperature Attachment Requirements:					
6.1	The system must include a complete attachment for crystal sample temperature control over the range 80 – 400 K, including a 60 litres LN2 Dewar vessel.	M				
6.2	An additional 160 litres LN2 Dewar vessel must be included.	M				
6.3.	Two appropriate service kits for the crystal sample temperature attachment must be included.	M				
6.4.	There must be full compatibility of the crystal temperature attachment with the hardware and software of the diffractometer, and with fully automated control of the attachment and the crystal temperature via the ‘standard’ instrument data-collection software menus.	M				
7	Cooling Equipment Requirements:					
7.1	Any recirculating liquid chiller or other equipment necessary for the cooling of the X-ray diffractometer or associated equipment must be included as part of the offer.	M				
8	Uninterruptible Power Supply Requirements:					

8.1	<p>For the support of all of the equipment listed above (including the complete X-ray diffractometer system, X-ray source, X-ray area detector, PC System, crystal temperature attachment and recirculating water chiller unit, etc.), a suitable uninterruptible power supply (UPS) unit must be supplied. An autonomy for the whole installation of at least 30 minutes is required.</p>	M				
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Attachment No 2 to the Bid

European Single Procurement Document - in a version to be downloaded from the Contracting Authority's website.

III. DRAFT CONTRACT**Contract No PN _____/2020**

concluded on _____, _____ 2020 in Poznań by and between:

Institute of Bioorganic Chemistry of the Polish Academy of Sciences, 61-704 Poznań, ul. Z. Noskowskiego 12/14, hereinafter referred to as the Contracting Authority, NIP 777-00-02-062, REGON 000849327

represented by

1. _____

2. _____

and

_____, with its registered office in _____
(*postal code, city/town*), ul. _____ (*street/number*),
entered into the National Court Register, KRS _____ at the District
Court for _____, _____ Commercial Division of the National Court
Register, share capital _____, hereinafter referred to as Economic Operator,
represented by:

1. _____

2. _____

§1.

1. This contract is concluded following the announcement of the result of the open tender procedure of more than EUR 144,000.00, published in the Official Journal of the European Union under No _____ on _____, for delivery together with installation and commissioning of a high-performance diffractometer equipped with a four-circle kappa goniometer and a surface detector used to record X-radiation scattering by single crystals in studies of biological particles crystallography and small particles crystallography for the Protein Engineering Laboratory, Institute of Bioorganic Chemistry of the Polish Academy of Sciences in Poznań, described in detail in the Technical Specification, included in part IV of the ToR, hereinafter referred to as the "Diffractometer " and in accordance with the bid submitted by the Economic Operator, constituting Attachment No 1 to this contract.

The scope of the subject of the contract also includes:

1. provision of equipment operating instructions in Polish or English;

2. two-day application training for the Contracting Authority's employees on how to operate the equipment after installation;
 3. provision of guarantee and guarantee service - detailed guarantee requirements are contained in §7 of this contract
2. The delivered diffractometer must be brand new, i.e. not used before the date of delivery, excluding the use necessary to test its correct operation.
 3. The delivered diffractometer must be ready for use without the need for additional equipment and must be equipped with a sufficient number of cables necessary for the proper functioning of the equipment and allowing it to be connected to standard power sockets, unless otherwise specified in the technical specifications.
 4. The prices given in the bid are final and are not subject to change until the end of the subject of the contract.

§2.

The Economic Operator undertakes to deliver the diffractometer together with installation and commissioning to the specified location in the Contracting Authority's registered office, by _____ from the date of signing this contract and carry out a two-day application training of the Employees of the Contracting Authority on the operation of the diffractometer, within 1 week from the installation and commissioning of the subject of the contract, with the reservation that the subject of the contract will be deemed completed when the Contracting Authority has signed the acceptance report referred to in §3 item 6 of this contract.

§3.

1. The Contracting Authority will pay the Economic Operator for the complete delivery of the contract the total gross amount of PLN _____, of which the net amount is PLN _____ and VAT is PLN _____.
2. The amount of the Economic Operator's remuneration given in item 1 of this paragraph includes the cost of delivery, connection, installation and start-up of the equipment, the cost of insurance for the time of transport and installation, the costs of guarantee service, training in the operation of the equipment and unlimited technical consultation - by phone and e-mail during the guarantee and post-guarantee period until the end of the equipment's operation.
3. The Parties mutually declare that they are VAT payers.

Contracting Authority's VAT NIP 777-00-02-062.

Economic Operator's VAT NIP _____

4. The Economic Operator undertakes to notify the Employee of the Contracting Authority, Mr _____ by phone about his readiness to deliver the diffractometer to the specified location in the registered office of the Contracting Authority, not later than **3 working days** before the planned delivery date.
5. Persons responsible for the implementation of the contract, including signing the acceptance report:

- representing the Contracting Authority: _____
 - representing the Economic Operator: _____
6. The basis for the issuance of an invoice by the Economic Operator will be the delivery and acceptance report, the specimen of which is attached as Attachment No 2 to the contract and which will be drawn up after delivery of the diffractometer to the location specified by the Contracting Authority, its installation, commissioning and training of the Contracting Authority's employees, as required by the Contracting Authority.
- All works related to the delivery will be performed at the expense of the Economic Operator.
7. Signing the acceptance report will not preclude the pursuit of warranty and guarantee claims in case of detecting defects in the diffractometer at a later date.
8. The Contracting Authority will transfer the remuneration to the Economic Operator's account, specified in the invoice, within **14 days** of receiving a correctly raised invoice as specified in the contract. The Contracting Authority agrees that the invoice be sent by e-mail to the address: faktura@ibch.poznan.pl, or in the case of foreign Economic Operators to invoice@ibch.poznan.pl, or to the sending of a structured invoice via the Electronic Invoicing Platform (in accordance with the rules set out in the Act of 9 November 2018 on electronic invoicing in public contracts, concessions for works or services and public-private partnerships), giving number GLN 5907696026909 as the Contracting Authority's ID. The date of performance is the date of debiting the Contracting Authority's bank account.
9. In the case of receiving an invoice that is incorrect or inconsistent with the contract, the Contracting Authority has the right to refuse to pay it. The Contracting Authority will send such an invoice back to the Economic Operator.

§5.

The Parties are obliged to immediately inform each other in writing about any changes in the legal status of their companies, as well as about the commencement of bankruptcy or liquidation procedure, and indicate an authorized entity that will take over the rights and obligations of the Party, as well as about any change in the address of its registered office.

§6.

1. Should the Economic Operator fail to meet the agreed deadline for completion of the contract for reasons attributable to the Economic Operator, the Contracting Authority will charge a contractual indemnity in the amount of statutory interest for delay, calculated from the gross remuneration referred to in §3 section 1 for each day of delay.
2. The Economic Operator will be obliged to pay the Contracting Authority a contractual indemnity amounting to 10% of the Economic Operator's gross remuneration referred to in §3 section 1, in case of withdrawal from the contract by any of the Parties for reasons attributable to the Economic Operator.
3. If it is found that the Economic Operator does not perform the guarantee and service in accordance with the conditions indicated in this contract, the Contracting Authority will be entitled to demand payment of contractual penalties amounting to 5% of the gross

remuneration referred to in §3 section 1 of the contract and will be entitled to withdraw from the contract.

4. Furthermore, the Contracting Authority may charge a contractual penalty in the amount of 0.5% of the gross price of the instrument specified in the Economic Operator's bid, constituting Attachment No. 1 to the contract, for each day of delay in case of failure to meet the guarantee deadlines resulting from §7 section 2 item 1 of this contract.
5. Payment of the contractual penalty does not exclude the demand for compensation in excess of the amount of the reserved contractual penalty.
6. In accordance with Article 145 of the PPL Act, in the event of a significant change in circumstances resulting in the execution of the contract not being in the public interest, which could not be predicted at the time of conclusion of the contract, or when continued performance of the contract may threaten the essential interest of state security or public safety, the Contracting Authority may withdraw from the contract within 30 days of becoming aware of these circumstances. In such a case, the Economic Operator may only claim the remuneration due to him for the performed part of the contract.
7. Pursuant to the provisions of Article 144 section 1 item 1) of the PPL Act, the Contracting Authority provides for the possibility of making significant changes to the provisions of the concluded contract in relation to the content of the bid on the basis of which the Economic Operator was selected, subject to signing an annex accepted by both Parties. Pursuant to the provisions of Article 140 section 3 of the Public Procurement Law such changes cannot go beyond the definition of the subject of the contract included in the ToR. Pursuant to Article 144 section 1 item 1) of the PPL Act, the Contracting Authority allows:
 - a) change of deadlines for performance of the subject of the contract for reasons beyond the control of the Economic Operator or the Contracting Authority, in particular in the case of circumstances of force majeure (e.g. occurrence of a random event caused by external factors which could not be predicted with certainty, in particular directly threatening people's life or health or threatening to cause significant damage), which must be documented by each of the Parties,
 - b) amendment of the contract in the event of a change in legal provisions, in particular those concerning the protection of personal data, by adapting the content of the contract to the amended legal provisions.
8. The amendment of the provisions of the concluded contract is also admissible in the cases listed in Article 144 section 1 items 2) thru 6) of the PPL Act.
9. If this contract provides for the right to withdraw from the contract in the case of non-performance or improper performance, the Contracting Authority may withdraw from this contract until the end of its performance by the Economic Operator, as well as during the guarantee period.

§7.

1. The Economic Operator undertakes to issue guarantee cards or other documents having the character of a guarantee card, which will be delivered to the Contracting Authority on the day of signing the acceptance report and will be issued with the date of signing the acceptance report.
2. The Economic Operator undertakes to provide a guarantee for the delivered subject of the contract according to the following rules:

2.1 Times:

Name	Response time	Repair time	Minimum guarantee period
X-ray diffractometer	24h	2 weeks	60 months

- a) the response time to the failure report is understood by the Contracting Authority as the time of arrival of the service personnel at the location indicated by the Contracting Authority where the equipment was delivered, calculated from the time the failure was reported; and where remote support is required, the first log-on time will be equivalent to the response on site.
 - b) the repair time is understood by the Contracting Authority as the time counted from the arrival of the service personnel after the failure is reported until the completion of the repair;
 - c) the guarantee covers the full cost of repairing the equipment, including the necessary parts, materials and the costs of a specialist;
 - d) the guarantee period starts on the day of signing the acceptance report of the product supplied under the contract;
 - e) during the guarantee period the equipment or its components will be replaced with new ones in case of 2 significant failures. Any damage that makes it impossible for the instrument to operate is considered significant. Replacement of the instrument (or its component) should take place within the deadlines specified in the above table in the column "repair time"; in case of replacing a damaged instrument (or its component) with a new one, the guarantee and service conditions stipulated in the bid will apply. In this case, the guarantee period will run from the beginning
3. The Economic Operator will provide for the possibility of reporting failures _____ **hours a day, from _____ to _____, Monday thru Friday (min. 8 hours a day from 9.00 to 17.00):**
by e-mail to: _____
 4. The provisions of the Civil Code will apply in matters concerning guarantee and warranty conditions not covered by the contract.

§8.

1. The Contracting Authority informs whom it may concern that it will process the Economic Operator's personal data for the purpose of concluding, performing and archiving this contract.

Institute of Bioorganic Chemistry of the Polish Academy of Sciences, as the Contracting Authority, informs whom it may concern that the personal data concerning the Economic Operator and his business activity, persons authorized to represent the Economic Operator in the public procurement procedure and the data concerning the entities which the Economic Operator refers to in this procedure will be processed in accordance with Article 13 of Regulation (EU) 2016/679 of the European Parliament and of the Council of 27.04.2016 on the protection of individuals with regard to the processing of personal data and on the free movement of such data and on the repeal of Directive 95/46/EC, hereinafter referred to as "GDPR". The administrator of personal data is the Institute of Bioorganic Chemistry of the Polish Academy of Sciences in Poznań address: ul. Z. Noskowskiego 12/14, 61-704 Poznań; REGON 000849327 NIP 777-00-02-062. Personal data is processed on the basis of:

- Article 6 section 1 letter b GDPR for the purpose of taking actions for the benefit of the Economic Operator before concluding a contract for the award of a public contract, the conclusion of that contract, its performance and its settlement;
- Article 6 section 1 letter c GDPR, in order to fulfil the obligations incumbent on the administrator under the provisions of the Public Procurement Law;
- Article 6 section 1 letter f GDPR, in order to fulfil the obligations incumbent on the administrator under the provisions of the Public Procurement Law.

Personal data will be stored during the period of cooperation with the Contracting Authority and for the purpose of archiving the documentation related to the cooperation according to the periods indicated in the detailed regulations or resulting from the rules of financing the public contract. The Economic Operator has the right to access the data and demand its rectification. The Economic Operator has the right to lodge a complaint with the President of the Office for Personal Data Protection, if he considers that the processing of personal data violates the provisions of the GDPR. The Data Protection Inspector, appointed by the Personal Data Protection Administrator, may be contacted by e-mail at dpo@ibch.poznan.pl, as well as by regular mail at the address: Institute of Bioorganic Chemistry of the Polish Academy of Sciences - Data Protection Inspector, ul. Z. Noskowskiego 12/14, 61-704 Poznań. The provision of personal data by the Economic Operator is voluntary, but necessary for the purposes of establishing and conducting cooperation. The personal data will not be subject to profiling. Personal data may be transferred to other persons and organizational units that cooperate with the Contracting Authority or apply for such cooperation. Furthermore, such data may be transferred to the authorities competent in matters of public procurement and to public procurement financing bodies; however, it cannot be excluded that they will be entities from outside the European Economic Area, from any country in the world, unless the ban on transferring the data results from separate legal regulations. Personal data may be made available to bodies authorized under the law and subcontracted under a subcontract agreement concluded in writing to entities cooperating with the Contracting Authority.

2. The Economic Operator declares that he has read the information clause referred to in paragraph 1 of this section and has understood it.

§9.

1. In matters not regulated by the contract, the provisions of the Public Procurement Law, Civil Code and other applicable laws will apply.
2. The parties will submit the disputes that may arise in connection with the application of the contract to the competent common court in the registered office of the Contracting Authority.
3. Any changes and additions must be made in writing otherwise being null and void.
4. The provisions contained in the ToR and the Economic Operator's bid, which constitutes Attachment No 1 to this contract, form an integral part of the contract.

§10.

The contract has been drawn up in two identical copies, one for each party.

§10.

(in case of contract signed with a foreign Economic Operator)

1. The contract has been drawn up in two identical copies, each in Polish and English, one for each party.
2. In case of discrepancies between the Polish and English versions of the contract, the Polish version will prevail.
3. Any disputes that may arise in connection with the application of the contract will be governed by Polish law and the jurisdiction of the Polish courts.

Economic Operator

Contracting Authority

Attachment No 1 to the contract

Economic Operator's bid

Attachment No 2 to the contract

Model acceptance report

Acceptance Report

made this _____ day of _____, _____
by and between

as the **Economic Operator**

and

Institute of Bioorganic Chemistry of the Polish Academy of Sciences with its registered office at
ul. Z. Noskowskiego 12/14 in (61-704) Poznań, represented by:

as the **Contracting Authority**

- 1) This acceptance report covers delivery, installation and commissioning of a high-performance diffractometer equipped with a four-circle kappa goniometer and a surface detector for recording the X-radiation scattering by single crystals and training of the Employer's employees, in accordance with Contract no. _____ of _____ (*date*). Detailed specification of the equipment, date of delivery to _____ and serial numbers are indicated in Attachment No 1 to the report.
- 2) The Contracting Authority has verified the completeness of the delivery and correct operation of the equipment and stated that the subject of the contract has been performed by the Economic Operator in full accordance with the Economic Operator's bid and the contract concluded between the parties.
- 3) The equipment was accepted without reservations.
- 4) The Economic Operator has trained the Contracting Authority's employees to operate

- 5) This report, when signed by both parties, constitutes the basis for issuing an invoice by the Economic Operator.

For the Economic Operator

For the Contracting Authority

IV. TECHNICAL SPECIFICATION OF THE SUBJECT OF THE CONTRACT

The contract provides for the delivery together with installation and commissioning of a high-performance diffractometer equipped with a four-circle kappa goniometer and a surface detector used to record X-radiation scattering by single crystals in studies in the field of crystallography of biological molecules and crystallography of small molecules for the Laboratory of Protein Engineering, Institute of Bioorganic Chemistry of the Polish Academy of Sciences, described in detail in the Technical Specification, contained in Part IV of the ToR (hereinafter referred to as the Technical Specification).

The scope of the contract also includes:

- a) provision of the equipment operating instructions in Polish or English;
- b) two-day application training for the Contracting Authority's employees on operating the equipment after installation
- c) granting the guarantee and providing the guarantee service - detailed requirements concerning the guarantee are contained in section 16 of the ToR;

It is required that the system offered has a wide range of applications for testing such molecules as proteins, RNA and low molecular weight compounds. The system must be capable of testing very small and/or weakly dispersed crystals. As the equipment will be used in very demanding scientific projects, it must guarantee the highest accuracy, precision and reliability of X-ray diffraction data. Therefore, the brightness, stability and reliability of the X-ray source and the sensitivity, dynamic range as well as the signal-to-noise characteristics of the X-ray area detector and the availability of a range of flexible and powerful tools in the data collection and analysis software are key elements to be considered during the evaluation.

The delivered product must be brand new, i.e. not used before the delivery date, except for the use necessary to test its correct functioning.

On the bid submission date the manufacturer must not plan to withdraw the product delivered under the contract from production or sale.

The delivered product must be ready to use without the need to install additional instruments and must be equipped with a sufficient number of cables necessary for the proper functioning of the instruments and allowing it to be connected to standard power sockets, unless otherwise specified in the technical specification.

Specification for Single Crystal X-ray Diffractometer System

Position	Description
1	General Requirement:
1.1	The supplier must be firmly established as a manufacturer of single crystal X-ray diffraction instrumentation: with a significant number of recent relevant installations of similar instruments in Europe and worldwide, and with a demonstrable reputation for provision of high data quality, very good reliability, excellent training and user-support and fully-supported remote diagnostics (the conditions necessary to participate in the procedure listed at point 5.2.3) ToR).
2	General X-ray Diffractometer System Requirements:

2.1	System must include a radiation enclosure that meets current EU radiation standards: equipped with interlock safety switches at all user accessible points and conforming to the highest level of X-ray safety standards appropriate for the class of equipment, so fully protecting the users from any accidental exposure to X-rays as well as mechanically moving parts as governed by the EU Machinery Directive.
2.2	----- Radiation enclosure equipped with fully automatically and software-controlled brightness of the cabinet and sample lighting combined with high resolution video imaging of crystals . – 5 points
2.3	System must be provided with evidence that all equipment is CE marked.
2.4	The X-ray diffractometer system must require single phase mains power supply only.
2.5	The X-ray diffractometer system must be mounted on wheels for easy installation and manoeuvrability.
2.6	The X-ray diffractometer system must be provided with total 5 years warranty, and must include any X-ray source consumable items for this period.
3	X-ray Source / Generator System Requirements:
3.1	The X-ray source must be rotating anode technology and deliver X-rays at the Cu K α characteristic wavelength (1.54 Å).
3.2	For the collection of X-ray diffraction data from the most weakly scattering crystal samples, the rotating anode X-ray source must be coupled with double-bounce, confocal multilayer monochromating and focusing X-ray optics in order to deliver a Cu K α X-ray beam of the highest X-ray brightness and high spectral purity for macromolecular and chemical crystallography data collection.
3.3	The Cu K α microfocus rotating anode X-ray source must be rated up to at least 1,000 W power and the beam diameter (FWHM) at the crystal position must be within the range 120 – 150 μ m, and with maximum divergence of ≤ 10 mrad.
3.4	To best enable the collection of data from very long unit cell materials (such as proteins), the Cu K α microfocus rotating anode X-ray source must be fitted with a suitable variable divergence facility .
3.5	----- The variable divergence facility associated with the microfocus Cu K α source is fully-automated (software controlled) and allows the continuous adjustment of the Cu K α X-ray beam divergence over the full range of 10 mrad – 1 mrad. – 10 points
3.6	For the analysis of the smallest and most weakly-diffracting crystals, the system must deliver a Cu K α X-ray beam with flux density equal to or greater than 1×10^{11} photons / (sec*mm ²) at the crystal sample position.
3.7	----- Cu K α beam with flux density equal to or greater than 2.5×10^{11} photons / (sec*mm ²) at the crystal sample position. – 10 points
3.8	Internal water cooling of the X-ray source system must be employed in order to best maintain the necessary most stable operating temperature and utmost constant X-ray intensity output.
4	X-ray Area Detector Requirements:
4.1	High sensitivity, low noise X-ray area detector for the optimal measurement of X-ray diffraction data .
4.2	----- For the best signal-to-noise in the diffraction data , the X-ray area detector is a direct detection single photon-counting instrument throughout the whole dynamic range of operation and utilizes a semiconductor pixel sensor: therefore without the employment of any X-ray to visible light conversion phosphor, nor any demagnifying fibre-optic taper instrument. (Detection of X-ray photons is direct: i.e. not requiring conversion of the X-ray signal to visible light: since this generates noise in the X-ray conversion.) – 10 points
4.3	The detector should not be prone to any dark current / background or read-out noise effects.

4.4	The detector characteristics should prevent any ‘rolling shutter geometrical distortion’ in the images.
4.5	Detector must have a pixel size equal to or less than 120 x 120 μm^2 : to allow for precise diffraction spot resolution.
4.6	----- Detector has a pixel size equal to or less than 100 x 100 μm^2 : to allow for the most precise diffraction spot resolution. - 10 points
4.7	The active area of the detector must be at least 55 cm^2 : for high coverage and maximised resolution of measurable data.
4.8	The detector must have:
4.8.1	At least 500,000 available pixels.
4.8.2	A ‘top hat’ point spread function (FWHM) not greater than 1 pixel: so enabling the optimal resolution of nearby Bragg reflection data, from possibly long unit cell (including protein) materials.
4.8.3	At least 16-bit dynamic range : for simultaneous measurement of both weak and strong reflections on the same image, so eliminating the need for repeated measurements.
4.8.4	----- Option for 30-bit dynamic range (or greater): for the optimal simultaneous measurement of both weak and strong reflections on the same image, so eliminating the need for repeated measurements. - 10 points
4.8.5	Single photon counting count rate capabilities: Local: greater than 1×10^6 photon counts per second per pixel, Global: greater than 5×10^{11} photon counts per second.
4.8.6	Read-out time not longer than 10 msec: to support ‘shutterless’ mode continuous data-collection, so reducing both noise and the total time duration of data collection.
4.8.7	----- Option for read-out time not longer than 10 nsec: to most effectively support ‘shutterless’ continuous data-collection mode, so minimising both noise and the total time duration of data collection. – 10 points
4.8.8	At least 50 Hz frame rate capability : in order to accommodate the most strongly diffracting crystals.
4.8.9	----- Greater than 80 Hz frame rate capability : in order to optimally accommodate the most strongly diffracting crystals. – 10 points
4.8.10	Energy discrimination: to exclude X-ray fluorescence effects.
4.8.11	Detective quantum efficiency of at least 95% at the Cu $K\alpha$ X-ray wavelength.
4.8.12	No streaking, bloom or afterglow effects.
4.9	The detector must be air-cooled and operate at room temperature, with no chiller requirement: without any compromise in measurement efficiency or detector stability.
5	Goniometer Requirements:
5.1	The instrument must include a four-circle kappa goniometer to allow the highest efficiency data collection strategies.
5.2	The goniometer must be constructed in such a way that the extended directions of the four rotation axes intersect at one point with an error not greater than (‘sphere of confusion’ of) 10 μm diameter.
5.3	The detector carriage, and Theta arm, must be integrated into the system in such a way that the distance from the centre of the crystal sample to the detector face is variable and under computer control, with high accuracy, over a range covering at least 32 – 200 mm.
5.4	The four-circle kappa goniometer must be able to support a load of at least 2.0 kg on the phi axis.
5.5	The goniometer must allow data-collection scan speeds up to at least 10 deg/sec on the Omega axis and 20 deg/sec on the Phi axis.

5.6	The goniometer must be equipped with a colour video camera microscope: to assist in live centring of the crystal and also for the face-indexing of crystals in support of the correction of crystal X-ray self-absorption effects. -----
5.7	The radiation enclosure is equipped with an internal display monitor: for the highest speed and convenience in centring the crystal on the goniometer. - 5 points
5.8	There should be a 'collision map' defining the available angular ranges for all of the goniometer axes, and, further, the goniometer must be equipped with comprehensive (hardware and software – supported) detection of any 'collision', with fully automated disablement of the goniometer movement in the case of any collision. -----
5.9	The instrument model can be accurately calibrated on-site, fully automatically: using a stable test crystal which is included. – 10 points
6	PC and Software Requirements:
6.1	The diffractometer system must be provided with a powerful control computer with all of the software required for instrument control, data collection, data integration and analysis, etc. Minimal computer requirements as follows: CPU: Intel Core i-7 or more, OS: Windows 10 Pro (64bit) or later, RAM: 8GB, HDD: 250 GB SSD system disc and 1TB data disc, LCD: 24" Full HD (1920 x 1080 resolution), Ethernet adapters: One port on the motherboard and two on the extension cards, keyboard & mouse.
6.2	An unlimited number of data integration and analysis software licenses must be provided and the software licenses must be valid for an unlimited period. Thus, importantly, all local (and 'remote') dependents of the equipment must have the capability to analyse data – independently of the instrument laboratory and the 'local' users, on their own PCs, remotely.
6.3	The software must be easy and straightforward to operate and include a rapid limited data-collection / 'connectivity' structure-determination tool for initial crystal screening, etc.
6.4	The software must include an automated 'pre-experiment' tool: for the most effective determination of unit cell and evaluation of crystal quality (resolution limit and mosaicity, etc.). Using this 'pre-experiment' data, the software must then support, fully automatically and most speedily, the determination of the optimised data-collection strategy : - according to some user-input criteria (for instance, the required resolution, multiplicity / redundancy, average I/σ or total overall data-collection time, etc.). -----
6.5	For the optimal collection and analysis of 'micro-diffraction' polycrystalline (or 'powder') diffraction data , the diffractometer hardware and software includes the option of the Gandolfi scan approach: continuous data-collection through simultaneous and coordinated omega and phi scans of the diffractometer. – 10 points
6.6	Software must include the capability for checking measured unit cell parameters against existing structural databases, such as the CCDC 'CSD', as well as 'local' (CBR, IBC, PAS) unit cell libraries.
6.7	Software must include flexible and most user-friendly tools for the semi-automated processing of images arising from (multiply-) 'twinned' crystal materials, for the analysis of diffuse scattering and data from modulated / incommensurate materials and quasicrystals.
6.8	The software must provide fully automated data-collection and data-reduction pipelines that are fully compatible with the inputs for the currently available state-of-the-art structure solution and refinement packages such as the latest Olex2, SHELX, Win-GX, SIR, Crystals and JANA, etc.
6.9	Software for the fully automated structure solution and refinement of ('small molecule') molecular / crystal structures concurrent with the ongoing data-collection must be

	included. The structure solution and refinement software package should include direct methods, Patterson methods and dual space methods.
6.10	For remote training and support diagnostics, the instrument must be capable of being controlled remotely via the www – by using a suitable ‘remote desktop’ program or other similar robust software tool.
6.11	The software must have the option for images to be saved in a format that is immediately compatible with other alternative data processing programs, without further conversion, for instance including CCP4/MOSFLM, XDS, d*TREK and HKL-2000/3000, etc.
6.12	For the processing of data collected using synchrotron central facilities and other instrumentation, the data analysis software must have the capability to read in (and also to output) images with a range of ‘alien’ formats, in addition to the manufacturers own: for instance including Dectris (cbf), Rigaku d*trek, MARRResearch CCD (many formats) and ‘Esperanto’, etc.
6.13	There must be the undertaking that updates to the principal instrument control / data-collection and data analysis software will be provided every 12 months, free of charge, and in perpetuity.
7	Crystal Temperature Attachment Requirements:
7.1	The system must include a complete attachment for crystal sample temperature control over the range 80 – 400 K, including a 60 litres LN2 Dewar vessel.
7.2	An additional 160 litres LN2 Dewar vessel must be included.
7.3.	Two appropriate service kits for the crystal sample temperature attachment must be included.
7.4.	There must be full compatibility of the crystal temperature attachment with the hardware and software of the diffractometer, and with fully automated control of the attachment and the crystal temperature via the ‘standard’ instrument data-collection software menus.
8	Cooling Equipment Requirements:
8.1	Any recirculating liquid chiller or other equipment necessary for the cooling of the X-ray diffractometer or associated equipment must be included as part of the offer.
9	Uninterruptible Power Supply Requirements:
9.1	For the support of all of the equipment listed above (including the complete X-ray diffractometer system, X-ray source, X-ray area detector, PC System, crystal temperature attachment and recirculating water chiller unit, etc.), a suitable uninterruptible power supply (UPS) unit must be supplied. An autonomy for the whole installation of at least 30 minutes is required.