

## Purchase Contract

(hereafter the “Contract”)

### 1. CONTRACTUAL PARTIES

#### 1.1 Fyzikální ústav AV ČR, v. v. i.,

with seat: Na Slovance 1999/2, 182 00 Praha 8,  
represented by: RNDr. Michael Prouza, Ph.D., Director,  
Registered in the Register of public research institutions of the Ministry of Education, Youth and Sports  
of the Czech Republic.

Bank: [REDACTED]  
Account No. IBAN: [REDACTED]; SWIFT (BIC): [REDACTED]  
ID No.: 68378271  
Tax ID No.: CZ68378271

(hereinafter the “Buyer”)

and

#### 1.2 CHROMSPEC spol. s r.o.,

with seat: Jindřicha Plachty 28, 150 00 Praha 5,  
represented by: Ing. Zdeněk Moravec, jednatel,  
registered in OR vedeném Městským soudem v Praze, oddíl C, vložka 5418,

Bank: [REDACTED]  
Account No.: [REDACTED]  
ID No.: 44794053  
Tax ID No.: CZ44794053

(hereinafter the “Seller”),

(the Buyer and the Seller are hereinafter jointly referred to as the “Parties” and each of them  
individually as a “Party”).



## 2. FUNDAMENTAL PROVISIONS

- 2.1 The Buyer is a *Partner with a financial contribution* in the project "**Ferroic Multifunctionalities**" (**FerrMion**) under the *Operational Programme Jan Amos Komenský* within the framework of EU funds, project registration number **CZ.02.01.01/00/22\_008/0004591** (hereinafter referred to as the "**Project**"). The subject of performance under this Contract is intended for the Project and mainly financed from the support provided for its implementation.
- 2.2 The Seller was selected as the winner of a public procurement procedure announced by the Buyer for the public contract called "**Detector for back-scatter Laue method**" (hereinafter the "**Procurement Procedure**").
- 2.3 The documentation necessary for the execution of the subject of performance hereof consist of
- 2.3.1 Technical specifications of the subject of performance hereof attached as **Annex No. 1** hereto.
- 2.3.2 The Seller's bid submitted within the Procurement Procedure in its parts which describe the subject of performance in technical detail (hereinafter the "**Sellers's Bid**"); the Sellers's Bid forms **Annex No. 2** to this Contract and is an integral part hereof.

In the event of a conflict between the Contract's Annexes the technical specification / requirement of the higher level / quality shall prevail.

- 2.4 The Seller acknowledges that it is essential for the Buyer that the Seller produces, delivers and handovers the subject of performance within the specified time and in the specified quality as stated in Annexes No. 1 and 2 of this Contract (including invoicing). If the Seller fails to comply with the contractual requirements, the Buyer may incur damages.

## 3. SUBJECT-MATTER OF THE CONTRACT

- 3.1 The subject of this Contract is the obligation on the part of the Seller to deliver and transfer into the Buyer's ownership the **Detector for back-scatter Laue method** specified in detail in Annexes No. 1 and No. 2 hereto (hereafter the "**Equipment**") and the Buyer undertakes to take delivery of the Equipment and to pay to the Seller the purchase price as defined below.
- 3.2 The following activities form an integral part of the performance to be provided by the Seller:
- 3.2.1 Transport of the Equipment incl. all accessories specified in Annexes 1 and 2 of the Contract to the site, un-packaging and control thereof (unless the Seller specifies that un-packaging and assembly can be done by the Buyer without loss of guarantee);
- 3.2.2 Verification of the functionality of the Equipment and compliance with technical parameters according to Annexes No. 1 and 2 (unless the Seller acknowledges that verification solely by the Buyer is valid);
- 3.2.3 Delivery of instructions and operating and repair manuals to the Equipment in Czech or English language to the Buyer, in electronic (MS Office or PDF format) or hardcopy (printed) versions;
- 3.2.4 Free-of-charge warranty service including service inspections, if such inspections are necessary;



3.2.5 Free-of-charge provision of technical support in the form of consultations (at least telephone and email support in Czech or English on working days) during the warranty period.

3.3 The Seller shall be liable for the Equipment and related services to be in full compliance with this Contract, its Annexes, the submitted bid and all valid legal regulation, technical and quality standards and that the Buyer will be able to use the Equipment for the defined purpose. In case of any conflict between applicable standards it is understood that the stricter standard or its part shall always apply.

3.4 The delivered Equipment and all its parts and accessories must be brand new and unused.

#### **4. PERFORMANCE PERIOD**

4.1 The Seller undertakes to deliver and handover the Equipment to the Buyer within to 122 days of the conclusion of this Contract.

4.2 The Seller is obliged to notify the Buyer of the date of delivery of the Equipment at least 10 working days in advance.

#### **5. PURCHASE PRICE, INVOICING, PAYMENTS**

5.1 The purchase price is based on the Seller's submitted bid and amounts to 749 000,00 CZK (in words: sevenhundredandfortyninethousandCZK ) excluding VAT (hereinafter the "Price").

5.2 VAT shall be paid by the Buyer and settled in accordance with the valid Czech regulation.

5.3 The Price represents the maximum binding offer by the Seller and includes any and all performance provided by the Seller in connection with meeting the Buyer's requirements for the proper and complete delivery of the Equipment hereunder, as well as all costs that the Seller may incur in connection with the delivery and handover, and including all other costs of expenses that may arise in connection with creation of an intellectual property and its protection.

5.4 The Parties agreed that the Price shall be invoiced as follows:

5.4.1 After the conclusion of this Contract, the Seller is entitled to issue an advance invoice in the amount of a maximum of 80 % of the Price.

5.4.2 The Seller is entitled to invoice the rest of the Price after the handover protocol in accordance with Section 8.2 will have been signed. In case the Equipment will be delivered with minor defects and / or unfinished work, the Price shall be invoiced after removal of these minor defects and / or unfinished work.

5.5 The invoice issued by the Seller as a tax document must contain all information required by the applicable laws of the Czech Republic (esp. all requirements by the Act No. 235/2004 Coll., on value added tax, as amended) and, in addition, they must contain registration number of this Contract and state that the Equipment is supplied for the purposes of the Project with its registration number.

5.6 The Buyer prefers electronic invoicing, with the invoices being delivered to [efaktury@fzu.cz](mailto:efaktury@fzu.cz). All issued invoices shall comply with any international double taxation agreements, if applicable.

5.7 Invoices shall be payable within thirty (30) days of the date of their delivery to the above address. Payment of the invoiced amount means the date of its remittance to the Seller's account.



- 5.8 If an invoice is not issued in conformity with the payment terms stipulated by the Contract or if it does not comply with the requirements stipulated by law, the Buyer shall be entitled to return the invoice to the Seller as incomplete, or incorrectly issued, for correction or issue of a new invoice, as appropriate, within five (5) business days of the date of its delivery to the Buyer. In such a case, the Buyer shall not be in delay with the payment of the Price or part thereof and the Seller shall issue a corrected invoice with a new and identical maturity period commencing on the date of delivery of the corrected or newly issued invoice to the Buyer.
- 5.9 The Buyer shall be entitled to unilaterally set off any of his payments against any receivables claimed by the Seller due to:
- 5.9.1 damages caused by the Seller,
  - 5.9.2 contractual penalties.
- 5.10 The Seller shall not be entitled to set off any of his receivables against any part of the Buyer's receivable hereunder.

## **6. OWNERSHIP TITLE**

- 6.1 The ownership right to the Equipment and at the same time the associated risk of damage shall pass to the Buyers upon proper handover and acceptance of the Equipment according to Section 8.2 by drawing up the Handover Protocol and their signature by an authorized representative of the Buyer.

## **7. PLACE OF DELIVERY OF THE EQUIPMENT**

- 7.1 The place of delivery and handover of the Equipment shall be the Fyzikální ústav AV ČR, v. v. i. (Institute of Physics of the Czech Academy of Sciences), at Na Slovance 1999/2, 182 00 Praha 8, Czech Republic (hereinafter the "**Place of performance**").

## **8. DELIVERY, INSTALLATION, HANDOVER AND ACCEPTANCE**

- 8.1 The Seller shall transport the Equipment at his own cost to the Place of performance. If the shipment is intact, the Buyer shall issue delivery note for the Seller.
- 8.2 The handover procedure shall be completed by handover of the Equipment confirmed by the Handover Protocol. The Handover Protocol shall contain the following mandatory information:
- 8.2.1 Information about the Seller, the Buyer and any subcontractors,
  - 8.2.2 Description of the Equipment including description of all components and their serial / production numbers,
  - 8.2.3 Description of executed tests and compliance with technical parameters according to Annexes No. 1 and 2,
  - 8.2.4 List of technical documentation including the manuals,
  - 8.2.5 Buyer's possible objections to minor defects of the Equipment including the manner of and deadline for their removal and



- 8.2.6 Signatures of authorized representatives of the Buyer and the Seller, with the date indicated.
- 8.3 Handover of the Equipment does not release the Seller from liability for damage caused by its defects.
- 8.4 The Buyer shall not be obliged to accept the Equipment which is defective (even if such defects - on their own or in connection with other defects – do not constitute an obstacle to the use of the Equipment). In such a case, the Buyer shall issue a report containing the reason for their refusal to accept the Equipment. If the Equipment or its part upon handover does not meet the parameters defined in Annexes No. 1 and 2 to this Contract, such non-compliance is considered a defect of the Equipment.
- 8.5 Should the Buyer not exercise his right not to accept the Equipment with a defect, the Seller and the Buyer shall list all defects detected in the relevant Handover Protocol, including the manner of and deadline for their removal. Should the Parties not be able to agree in the Handover Protocol on the deadline for removal of the defects, it shall be understood that all above shall be removed / rectified within 14 days of handover.

## 9. REPRESENTATIVES, NOTICES:

- 9.1 The Seller authorized the following representatives to communicate with the Buyer in all matters relating to the Equipment delivery, installation and handover:

e-mail: [REDACTED]  
tel. [REDACTED]

The Buyer authorized the following representatives to communicate with the Seller in all matters relating to the Equipment delivery, installation and handover:

e-mail: [REDACTED]  
tel. +420 [REDACTED]

- 9.2 The representatives according to Sections 9.1 and 00 can be changed by a unilateral written declaration of the Buyer / Seller delivered to the Seller / Buyer
- 9.3 All notifications to be made between the Parties hereunder must be made out in writing and delivered to the other Party by hand (with confirmed receipt) or by registered post (to the Buyer's or Seller's address), or in some other form of registered post or electronic delivery incorporating electronic signature (qualified certificate) to [epodatelna@fzu.cz](mailto:epodatelna@fzu.cz) in case of the Buyer and to [info@chromspec.cz](mailto:info@chromspec.cz) in case of the Seller.
- 9.4 In all technical and expert matters (discussions on the Equipment testing, notification of the need to provide warranty or post-warranty service, technical assistance etc.), electronic communication between technical representatives of the Parties will be acceptable using e-mail addresses specified in Sections 9.1 and 0.

## 10. TERMINATION

- 10.1 The Buyer is entitled to withdraw from the Contract without any penalty from the Seller in any of the following events:



- 10.1.1 The Seller is in delay with the delivery of the Equipment longer than 4 weeks after the date pursuant to Section 4.1 hereof.
  - 10.1.2 The Seller is more than 4 weeks in delay with the removal of Equipment defects listed in the list of detected defects of the Handover Protocol according to Section 8.5.
  - 10.1.3 The technical parameters or other conditions set out in the technical specifications defined in Annexes No. 1 and 2 to this Contract and in the relevant applicable technical standards will not be met by the Equipment at handover.
- 10.2 The Seller is entitled to withdraw from the Contract in the event of the Buyer being in default with the payment for more than 2 months with the exception of the cases when the Buyer refused invoice due to defect on the delivered Equipment or due to breach of the Contract by the Seller.
- 10.3 Withdrawal from the Contract shall be effective on the date the notice of withdrawal is delivered to the Seller / Buyer. In the event of withdrawal, the performances received under this Contract prior to withdrawal shall be duly returned within 30 days from the date of sending the notice of withdrawal by the withdrawing Contracting Party, unless the withdrawing Contracting Party sets a longer period.
- 10.4 In the event of early termination of the Contract, the Seller shall ensure the removal of the Equipment or its part from the Place of performance within 30 days from the date on which withdrawal from the Contract became effective. The Buyer will provide the Seller with the necessary cooperation similar to the cooperation during the installation of the Equipment. The cost of removal shall be paid by the Party which caused the early termination of the Contract by breaching it.

## **11. INSURANCE**

- 11.1 The Seller undertakes to insure the Equipment against all risks, in the amount of the Price for the entire period from the commencement of the transportation of the Equipment until duly handed over to the Buyer. In the event of a breach of this obligation, the Seller shall be liable to the Buyer for damages incurred in connection therewith.
- 11.2 The Seller is liable for the damage that he has caused. The Seller is also liable for damage caused by third parties which have undertaken to carry out performance or part thereof under this Contract.

## **12. WARRANTY TERMS**

- 12.1 The Seller shall provide warranty for the quality of the Equipment for a period of 24 months.
- 12.2 The warranty term shall commence on the day following the date of signing of the Handover Protocol pursuant to Section 8.2 hereof.
- 12.3 Should the Buyer discover a defect, he shall notify the Seller to rectify such defect using the email address [servis@chromspec.cz](mailto:servis@chromspec.cz).
- 12.4 The Seller shall be obliged to
- 12.4.1 within 48 hours of sending the request according to paragraph 12.3, propose a way to eliminate the defect,
  - 12.4.2 within 5 working days of sending the request according to paragraph 12.3, to initiate warranty repair, if necessary,
  - 12.4.3 remove the defect within 30 days of sending the request according to paragraph 12.3.



- 12.5 In case of unusual defects the Seller shall be obliged to remove the defect within a special period agreed upon by the Parties and corresponding to the nature of the defect.
- 12.6 During the warranty period, any and all costs associated with defect removal / repair including transport and travel expenses of the Seller shall be always borne by the Seller.
- 12.7 The repaired Equipment shall be handed over by the Seller to the Buyer on the basis of a protocol confirming removal of the defect (hereinafter the “**Repair Protocol**”). If the part of the Equipment is duly repaired and defect-free, the Buyer will confirm the Repair Protocol.
- 12.8 The repaired portion of the Equipment shall be subject to a new warranty term in accordance with Section 12.1, which commences to run on the day following the date when the Repair Protocol was executed.

### **13. CONTRACTUAL PENALTIES**

- 13.1 The Buyer shall be entitled to claim a contractual penalty against the Seller in the amount of 0,1 % of the Price for each commenced day of delay with the delivery pursuant to Section 4.1 hereof.
- 13.2 The Buyer shall be entitled to a contractual penalty in the amount of 0.1 % of the Price for each commenced day of delay with the performance pursuant to Section 12.4 hereof and with the removal of defects claimed within the warranty period pursuant to Section 12.5 hereof.
- 13.3 In case of default in payment of any due receivables (monetary debt) under the Contract, the defaulting Buyer or Seller (the debtor) shall be obliged to pay a contractual penalty in the amount of 0.1 % of the owed amount for each commenced day of delay with the payment.
- 13.4 Contractual penalties are payable within 30 days of receipt of the demand for payment.
- 13.5 Payment of the contractual penalty shall be without prejudice to the rights of the Parties to claim compensation for damages incurred.
- 13.6 Payment of any contractual penalty cannot be demanded if the breach of the contractual obligation is caused by force majeure.

### **14. DISPUTES**

- 14.1 Any and all disputes arising from or relating to this Contract shall be settled by the Parties by mutual negotiations. In the event that any dispute cannot be resolved by negotiations within sixty (60) days, the dispute shall be resolved by a competent court in the Czech Republic upon a legal action brought by either Party; the competent court shall be determined by the location of the registered office of the Buyer. Disputes shall be settled exclusively under the law of the Czech Republic.

### **15. FINAL PROVISIONS**

- 15.1 This Contract constitutes the entire agreement between the Parties. The relationships between the Parties not regulated by this Contract shall be governed by Czech law, in particular by the Act No. 89/2012 Coll., the Civil Code, as amended (hereinafter the “**Civil Code**”).
- 15.2 This Contract may be amended or supplemented solely by written amendments, if this Contract or legal regulation does not allow unilateral changes.



- 15.3 The Parties expressly agree that the Contract as a whole, including all attachments, will be published in accordance with Act No. 340/2015 Coll. on special conditions for the effectiveness of some contracts, publication of these contracts and Contract Register, as amended. The Parties hereby declare that all information contained in the Contract and its Annexes is not considered trade secrets under § 504 of the Civil Code and grant permission for their disclosure without setting any additional conditions. This Contract becomes effective as of the day of its publication in the Contract Register, which shall be provided by the Buyer.
- 15.4 The Parties declare that they are governed by the terms and conditions of this Contract from the date of its conclusion and consider all their possible mutual performance provided from the date of conclusion of this Contract to the date of entry into force of this Contract as performance provided under this Contract.
- 15.5 The following Annexes form an integral part of the Contract:
- Annex No. 1: Technical specification on the subject of performance
- Annex No. 2: Technical description of the device as presented in Seller's bid (
- 15.6 The Parties, manifesting their consent with the entire contents of this Contract, attach their signature hereunder.

In Prague on \_\_\_\_\_

In Prague on \_\_\_\_\_

For the Buyer:

For the Seller:

\_\_\_\_\_  
RNDr. Michael Prouza, Ph.D.  
Director

\_\_\_\_\_  
Ing. Zdeněk Moravec  
jednatel



**Annex No. 1**

**Technical specification on the Equipment**

Description and minimum specification of the Equipment as defined by the Buyer	Description and specification of the Equipment offered by the Seller	Complies YES/NO
<p>minimum requirements:</p> <p>minimum dimension of detection area (covered by sensitive pixels): 100 x 100 mm<sup>2</sup>            maximum individual pixel dimensions: 80 x 80 μm<sup>2</sup> (a total of 3600 μm<sup>2</sup>, while the maximum pixel size in both perpendicular directions is 80 μm)            shortest acquisition duration: max. 1 s (1s or less)            longest acquisition duration: min. 30 min. (might be achieved by automatic summing of shorter periods)            minimum dynamic intensity range: 16 bits/pixel            photon energy sensitivity range: 5-50 keV with min. 25% efficiency in the whole region.</p>	<p>155 x 105 mm<sup>2</sup>            61.1 x 61.1 μm<sup>2</sup>            1 ms            Approx. 35 min            Up to 18 bits/pixel            Min 25% efficiency 5-50 keV</p>	<p>YES</p>
<p>features:</p> <p>Detector must allow for primary beam passage through a centre of detection area at maximum 85 mm distance from the lower edge of the detector (including its casing).            Should the acquisition and read-out require software coordination of the primary beam shutter, the shutter must be part of the delivery including peripherals necessary for its connection to control computer with the same specifications pertaining the detector. When the acquisition and readout timing is possible during uninterrupted irradiation of the sample, the shutter is not required.            To mount the detector, appropriate stage is required allowing to place the whole assembly at a water-leveled surface setting the detection surface with 6 degree inclination downwards (from vertical) that allows for centering of its primary beam pinhole in a minimum range of 270-310 mm from the support surface providing that at minimum</p>	<p>Centre of detection area is less than 85 mm from lower edge of the detector.            n/a source not supplied by PSEL            No shutter required            Photonic Science can provide drawings to show current mounting positions.</p>	<p>YES</p>



<p>width of 40 mm below the primary beam pinhole and along the beam path is a reserved area left for tracker intended for sample holders mounting. Alternatively it is possible to present as part of the bid a complete technical drawing of the detector casing with denoted mounting holes at lower side of the casing allowing to hold the detector, which do not interfere with the reserved area for the sample holder tracker.</p>		
<p>accessories:</p> <p>Data interface for connection with standard PC-interfaces (PCI, SATA, USB or Ethernet), the PC need not to be a part of the delivery, but the bid must provide minimum hardware specifications for the delivered software and hardware.</p> <p>All necessary power supply sources required for the detector allowing to plug into standard CEE 7/5 (type "E") sockets with 230V AC nominal voltage at 50 Hz frequency.</p> <p>Software for data acquisition and read-out for either MS-Windows or Linux operation system that is capable of data conversion into standard image formats (TIFF/BMP and JPG). The process of acquisition timing, detection, read-out and data storage must be possible to start from external program (e.g. by command-line/console) or the software must allow for running an external program in a batch mode between particular snap-shots. This feature is crucial for cooperation with different motor-driven sample stages.</p>	<p>Preconfigured PC provided as part of the bid.</p> <p>All power supplies included.</p> <p>Compatible with this section, runs under Windows 11.</p> <p>Yes if python can be run from command line, python library is available for the camera. If Zaber/Newport stages are being used, software macros in PSViewer can communicate with these stages. PSEL are available to support the end user for this type of application.</p>	<p>YES</p>
<p>Software for orientation determination and orientation verification (through visualisation of reference computed Laue-pattern).</p>	<p>Yes full Laue analysis tool is provided in PSViewer software, included with the detector.</p>	<p>YES</p>
<p>Device for precise sample positioning in the beam. It can be provided by either laser pointer aligned by manufacturer or installation technician such that it intersects x-ray beam in the normal distance from the detector surface or by a camera with cross-hair aligned likewise or by a combination of both. camera and/or</p>	<p>Yes, mechanical sample alignment pointer is provided, and comes pre aligned to beam path, such that the pointer is 50 mm away from detector surface.</p>	<p>YES</p>



laser must be positioned such that they do not interfere with the area reserved for sample stages tracker (i.e. from top or side-wise, not below the detector).		
Installation and starting support of data connection and software it does not concern mounting or adjustment of the detector. This support can either be provided by service technician on the place or remotely. The result should be the ability of the software to perform requested tasks in cooperation with the detector. Particular mechanical adjustment of the detector into beam is not a responsibility of the vendor.	1 hour of remote support is included in the price of the camera. As we have no information of the end user setup, we do not guarantee camera operation in cooperation with any stages.	YES

The evaluated parameters according to the evaluation sub-criterion (Technical level of devices) are listed in this table:

The evaluated parameters	Value
Total number of detector pixels	4 394 700
The total area of the active matrix of the detector in mm <sup>2</sup>	155 x 105 mm <sup>2</sup>
Value of maximum guaranteed average dark current per pixel in cps. The value obtained by 1 minute verification measurement of total intensity counted by all pixels without X-ray irradiation divided by number of pixels and divided by 60 seconds must not exceed this parameter.	0.0018 cps



**Annex No. 2**

**The Seller's bid in the extent it describes technical parameters of the Equipment**

**See Quotation no. V2410241OS and attached brochure PS-DS007-XrayLaueCamera-Rev05.pdf**

PRO:

Fyzikální ústav AVČR

[REDACTED]

Na Slovance 2

182 21 Praha 8

ČÍSLO: V2410241OS

DATUM: 24. 10. 2024

VYŘIZUJE: [REDACTED]

## Detector for back-scatter Laue method

POZ.	NÁZEV	MNOŽSTVÍ	CENA / MJ BEZ DPH	CENA CELKEM BEZ DPH
	<b>Detector for backscatter Laue method</b> Photonic Science Standard Crystal Orientation Laue Detector Compact, desktop Laue crystal orientation system Real-time crystal orientation	1	749 000 Kč	<b>749 000 Kč</b>
<b>CELKEM BEZ DPH:</b>				<b>749 000,00 Kč</b>
CELKEM DPH 21%				157 290,00 Kč
<b>CELKEM VČETNĚ DPH:</b>				<b>906 290,00 Kč</b>

## Zastoupení a servis v ČR:

CHROMSPEC spol s r.o.,

Zapsána v obchodním rejstříku vedeném Městským soudem v Praze, oddíl C, vložka 5418

IČO: 44794053 DIČ: CZ44794053

Banka: [REDACTED]

Sídlo:

Jindřicha Plachty 28,

150 00 Praha 5, tel.:257324057

Registrované pobočky:

252 10 Mníšek pod Brdy, Lhotecká 594,

tel.:318599083, fax:318591529

634 00 Brno, Plachty 2

tel.:547246683

e-mail: info@chromspec.cz

www.chromspec.cz

Vypracoval: [REDACTED]