

## PURCHASE CONTRACT

**entered into within the meaning of Section 2079 of Act No. 89/2012 Coll., the Civil Code (hereinafter the "Civil Code") on the day, month and year specified below and under the following conditions by and between the following parties:**

### THE BUYER

**Name:** Brno University of Technology  
**Component part:** Central European Institute of Technology  
**Seat:** Purkynova 656/123, 612 00 Brno, Czech Republic  
**Represented by:** prof. Ing. Radimír Vrba, CSc., Director of Central European Institute of Technology  
**Id. No.:** 00216305  
**Tax Id. No.:** CZ 00216305  
**Contact person of the Buyer:**  
xxxx

and

### THE SELLER

**Name:** Angstrom Engineering Inc  
**Seat:** 91 Trillium Drive, Kitchener, ON N2E1W8, Canada  
**Registration in the Commercial Register:** 1867568  
**Represented by:** Mike Miller  
**Id. No.:** N/A  
**Tax Id. No.:** 88607 6728 RC0001  
**Bank details:** xxxx

**Contact person of the Seller:**  
xxxx

**(hereinafter also jointly referred to as the "Parties")**

## I. SUBJECT OF THE PURCHASE

- 1) The Subject of the Purchase hereunder is delivery of equipment for physical vapor deposition (PVD) Covap Series Thermal Evaporator.

The Subject of the Purchase is specified in more detail in the technical description which constitutes an integral part of this Contract as its Annex 1.

- 2) The purpose of this Contract is to guarantee the Seller the fulfillment of the public contract "Vacuum evaporator apparatus" and all resulting conditions and obligations assumed by the Seller in the tender procedure according to the tender documentation of the public contract and the Seller's offer. This warranty takes precedence over the other terms and conditions set forth in this Contract.

- 3) By virtue of this Contract, the Seller agrees to:

- a) hand over the Subject of the Purchase to the Buyer pursuant to paragraph 1 and enable the Buyer to assume the ownership title to the Subject of the Purchase;
- b) to perform the other obligations contained herein.

and the Buyer agrees to take over the Subject of the Purchase and pay the purchase price.

- 4) The Seller and the Buyer further agree that, in addition to the above, the Seller is also obliged and agrees to:

- a) deliver the Subject of the Purchase at the place specified by the Buyer, (transport inside CEITEC is arranged by the Buyer with the assistance of the Seller);
- b) carry out the assembly and installation of the Subject of the Purchase at the place of performance, the material necessary for the assembly and installation is part of the Subject of Purchase;
- c) bring the Subject of the Purchase into a fully functional and operable condition at the place of performance;
- d) perform a demonstration and verification of the guaranteed parameters of the Subject of the Purchase at the place of performance.
- e) properly acquaint and train the operator of the equipment forming the Subject of the Purchase and to train it so that it is able to handle the Subject of the Purchase (both the hardware part and the software part) without any complications and to use it properly;
- f) provide the Buyer with usage rights (necessary licenses, if licenses are required) for the delivered software for an indefinite period of time;
- g) acquaint the operator of the equipment with the maintenance of the Subject of the Purchase;
- h) submit instructions and user manuals for the Subject of the Purchase in an electronic version in English or Czech language and at the same time a printed version of the user manual with a description of the basic operation of the device in English or Czech language;
- i) hand over the lists of individual items of the Subject of the Purchase.

## II. PURCHASE PRICE, PAYMENT TERMS

- 1) The Buyer agrees to pay to the Seller the purchase price in the amount of:

|                                 |                         |
|---------------------------------|-------------------------|
| <b>Purchase price excl. VAT</b> | <b>87 000 USD</b>       |
| <b>Amount of VAT in CZK</b>     | <b>FOREIGN SUPPLIER</b> |
| <b>Purchase price incl. VAT</b> | <b>87 000 USD</b>       |

- 2) The Purchase price does not include the costs associated with the payment of taxes, duties and costs incurred in connection with the disposal of waste incurred during the handover of the Subject of Purchase. Such costs shall be borne by the Buyer.

- 3) After signing this Contract, the Seller is entitled to issue an advance invoice for 20% of the total Purchase Price, i.e. USD 17 400, which the Buyer is obliged to pay.
- 4) The Seller is entitled to issue next advance invoice before the start of the transport of the Subject of the Purchase to the Buyer, in the amount of 60% of the total Purchase Price, i.e. USD 52 200. The Seller is obliged to inform the Buyer about this and at the same time to demonstrate the Subject of the Purchase, before the start of transport, the demonstration can take place online. The declaration of the Buyer's representative on timely informing and demonstration of the Subject of the Purchase will be attached to the advance invoice.
- 5) For the remaining part of the Purchase Price, the Seller shall issue a tax document (invoice) on the basis of handing over the Subject of the Purchase to the Buyer as perfect. The perfect acceptance of the Subject of Purchase will be confirmed by a mutually signed protocol on the handover of the Subject of Purchase.
- 6) The due date of tax documents is 30 days from the date of their delivery to the Buyer.
- 7) **Price change** – a reserved change of the obligation under the Contract

The price may be changed in the event of the Buyer's reserved change of the obligation under the Contract in accordance with the tender conditions specified in the tender documentation for the public contract "Vacuum evaporator apparatus".

### III. PLACE AND TIME OF PERFORMANCE

- 1) The Seller agrees to hand over the above-specified Subject of the Purchase to the Buyer not later than **20 weeks** from the date of effectiveness of the Contract.  
The Seller will be considered to have met its obligation to hand over the above-specified Subject of the Purchase upon its takeover by the Buyer provided that the Buyer will deem it free of any defects.
- 2) At the same time, the Seller agrees that, with regard to the nature of the Subject of the Purchase, it shall demonstrably inform the Buyer sufficiently in advance (at least 5 business days) that it intends to hand over the Subject of the Purchase; otherwise, the Buyer is not obliged to take over the Subject of the Purchase. In case the Seller informs the Buyer in a timely manner pursuant to the preceding sentence, the Buyer agrees to permit the Seller an access to the place of performance.
- 3) The Seller agrees to hand over the Subject of the Purchase at the following place:  
Brno University of Technology, Central European Institute of Technology, Purkynova 656/123, 612 00 Brno, Czech Republic.
- 4) The Buyer represents that it is authorised to take over the Subject of the Purchase and sign the handover record:
  - xxxx
- 5) The Seller acknowledges that the Buyer specifically requested the delivery of all the required documents for the Subject of the Purchase in accordance with Art. IV (3) of the General Purchasing Conditions of the University of Technology.

### IV. QUALITY WARRANTY; RIGHTS ARISING FROM DEFECTIVE PERFORMANCE

- 6) The Buyer and the Seller agree that the Warranty Period for the Subject of the Purchase, as well as for each of its parts is **12 months** from the date on which the Subject of Purchase was taken over by the Buyer free of any defects.

- 2) The Seller is obliged to remedy any defects of the Subject of Purchase always without delay, not later than thirty (30) business days after they were exercised, unless the Contracting Parties agree on another date. The Seller shall bear any and all costs related to remedying defects.

## V. ARRANGEMENTS FOR IMPLIED PERFORMANCE

The Parties note that they are concluding the Purchase Contract at the time of the ongoing pandemic in connection with the occurrence of coronavirus (referred to as SARS CoV-2). As of the date of concluding the Contract, the Seller is not aware of any obstacles that would prevent it from properly fulfilling the obligations arising from the Contract due to the spread of coronavirus. In the event that such obstacles arise after the entry into force of the Contract, this situation will be resolved in accordance with the relevant provisions of the Contract with appropriate application of force majeure provisions. The Buyer's right to withdraw from the Contract pursuant to Article X, paragraph 5) of the BUT General Terms and Conditions shall arise only after the expiration of 15 days of force majeure circumstances.

## VI. FINAL PROVISIONS

- 1) The following annexes form an integral part of this Contract:
  - a) Annex 1 – Technical description of the Subject of the Purchase.

The Parties agree that in case of any inconsistencies or contradictions, the Articles I. to VI. of the Contract take precedence over any annexes to the Contract. Furthermore, the Parties agree that in case of any inconsistencies or contradictions between individual annexes, the annex whose numerical designation specified in this paragraph is lower, shall prevail.
- 2) General Purchasing Conditions of the University of Technology, in the wording applicable as of the date this Contract is entered effective forms part of this Contract. The GPC apply as terms and conditions within the meaning of Section 1751 of the Civil Code and provide for the rights and obligations of the Seller and the Buyer that are not specified herein. In this regard, in order to avoid any speculations, the Parties also declare and agree that in the GPC, any reference to “the Contract” shall mean this Contract. Both Parties simultaneously agree that in case the provisions of the Contract and the GPC differ, the Contract shall prevail. The GPC are available at: <http://vut.cz/vnp>, where, by its signature below, the Seller represents that it has become acquainted in detail with the text of the GPC and thus that the Seller is familiar with it.
- 3) Article VIII. stated in the GPC is invalid in relation to the obligations under this contract. The other provisions set out in the GPC remain in force, unless otherwise stated in the Contract.
- 4) The Seller is entitled to transfer all its rights and obligations hereunder to a third party only with a prior written consent of the Buyer. Section 1879 of the Civil Code shall not apply.
- 5) The Seller agrees to tolerate the publication of this Contract including any annexes by the Buyer pursuant to Section 219 of Act No. 134/2016 Coll., the Public Procurement Act.
- 6) By execution hereof, the Parties confirm that they are aware that this Contract is subject to publication pursuant to Act No. 340/2015 Coll., on the Contracts Register, as amended. Publication of the Contract shall be provided for by the Buyer.
- 7) If any of the provisions of this Contract becomes invalid or ineffective, this shall in no way prejudice other provisions hereof which shall remain valid and effective. In that case, the Parties agree to replace the invalid or ineffective provision by a new valid and effective provision which best corresponds to the originally intended purpose of the invalid or ineffective provision.

- 8) This Contract constitutes the entire agreement on its subject-matter and contains all the arrangements that the Parties had to, and intended to, make in the Contract, and which they consider important for this Contract to be binding. No manifestation made by the Parties in negotiations on this Contract or a manifestation made after the conclusion of this Contract may be construed at variance with explicit provisions of the Contract and shall not establish any obligation of any of the Parties.
- 9) This contract is concluded by electronic means, so that each contracting party provides it with its recognized electronic signature.
- 10) The Parties confirm that they have read this Contract before executing it and agree with its contents. In witness thereof, the Parties affix their respective signatures.

In Brno, on

In Kitchener, ON, Canada, on

.....  
prof. Ing. Radimír Vrba, CSc.  
director of CEITEC BUT  
For the Buyer:

.....  
Mike Miller  
Director of Business Development  
For the Seller:

**Příloha č. 1 Smlouvy**  
**Annex No. 1 of the Contract**  
**Technická specifikace Předmětu zakázky**  
**Technical specification of the Subject of the public contract**

**Veřejná zakázka: Vakuová napařovací aparatura**  
**Public tender: Vacuum evaporator apparatus**

Tato specifikace určuje **minimální** požadavky zadavatele na předmět zakázky, dodavatel doplní obchodní názvy nabízeného zboží tam, kde je to vhodné, případně přiloží do nabídky vlastní cenovou nabídku a technický popis, přičemž všechny požadavky uvedené v této příloze musí být splněny a zahrnuty v nabídkové ceně.

Z této přílohy či dalších příloh musí být bez jakýchkoli pochyb zřejmé jaký konkrétní výrobek/výrobky a v jakém provedení jsou nabízeny. Není-li taková informace zřejmá pak budou předloženy konkrétní datasheety či jiné dokumentace, a to nejpozději na výzvu zadavatele.

*This specification determines the Contractor's entity minimum requirements on the subject of public contract, the contractor adds the trade names of the goods offered where appropriate, or adds a quotation and technical description to the tender bid, all the requirements set out in this Annex must be fulfilled and be a part of bid price.*

*It must be clear from this annex or other annexes without any doubt which specific product (s) and in what design they are offered.*

*If not such obvious information will then be submitted to specific datasheets or other documentation, at the latest at the request of the contracting authority.*

| číslo řádku/row number | Požadavek zadavatele   | Requirement of Contracting Authority   | Nabídka dodavatele/Supplier's offer   |
|------------------------|--|--|---|
| 1                      | Systém je požadován v takové konfiguraci, která zaručí plnou funkčnost celku a všech jeho částí  | <i>The system is delivered in such configuration that guarantees the full functionality of the unit and all of its parts.</i>  | Yes   |
| 2                      | <b>Obecné požadavky</b>  | <b>General requirements</b>  |   |
| 3                      | Kompatibilita s čistými prostory s třídy 100: ANO  | <i>Compatibility with the class 100 clean room: YES</i>  | Yes   |
| 4                      | Systém v plné konfiguraci je kompatibilní s umístěním v atmosférických podmínkách v prostředí s kontrolovanou teplotou 22 °C ± 1°C a vlhkostí 45 % ± 7 % dosažené pomocí klimatizace. Kolísání těchto podmínek v zadaném rozsahu nemá žádný vliv na správnou funkci přístroje: ANO | <i>System is compatible with the atmospheric condition having the temperature range 22 °C ± 1 °C and the humidity range 45 % ± 7 % as achieved with air conditioning. The specified temperature and humidity ranges do not influence the instrument functionality: YES</i> | Yes   |
| 5                      | Rozměry max (délka x šířka x výška): 1500 x 1000 x 2500 mm   | <i>Maximum size (length x width x height): 1500 x 1000 x 2500 mm</i>   | 1022 x 589 x 1340 mm  |
| 6                      | Systém je umístěn do jednoho nebo více rámců, které obsahují veškerou řídicí elektroniku (napěťové zdroje, ovládání pneumatických ventilů, chlazení vodou, rozvod plynů, atd.): ANO  | <i>Device is mounted in one or two frames that contain all electronic control units (voltage sources, control of pneumatic valves, cooling water, gas supplies, etc.): YES</i>   | Yes - mounted on one frame  |
| 7                      | Přístroj obsahuje sady bezpečnostních opatření chránících přístroj před vážným poškozením v případě přerušení dodávky elektrické energie, poruše vodního chlazení a vakuového čerpacího systému: ANO   | <i>The system is supplied with safety features avoiding a serious damage of the instrument in the case of power, water chiller and vacuum pumping system failure: YES</i>  | Yes   |
| 8                      | Systém musí splňovat evropské normy, především<br>Voltage Directive – 2014/35/EU<br>Directive – 2014/30/EU   | <i>The system must meet the current CE regulations, namely<br/>Low Voltage Directive – 2014/35/EU<br/>EMC Directive – 2014/30/EU</i>   | Yes   |
| 9                      | <b>Depoziční komora</b>  | <b>Deposition Chamber</b>  |   |
| 10                     | Vodou chlazený držák substrátu umožňující manipulaci a depozici na substrát min. průměru 4". Držák je rovněž vybaven shutterem: ANO  | <i>Water-cooled substrate holder allowing handling and deposition on the substrate of min. 4" diameter. The holder is also equipped with a shutter: YES</i>  | Yes   |
| 11                     | Držák substrátu umožňuje rotaci substrátu v průběhu depozice rychlostí min. 10 ot.min-1: ANO   | <i>Substrate holder allows rotation of the substrate during deposition at the speed of min. 10 rpm: YES</i>  | Yes - 10 - 30 RPM continuous rotation capability  |
| 12                     | Komora je čerpána turbomolekulární vývěvou na mezní tlak min. 10-5 Pa. Turbomolekulární vývěva je přečerpávána pomocí suché vývěvy: ANO  | <i>The chamber is pumped by a turbomolecular pump to a base pressure min. 10-5 Pa. The turbomolecular pump is pumped by a dry pump: YES</i>  | Yes - HiPace 300 Turbo pump with TriScroll dry pump, base pressure 1x10 <sup>-5</sup> Pa  |
| 13                     | Komora je vybavena měrkou tlaku měřící v celém rozsahu tlaků: (atm - 10-6 Pa)  | <i>The chamber is equipped with a pressure gauge operating in the whole range: (atm - 10-6 Pa)</i>   | Yes - Inficon MPG 400 full range vacuum sensor<br>Combination gauge – Inverted Magnetron & Pirani<br>Wide measurement range from 3.75E-9 Torr to atmosphere |
| 14                     | Komora je chráněna proti napařování materiálu na stěny např. užitelsky vyměnitelnými stínícími plechy: ANO   | <i>The chamber is protected against material deposition on the walls, e.g. by user-replaceable shielding sheets: YES</i>   | Yes   |

| číslo řádku/ <i>row number</i> | Požadavek zadavatele   | <i>Requirement of Contracting Authority</i>   | Nabídka dodavatele/ <i>Supplier's offer</i>   |
|--------------------------------|--|---|---|
| 15                             | <b>Napařovací zdroj</b>  | <i>Deposition source</i>  |   |
| 16                             | Zařízení musí obsahovat čtyři nezávislé ovládané termální napařovací zdroje, se dvěma proudovými zdroji: ANO   | <i>The system must have four independently-controlled thermal evaporation sources with two independent power supplies: YES</i>  | Yes   |
| 17                             | Napájecí proudové zdroje musí poskytovat dostatečný výkon pro konvenční tepelné odpařování kovů, včetně kovů s vysokou teplotou tání, například titan nebo chromu. Proudový zdroj proto musí poskytovat alespoň 800 W: ANO   | <i>The power supplies must provide sufficient power for conventional thermal evaporation of metals, including high melting-temperature metals such as titanium or chromium. The power supply power must therefore provide at least 800 W: YES</i>   | Yes - 2500 W transformers<br>Note: Titanium should not be deposited in this system, as the heat from the deposition will overheat the source boats. |
| 18                             | Zařízení musí umožňovat současné napařování ze dvou zdrojů. Systém kontroly rychlosti napařování bude obsahovat dva detektory rychlosti napařování integrované do zařízení. Jednotlivé zdroje a jejich detektory (QCMs) budou oddělené fyzickou přepážkou zabráňující jejich vzájemnému rušení a umožňující přesné určení depozičních rychlostí z jednotlivých zdrojů: ANO | <i>The system must enable co-evaporation from two sources simultaneously. Two deposition rate monitors (quartz crystal microbalances – QCMs) are integrated into the system to control the co-evaporation. A physical barrier between the two sources and their respective QCMs is installed to prevent a cross-talk and allow accurate evaporation rate readings from each source: YES</i> | Yes   |
| 19                             | Dodavatelem garantovaná uniformita deponované vrstvy na 4" waferu: <= 5%   | <i>Supplier guaranteed uniformity of deposited layer on 4" wafer: &lt;= 5%</i>  | Yes   |
| 20                             | Součástí dodávky přístroje je sada nástrojů pro práci se vzorky, držáky vzorků a základní spotřební materiál sloužící k připevňování vzorků, jde-li o speciální nástroje: ANO  | <i>The supply contains the tool palette for work with samples, sample holders and standard consumables for sample fixing if the tools are not commonly available: YES</i>   | Yes   |