Purchase Contract

(hereinafter the “**Contract**”)

1. **THE PARTIES:**
	1. **Fyzikální ústav AV ČR, v. v. i.**,

*(Institute of Physics of the Czech Academy of Sciences, public research institution)*

with its registered office at Na Slovance 2

PSČ 182 21 Praha 8,

represented by: Prof. Jan Řídký, DrSc. - Director

Registered in the register of public research institutions of the Ministry of Education, Youth and

Sports of the Czech Republic

Tax Id. No.: CZ68378271

Bank: UniCredit Bank Czech Republic, a.s.

Account number: 2106535627/2700

Id. No.: 68378271

Tax ID No.: CZ68378271

(hereinafter the “**Buyer**”)

and

* 1. Seller:

**\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_,**

with its registered office at **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**,

Id. No.: **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_,**

registered in **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**,

represented by \_\_\_\_\_\_\_\_\_\_, \_\_\_\_\_\_\_\_\_\_\_\_\_\_,

Bank:

Id. No.: \_\_\_\_\_\_\_\_\_\_\_\_

Tax Id. No.: \_\_\_\_\_\_\_\_\_\_\_\_

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

enter, on the present day, month and year, into this Purchase Contract (hereinafter the "**Contract**").

1. **Fundamental Provisions**
	1. The Buyer is a public research institution whose primary activity is scientific research in the area of physics, especially elementary particles physics, condensed systems, plasma and optics. This research includes research of semiconducting nanoheterostructures.
	2. The Buyer is in the process of implementing a project registration No. CZ.2.16/3.1.00/21560 with the title “Laboratory for preparation and characterization of semiconductor structures based on nitrides – LABONIT” within the framework of the Operational programme Prague – Competitiveness (**OPPC**)(hereafter the “**Project**”).
	3. The subject matter of this Contract is funded using aid provided to the Project, for which it is destined.
	4. The Buyer wishes to acquire the subject matter hereof (**Scrubber - chamber for ammonia and metal-organics**) for the purpose of removing residual ammonia and metal-organics in the exhaust from the MOVPE apparatus including partially decomposed products from the compound, which were not fully used up in the epitaxy process. The gas compound in the exhaust from the chamber must comply, after being dissolved by air flowing at 500m3/hr, with imission standards valid in the Czech Republic.
	5. The Seller’s bid was selected as the winning bid for Part 2 of the “MOVPE Apparatus” tender (hereafter the “**tender**”) organized pursuant to Act No. 137/2006 Coll., on Public Procurement (hereinafter the “**Act**“) for the delivery of the subject matter hereunder.
	6. The documentation governing performance hereunder consist of:
		1. **Technical specification of the subject matter – Annex No. 1**
		2. The Seller’s bid submitted within the tender in the extent it describes the technical solution of the subject matter to be delivered hereunder (hereinafter the “**Bid**”) – **Annex No. 2**.

In the event of a conflict between these Annexes, the higher-quality solution complying with higher level technical requirements shall have precedence.

* 1. The Seller represents that it has all the professional prerequisites required for the supply of the subject of performance under this Contract, is authorised to supply the subject of performance and there exist no obstacles on the part of the Seller that would prevent the Seller from supplying the subject of this Contract to the Buyer.
	2. The Seller acknowledges that the Buyer considers the Seller’s participation in the tender, provided that the Seller complied with all qualification requirements, as the confirmation of the fact that the Seller is capable, within the meaning of Sec 5(1) of the Civil Code, of providing performance under the Contract with such knowledge, diligence and care that is associated and expected of the Seller’s profession, and that the Seller’s potential performance lacking such professional care would give rise to corresponding liability on the Seller’s part. The Seller is prohibited from misusing his qualities as the expert or his economic position in order to create or exploit dependency of the weaker party or to establish an unjustified imbalance in the mutual rights and obligation of the Parties.
	3. The Seller acknowledges that the Buyer is not, in connection to the subject of this Contract, an entrepreneur, and also that the subject of this contract is not related to any business activities of the Buyer.
	4. The Seller acknowledges that the deadlines for the performance / delivery of the subject of this Contract in the quality as set out in Annexes No. 1 and 2 hereto are of essential importance for the Buyer in view of the schedule of activities within the Project. The Project end on 30 June 2015 and all activities under the Project a must be completed as of this date including any performance hereunder (i.e. incl. handover and invoicing). In case the Seller fails to observe these contractual terms, the Buyer may incur damage.
	5. The Seller declares that he accepts the “risk of changed circumstances” within the meaning of Sec 1765(2) of the Civil Code.
	6. The Contractual Parties declare that they shall maintain confidentiality with respect to all facts and information, which they learned in connection herewith and / or during performance hereunder, and whose disclosure could cause damage to either Party. Confidentiality provision does not prejudice obligations on the part of the Buyer arising from valid legislation.
1. **Subject Matter of the Contract**
	1. The subject matter of this Contract is the obligation of the Seller to deliver to the Buyer and to transfer to the Buyer the ownership right to:

**“Scrubber – chamber for removing ammonia and metal-organics”** (hereinafter “**Goods**” or “**Equipment**”)

and the Buyer undertakes to take delivery of the Goods and pay to the Seller the agreed upon price herein.

* 1. The performance of the subject matter hereunder includes:
		1. Transport of the Equipment including all accessories as may be defined in Annexes No. 1 and 2 hereto the place of performance, un-packaging and inspection,
		2. Installation of the Equipment incl. connection to the infrastructure / networks at the place of performance,
		3. Delivery of manuals describing controls and maintenance in the Czech or English language to the Buyer, in electronic and hardcopy versions,
		4. Removal and liquidation of packaging and other materials used by the Seller in performance hereof,
		5. Warranty and post-warranty service,
		6. Technical support in the form of consultations.
	2. The subject matter hereof (Equipment), has been described in detail in Annexes No. 1 and 2 hereto.
	3. Additional terms and conditions pertaining to the delivery:
		1. The Seller proceeds independently during making of the delivery hereunder while respecting all instructions issued to him by the Buyer in connection with performance provided hereunder.
		2. The Seller shall be obliged to notify the Buyer, without unnecessary detail, if any instructions issued by the Buyer in connection with the delivery would be inappropriate, provided that the Seller is able to discern the inappropriateness of such instructions using all professional due care.
		3. The Seller shall ensure that the Equipment and related services will comply in full 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 more strict standard or its part shall always apply.
		4. The delivered Equipment and all its parts, accessories must be brand new and unused.
1. **Delivery terms**
	1. The Seller undertakes to
		1. Deliver the Equipment within 4 month of the execution hereof;
		2. Handover the already installed Equipment within 14 days from the MOVPE apparatus delivery date (subject to part 1 of the tender) and demonstrate its functionality.
	2. The Seller shall not be entitled to deliver the Equipment sooner, within the framework of the period stipulated in 4.1 above, than being notified by the Buyer that the premises are ready for installation.
	3. Any performance shall be extended for the period of time, when the Seller could not provide performance due to obstacles on the part of the Buyer.
2. **Purchase price, Invoicing, Payments**
	1. The purchase price is based on the Seller’s submitted bid and amount to \_\_\_\_\_\_\_\_ CZK (in words: \_\_\_\_\_\_\_\_\_\_\_) (TO BE FILLED IN BY THE APPLICANT) excluding VAT (hereinafter the “Price”). VAT shall be paid and settled in accordance with the valid Czech regulation.
	2. The Price represent 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, installation and handover, and including all other costs of expenses that may arise in connection with creation of an intellectual property creation and it protection.
	3. The Parties agreed that the Seller shall be entitled to invoice the Price as follows:
		1. the first part of the price corresponding to ….. (maximum 70) % from the total Price in the amount \_\_\_\_\_\_\_\_\_ CZK excl. VAT (TO BE FILLED IN BY THE APPLICANT) after the delivery of the Equipment in line with Section 4.1.1. based on a delivery certificate.
		2. the second part of the price corresponding to the remainder of the Price in the amount \_\_\_\_\_\_\_\_\_ CZK excl. VAT (TO BE FILLED IN BY THE APPLICANT) after handover of the Equipment in line with Section based on the handover protocol in accordance with Section , confirming functionality of the installed Equipment without minor defects or unfinished work.
	4. Invoices issued by the Seller hereunder shall include particularly the following details:
		1. the business name/designation and registered office of the Buyer, as provided above
		2. the tax identification number of the Buyer,
		3. the business name/designation and registered office of the Seller,
		4. the tax identification number of the Seller,
		5. the registration number of the tax document,
		6. the scope and object of the performance invoiced,
		7. the date of issue of the tax document,
		8. the invoiced amount, VAT rate, the VAT amount, the invoiced amount incl. VAT – all specified in CZK,
		9. declaration that the invoiced performance is provided in connection with the “Laboratory for preparation and characterization of semiconductor structures based on nitrides – LABONIT” reg. No. CZ.2.16/3.1.00/21560, which is co-financed under the OPPC,
		10. contract number.
	5. The Buyer prefers electronic invoicing, with the invoices being delivered to efaktury@fzu.cz. All issued invoices / tax documents shall comply with any international treaties prohibiting double taxation, if applicable.
	6. Invoices shall be payable within twenty one (21) days of the date of their delivery to the Buyer (hereinafter the "Maturity Period"). Payment of the invoiced amount means the date of its remitting to the Seller’s account.
	7. If a tax document – 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 tax document – 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 tax document – invoice to the Buyer.
	8. The Buyer shall be entitled to suspend or unilaterally set off against any receivables claimed by the Seller any of its payment due to:
		1. Outstanding defects or unfinished work,
		2. Damages caused by the Seller,
		3. Contractual penalties and other sanctions.
	9. The Seller shall not be entitled to set of any of its receivables against any part of the Buyer’s receivable hereunder.
3. **Ownership title**
	1. The ownership right to the Equipment and the risk of damage shall pass to the Buyer by the handover. Handover shall be understood as delivery and acceptance of the Equipment duly confirmed by Parties on teh handover protocol.
4. **Place of delivery**
	1. The place of delivery and handover of the Equipment shall be the premises of the Buyer at Cukrovarnická 10, Praha 6, building F, room No. F107.
5. **Site readiness**
	1. The Buyer shall notify the Seller in writing on the exact date when the Equipment may be installed at least 4 weeks prior to such date, ensuring that the deadline for the performance hereunder is maintained.
	2. The Buyer shall invite the Seller, with sufficient advance prior to the Equipment installation, to inspect the premises into which the Equipment will be installed, so that any potential defects or deficiencies may be removed prior to installation pursuant to Section 4.1.
	3. The Buyer shall be obliged to allow the Seller, once the deadline set forth in Section 8.1 hereof expires, to install the equipment at the place of performance. The Buyer reserves the right to extend the installation deadline by a written notification to the Seller (delivered to the address specified in 1.2 hereof), if organizational reasons on his part warrant so.
6. **Cooperation of the Parties**
	1. The Seller undertakes to notify the Buyer of any obstacles on his part, which may negatively influence proper and timely delivery of the Equipment.
	2. The Seller shall be obliged to notify the Buyer about insufficient readiness of the site / place of performance for the delivery and installation of the Equipment.
	3. The Buyer shall be entitled to receive information on the progress with the Equipment completion.
	4. The Parties wish to deviate from provisions of Section 2126 of the Civil Code and agree that the Seller shall not be authorized to use institutes established therein.
7. **Delivery, Installation, Handover and Acceptance**
	1. The subject of the handover procedure is to verify completeness and functionality of the Equipment in line with specification provided in Annexes No. 1 and 2 hereto.
	2. The Seller shall transport the Equipment at his own cost to the place of performance. The Buyer shall issue a certificate of delivery to the Seller is the delivery is found complete and without defects.
	3. The Seller shall carry out and document the Equipment installation; the Seller shall also run a test verifying functionality and compliance with technical specification as defined in Annexes No. 1 and 2 hereto.
	4. Handover procedure includes handover of any and all technical documentation pertaining to the Equipment, user manuals and certificate of compliance of the Equipment and all its parts and accessories with approved standards.
	5. The handover procedure shall be completed by handover of the Equipment confirmed by the handover protocol containing specifications of all performed tests (hereinafter the “**Handover protocol“**). The Handover protocol shall contain the following mandatory information:
		1. Information about the Seller, the Buyer and any subcontractors,
		2. Description of the Equipment, which subject to handover and acceptance, including description of all components,
		3. Description of performed tests: type of test, duration, achieved parameters,
		4. List of technical documentation including the manuals,
		5. Reservation of the Buyer regarding minor defects and unfinished work,
		6. Declaration of the Buyer on acceptance / non-acceptance of the Equipment,
		7. Date of signature of the Equipment Handover protocol.
	6. Handover of the Equipment does not release the Seller from liability for damage caused by product defects.
	7. The Buyer shall not be obliged to accept the Equipment, which would show defects or unfinished work and which would however not form a barrier, on their own or in connection with other defects, to using the Equipment. Should the Buyer not exercise its right not to accept the Equipment with defects or unfinished work, the Seller and the Buyer shall list these defects and unfinished work in the Handover protocol, including the manner 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 any defects shall be removed / rectified within 48 hours from the handover and acceptance of the Equipment.
8. **Technical assistance - consultations**
	1. The Seller shall be obliged to provide to the Buyer free-of-charge consultations and technical assistance relating to the subject matter hereof during the entire term of the warranty period. The Seller undertakes to provide to the Buyer consultations and technical assistance relating to the subject matter hereof also after the warranty period expires.
9. **Representatives, Notices:**
	1. The Seller authorized the following representatives to communicate with the Buyer in all matters relating to the Equipment delivery:

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

e-mail: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

tel. : \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ (TO BE FILLED IN BY THE APPLICANT)

* 1. The Buyer authorized the following representatives to communicate with the Seller:

Ing. Alice Hospodková, Ph.D.

e- **mail:** hospodko@fzu.cz

tel. (+420) 220 318 401

RNDr. Jiří Pangrác

e-mail: pangrac@fzu.cz

tel. (+420) 220 318 584

* 1. 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 address), or in some other form of registered post or electronic delivery incorporating electronic signature (qualified certificate) to e-podatelna@fzu.cz in case of the Buyer and to …….@...... (TO BE FILLED IN BY THE APPLICANT) in case of the Seller.
	2. In all technical and expert matters (discussions on the Equipment testing and demonstration, notification of the need to provide warranty or post-warranty service etc.)electronic communication between technical representatives of the Parties will be acceptable using e-mail addresses defined in Sections 12.1 and 12.2.
1. **Termination, Vis Major**
	1. This Contract may be terminated by completing the performance hereunder, by agreement of the Parties or withdrawal from the Contract on the grounds stipulated by law or in the Contract.
	2. The Buyer is entitled to withdraw from the Contract without any penalty from Seller in any of the following events:
		1. The Seller fails to comply with the delivery pursuant to Section hereof,
		2. Technical parameters or other conditions required in the technical specification defined in Annex No. 1 and 2 hereto and in the relevant valid technical standards will not be achieved by the Equipment at handover,
		3. Facts emerge bearing evidence that the Seller will not be able to deliver the Equipment,
		4. The Seller will not comply with qualification criteria as defined in the tender.
	3. 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 Goods or due to breach of the Contract by the Seller.
	4. Withdrawal from the Contract becomes effective on the day the written notification to that effect is delivered to the other Party. The Party which had received performance from the other Party prior to such withdrawal shall duly return such performance.
	5. Circumstances precluding liability shall be understood as obstacles which arose independently of the will of the obliged Party and which prevent her from fulfilling its obligations in a situation when it cannot be reasonably expected that the obliged Party would be able to overcome such obstacle or its consequences, and furthermore that it could anticipate such obstacle. Obstacles which do not preclude liability shall be understood as obstacle arising during the period when the obliged Party was already in default with fulfilling its obligations or arising due to its economic circumstances. Effects precluding liability are strictly limited to the period for which the obstacles persist.
	6. In case of Vis major, the deadlines agreed herein shall be extended by the time such Vis major will be in force.
2. **Insurance**
	1. The Seller undertakes to insure the Equipment against all risks, in the amount of the Price of the Equipment for the entire period commencing when transport of the Equipment starts until duly delivered to the Buyer. In case of breach of this obligation, the Seller shall be liable to the Buyer for any damage that may arise.
3. **Warranty, Post-warranty and Out-of-warranty Service**
	1. The Seller shall provide warranty for the quality of the Equipment for a period of 12 motnhs. The warranty term shall commence on the day following the date of execution of the Handover Protocol on handover and acceptance of the Equipment pursuant to hereof. The warranty shall not apply to consumables (filters that must be replaced).
	2. The Seller undertakes to provide free-of-charge service and regular service inspections in the extent defined by the manufacturer for the entire warranty term hereunder, including repairs, supply of spare parts and transport and costs associated with employing a service technician.
	3. Should the Buyer discover a defect, he shall notify the Seller to rectify such defect using the …….@...... (TO BE FILLED IN BY THE APPLICANT) address. The Seller shall be obliged to review any warranty claim within 5 business days from receipt and to propose solution, unless agreed otherwise by the Parties.
	4. The Seller shall be obliged to rectify any claimed defects within 14 business days from receipt of the Buyer’s notification. In cases of unusual defects, the Seller shall be obliged to rectify the defect in the period corresponding to the nature of the defect and to define the deadline for the handover of the rectified Goods.
	5. Any and all costs associated with defect rectification / repair including transport and travel expenses shall be always borne by the Seller.
	6. 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**”**)** containing confirmations of both Parties that the Equipment was duly repaired and is defect-free.
	7. The repaired portion of the Equipment shall be subject to a new warranty term in accordance with Section , which commences to run on the day following the date when the Repair Protocol was executed.
	8. Should the Equipment suffer from defects which make it demonstrably unusable for a period exceeding 60 days (defect period) during any six consecutive months during the warranty term, the Seller shall be obliged to rectify such defect by delivering new defect-free Equipment in accordance with Section 2106(1)(a) of the Civil Code within 60 days.
	9. The Seller declares that he shall ensure post-warranty service during the warranty term and post-warranty [out-of-warranty] service for the period of 5 years after the warranty term expires; the service terms shall be identical with provisions of Sections 15.3, 15.4 and 15.6. and the price of the service may be exceed the usual price for performance of similar type.
	10. The Buyer shall have the right to a penalty in the amount of 500,- CZK for each day when the Equipment was inoperational due to defect subject to warranty repairs, staring on the 15th day from notification on the defect.
4. **Contractual penalties**
	1. The Buyer shall be entitled to claim a contractual penalty against the Seller in the amount of 0.1 % from the Price for each commenced day of delay with fulfilment of the Seller’s obligations according to Section and of the Contract.
	2. In case of the Seller’s delay with warranty repair, the Buyer shall be entitled to claim a contractual penalty against the Seller in the amount of 500,- CZK for each commenced day of delay.
	3. In case of withdrawal from the Contract pursuant to Section the Buyer shall be entitled to claim a contractual penalty against the Seller in the amount of 20 % of the Price.
	4. The Buyer shall be obliged to pay to the Seller a contractual penalty in the amount of 0.05 % of the owed amount for each commenced day of delay with the payment of the Price.
	5. All contractual penalties shall be payable within 30 days from the date claimed.
	6. Payment of the contractual penalty does not prejudice the rights of the Parties to claim damages; The Parties exclude use of Sec 2050 of the Civil Code.
5. **Disputes**
	1. Any and all disputes arising out of this Contract or the legal relationships connected with the Contract shall be resolved 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 the competent court in the Czech Republic based on application of any of the Parties; the court having jurisdiction will be the court where the seat of the Buyer is located.
6. **Acceptance of the Project Rules**
	1. The Seller shall be obliged to cooperate during financial inspections carried out in accordance with Act 320/2001 Coll., on Financial Inspections, as amended.
	2. The Seller shall be obliged to the Buyer any and all documents relating to the subject matter hereof, as may be requested by the audit body.
	3. The Seller shall be obliged to allow access to premises and sites connected with the project and its implementation to all authorized personnel of the Managing Authority, whether in service of the Magistrate of the Capital City of Prague, Ministry of Finance, European Commission, European Court of Auditors, Supreme Audit Office of the Czech Republic and other authorized state administration bodies.
	4. The Seller shall be entitled, complying with provision of Act No. 137/2006 Sb., on Public Procurement, as amended, to fulfil / perform any part hereof using subcontractors. In such cases the Seller shall be obliged to ensure that each of his subcontractors complies with provisions of Sections to . The list of subcontractors is attached hereto as Annex No. 3, including all necessary related documentation.
7. **Final Provisions**
	1. This Contract represents the entire agreement between the Buyer and the Seller.
	2. In the event that any of the provisions of this Contract shall later be shown or determined to be invalid, ineffective or unenforceable, then such invalidity, ineffectiveness or unenforceability shall not cause invalidity, ineffectiveness or unenforceability of the Contract as a whole. In such event the Parties undertake without undue delay to subsequently clarify any such provision or replace after mutual agreement such invalid, ineffective or unenforceable provision of the Contract by a new provision, that in the extent permitted by the laws and regulations of the Czech Republic, relates as closely as possible to the intentions of the Parties to the Contract at the time of creation hereof.
	3. This Contract becomes valid and effective as of the day of its execution by the authorised persons of both Parties.
	4. This Contract may be changed or supplemented solely by means of numbered supplements in writing, furnished with the details of time and place and signed by duly authorised representatives of the Parties. The Parties expressly reject, within the bounds of Sec 564 of the Civil Code, modifications to the Contract in any other manner.
	5. This Contract is drawn up in four (4) counterparts, each of which is deemed to be the original. Each Party to the Contract shall receive two (2) counterparts.
	6. The following Annexes form an integral part of the Contract:

Annex No. 1: Technical specification of the Equipment (submitted by the Buyer)

Annex No. 2: Technical specification submitted by the Seller

1. Technical specification table (The Seller shall fill in columns “Description and specification of the Equipment offered by the Seller “ and “Complies YES/NO”)
2. Seller’s bid in the extent it technically describes the Equipment (submitted in the tender)

Annex No. 3: List of subcontractors who will receive more than 10% of the Price for the performance provided hereunder incl. all related documentation (submitted in the tender)

* 1. The Seller undertakes that after the delivery of the Equipment he shall provide to the Buyer all necessary cooperation so that the Buyer will be able to fulfil his obligations under Section 147a the Act, i.e. to provide to him a list of subcontractors who will receive more than 10% of the Price for the performance provided hereunder.
	2. The Parties, manifesting their assent with its entire contents of the Contract attach their signature hereunder.

In Prague on \_\_\_\_\_\_\_\_\_\_\_\_, 2014

On behalf of the: Fyzikální ústav AV ČR, v. v. i.

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Name: prof. Jan Řídký, DrSc.

Function: Director

In  \_\_\_\_\_\_\_\_\_\_ on \_\_\_\_\_\_\_\_\_\_\_\_ 2014

On behalf of the: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Name: \_\_\_\_\_\_\_\_\_\_\_\_\_

Function: \_\_\_\_\_\_\_\_\_\_\_\_\_ (TO BE FILLED IN BY THE APPLICANT)

**Annex No. 1 – Technical specification**

 **“Scrubber - chamber for ammonia and metal-organics”**

The Buyer wishes to acquire the subject matter “**Scrubber - chamber for ammonia and metal-organics”** for the purpose of removing residual ammonia and metal-organics in the exhaust from the MOVPE apparatus including partially decomposed products from the compound, which were not fully used up in the epitaxy process. The Equipment must comply with all requirements arising from technical and safety standards valid in the Czech Republic for this type of equipment. Performance hereunder includes handover of the entire documentation to the Equipment.

**Obligatory requirements:**

* Dry ammonia elimination from output residual gases of the nitride MOCVD system is required;
* The efficiency of the ammonia abatement for the flow of 5 slpm of HN3 has to be at least 99.5 %.
* The scrubber has to be able to catch/decompose potential organo-metallic compounds, which are not decomposed during the MOCVD usage process, in the exhaust; namely trimethylgallium, trimethylaluminium and trimethylindium.
* The maximum dimensions of scrubber are 1 m (depth) x 1 m (width) x 2 m (height)
* The cartridges/filters have to be recyclable.
* The Scrubber has to be able to handle the flow of at least 5 slpm of NH3 and 50 slpm of total residual gases.
* The final exhaust will be piped away by the air-conditioning system, so the device has to be connectable to such a system
* The scrubber mains voltage must be 230 V
* The Scrubber must have electrical, optical or acoustical warning of the end of filter (catalyser).

**Annex No. 2 a) – Technical specification table:**

**“Scrubber - chamber for ammonia and metal-organics”**

The Buyer wishes to acquire the subject matter “**Scrubber - chamber for ammonia and metal-organics”** for the purpose of removing residual ammonia and metal-organics in the exhaust from the MOVPE apparatus including partially decomposed products from the compound, which were not fully used up in the epitaxy process; the subject matter includes, in accordance with Section 46(4) the Act the following parts and complies with technical conditions:

|  |  |  |
| --- | --- | --- |
| Description and minim specification of the Goods as defined by the Buyer | Description and specification of the Equipment offered by the Seller | Complies YES/NO |
| **SCRUBBER** |  |  |
| Must remove ammonia from output residual gases of the nitride MOCVD system using dry ammonia decomposition  |  |  |
| Must be able to catch/decompose potential organo-metallic compounds, which are not decomposed during the MOCVD usage process, in the exhaust; namely trimethylgallium, trimethylaluminium and trimethylindium  |  |  |
| Maximum dimensions of scrubber are 1 m (depth) x 1 m (width) x 2 m (height) |  |  |
| cartridges/filters have to be recyclable |  |  |
| Must be able to handle the flow of at least 5 slpm of NH3 and 50 slpm of total residual gases  |  |  |
| Efficiency of the ammonia abatement for the flow of 5 slpm of HN3 has to be at least 99.5 %. |  |  |
| Final exhaust will be piped away by the air-conditioning system, so the device has to be connectable to such a system |  |  |
| Mains voltage must be 230 V, 50 Hz |  |  |
| Must have electrical, optical or acoustical warning of the end of filter (catalyser) |  |  |

**Bidders shall provide in their bid an unambiguous statement to all the above points of the technical specification, which will clearly indicate whether the offered equipment complies (or exceeds) the required parameters, or in which manner the offered equipment ensures the required functionality.**

**Annex No. 2 b) – The Seller’s bid in the extent it describes technical parameters of the Equipment**

To be provided by the Seller / Bidders

**Annex No. 3 -** list of subcontractor who will receive more than 10% of the Price for the performance provided hereunder, including all pertinent documentation

***Variant 1:***

|  |  |  |  |
| --- | --- | --- | --- |
| **No.** | Name, seat, ID/Tax ID, tel./fax, e-mail, Commercial Registry registration details, authorized person | Definition of that part of the performance which the Seller shall provide via the subcontractor  | % share on the performance |
| **1** |  |  |  |
| **2** |  |  |  |
| **3** |  |  |  |

*The Seller shall include as a part of Annex No. 3 hereof all individual contract with subcontractors listed above; the subcontractors must clearly include the specific commitment of each subcontractor to provide specific performance, or to provide things or rights, which the Seller will be authorized to use to complete the subject matter hereof.*

***Variant 2:***

No subcontractors will be used to perform the subject matter hereof, no subcontractors will receive more than 10% of the Price for the performance provided hereunder.