

Purchase Contract

1. PARTIES

Vysoká škola chemicko-technologická v Praze (University of Chemistry and Technology Prague)

with the registered office at: Technická 5, Prague 6 – Dejvice, post code 160 00, Czech Republic

represented by: xxxxx, rector

IN: 60461373

TIN: CZ60461373

Bank: xxxxx; account number: xxxxx

(hereinafter “Purchaser”)

and

Adscientis

with the registered office at **10 Rue Alfred Kastler, Parc Secoia, 68310 Wittelsheim, FRANCE,**

incorporated in the Commercial Register kept by the **Grefe du Tribunal Judicaire** Court in Mulhouse, France,

represented by xxxxx, CEO

ID: **431 369 602 R.C.S Mulhouse**

TIN: ID VAT FR02 431369602

Bank: xxxxx, BIC: xxxxx; account number kept with tax administrator: **xxxxx (IBAN)**

(hereinafter “Seller”)

The Purchaser and the Seller hereinafter collectively as “Parties” or individually as “Party”)

conclude this Purchase Contract (hereinafter “Contract”) on this day, month and year

2. RECITALS

- 2.1. The Seller acknowledges that the Purchaser considers Seller's participation in a public contract and the fact it has fulfilled qualification requirements as a confirmation that, the Seller is able to act with knowledge and care within the performance of this Contract, which is associated with its occupation or profession. Should the Seller fail to act with professional care, it shall bear the resulting consequences. The Seller may not abuse its professional quality, nor its economic position to create or exploit the dependance of the weaker party and to achieve a clear and unjustified imbalance between mutual rights and obligations of the Parties.
- 2.2. The Seller acknowledges that the Purchaser is not an entrepreneur in relation to this Contract and that the subject-matter hereof is not part of Purchaser's business activity.
- 2.3. The Seller has been awarded a contract within below-threshold public procurement announced by the Purchaser in accordance with Act No. 134/2016 Coll., on Public procurement, for a public contract named "**Device for inverse gas chromatography**" (hereinafter "Procurement Procedure").
- 2.4. The following documents also serve as basic materials for delivery of the subject matter of the performance hereunder:
Conditions for participation in the Procurement Procedure;

Technical Specification of Performance according to the Procurement documentation and Seller's tender which is attached as Annex No. 1 hereto (hereinafter "**Technical Specification of Performance**") and is an integral part hereof;

The Seller's tender submitted within the Procurement Procedure providing technical information on the subject-matter of performance (hereinafter "**Tender**").
- 2.5. The Seller declares it meets all the professional prerequisites necessary for the delivery of the subject matter of performance under the Contract, is entitled to execute / deliver the performance and there are no impediments on the Seller's part preventing it from delivering the subject matter of this Contract to the Purchaser.
- 2.6. The Parties declare they shall maintain in confidentiality all facts learned in connection with this Contract and its performance, the disclosure of which could result in harm incurred by the Parties. This provision is without prejudice to the Purchaser's obligations arising from legal regulations.

3. SUBJECT MATTER OF CONTRACT

- 3.1. The subject matter hereof is the Seller's obligation to deliver and transfer the ownership right to the device specified in the Technical Specification of Performance, attached as Annex No. 1 hereto, to the Purchaser.
(the device mentioned in paragraph 3.1 hereinafter as "**device**" or "**goods**").
- 3.2. Within the performance the Seller shall also:
 - (i) transport the device according to DDP, Incoterms 2020, to place of performance, unpack and inspection it,

- (ii) connect the device to the grid in the place of performance including commissioning and calibration,
- (iii) demonstrate its operability and verify parameters required by the Purchaser. This verification shall be a part of the installation and Handover protocol.
- (iv) process and hand over instructions and manuals to the Purchaser for the operation and maintenance of devices in the Czech or English language, electronically or in a printed form,
- (v) train operators of the device in the Czech or English language immediately after installation,
- (vi) submit a declaration of conformity of the delivered device with the approved standards,
- (vii) grant authorization to exercise the right to use software (license) where it is necessary for the proper use of the subject matter of performance, or if the Seller requires so under this Contract,
- (viii) prepare a list of items delivered for inspection purposes.
- (ix) provide cooperation to the Purchaser during delivery, consisting, *inter alia*, in verifying whether the premises are prepared for the installation of the device,

(The device under paragraph 3.1 and the performance under paragraph 3.2 of this Article hereinafter also as “**delivery**”).

- 3.3. The Purchaser undertakes to take over the duly and timely delivered device, and to pay the Seller the purchase price specified in Article 5 of this Contract for them.
- 3.4. In the event that proper performance and operation of the device requires further deliveries and works not expressly listed herein in order to meet the Purchaser’s requirements arising from this Contract including its Annexes, the Seller agrees and commits to secure or make these deliveries, and secure or perform the required works at its expense and include them in the performance without adjusting the purchase price hereunder.
- 3.5. Under the conditions set out in this Contract, the Seller undertakes to deliver the device to the Purchaser at its own expense and responsibility according to DDP, Incoterms 2020, as specified in paragraphs 3.1 and 3.2 of this Article hereof. The Seller shall ensure that the device comply with this Contract, including the Annexes, Tender, applicable legal, technical and quality standards, and that the device has a CE certification.

4. OWNERSHIP RIGHT

- 4.1. Ownership right passes to the Purchaser upon takeover of the device. Takeover means the signing of a Handover protocol for the device by both Parties. The risk of damage to the device passes onto the Purchaser upon signature of the mentioned protocol.

5. PURCHASE PRICE AND TERMS OF PAYMENT

- 5.1. The purchase price for the subject matter of the Contract referred to in Article 3 paragraph 3.1. and 3.2. was determined on the basis of the Tender as a maximum and not-to-exceed price, in the amount of net EUR 122’760.- excl. VAT.

- 5.2. The purchase price includes all costs associated with the performance of the subject matter of this Contract, including the cost of insurance of the device until its handover and takeover. The purchase price is not affected by price developments and exchange rate changes.
- 5.3. The purchase price is the highest permissible price for the subject-matter of performance.
- 5.4. The Purchaser commits to pay the purchase price to the Seller as follows:
100 % of the purchase price shall be paid based on the invoice issued after acceptance of the delivery by the Purchaser.
The maturity period of invoices, except for the pro forma invoice, shall always be 30 days from the date of delivery thereof to the Purchaser. The charged amount is deemed paid when the relevant sum is sent to the Seller's account. Tax documents – invoices issued by the Seller under this Contract shall, in accordance with the relevant legal regulations of the Czech Republic, contain the following data in particular:
- (i) company/business name and registered office of the Purchaser
 - (ii) tax identification number of the Purchaser
 - (iii) company/business name and registered office of the Seller
 - (iv) tax identification number of the Seller
 - (v) tax document registration number
 - (vi) scope and subject matter of performance,
 - (vii) date of issue of tax document,
 - (viii) date of taxable supply or date of receipt of payment, whichever is earlier, if these dates do not correspond with the date of issue of tax document
 - (ix) price of performance.
- 5.5. If the tax document - invoice is not issued in accordance with the terms of payment set out in the Contract or fails to meet the required legal requirements or is not delivered to the Purchaser by the deadline specified above, the Purchaser is entitled to return the tax document - invoice to the Seller as incomplete, or incorrectly issued, to correct it or issue a new tax document - invoice within 5 working days from the date of its delivery to the Purchaser. In such a case, the Purchaser is not in delay with the payment of the purchase price or a part thereof and the Seller shall issue a corrected invoice with a new, identical maturity period, beginning on the day of delivery of the corrected or newly issued tax document - invoice to the Purchaser.
- 5.6. Purchaser's invoicing data are listed in Article 1 hereof.
- 5.7. The Seller is obliged to send the electronic version of the invoice to the Purchaser to email xxxxx@xxxxx in pdf. format and subsequently send the original of the invoice to the Purchaser's address provided in Article 1 hereof.
- 5.8. If applicable, the Seller declares it specified its bank account in Article 1, which is published in the Register of Payers. This provision shall not apply to persons who are not obliged to submit an application for registration under the VAT Act.

6. PERFORMANCE DATES

- 6.1. The Seller undertakes to duly produce, procure, deliver, test, install, hand over to the Purchaser and demonstrate the functionality of the device referred to in Article 3, paragraph 3.1 of this Contract within **4 months** from the date of the effectiveness of this Contract.

7. PLACE OF PERFORMANCE

- 7.1. Place of performance is: Department of Organic Technology, University of Chemistry and Technology, Technická 5, 166 28 Prague 6 – Dejvice, Prague (hereinafter “**place of performance**”).

8. Handover and Takeover of Premises for Installation

- 8.1. The Seller is obliged to inform the Purchaser in writing about the exact date for installation and demonstration of the device, at least 5 working days in advance so that the deadline specified in Article 6, paragraph 6.1 of the Contract is maintained.
- 8.2. After the expiry of the period pursuant to paragraph 8.1 of this Article of the Contract, the Purchaser is obliged to allow the Seller to install and demonstrate the device in the Premises for installation. The Parties shall draw up a protocol documenting handover and takeover of Premises for installation.
- 8.3. The Seller is obliged to invite the Purchaser in good time before the date of installation and demonstration of the device to inspect the Premises for installation and check points for connection of the device to distribution of electricity, heat, etc. in good time, and remedy any deficiencies preventing installation and demonstration of devices on the date referred to in Article 6 (6.1).

9. FURTHER TERMS OF DELIVERY

- 9.1. When making the delivery, the Seller proceeds independently, but undertakes to respect the Purchaser’s instructions regarding the implementation of the subject matter of performance hereunder.
- 9.2. The Seller is obliged to notify the Purchaser without undue delay if items taken over from the Purchaser or the instructions given to the Seller by the Purchaser concerning the delivery are unsuitable, if the Seller was able to detect such unsuitability when exercising professional care.
- 9.3. Unless otherwise stipulated in the Contract, the Seller is obliged to provide all items necessary for the performance under this Contract.
- 9.4. The Seller is obliged to deliver completely new, fully functional goods (including any SW) to the Purchaser, in quality and technical design corresponding to valid European Union regulations and corresponding requirements set by EU legislation, applicable to the goods.
- 9.5. The Seller declares that the goods delivered by virtue of this Contract fully comply with the conditions set out in the procurement documents used in the procurement procedure where Seller’s tender was selected as the most suitable.

- 9.6. The Seller undertakes to ensure that the goods shall not be encumbered by any third-party rights, in particular no pre-emption right, pledge or right of lease, from the moment the ownership right to the goods is transferred.
- 9.7. With regard to the Purchaser's obligations arising in particular from Act No. 134/2016 Coll., on public procurement, the Seller agrees to the publication of all information concerning the contractual relationship established between the Seller and the Purchaser herein, in particular the content of this Contract.
- 9.8. If applicable, the Seller declares that no execution proceedings have been instituted against the Seller, it has no overdue debts, which may be collected within execution under Act No. 120/2001 Coll., on court executors and execution (rules of execution) and on amending other acts, as amended. Further, the Seller declares no petition for judicial enforcement of a decision has been filed and it has no overdue debts, which may be collected within enforcement of a decision under Act No. 99/1963 Coll., the civil procedure code, as amended, Act No. 500/2004 Coll., the code of administrative procedure, as amended, or under Act No. 280/2009 Coll., tax code, as amended.

10. Installation, Commissioning, Demonstration of Operation and Handover and Takeover of Device

- 10.1. Handover and takeover of the device hereunder includes its installation in the Premises for installation, configuration in the place of performance and verification of correct functionality with the participation of representatives of the Purchaser and Seller.
- 10.2. With the participation of the Purchaser's representatives, the Seller shall further verify that the device meets the parameters specified by the manufacturer and required by the Purchaser in the Technical Specification of Performance and this Contract, by demonstrating the operation of the device after its proper commissioning according to the manufacturer's instructions applicable to the given device and after calibration and verification of correct functionality by the Seller. Flawless demonstration is required for acceptance of the device by the Purchaser.
- 10.3. Within handover, the Seller shall submit the following to the Purchaser:
 - (i) a list of items delivered,
 - (ii) operating and maintenance instructions, conditions for maintenance and protection of the device in Czech or English language, and all necessary documents or accessories related to the device.
- 10.4. If the Seller fails to submit all the above documents to the Purchaser, the subject-matter of performance hereunder shall not be deemed properly finished and fit for handover.
- 10.5. The Parties shall draw up a Handover protocol documenting handover and takeover which shall contain the following mandatory information:
 - (i) Purchaser's and Seller's data
 - (ii) description of the device which is the subject-matter of handover and takeover, including the serial / production number of the device,
 - (iii) warranty period start date,

- (iv) a declaration of the Seller confirming that the device is in compliance with valid legal regulations, technical standards and in accordance with the Technical Specification of Performance and the business terms and conditions laid down herein,
 - (v) declaration of the Purchaser either confirming or rejecting the delivery,
 - (vi) date of signature of Handover protocol;
("Handover Protocol").
- 10.6. In the Handover Protocol, the Parties shall confirm they verified correct functionality of the device, and that it was installed, configured and the Seller demonstrated its operability.
- 10.7. The risk of damage to the delivered device passes onto the Purchaser when handover of the device is confirmed by signatures of the contact persons appointed by the Parties on the Handover Protocol. However, this fact shall not release the Seller from its liability for damage incurred from a defective device. The Seller bears the risk of damage to the device until it is handed and taken over.
- 10.8. The Purchaser is not obliged to take over a defective or unfinished device, even if such issues alone or in conjunction with other problems do not prevent from proper use of the device. If the Purchaser fails to exercise its right to reject takeover of a defective and unfinished device, the Seller and the Purchaser shall state a list of detected defects and unfinished work in the Handover Protocol, including the method and date of their removal. If the Parties fail to agree on the deadline for removal of defects in the Handover Protocol, these defects shall be removed within 48 hours from the date of handover and takeover of the device.
- 10.9. If the device and/or a part thereof has defects, which could not have been detected at takeover (hidden defects) and which are covered by the warranty period under Article 11.1 hereof, the Purchaser shall be entitled to claim such defects with the Seller within the warranty period. If the device and/or a part thereof is covered by a warranty exceeding the period under Article 11.1, the Purchaser shall be entitled to claim such hidden defects with the Seller within the longer warranty period.
- 10.10. If the Seller notifies the Purchaser that the device is prepared for handover and takeover and the handover procedure reveals that the device has not been properly completed, the Seller shall pay all costs incurred by the Purchaser in connection with unsuccessful handover and takeover.

11. WARRANTY AND CLAIMS FROM DEFECTIVE DELIVERY

- 11.1. The warranty period for delivery is **24 months, and is covering the entire delivery.**
- 11.2. The warranty period begins on the day the Purchaser signs the Handover Protocol. If the device is taken over, even with one defect or unfinished part, the warranty period begins from the date when the last defect was removed by the Seller. The Purchaser shall request the removal of a defect of the delivery from the Seller without undue delay after its discovery, but no later than the last day of the warranty period, unless expressly stated elsewhere in this Contract, by a written notice to the Seller's responsible technical representative specified in this Contract. A complaint sent by the Purchaser on the last day of the warranty period is deemed to have been lodged in time.

- 11.3. In a written warranty claim, the Purchaser shall describe a defect and method required for removal.
- 11.4. The Purchaser is entitled to withdraw from the Contract if the delivery of defective goods materially violates the Contract. Noncompliance of the delivery (or part thereof) with minimum parameters required by the Purchaser and specified in the Seller's Tender in the Technical Specification of Performance and in this Contract shall always be deemed a material breach of the Contract.
- 11.5. The Seller commits to remove claimed defects free of charge.
- 11.6. The Seller undertakes to **initiate procedures for removing defects within 5 working days** from the date of receipt of a claim from the Purchaser, and subsequently and without undue delay inspect the claim, diagnose the defect, notify the Purchaser whether the complaint is acknowledged and inform the Purchaser in writing if a specialized spare part is needed to remove the defect.
- 11.7. The Seller is obliged to **remove the defect within 30 working days** after the expiration of the period specified in the previous paragraph in the place of performance if replacement parts are available in time. In case that the defect cannot be removed within 60 working days, Seller will provide to Purchaser for the period the device under this contract cannot be used, a rental equipment free of charge similar to the device.
- 11.8. Whether or not the Seller acknowledges the claimed defect, it is obliged to remove it within the deadlines specified in paragraph 11.7 of this Article of the Contract, unless the Parties subsequently agree otherwise. In such a case, the Seller is entitled to demand from the Purchaser the payment of costs incurred. If the Seller rejects a claimed defect, the claim may be assessed by an expert's report, which shall be ordered by the Purchaser. If a claim is deemed justified by an expert, the Seller shall also bear the costs of such expert report. If the Purchaser provably claimed the defect without justification, it shall be obliged to reimburse the Seller for the costs expediently and demonstrably incurred in its removal.
- 11.9. The Parties shall draw up a defect removal report, wherein they shall confirm the removal of the defect. The warranty period is extended by the time elapsed from the date of the claim until removal of the defect.
- 11.10. If the Seller fails to remove the defect within the deadlines specified in paragraph 11.7 of this Article, or within the period agreed by the Parties, or if the Seller refuses to remove the defects, the Purchaser is entitled to have the defect removed at its own expense and the Seller is obliged to reimburse the Purchaser for such costs incurred, within 10 days after the Purchaser's request or to demand the replacement of the device by a non-defective device, in case that the defect deprives the Purchaser from the benefit of this contract. However, this right of the Purchaser shall not release the Seller from liability for defects and the warranty shall have the agreed scope.
- 11.11. The warranty shall not cover defects caused by improper handling, incorrect or inappropriate maintenance, non-compliance with manufacturer's regulations for operation and maintenance of the device, which the Purchaser took over from the Seller upon delivery or which were notified by the Seller to the Purchaser in writing. The warranty shall also not cover defects caused by gross negligence or willful misconduct and wear and tear parts.

12. CONTRACTUAL PENALTIES

- 12.1. In the event the Seller fails to observe the deadline for delivery specified in Article 6 paragraph 6.1 of this Contract due to its negligence or willful misconduct, the Purchaser is entitled to charge the Seller, after a grace period of two weeks, a contractual penalty of 0.1 % of the purchase price for each commenced day of delay, **maximally up to 25 % of the purchase price.**
- 12.2. If the Purchaser fails to pay the purchase price within the deadlines specified in this Contract, it shall pay the Seller statutory default interest, unless the Purchaser proves that the default in payment of the purchase price was caused by delayed release of funds by the subsidy provider.
- 12.3. The obliged party shall pay the penalties to the entitled party at the latest within 15 calendar days after receipt of the relevant account of the other Party.
- 12.4. The Purchaser's claim for damages shall always be maintained, however, it shall not be applicable vis-à-vis third parties.

13. TERMINATION

- 13.1. This Contract may be terminated by its fulfillment, by agreement of the Parties or withdrawal from the Contract due to reasons stipulated by laws or herein.
- 13.2. The Purchaser is further entitled to withdraw from the Contract without any sanctions if any of the below circumstances occurs:
 - (i) the Seller materially breaches its obligations hereunder,
 - (ii) insolvency proceedings are held over Seller's assets,
 - (iii) if conditions laid down in Section 223 (2) of Act No. 134/2016, on public procurement, are met
- 13.3. The Seller is entitled to withdraw from the Contract in the event of a material breach of the Contract by the Purchaser. Purchaser's failure to pay the Price of Performance within the deadline specified in this Contract, despite being notified of this breach by the Seller in writing and provided with a sufficient additional period for remedy shall be considered a material breach of the Contract.

14. LIMITATION OF LIABILITY

- 14.1. Nothing in this Agreement shall exclude or limit the liability of either Party in respect of the following (i) death or personal injury arising out of a negligence, (ii) fraud or (iii) willful misconduct.
- 14.2. Except as otherwise set out in Clause 14.1 and notwithstanding anything to the contrary herein, Seller's overall financial liability shall be limited to and not exceed 100 % (one hundred percent) of the purchase price hereunder irrespective of whether such liability, but for its exclusion, would be based on contract, tort (including negligence) or any other legal theory.
- 14.3. Except as otherwise set out in Clause 14.1 and notwithstanding anything to the contrary herein, Seller or Purchaser shall not be or become liable towards the other Party for any use of any works and/ or equipment hereunder, loss of profits, loss of any contract, loss of production, loss

of product, loss of business opportunities or for any indirect, special, incidental, exemplary, punitive or consequential loss or damage suffered by the other Party irrespective of whether such liability, but for its exclusion, would be based on contract, tort (including negligence) or any other legal theory.

15. FORCE MAJEURE

- 15.1 If either Party is prevented from, or delayed in performing any obligation under this Agreement by any event of Force Majeure, this Party shall not be considered in default or breach of this Agreement and no remedy shall be available to the other Party, unless otherwise provided for in this Agreement. The time for performance of that obligation shall be extended accordingly. However, Force Majeure shall not be applied for payment obligations under this Agreement.
- 15.2 "Force Majeure" means any event beyond the reasonable control of a Party, including but not limited to (i) war (whether declared or not), armed conflict or serious threat of same (including but not limited to hostile attack, blockade, military embargo), hostilities, invasion, act of foreign enemy, extensive, military mobilization; (ii) civil war, riot rebellion and revolution, military or usurped power, insurrection, civil commotion or disorder, mob violence; (iii) act of terrorism, sabotage or piracy; (iv) act of authority whether lawful or unlawful, compliance with any law or governmental order, rule, regulation or direction; (v) act of god, plague, epidemic, pandemic (including but not limited to limited operational capacity, in particular with regard to production and administration, travel restrictions, limited travel opportunities and shipping difficulties), natural disaster, such as, but not limited to violent storm, cyclone, hurricane, earthquake, flood, tsunami; (vi) explosion, fire, destruction of machines, equipment, factories or any kind of installation, prolonged breakdown of transport, telecommunication or electric current; or (vii) general labor disturbance, such as but not limited to boycott, strike and lockout; and (viii) any similar event, whether or not similar to the causes specified above and regardless of whether the cause affects the Party hereunder or its sub-suppliers or sub-contractors. Force Majeure shall also include any Force Majeure events, even, if these could reasonably have been expected due to political or other developments or reasons at the effective date of the Agreement and even if the Force Majeure event has already occurred at the effective date of the Agreement.
- 15.3 The Party affected by Force Majeure shall without undue delay inform the other Party of the existence of Force Majeure, the expected duration and the estimated effect on the ability to perform the obligations under this Agreement.
- 15.4 If Force Majeure has lasted more than 90 (ninety) days and the failure to perform the prevented or delayed obligation would constitute a material breach of this Agreement in the absence of such Force Majeure, then either Party may terminate this Agreement by written notice to the other Party.
- 15.5 If Force Majeure prevent Seller and/ or the Purchaser from fulfilling of its obligations, Purchaser shall compensate Seller for expenses incurred in securing, protecting and storing the Equipment.

16. REPRESENTATIVES OF PARTIES, NOTICES

16.1. The Seller has appointed the following responsible representative for communication with the Purchaser in connection with the subject matter of performance hereunder:

In technical matters:

xxxxx, E-mail: xxxxx, tel.: **xxxxx or mobile xxxxx**

In contractual matters:

xxxxx, E-mail: xxxxx, tel.: xxxxx

16.2. The Purchaser has appointed the following representatives responsible for communication with the Seller in connection with the subject matter of performance hereunder:

In technical matters:

xxxxx

E-mail: xxxxx, phone: xxxxx

In contractual matters:

xxxxx, rector

E-mail: xxxxx, phone: xxxxx

16.3. Unless otherwise agreed herein, all notices that are to be given or may be given between the Parties hereunder shall be made in writing and delivered to the other Party by an authorized courier service, in person (with written confirmation of receipt) or by registered mail sent using a postal service provider; such notification shall be deemed to have been delivered on the third business day after dispatch, unless it was sent to a foreign address, whereby it shall be deemed delivered on the fifteenth business day after dispatch. In the event of a warranty claim, a written notice may also be sent via e-mail.

17. GOVERNING LAW

17.1. This Contract and all legal relations arising from it are governed by the laws of the Czech Republic without giving effect to the principles of conflict of laws thereof. The application of the UN Convention on contract for the international sales of goods (CISG) shall be expressly excluded.

17.2. All disputes arising from this Contract or from legal relations related to it shall be resolved by the Parties through negotiations. If it is not possible to settle a dispute by negotiation within 60 days, all disputes arising out of or in connection with the present contract shall be finally settled under the Rules of Arbitration of the International Chamber of Commerce by one arbitrator appointed

in accordance with the said Rules. Place of arbitration shall be Prague, Czech Republic. The language of arbitration shall be Czech.

18. INTELLECTUAL PROPERTY RIGHTS

- 18.1. This Article applies only if the supplied goods include software necessary for the proper use of the goods, or if the Purchaser required delivery of software within the specification of the subject matter of performance.
- 18.2. The Parties declare they have agreed that the Seller's fee for the provision of a software license is already included in the price of the goods.
- 18.3. The Seller declares that licenses granted to the Purchaser shall not infringe intellectual property rights of third parties and that it is entitled to transfer the license to the Purchaser. If the Seller fails to comply with this provision, it shall pay all claims of third parties due to infringement of intellectual property rights of third parties and compensation for damage incurred by the Purchaser.
- 18.4. By virtue of this Contract, the Seller grants the Purchaser a user license for a software part of the subject-matter of performance, listed in Annex No. 1 hereto as a non-exclusive, non-transferable and perpetual right to use this part of the subject-matter of performance.
- 18.5. The Seller declares that it is the copyright holder of the SW and has not previously granted an exclusive license to SW to a third party (unless such licensee has given written approval of this Contract), or it at least has a right to the SW permitting it to provide a license to the Purchaser in the scope under this Contract.

19. FINAL PROVISIONS

- 19.1. This Contract, including the Annexes, constitutes a complete and comprehensive agreement between the Purchaser and the Seller.
- 19.2. The Parties have agreed that the Seller is not entitled to set off its receivable, nor a receivable of its garnishee, from the Purchaser against the Purchaser's receivable from the Seller.
- 19.3. The Seller is not entitled to assign a receivable arising from this Contract or in connection with it to a third party. The Seller is not entitled to assign the rights and obligations under this Contract or any part thereof to a third party.
- 19.4. The Seller undertakes to maintain liability insurance for damage caused in connection with the performance of business activities for the entire term of this Contract, with a limit of indemnity at least in the amount of the purchase price for the subject matter of this Contract.
- 19.5. If any provision of this Contract later becomes or is found invalid, ineffective, apparent or unenforceable, such a defective provision shall not render the Contract invalid, ineffective, apparent or unenforceable as a whole. In such a case, the Parties undertake to further clarify such defective provision without undue delay or to replace it upon mutual agreement with a new provision which, in the scope permitted by legal regulations, corresponds to the largest possible degree to the intent of the Parties manifested from the moment this Contract was concluded.
- 19.6. The Purchaser is the obliged entity pursuant to Act No. 340/2015 Coll., on special conditions for the effectiveness of certain contracts, on the publication of these contracts and on the register of contracts, as amended (hereinafter the "Act on the Register of Contracts"). The Seller

acknowledges and expressly agrees to the publishing of the Contract in accordance with the Act on the Register of Contracts. The Parties agree that the Contract shall be published in the register of contracts in accordance with the Act on the Register of Contracts by the Purchaser.

- 19.7. This Contract shall enter into force on the day of its signing by the authorized persons of both Parties and shall take effect on the day of publishing of the Contract in the register of contracts pursuant to the Act on the Register of Contracts.
- 19.8. This Contract may be amended or supplemented only in the form of written numbered amendments, including a specification of time and place of signature, signed by authorized representatives of the Parties.
- 19.9. If a Party breaches an obligation under this Contract or if it is able to detect or should be aware of such a breach, it shall notify the other Party which may incur damage without undue delay, and warn it of the possible consequences; in such a case, the injured Party shall not be entitled to compensation for damage which was avoidable in light of the notification.
- 19.10. Under the conditions stipulated by this Contract, the Seller undertakes, as a person obliged pursuant to the provisions of Section 2 e) of Act No. 320/2001 Coll., on financial control in public administration, as amended, to cooperate during financial control. The Seller shall ensure its eventual subcontractors fulfill this obligation as well.
- 19.11. In the event that the provisions of the Agreement and its Annexes are different, the provisions of this Agreement will apply.
- 19.12. This Contract is drafted in English. The following Annexes are an integral part hereof:

Annex No. 1: Technical Specification of Performance According to Award Criteria and Seller's Tender

In witness of their approval of the content of the Contract, the Parties attach their signatures below.

In Prague dated

In Wittelsheim dated

For **UCT Prague**

For: **Adscientis SARL**

Name: xxxxx

Position: rector

Name: **xxxxx**

Position: **CEO**

Annex No. 1: *Shall be added upon signature of the Contract*

Technical Specification for an Automated Inverse Gas Chromatography (IGC) Device with two Channels

NeuronIC IGC Solution – the most advanced and versatile Instrument

Authors: xxxxx
xxxxx

Date: 24nd March 2022

To: xxxxx, rektor
University of Chemistry and Technology Prague
Technická 1905/5
166 28 Praha 6
CZECH REPUBLIC

Specifications nr: Your tender no 489877.

Our reference: 848-2C@22

File: Tender-489877-TechnicalSpecifications-Adscientis-2022-0324.pdf



Table of contents

Automated IGC system.....	2
Position 1: Gas Chromatograph Instrument Thermo Scientific Trace 1610.....	3
Position 2: PAL RSI Robot.....	3
Position 3: Mass Flow Meters (MFM).....	4
Position 4: Model RH-200 RH Generator	4
Position 5: Computer (Plug & Play).....	4
Position 6: NUCLEUS	5
Position 7: SOLID	5
Position 8: INPULSE	5
Position 9: Starting kit, consumables and small equipment	5
Position 10: Flat surface device.....	6
Position 11: Sample Analysis, Training and Support.....	6
Position 12: Delivery, Installation and a one (1) Year Maintenance	7
Fulfillment of Minimal Technical requirements.....	7
Compact assembly with at least one TCD.....	7
Control by a PC.....	7
Evaluation software	7
Automatic repetitions	7
Two measurements simultaneously	8
Temperature range 30 – 350°C.....	8
Adsorption isotherms of water, alkanes and others.....	8
Relative humidity control.....	9
Powders, fibers and flat samples	9
Ready-to-use	9
Costs.....	10
Our offer to fulfil your requirements.....	10
Purchase contract.....	10

Automated IGC system

This Technical Specification document describes an Automated Inverse Gas Chromatography (IGC) Device with two Channels consisting of several positions as described in detail below. The document is part of the Purchase Contract for the tender No. 489877.

Position 1: Gas Chromatograph Instrument Thermo Scientific Trace 1610

The model TRACE 1610 is the newest model from Thermo Scientific. It replaces the older generation TRACE 1310. It has a built-in display for setup operations and independent control. The GC has two (2) independent working analytical channels (2 x Injectors and two (2) FID detector modules). One easily exchangeable Thermal Conductivity Detector (TCD) is included to allow experiments with non-carbon containing probes, as water, with one channel. The two independent channels ensure a very efficient determination of sample properties per time – unsurpassed by any other IGC instrument.

Thermo Scientific Trace 1610 consists of:

- TRACE 1610 Mainframe 230V 1x
- Instant Connect Split/Splitless SSL Injector Module 2x
- Instant Connect Flame Ionization Detector (FID) Module 2x
- Instant Connect Thermal Conductivity Detector (TCD) Module 1x
- Kit adapters for connection 1/8" or 1/16" packed columns 2x

The complete characteristics of this instrument can be found on the respective websites (<https://www.thermofisher.com/order/catalog/product/MI-148000-0003>).

Altogether, this setup is highly modular and most versatile, and detectors can be exchanged within minutes. The FIDs will be mostly used, but the TCD is a very useful option. Our preferred application for the TCD is the determination of water adsorption isotherms. However, compared to the FID, the TCD detector is less sensitive and less stable (MDL: <400 pg tridecane/mL with Helium carrier or <20 pg tridecane/s with a total flow through the cell of 3 mL/min; Linear dynamic range: 10⁵). The advantage of the TCD is clearly the ability to detect molecular probes like water, CO₂, NH₃, H₂S that the FID is not able to, making it complementary to the FID.

Position 2: PAL RSI Robot

The Robot PAL RSI Autosampler is required to make your NeuronIC solution automatic. The PAL RSI is able to perform all the injections for analytical gas chromatography purposes. Hence, this autosampler can be used for both kinds of analysis (IGC-ID and IGC-FC). PAL RSI System comes with the following characteristics:

- PAL3-RSI-LG-S-9-2, PAL RSI 850 system with: 1x
 - 1 pc PALbase 534 X/Y unit with PAL Control Board SII
 - 1 pc PAL RSI z-head with Smart Reader
 - 1 pc PAL terminal
 - 1 pc Safety guard
 - 1 pc PALpower and cables
 - 1 pc Gas Purge Line for Headspace Technique built-in
- PAL3-WashStd: Standard Wash Module 1x
- PAL3-Trayholder for sample racks VT15 1x
- PAL3-Kit-VT15: Sample Rack for 15 vials of 10/20mL 3x
- PAL3-TH-D757: Universal Liquid Syringe Tool(1) 1x
- SF25-57-T-26S-CO: 25µL Smart Syringe(2) 1x

- (1) For syringes of 1.2µL, 5µL, 10µL, 25µL, 50µL or 100µL, with a needle length of 57mm, Syringes not included¹
- (2) Syringe with fixed needle for Tool D7/57 Needle length 57mm, PTFE plunger, gauge 26S, scale length 60mm Point Style conical

The PAL RSI is modular and can be upgraded thanks to numerous tools and modules. More information can be found at the respective websites (<https://www.palsystem.com/index.php?id=132&L=454>).

Position 3: Mass Flow Meters (MFM)

The GC TRACE 1610 comes with a build in flow control originally designed for capillary tubes. Flow can be adjusted, but an initial check with a flowmeter at the end of the column is required. The optional Mass Flow Meters can be fitted in front of GC and easily connected to the provided PC.

The Brooks Instrument's SLA5800 Series are elastomer sealed digital thermal mass flow measurement instruments offering unparalleled performance in advanced gas handling systems. The MFM are supportive for an independent control of the helium gas flow passing through the column (Flow range: 0 - 50 SCCM, Temperature: ambient, Fluid: helium). Two MFM are proposed, one for each GC's analytical channel. They are delivered with their power supply and are driven by NUCLEUS (position 5). More information about the MFCs is available at the website (<https://www.brooksinstrument.com/en/products/mass-flow-controllers/thermal-elastomer-sealed/sla5800-series>).

Position 4: Model RH-200 RH Generator

The Model RH-200 RH Generator provides a precise air, nitrogen or helium stream of desired relative humidity and is designed to easily integrate with a variety of target systems and laboratory instruments (such as XRD, TGA, TMA, DMA, calorimeters and micro-calorimeters) and also with glove boxes and environmental chambers. This fully automated, compact, bench-top instrument allows for convenient set-up and operation.

Relative Humidity Range: 0% to 98% RH, with control to ± 1.0%RH. Temperature Range: Ambient to 50°C for temperature desired at target instrument.

Flow Range: Standard flow rates up to 500 sccm with optional ranges up to 10 liters/min.

Standard RH-200 consists of the following:

- Two precision mass flow controllers to regulate the flow of dry gas and saturated gas.
- Dual-stage chilled-mirror Dew Point Analyzer provides stable, accurate measurement.
- Thermostated enclosure, with constant temperature control from ambient to 50°C.
- Lab Windows software from National Instruments with on-line graphics
- Software allows for user defined protocols with step variants in both temperature and RH.
- All connections are 1/4" (6 mm) Swagelok fittings.

Position 5: Computer (Plug & Play)

Plug and Play computer with screen and two (2) RJ45 jacks. The computer will be delivered with all the purchased IGC software installed and tested.

¹ Four syringes (1.2, 5 10 and 25µL) are included in the starting kit (Position 10)

Position 6: NUCLEUS

The heart of our IGC solution is Nucleus. This software manages the data acquisition and the data bases concerning the samples, the columns, the chromatograms, and the complete history of the analyses. In its automatic version, Nucleus also drives the PAL RSI Autosampler and can be connected to the optional Mass Flow Meters (Pos.Opt2).

A suitable computer equipped with two RJ45 jacks (position 3), is associated to the proper functioning of Nucleus.

The NUCLEUS upgrades are free of charge for the first five years starting after the order entry.

Position 7: SOLID

The software SOLID is dedicated to the treatment of the chromatograms measured at Infinite Dilution conditions. It is directly connected to the data bases managed by Nucleus and has been developed in order to determine:

- Disperse surface energy (γ_s^d)
- Nanoroughness, morphology index (IMs)
- Acid-base character of solids' surface (Σ ISP, Ka, Kb)
- ΔG_a of all injected probes

The obtained results and chromatograms can be easily exported. SOLID is also able to generate reports, compare chromatograms and to compile several reports in order to generate tables containing the results of the above cited parameters. SOLID is also able to generate files that can be directly read and processed by the HSPiP software for the determination of Hansen Solubility Parameters (HSP).

The SOLID upgrades are free of charge for the first five years starting after acceptance of commissioning.

Position 8: INPULSE

The InPulse software is for the treatment of chromatograms obtained at Finite Concentration conditions. The determined physicochemical parameters are:

- Probe desorption isotherms
- The specific surface area (BET method)
- The surface heterogeneity description by means of an Adsorption Energy Distribution Function
- Irreversibly adsorbed probe amounts can be determined too

The INPULSE upgrades are free of charge for the first five years starting after the order entry.

Position 9: Starting kit, consumables and small equipment

The following small parts, tools and consumables are part of the starting kit for the column preparation, the column filling and for the measurements (molecular probes, manometer, flowmeters...). The list below contains all the required parts and is part of the offering.

List of consumables and small equipment:

- | | |
|------------------------------|----|
| • Flowmeter | x1 |
| • Manometer | x1 |
| • Snoop liquid peak detector | x1 |
| • Engraver-vibrator | x1 |

- Silanized glass wool 20 g
- Pipe cutter (Inox, Ø : 35 mm – 1.3/8") x1
- Round file x1
- Curved pliers (steel or inox) x1
- Glass funnel x1
- Smart Syringe 1.2 µL (PAL) x1
- Smart Syringe 5 µL (PAL) x1
- Smart Syringe 10 µL (PAL) x1
- Smart Syringe 25 µL (PAL) x1
- Tubing (Inox, Ø ¼ : Ø 6,35 x 0,89 mm, Ø 1/8 : Ø 3,17 x 0,51 mm, Ø 1/16 : Ø1,59 x 0,36)
- Open-end wrench (9/16, 1/2, 7/16, 3/8, 1/4, 5/16)
- Union reducer / Union 1/16-1/4 / Union 1/16-1/8 / Union 1/8-1/8
- Brass nut ¼ / Brass nut 1/8
- Ferrule ¼ / Ferrule 1/8
- Methane gas cylinder (Methane CANGas, 99,995%) x1
- Methane pressure regulator x1
- Vials with screwed cap for the PAL Tray holders and Racks
- Molecular probes if needed

Position 10: Flat surface device

The flat device is dedicated to the surface characterization of films, sheets or flat plates having 10 cm x 10 cm size. Up to two of these devices can be mounted in the oven of the Trace 1310 GC. The connection to the GC is easy.

Please, note that any flat surface device with specific dimensions may be developed on your request.

The offer contains one flat surface device.

Position 11: Sample Analysis, Training and Support

The training and support sessions are designed to give you the required skills to run your own IGC experiments. Briefly, it consists of the following topics:

- Analysis of a standard reference samples
- Preparation and filling of the column
- Taking control of the software program
- Full realization of IGC measurements
- Treatment of the chromatographic data
- Reproduction of your sample analysis
- Interpretation of the results

After installation of the equipment at customer's site, a first 2 day-training will enable assigned staff to the correct and efficient use of the installed IGC instrument. This training is performed on one or two standard samples as silica or lactose with existing measurements protocols.

We also ensure for a duration of 3 months after the end of the training, a technical support for the use of the technique or for the interpretation of the results.

After these 3 months (or earlier if needed) we propose a second 2 day-training session either in order to refine the first two days training or to complete it. Discussion about your results is also included.

For practical reasons, equivalent trainings via online meetings including instrument control via Teamviewer might be provided.

Position 12: Delivery, Installation and a one (1) Year Maintenance

Hardware installation and a one year maintenance on the GC (Pos. 1) and the PAL Robot (Pos. 2) is included in the overall offer.

Fulfillment of Minimal Technical requirements

Compact assembly with at least one TCD

The offered instrument consists of a high-quality gas chromatograph, TRACE 1610, of one of the leading suppliers and a proven, most-versatile lab automate, PAL RSI, mounted on top of the GC as designed by the manufacturers. Detectors can be easily exchanged by design. The offer consists of two FID detectors for regular use and one TCD detector for special use as operation with water or non-carbon containing compounds. Two high-quality, dedicated mass flow meters ensure, that the carrier gas flow is monitored independently and the information processed by the connected PC.

Control by a PC

Established communication protocols ensure, that the proprietary IGC software can control the lab automate and the GC in a bidirectional way. The delivered PC is connected via RJ45 jacks to the GC and the PAL lab automate.

Evaluation software

Two software modules provide different ways of data interpretation.

The infinite dilution experiments (IGC-ID) are interpreted by the SOLID module providing disperse surface energy, nanoroughness, acid-base components and the free energy of adsorption values, ΔG_a , of all injected probes.

The finite concentration experiments (IGC-FC) are interpreted by the INPULSE module providing isotherms, specific surface area and the adsorption energy distribution function.

The two different modules are required, since the operation and the containing information is very different. The evaluation software can be run at the same time as the computer controls running experiments.

Automatic repetitions

The operating software NUCLEUS is designed to perform different ways of automatic repetitions.

First, several injections of the same molecular probe can be easily setup. In our recommended standard procedure for IGC-ID usually three injections of every molecular probe are performed. The software has flags integrated, if deviations are significantly high and special care should be taken.

Second, the complete measurement routines are stored and can be repeated easily upon desire. This is useful to repeat a run or to measure several different samples under exactly the same conditions.

In addition, the software has advanced features as automatic peak detection to optimize the measurement time. This option can be switched on or off. Other excellent features are the visual examination of the automatic peak integration settings and the possibility of manual corrections, e.g. in case of highly asymmetric peaks of some molecular probes.

Two measurements simultaneously

The offered configuration contains two injection ports and two detectors, which are operating simultaneously. In addition, the GC oven is spacious enough to hold two columns, too.

The lab automate can inject only into one column at a time, but the required time for one injection including syringe purge and filling is very small (5-15 sec) and injections can be performed consecutively. This means, two measurements are running simultaneously, but slightly time-delayed.

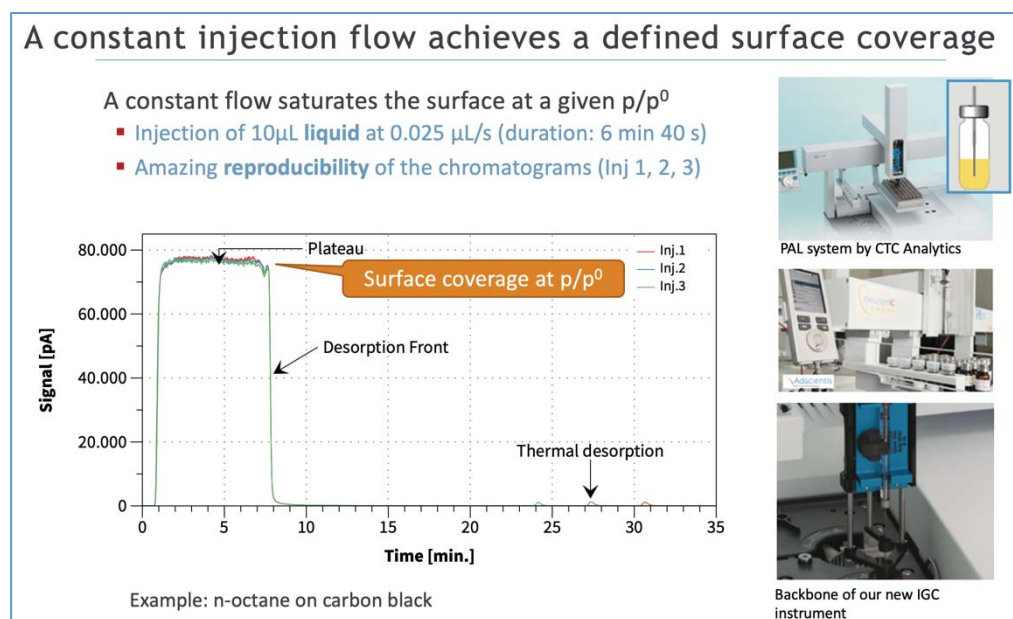
The computer system and the software is designed to operate two simultaneous measurements.

Temperature range 30 – 350°C

The operational temperature range is defined by the specifications of the GC. The TRACE 1610 has an operational temperature range of ambient +3°C to 450°C. All column materials and fittings are made of stainless steel (Swagelok or alike) and can tolerate temperatures up to 350°C.

Adsorption isotherms of water, alkanes and others

The offered setup uses principle of finite concentration conditions (IGC-FC) as described on the Adscientis webpage (<https://www.adscientis.com/igc-at-finite-concentration-igc-fc.html>). The unique feature hereby is, that the PAL RSI lab automate allows a very small, but continuous liquid injection of any molecular probe, see figure. The desorption front is analysed by the INPULSE software to provide not only the isotherm, but also the specific surface area (S-BET) and the Adsorption Energy Distribution Function (AEDF) with information about the surface heterogeneity.



The potential use of two different detectors (FID and TCD) allows the use of water, alkanes or other molecular probes for the determination of the isotherms.

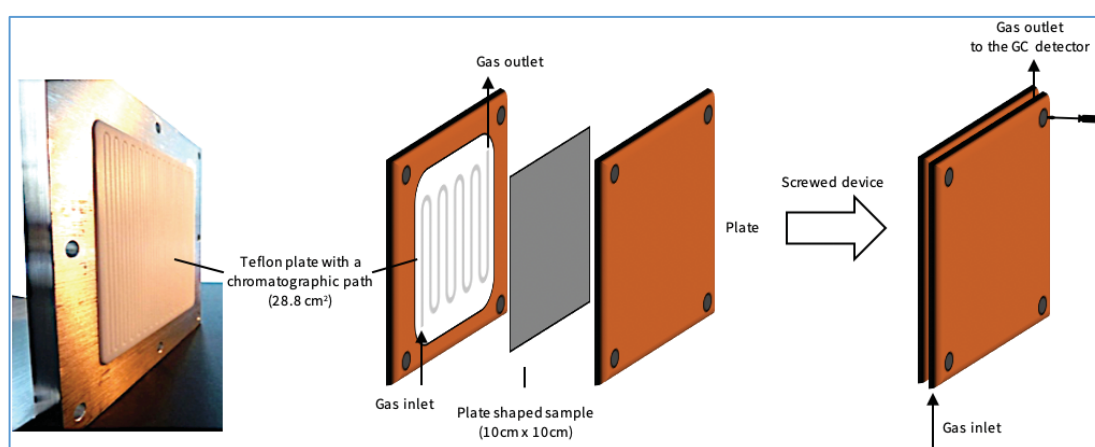
Relative humidity control

The dedicated relative humidity generator, Model RH-200, provides a relative humidity of water vapor of the carrier gas as desired for any IGC experiment.

Powders, fibers and flat samples

In case of powders and fibers stainless steel columns are recommended. The length and the diameter can be easily adapted to minimize the dead volume and provide a good chromatographical behaviour with symmetric peaks and a high reproducibility.

However, in some cases the surface properties of flat surfaces as plates or polymer films need to be studied. Adscientis has developed a flat surface device with a chromatograph path adjacent to the studied surface. The exposed area is 28.8 cm². The retention times are short, but long enough to perform all standard IGC analysis.



Ready-to-use

The complete IGC instrument will be installed and ready to be used. Qualification experiments with standard material will be part of the installation and the training sessions.

Costs

Our offer to fulfil your requirements

The costs of a complete, automatic and fully flexible IGC system with two FID analytical channels (columns) is the following. The complete installation of the instrument plus a qualification of the system with one of your samples, training and support is included in the offer.

Position	Description	Units
Pos.1	Trace 1610 & modules (2 SSL injectors; 2 FID; 1 TCD)	1
Pos.2	PAL RSI Robot	1
Pos.3	Mass Flow Meters (MFM)	2
Pos.4	Model RH-200 RH Generator	1
Pos.5	Computer Plug and Play	1
Pos.6	NUCLEUS Operating System and Database	1
Pos.7	SOLID IGC-ID Analysis Software	1
Pos.8	IMPULSE IGC-FC Analysis Software	1
Pos.9	Starting kit, consumables and small equipment	1
Pos.10	Flat surface device	1
Pos.11	Your Sample Analysis, Training and Support (days)	4
Pos. 12	Delivery and Installation, one (1) Year Maintenance	1
Total Cost without VAT		122'760.00 €

We are very confident, that this automated IGC version is the most versatile and advanced IGC setup suitable for all experimental challenges in surface and material characterization suitable for dynamic gas adsorption.

Purchase contract

This Technical Specifications document is part of the Purchase Contract signed as part of this tender.