sercon
innovators in isotopes

Proforma Invoice

Invoice to:

Northumbria Universirty
PO BPX 263
Rotherham
S98 1TL

VAT Reg No: GB

Invoice No.	15102a
Invoice/Tax Date	19/04/2021
Due Date	19/05/2021
Account No.	NOR005

Customer Order No: 7100068509

Instrument No. IN1256

Quantity	Product Code	Product Description	Net Amount £	VAT Rate %	VAT Amount £
		Gas Flush and sampling system			
1	10202/10	XYZ Gas Sampling Control Box			
1	11801	Sercon XYZ Gas Autosampler			
1	INST	Installation and start up training at Customer's site			
		Total amount of order: 10,885.00 50% payable with order: 40% payable on delivery: 4,354.00 10% payable on installation: 1,088.50	5,442.50	20.00	1,088.50

Delivery address:
Sebastian Breitenbach
Northumbria University
Engineering and Envirovnment
C006 Ellison Building
Newcastle Upon Tyne
Tyne and Wear, NE1 8ST, 4691

This invoice is issued in: Pound Sterling

Total Net Amount	£	5,442.50
Total VAT Amount	£	1,088.50
Invoice Total	£	6,531.00

Payment Details:-
Payment is required within 30 DAYS of invoice date by bank transfer.
All bank transfer charges are the responsibility of the customer.

Sercon Bank Details:-
National Westminster Bank, 36 High Street,
Nantwich, Cheshire CW5 5GA U.K.

IBAN: GB74NWBK54101736755133
SWIFT/BIC: NWBKGB2LXXX

sercon

Sercon Limited
Unit 3B Crewe Trade Park
Gateway, Crewe
CW1 6JT U.K.
Company Registration No.: 4290072

Phone: +44 (0) 1270 580008
Fax: +44 (0) 1270 252310
Email: accounts@sercongroup.com
www.sercongroup.com
VAT No.: GB 771 1100 74

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Sercon Ltd, Unit 3B Crewe Trade Park, Gateway
Crewe, Cheshire CW1 6YY, UK
Tel: +44 (0)1270 580008 Fax: +44 (0)1270 252310
Company Registration No. 4290072 Vat No. 771 1100 74

4 - LOG SHEET

Client:	Northumbria University		
Quotation Number:	15102	Date:	24/02/2021
Job Number:	IN1256	Date:	12/04/2021

Date	Action Taken	By Whom
17Jun21	Flush box setup on test bench filled with Test Rig 1 MS.	DJH
18Jun21	Comms with board established edited software to match setup No comms to valves.	DJH
21Jun21	Set up Cetac + needle. Comms ok to Cetac.	
23Jun21	Established comms to valves (Software set up error). All respond ok. Crimped flows to 60ml/min for both He + CO_2/HD gas lines. Setup Cetac coordinates	DJH
24Jun21	Attachment fitted to needle guide so 6ml vials can be flushed. Set up 6ml methods. Removed software parts not needed. Methods will not run with out System Controller active + MS locked in nodes.	DJH
25Jun21	Prepped samples for use on active MS system at customer site in Canada.	DJH
05Jul21	Flushed tubes produced good results. Flushing system mechanically - All ok.	DJH
06Jul21	.exe file updated by WM System can now run without Sys Con attached. System ready to ship. Software backed up by WM.	DJH

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Company Registration No. 4290072 Vat No. 771 1100 74

5 - FAULT REPORTING

Client:	Northumbria University		
Quotation Number:	15102	Date:	24/02/2021
Job Number:	IN1256	Date:	12/04/2021

Fault(s)	Action Taken	By Whom	Total Time Taken to Resolve
21Jun21	Software error. WM fixed. See logsheet.	DJH/WM	2 hr.

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Company Registration No. 4290072 Vat No. 771 1100 74

6 - TEST / ACCEPTANCE SPECIFICATION

Customer:	Northumbria University		
Quotation Number:	15102	Date:	24/02/2021
Job Number:	IN1256	Date:	12/04/2021

Special tests
System developed for flush of tubes/vials only.
Flushed tubes proven to be good by testing at Sick Kids, Toronto Canada. 5% CO_2 flush gave (5A) $^{13}C = 0.0227‰$ s.d PDB also 0.5% - 8% CO_2 linearity gave (6A) $^{13}C = 0.0323‰$ s.d PDB

Sales Signature: O'Connor	Date: 7/ June/2021
Test Signature:	Date: 07 Jun 2021

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Crewe, Cheshire CW1 6JT, UK
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Company Registration No. 4290072 Vat No. 771 1100 74

7: ASSEMBLY AND TEST RECORD

Client:	Northumbria University		
Quotation Number:	15102	Date:	24/02/2021
Job Number:	IN1256	Date:	12/04/2021

PRODUCT: GAS FLUSH AND SAMPLING SYSTEM.

SERIAL NUMBER: 10202/10-2021/1256

ASSEMBLED: (Name) [signature] Date: 16.06.21

PRE-TEST INSPECTION: (Production name) P. Hayes Date: 16/06/21

PRE-TEST INSPECTION: (Test name) S. Mas Date: 16/06/21

SYSTEM TEST: (Name) S. Mas Date: 8/7/21

PRE-DESPATCH INSPECTION: (Name) P. Hayes. Date: 8/7/21

P.A.T. Test results

In compliance with Low Voltage directive 73/23/EEC
To Low Voltage standard EN61010 – 1:1993

Earth Continuity 0.079. Ω

Insulation >300 MΩ

Earth Leakage Current 0.75 mA. @ 0.05 kVA.

Tested by: P. Hayes

Date: 16/6/21

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Company Registration No. 4290072 Vat No. 771 1100 74

8 - Serial Numbers Record Document

Client:	Northumbria University		
Quotation Number:	15102	Date:	24/02/2021
Job Number:	IN1256	Date:	12/04/2021

Units	S/N
MS/ABCA	
Integra 2	
Prep Unit 1	
Prep Unit 2/Misc	
Electronics Upgrade	
CETAC	052115A7400HR
Gas Box	10202/10-2021/1256
Autosampler	
BCR	
Dual Heater Block	

Pump Kit and Optics	S/N
Turbo pump S	
Turbo pump A	
Rotary Pump	
Voltage	110 / 240
Gauge S	
Gauge A	
Source	
Collector 1	
Collector 2	
Magnet	

Parts	S/N
Fan PSU	
24V PSU	

PCBs	S/N
Electronics Box	
Prep PCB	20200009.
VFC PCB	
Watchdog PCB	
Head Amp PCB 1	
Head Amp PCB 2	
Electromagnet RP	

Furnaces	S/N
Combustion	
Reduction	
HT-EA	
GC Oven	
Furnace 1	
Furnace 2	

PC	S/N
PC	
Monitor	
Printer	

Key

Pumps:	E: Edwards P: Pfeiffer
Furnaces:	V/S: Vecstar E; Elite
Magnet:	E: Electromagnet S: Standard
Turbos & Gauges:	S: Source A: Analyser
Collectors:	Std: Standard S: Sulphur HD: Hydrogen Deuterium

Additional System Info:

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Quotation Number:	15102	Date:	24/02/2021
Job Number:	IN1256	Date:	12/04/2021

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- ☑ 2 CUSTOMER ORDER
- ☑ 3 MACHINE SPECIFICATION DOCUMENT_S027_v11
- ☑ 4 LOG SHEET_S028_v3
- ☑ 5 FAULT REPORTING DOCUMENT_S029_v3
- ☑ 6 TEST ACCEPTANCE SPECIFICATION_S030_v9
- ☑ 7 ASSEMBLY AND TEST RECORD_S023_v5
- ☑ 8 SERIAL NUMBER FORM_S053_v4
- ☐ 9 TEST DATA N/A
- ☑ 10 PACKING LIST_S035b_v6
- ☑ 11 INSTALLATION REPORT_S057_v6
- ☑ 12 INSTALLATION ACCEPTANCE AND WARRANTY CERTIFICATE_S071_v3

ADDITIONAL:

Payment Terms:
50% / 40% / 10%
Other: please specify

Penalty Clause **Yes / No**
Please specify: _____

Blue Book Completion:

Signed	S. [signature]	Date	7 July 21
Verified	[signature]	Date	22/9/21

15102
IN1256

Order Acknowledgement

Order Date	19/04/2021
Order Ref.	15102
Cust. Ref.	7100068509
Account Ref.	NOR005

Invoice address
Northumbria Universirty
PO BPX 263
Rotherham
S98 1TL

VAT No.

Delivery address
Northumbria University
Engineering and Envirovnment
C006 Ellison Building
Newcastle Upon Tyne
Tyne and Wear, NE1 8ST
4691

Contact: Sebastian Breitenbach
Tel:

Quantity Ordered	Product Code	Product Description	Unit Price £	Net Price £
		Gas Flush and sampling system		
1	10202/10	XYZ Gas Sampling Control Box Gas flow control and purification module	1,835.00	1,835.00
1	11801	Sercon XYZ Gas Autosampler XYZ autosampler with sample tray for up to 240 6 ml or 12 ml vials which can be analysed in a single, unattended run. Alternative trays can be provided for larger vials	8,200.00	8,200.00
1	INST	Installation and start up training at Customer's site	850.00	850.00

Total Net Amount	£	10,885.00
Total VAT Amount	£	2177.00
Order Total	£	13,062.00

Sercon Limited
Unit 3B Crewe Trade Park
Gateway, Crewe
CW1 6JT U.K.
Company Registration No.: 4290072

Phone: +44 (0) 1270 580008
Fax: +44 (0) 1270 252310
sales@sercongroup.com
www.sercongroup.com
VAT No.: GB 771 1100 74

Note: This PO has additional file attachments. To view them online, please click here.

Northumbria University
PURCHASE ORDER

SERCON LIMITED
UNIT 3B, CREWE TRADE PARK
GATEWAY, CREWE, CHESHIRE, CW1 6JT
accounts@sercongroup.com

PO NUMBER	**7100068509**
DATE	**12/04/2021**
PAYMENT TERMS	**V001**
SHIPPING TERMS	
CURRENCY	**GBP**
CONTRACT	**Q20/0038**
CONTACT	**Janice McLeod**

janice.mcleod@northumbria.ac.uk

Deliver To
Northumbria University
Engineering and Environment
C006 Ellison Building
Newcastle Upon Tyne, Tyne and Wear NE1 8ST
4691
Attn: Sebastian Breitenbach

Invoice To
Northumbria University
PO BOX 263
Rotherham, S98 1TL
Attn:
northumbria.invoices@parseq.com

Line	Description	Qty	Unit	Price	Total
1	XYZ Gas Sampling Control Box Gas flow control and purification module Part Number: 10202/10 Need By:	1	each	1,835.00	1,835.00
2	Sercon XYZ Gas Autosampler Part Number: 11801 Need By:	1	each	8,200.00	8,200.00
3	Installation and start up training at Customer's site Part Number: INST Need By:	1	each	850.00	850.00
		3 Units			**10,885.00** GBP

General Terms and Conditions of Purchase

1. Interpretation

1.1 In these Terms and Conditions, the following definitions apply:

Commencement Date: means the earlier of (a) the Supplier issuing written acceptance of the Purchase Order or (b) any act by the Supplier consistent with fulfilling the Purchase Order.

Contract: the contract between Northumbria and the Supplier for the supply of Goods and/or Services in accordance with these Terms and Conditions and Purchase Order documentation as set out in 2.1.

Deliverables: all documents, products and materials developed by the Supplier as part of or in relation to the Services in any form, including drafts, drawings, maps, plans, diagrams, designs, pictures, computer programs, data, specifications and reports.

Goods: the goods (or any part of them) set out in the Purchase Order.

Goods Specification: any specification for the Goods, including any related plans and drawings, that is agreed in writing by Northumbria and the Supplier.

Intellectual Property Rights: patents, rights to inventions, copyright and related rights, trade marks, business names and domain names, rights in designs, database rights, rights to use, and all other intellectual property rights, in each case whether registered or unregistered and including all applications and rights to apply for and be granted, renewals or extensions of, and rights to claim priority from, such rights and all similar or equivalent rights or forms of protection which subsist or will subsist now or in the future in any part of the world.

Materials: All tools, materials, drawings, specifications and other equipment and data owned by Northumbria and which are the exclusive property of Northumbria.

Order Amendment: Northumbria's authorised Order amendment or series of order amendments, each other amendment having precedence over any earlier order amendment.

Purchase Order: Northumbria's Purchase Order, with these Terms and Conditions attached, for the supply of Goods and/or Services, as set out in Northumbria's Purchase Order form.

Services: the services, including any Deliverables, to be provided by the Supplier under the Contract.

Supplier: the person or firm from whom Northumbria purchases the Goods and/or Services, as defined and detailed on the Purchase Order. This includes all employees, servants and agents associated with the person or firm.

2. Basis of contract

2.1 The Contract shall comprise (in order of precedence); any Order Amendments, the Purchase Order; these Terms and Conditions of Purchase and any other document or part thereof referred to in the Purchase Order

2.2 The Purchase Order constitutes an offer by Northumbria to purchase Goods and/or Services from the Supplier in accordance with these Terms and Conditions which apply to the supply of both Goods and Services except where the application to one or the other is specified.

2.3 These Terms and Conditions apply to the Contract to the exclusion of any other terms that the Supplier seeks to impose or incorporate, or which are implied by trade, custom, practice or course of dealing.

3. Supply of Goods

3.1 The Supplier will ensure that the Goods will:

(a) correspond with their description and any applicable Goods Specification;

(b) be of satisfactory quality (within the meaning of the Sale of Goods Act 1979), fit for purpose and be free from defects in design, materials and workmanship and remain so for 12 months after delivery; and

(c) comply with all applicable statutory and regulatory requirements.

3.2 The Supplier will ensure that at all times it has all licences and other consents required by law, that it needs to carry out its obligations under the Contract in respect of the Goods.

3.3 Northumbria has the right to inspect and test the Goods at any time before delivery. If following such inspection or testing Northumbria considers that the Goods do not conform or are unlikely to comply with the Purchase Order Northumbria will inform the Supplier and the Supplier will immediately take steps to remedy the problem. Northumbria will have the right to conduct further inspections and tests after the Supplier has carried out its remedial actions

4. Delivery of Goods

4.1 The Supplier will ensure that:

(a) the Goods are properly packed and secured at the Supplier's expense to arrive in good condition and at the time and place specified by Northumbria and not be delivered in instalments without Northumbria's prior written consent;

(b) each delivery of the Goods is accompanied by a delivery note which shows the date of the Purchase Order, the Purchase Order number (if any), the type and quantity of the Goods, special storage instructions (if any); and

(c) if the Supplier requires Northumbria to return any packaging material for the Goods to the Supplier, that fact is clearly stated on the delivery note. Any such packaging material will only be returned to the Supplier at the cost of the Supplier.

4.2 The Supplier will deliver the Goods to Northumbria's premises as instructed by Northumbria prior to delivery (Delivery Location) and delivery of the Goods will be completed on the completion of unloading the Goods at the Delivery Location. Title and risk in the Goods will pass to Northumbria on completion of delivery.

4.3 Any rejected Goods will be returnable at the Supplier's risk and expense.

5. Supply of Services

5.1 The Supplier will from the Commencement Date and for the duration of this Contract provide the Services to Northumbria in accordance with the terms of the Contract and meet any performance dates for Services specified in the Purchase Order.

5.2 In providing the Services, the Supplier will:

(a) co-operate with Northumbria and comply with all reasonable instructions of Northumbria;

(b) perform the Services with the best care, skill and diligence in accordance with best practice in the Supplier's industry, profession or trade;

(c) use personnel who are suitably skilled and experienced to perform tasks assigned to them, and in accordance with this Contract;

(d) ensure that the Services and Deliverables will conform with the Purchase Order or as notified by Northumbria, and that the Deliverables will be fit for any purpose expressly or impliedly made known to the Supplier by Northumbria;

(e) provide all equipment, tools and vehicles and other required items to provide the Services;

(f) use the best quality goods, materials, standards and techniques, and ensure that the Deliverables, and all goods and materials supplied and used in the Services or transferred to Northumbria, will be free from defects in workmanship, installation and design;

(g) obtain and at all times maintain all necessary licences and consents, and comply with all applicable laws and regulations;

(h) observe all health and safety rules and regulations, security requirements or relevant regulations that apply at any of Northumbria's premises;

(i) keep the Materials, supplied by Northumbria to the Supplier in safe custody at its own risk, maintain the Materials in good condition until returned to Northumbria, and not dispose or use the Materials other than in accordance with Northumbria's written instructions or authorisation; and

(j) not do or omit to do anything which may cause Northumbria to lose any licence, authority, consent or permission upon which it relies for the purposes of conducting its business, and the Supplier acknowledges that Northumbria may rely or act on the Services.

6. Customer Remedies

6.1 If the Supplier fails to deliver the Goods and/or perform the Services by the applicable date and/or have delivered Goods that do not comply with these Terms and Conditions or Northumbria has the right:

(a) to terminate the Contract with immediate effect by giving written notice to the Supplier;

(b) reject any supplied Goods (in whole or in part) and return them to the Supplier at the Supplier’s own risk and expense;

(c) to refuse to accept any subsequent performance of the Services and/or delivery of the Goods which the Supplier attempt to make;

(d) require the Supplier to repair or replace the rejected Goods, or to provide a full refund of the price of the rejected Goods

(e) to recover from the Supplier any costs incurred by Northumbria in obtaining substitute goods and/or services from a third party;

(f) cancel any Services that have not yet been provided by the Supplier and/or Goods which have not been delivered by the Supplier and to have such sums refunded by the Supplier; and

(g) to claim damages for any additional costs, loss or expenses incurred by Northumbria arising from the Supplier’s failure to supply the Goods and/or Services in accordance with these Terms and Conditions

6.2 These Terms and Conditions will extend to any substituted or remedial services and/or repaired or replacement goods supplied by the Supplier.

6.3 Northumbria's rights under this Contract are in addition to its rights and remedies implied by statute and common law.

7. Northumbria's obligations

Northumbria will provide the Supplier with reasonable access at reasonable times to Northumbria's premises for the purpose of providing the Services and provide such information as the Supplier may reasonably request for the provision of the Services and Northumbria considers reasonably necessary for the purpose of providing the Services.

8. Prices and Payment

8.1 The price for the Goods:

(a) will be the price set out in the Purchase Order, or if no price is quoted, the price set out in the Supplier's published price list in force at the Commencement Date. The price will be the Supplier's full and exclusive remuneration in respect of the performance of the Services. Unless otherwise agreed in writing by Northumbria, the charges will include every cost and expense directly or indirectly incurred by the Supplier in connection with the performance of the Services; and

(b) will be inclusive of the costs of packaging, insurance and carriage of the Goods, unless otherwise agreed in writing by Northumbria. No payment will be made for additional costs which are incurred without prior written authorisation from Northumbria.

8.2 In respect of Goods, the Supplier will invoice Northumbria upon delivery. In respect of Services, the Supplier will invoice Northumbria on completion.

8.3 In consideration of the supply of Goods and/or Services by the Supplier, Northumbria will pay the invoiced amounts within 30 days net monthly account of the receipt of a correctly rendered invoice. The Supplier's invoice must comply with the instructions stated on the Purchase Order and must quote the full Purchase Order number. We will not be held responsible for delays in payment caused by the Supplier's failure to comply with our invoicing instructions.

8.4 All amounts payable by Northumbria under the Contract are exclusive of VAT.

9. Intellectual Property rights

9.1 In respect of the Goods and any part of the Services, the Supplier warrants that they have full and unencumbered title to all items and that they have unrestricted rights to sell such items to Northumbria.

9.2 The Supplier hereby assigns to Northumbria, with full title guarantee and free from all third party rights, all Intellectual Property Rights in and resulting from the Services. Anything arising out of or deriving from this Contract, including inventions, designs, copyright and knowledge will be the property of Northumbria absolutely.

9.3 The Supplier will on request assist Northumbria in securing for Northumbria the full benefit of the Contract, including all right, title and interest in and to the Intellectual Property Rights assigned to Northumbria in accordance with clause 9.2.

9.4 The Supplier will ensure that all technical information (including but not limited to computer programmes, programming information, specifications, know-how or processes) arising out of or deriving from this Contract is held in strict confidence.

10. Indemnity

10.1 The Supplier will keep Northumbria indemnified against all liabilities, costs, expenses, damages and losses (including but not limited to any direct, indirect or consequential losses, loss of profit, loss of reputation and all interest, penalties and legal costs (calculated on a full indemnity basis) and all other professional costs and expenses) suffered incurred by Northumbria as a result of or in connection with:

(a) any claim made against Northumbria for actual or alleged infringement of a third party's intellectual property rights arising out of, or in connection with the Goods or Services, to the extent that the claim is attributable to the acts or omissions of the Supplier, its employees, agents or subcontractors;

(b) any claim made against Northumbria by a third party for death, personal injury or damage to property arising out of, or in connection with, defects in Goods, to the extent that such defects are attributable to the acts or omissions of the Supplier, its employees, agents or subcontractors; and

(c) any claim made against Northumbria by a third party arising out of or in connection with the supply of the Goods or the Services, to the extent that such claim arises out of the breach, negligent performance or failure or delay in performance of the Contract by the Supplier, its employees, agents or subcontractors.

11. Warranty

11.1 The Supplier will promptly make good at the Supplier's expense any defect in the Goods that Northumbria discovers under proper usage during the first 12 months of actual use or 18 months from the date of acceptance by Northumbria, whichever period will expire first. Such defects may arise from the Supplier's faulty design, the Supplier's erroneous instructions as to use or inadequate or faulty materials or poor workmanship or any other breach of the Supplier's obligations whether in this Contract or at law. Repairs or replacements will themselves be covered by this warranty for a period of 12 months from acceptance by Northumbria.

12. Insurance

During the term of the Contract Supplier will maintain in force the professional indemnity, product liability and public liability insurance policies, with a reputable provider to cover the liabilities that may arise in connection with the Contract, and will, on request, produce both the insurance certificate giving details of cover and the receipt for the current year's premium in respect of each insurance.

13. Confidentiality

13.1 A party (**receiving party**) will keep in strict confidence all technical or commercial know-how, specifications, inventions, processes or initiatives which are of a confidential nature and have been disclosed to the receiving party by the other party (**disclosing party**), its employees, agents or subcontractors, and any other confidential information concerning the disclosing party's business, its products and services which the receiving party may obtain. The receiving party will only disclose such confidential information to those of its employees, agents and subcontractors who need to know it for the purpose of discharging the receiving party's obligations under the Contract, and will ensure that such parties comply with the obligations set out in this clause as though they were a party to the Contract. The receiving party may also disclose such of the disclosing party's confidential information as is required to be disclosed by law.

14. Termination

14.1 Without limiting its other rights or remedies, Northumbria may terminate the Contract:

(a) in respect of the supply of Services, by giving the Supplier 30 days written notice; and

(b) in respect of the supply of Goods, in whole or in part at any time before delivery with immediate effect by giving written notice to the Supplier, whereupon the Supplier will discontinue all work on the Contract. Northumbria will pay the Supplier fair and reasonable compensation for any work in progress on the Goods at the time of termination, but such compensation will not include loss of anticipated profits or any consequential loss.

14.2 Notwithstanding clause 14.1 Northumbria may terminate the Contract with immediate effect and without any compensation or damages due to the Supplier, but without prejudice to any other rights or remedies Northumbria may have, if the Supplier should:

(a) commit a material breach of the terms of this Agreement which it fails to remedy within fourteen days after receipt of written notice from Northumbria specifying the breach and requesting remedy;

(b) persistently neglect, fail or refuse for whatever reason to perform the Services to Northumbria’s reasonable satisfaction;

(c) act in any way materially contrary to the interests of Northumbria whilst providing or purporting to provide the Services;

(d) have a petition presented for its winding-up, or pass a resolution for voluntary winding-up otherwise than for the purposes of a bona fide amalgamation or reconstruction, or compound with its creditors, or have a receiver or administrative receiver appointed of all or any part of its assets, or enter into any arrangements with creditors, or take or suffer any similar action in consequence of debts.

14.3 In the event of the termination of the Contract under clause 14.2 Northumbria will only be liable to the Supplier in respect of charges in accordance with the terms of the Contract for the Services provided up to the effective date of termination.

14.4 In the event of the termination of the Contract for any reason, where both Goods and Services are supplied, Northumbria may terminate the part of the Contract in respect of the Goods only, or in respect of the Services only, and the Contract will continue in respect of the remaining supply.

14.5 On the termination of the Contract (however arising), the Supplier will deliver up to Northumbria Materials which were provided by Northumbria to the Supplier, or which were prepared by or on behalf of the Supplier for Northumbria in the course of providing the Services. If the Supplier fails to do so, then Northumbria may enter the Supplier's premises and take possession of them. Until they have been returned or delivered, the Supplier will be solely responsible for their safe keeping and will not use them for any purpose not connected with this Contract.

14.6 Clauses 10 and 13 will survive termination of this Contract.

15. Force majeure

15.1 Neither party will be in breach of the Contract nor liable for delay in performing, or failure to perform, any of its obligations under it if such a delay or failure result from events, circumstances or causes beyond its reasonable control. The Supplier will use all reasonable endeavours to mitigate the effect of a force majeure event on the performance of its obligations. If a force majeure event prevents, hinders or delays the Supplier's performance of its obligations for a continuous period of more than 30 Business Days, Northumbria may terminate the Contract immediately by giving written notice to the Supplier.

16. Anti-Bribery, anti-slavery data protection and freedom of information

16.1 The Supplier will comply with all applicable laws, statutes, and regulations including but not limited to the Bribery Act 2010 and Modern Slavery Act 2015;

16.2 The Supplier will observe all obligations and comply with any notification requirements under the Data Protection Act (DPA), which arise in connection with the agreement and agrees that this clause will apply during the continuance of the agreement and indefinitely after its expiry or termination.

16.3 The Supplier acknowledges that Northumbria is subject to the requirements of the Freedom of Information Act and will assist and co-operate (at the Supplier's expense) to enable Northumbria to comply with these requirements.

17. General

17.1 **Assignment and other dealings.**

(a) Northumbria may at any time assign, transfer, mortgage, charge, subcontract or deal in any other manner with all or any of its rights or obligations under the Contract.

(b) The Supplier may not assign, transfer, mortgage, charge, subcontract, declare a trust over or deal in any other manner with all or any of its rights or obligations under the Contract without the prior written consent of Northumbria.

(c) In the event that Northumbria consent to the Supplier subcontracting some or all of the Supplier's obligations the Supplier will remain responsible for any and all word done and goods and services supplied by all subcontractors.

17.2 **Notices.** All notices and communications required to be sent by the Supplier or us in this Contract will be made in writing.

17.3 **Waiver.** A waiver of any right or remedy under the Contract or law is only effective if given in writing and will not be deemed a waiver of any subsequent breach or default. No failure or delay by a party to exercise any right or remedy provided under the Contract or by law will constitute a waiver of that or any other right or remedy, nor will it prevent or restrict the further exercise of that or any other right or remedy. No single or partial exercise of such right or remedy will prevent or restrict the further exercise of that or any other right or remedy.

17.4 **No partnership/agency.** Nothing in this Agreement shall or shall be deemed to create a partnership between the parties.

17.5 **Third parties.** A person who is not a party to the Contract will not have any rights to enforce its terms.

17.6 **Variation.** Except as set out in these Terms and Conditions, no variation of the Contract, will be effective unless it is agreed in writing and signed by Northumbria.

17.7 **Governing law and jurisdiction.** This Agreement shall be governed by and construed in accordance with English Law.

VAT Registration number GB 686 99 48 42

Northumbria University is the trading name of the University of Northumbria at Newcastle

sercon
innovators in isotopes

Packing List

Customer Reference: 7100068509

Shipper / Exporter:

Sercon Limited
Unit 3B Crewe Trade park
Gateway
Crewe
CW1 6JT
UK

Tel: +44 (0)1270 580008
Reference: IN1256

Consignee:

Northumbria University
Engineering and Environment
C006 Ellison Building
Newcastle Upon Tyne
Tyne and Wear
NE1 8ST
4691

Contact Name: Sebastian Breitenbach
Contact Tel Number: +

BOX: 1

Quantity	Product Code	Product Description	Serial Number: *if available*
☑ 1	10202/10	Gas Flush and Sampling System.	10202/10/2021/1256
☑ 1	11801	Sercon XYZ Gas Autosampler	052115A7400HR
☑ 1		Sampling box mains cable on top of unit.	
☑ 1	SI1765	Cetac Base	
☑ 1	SI1757	Needle (top of Cetac box)	
☑ 1	SiSI0967	Bottle Rack shelf set on frame	

Packed by: L. Hayes
Date: 8/7/21

Claims for damage or shortages must be made within 3 days

Sercon Limited
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Gateway, Crewe
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Company Registration No.: 4290072

Phone: +44 (0) 1270 580008
Fax: +44 (0) 1270 252310
sales@sercongroup.com
www.sercongroup.com
VAT No.: 771 1100 74

15102

Quotation

To: Northumbria Universirty
D116, Ellison Building
Ellison Place
Northumbria university
Newcastle-upon-Tyne
NE1 8ST

VAT Reg No: GB

Quotation Date: 24/02/2021
Quotation Reference: 15102
Customer Ref:
Account Ref. NOR005
Quotation Validity: 24/05/2021

Quantity	Product Code	Product Description	Unit Price £	Net Price £
		Gas Flush and sampling system		
1	10202/10	XYZ Gas Sampling Control Box Gas flow control and purification module	1,835.00	1,835.00
1	11801	Sercon XYZ Gas Autosampler XYZ autosampler with sample tray for up to 240 6 ml or 12 ml vials which can be analysed in a single, unattended run. Alternative trays can be provided for larger vials	8,200.00	8,200.00
1	INST	Installation and start up training at Customer's site	850.00	850.00

This quotation is issued in **Pound Sterling**

Total Net Amount	£	10,885.00
Total VAT Amount	£	2,177.00
Order Total	£	13,062.00

*** The price quoted does not include any local taxes or duties**
See separate document for terms and conditions

Delivery: within 90 days of receipt of order

Payment Details:-
50% with order, 40% on delivery and 10% on installation.
Payment is required within 30 DAYS of invoice date by bank transfer.
All bank transfer charges are the responsibility of the customer.

Sercon Bank Details:-
National Westminster Bank, 36 High Street,
Nantwich, Cheshire CW5 5GA U.K.

IBAN: GB74NWBK54101736755133
SWIFT/BIC: NWBKGB2LXXX

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VAT No.: 771 1100 74

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Company Registration No. 4290072 Vat No. 771 1100 74

3 - MACHINE SPECIFICATION

Client:	Northumbria University		
Quotation Number:	15102	Date:	24/02/2021
Job Number:	IN1256	Date:	12/04/2021

Ref No.	Product Description	Required
HS2022 (continuous flow)		
20402/1	HS2022 Ref Gas + P Mag	
20402/2	HS2022 Ref Gas + E-Mag	
20402/3	HS2022 Ref Gas + Hd Collector + E-Mag	
20402/4	HS2022 Ref Gas + Hd Collector+E-Mag+Trap Loop	
20501	Hd Collector Assy ***	
50101/2	Trapping Loop Assy	
70201-1	*70201-1 Analyser spares kit – Included*	
EA Units		
10202/11	iso-EArth	
10202/13	iso-EArth+	
10202/14	iso-Earth HT Furnace Upgrade	
10202/15	Iso-Earth (Without Autosampler)	
11802/1	Earth+PC	
11802/2	EArth+Clarity+PC	
70501-1	*Consumables for C and N for Combustion Only*	
70501-11	*Simultaneous CNS Consumables Kit (approx. 10000 analysis)*	
70501-3	*Sample Prep Kit (Inc.)*	
70501-4	*GSL Combustion and Gas C & N Start Up Kit*	
70501-5	*Simultaneous NCS Consumables Kit*	
70501-6	*C&N Combustion Only Consumables Kit (approx. 5000 samples)*	
70501-8	*Simultaneous CNS Consumables Kit (approx. 5000 samples)*	
70601-1	*Sulphur Start Up Kit (Inc. with Sercon EA Systems)*	
70601-2	*Sulphur Consumables Kit for 1000 Samples*	
70601-4	*Sulphur Consumables Kit (approx. 5000 Samples)*	
70801-2	*Pyrolysis Consumables Kit-Low temp for Solids*	
71701-1	*Sub Microgram Nitrogen Analysis Start Up Kit*	
SI2040	*PN150 Pneumatic Autosampler with one no.50 pos, carousel*	
SI2345	ME Micro Balance	
SI2737/A	Sercon 50 Position Autosampler Assy	
SI2789	Extra 50 Position Carousel	
SI2744	Automatic Liquid Sampler 15 Position	
SI2743	Liquid Sampler Mounting Plate	
Headspace Equilibration		
10202/10	XYZ Gas Sampling Control Box	Y
10302/1	Aqua System	
11103	µCarbs for CF	
11103-1	µCarbs for DI	
11601	200 Place Dual Heated Block 240 Volt	
11801	Sercon XYZ Gas Autosampler	Y
71107-1	*CF oxygen-18 equilibration kit*	
71107-2	*DI Oxygen-18 Equilibration kit*	
71201-1	*CF deuterium equilibration kit*	
71201-2	*DI Deuterium Equilibration kit*	
71801-1	*WES-DI start up kit (Inc. with WES-DI)*	
GC Units		
10402/2	Orchid module 1500C (Will run Hd 70901-1 C Spares Kit Inc)	
10901	Nitrogen Option (71301-1 N Spares kit Included)	
HP7890/1	Agilent 7890B GC System	
HP7890/2	Agilent 7890B GC with Auto Injector	
HP7890/3	Agilent 7890B GC + Auto Injector + 150 Vial Sample Tray	
SI2561	Nexis GC 2010 Plus	

*** When ordered alone IN no. / Blue book **NOT** required

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3 - MACHINE SPECIFICATION

Client:	Northumbria University		
Quotation Number:	15102	Date:	24/02/2021
Job Number:	IN1256	Date:	12/04/2021

Ref No.	Product Description	Required
GC Units ***continued***		
SI2564	Nexis GC-2030	
70901-3	*GC Pyrolysis H and O Start Up Kit*	
70901-4	*GC Pyrolysis H Spares Kit*	
70901-5	*GC Combustion C Spares Kit (approx. 5000 samples)*	
70901-6	*GC Pyrolysis h Start Up Kit (approx. 5000 samples)*	
71301-1	*GC N Spares kit*	
ABCA2 Units		
10502/1	ABCA2 Sercon XYZ Autosampler	
10602	ABCA2 Gas Box	
20602	Complete Sercon ABCA2 system	
20603	ABCA IR Analyser	
70101-1	*ABCA2 spares kit (Inc.With ABCA2)*	
70101-2	*ABCA2 Spares Kit for AB Analitica Systems*	
70101-3	*ABCA2 Autosampler Upgrade Kit*	
SI1767	*CVL505 – Barcode Reader*	
SC9973	*13C Urea breath test kit for Helicobacter pylori infection*	
SC9974	*Helicobacter Test kit for children age 3-11 (45mg)*	
Integra2 Units		
20802/4	Integra2	
70201-2	*Integra2 analyser spares kit - Included*	
70401-1	*Integra-2 consumables (Inc. With Integra2)*	
Trace Gas Systems		
10802/4	CryoPrep	
10802/5	Automated LN refiller	
10802/6	CryoFlex (TOC)	
10802/7	CryoGas	
10802/8	CryoFlex (LA)	
SI2533	Silicon Carbide Vertical Furnace	
SI2731	213nm Laser Ablation System	
SI2733	isoScell 100 sampler chamber	
71001-1	*Cryoprep Spares Kit*	
71001-5	*CryoGas Consumables Kit*	
TOC Units		
14001	Thermalox Environmental TOC-IRMS	
14002	Thermalox Environmental TOC-Standalone	
14003	Thermalox Environmental TOC-Standalone No Sampler	
SI2772	CO2 Detector, High sensitivity Option	
SI2773	NOx detector Option	
SI2774	Vacuum pump Option	
SI2775	Stirred Vial rack Option	
72101-1	TOC Start Up Kit	
72101-2	TOC Chem Pack	
72101-3	TOC & TN Instrument with heavy usage - one year	
72101-4	TOC only - economy holding	
GEO 20-22 (dual inlet)		
10702	GEO 20-22 Water Equilibration System (D & 18O)	
21802/1	GEO 20-22	
21802/2	GEO 20-22 + E-Mag	

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3 - MACHINE SPECIFICATION

Client:	Northumbria University		
Quotation Number:	15102	Date:	24/02/2021
Job Number:	IN1256	Date:	12/04/2021

21802/3	GEO 20-22 + E-Mag +Hd	
21802/4	GEO 20-22 Inlet	
70301-1	*GEO start up kit - Included*	
70301-3E	*Comprehensive GEO 20-22 spares kit for 5 years operation*	
HT-EA		
11501/4	HT-EA (With Autosampler)	
11501/5	HT-EA With Liquid Option	
11501/6	HT-EA Stand Alone	
11501/7	HT-EA (Without Autosampler)	
SI2622	CTC PAL3-LSI-L-S	
SI2624	CTC PAL3-Kit-Standalone	
70801-1	*Pyrolysis Consumables Kit-High Temp for Solids*	
71501-1	*HT-EA Pyrolysis Start Up kit O and H*	
71501-2	*HT-EA Pyrolysis Kit for Water injections*	
71501-3	*HT-EA Sensitivity Start Up Kit for O & H in small samples*	
71501-4	*HT-EA Sensitivity Consumables Kit for O & H in small samples*	
71501-5	*HT-EA Sensitivity Kit for O&H in Small Samples (5000 samples)*	
71501-7	*HT-EA Kit for Room Temp Equilibration*	
71501-8	*HT-EA Pyrolysis Kit for Water injections (approx.1 year kit)*	

Ref No.	Product Description	Required
Upgrades		
12101	Evacuation System ***	
12102	2 Ref Gas+ Dilutor Box ***	
20101	Standard Source Assy ***	
20102	HS Source Assy ***	
20301	Standard Collector Assy ***	
30202/1	System Control Upgrade (Pmag) installation not included	Edwards Or Pfeiffer
30202/2	System Controller Upgrade (Emag) installation not included	Edwards Or Pfeiffer
10202/7	Preparation PCB Upgrade	
30202/3	Hijack Box ***	
30302/4	nEXT85 Edwards Pumping System Upgrade Single - installation not included	
30302/5	nEXT85 Edwards Pumping System Upgrade Dual - installation not included	
30302/6	nEXT85 Edwards Pumping System Upgrade Triple- installation not included	
SI2542	ABCA2 Upgrade Kit	
CALLISTOW	Callisto software upgrade ***	
Specials		
11702	LC-I interface	
12202	Leco Interface Unit	
SI2320	Agilent 1260 Series Refractive Index Detection HPLC System	
71401-1	*ABCA-G Start Up/Spares Kit*	
71401-2	*ABCA-G Equilibration Spares Kit - Room temp O only*	
71401-3	*ABCA-G Equilibration Spares Kit - Room Temp O & H*	
71601-1	*LC Interface Spares Kit*	
ADDITIONS		
PC	Windows 7 based PC System with Callisto Software	
Printer	Printer	
INST1	Installation and start up training at customer's site by **Sercon** Engineer	Y
INST2	Installation and start up training at customer's site by **Agents** Engineer	
WARR	1 year warranty	Y
WARR2	2 year warranty	
TRAIN	Training in UK for one person for 3 days	
SCONTRACT	Maintenance Service Contract – 1 year	

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3 - MACHINE SPECIFICATION

Client:	Northumbria University		
Quotation Number:	15102	Date:	24/02/2021
Job Number:	IN1256	Date:	12/04/2021

SPECIFICATION REQUIREMENTS		
Voltage	230 Volts 50/60Hrzs	Y
Plug Type	SI2510 3 Metre USA/Japan plug to IEC C 13	
	SI2511 2.5 Metre Australian plug to IEC C 13	
	SI2512 3 Metre UK 13 amp Fused plug to IEC C 13	Y
	SI2523 3metre Schuko (Euro) Plug to IEC C13 Socket	
	SI2514 2.5 metre Chinese mains to IEC C13	
Pallet	Stamped for export heat treated for 30 min @ 56 °C	Y
	Complies with all Export Requirements	

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3 - MACHINE SPECIFICATION

Client:	Northumbria University		
Quotation Number:	15102	Date:	24/02/2021
Job Number:	IN1256	Date:	12/04/2021

SPECIAL REQUIREMENTS (DETAILED SPECIFICATION)
Garry to contact customer with an requirements need to connect onto their existing machine
This will be passed to Simon to configure the gas box for production.

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3 - MACHINE SPECIFICATION

Client:	Northumbria University		
Quotation Number:	15102	Date:	24/02/2021
Job Number:	IN1256	Date:	12/04/2021

No.	ACTIONS FROM MEETING	ACTIONEE	RESPONSE

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11 – Installation Report

Client:	Northumbria University, Newcastle UK		
Quotation Number:	15102	Date:	24/02/2021
Job Number:	IN1256	Date:	12/04/2021

Contact:	Sebastian Breitenbach, Sevi Modestou		
Date of Visit:	20th July 2021	No. of Days:	1
Engineer:	David Harris		

Details of visit:

Arrived on site. Moved FlushBox system & CETAC autosampler to lab area.
Unboxed and set up units under desk area in lab

Customer setup backline plumbing of helium gas only and fitted to rear of FlushBox unit.
Customer does not require other gasses fitted at this time.

Pressure set to 50psi at wall gauge and 20psi on instrument.
Lines leak checked – All OK
Pressure holds on back line plumbing.

Set up CETAC build and attached needle assy

Connected instruments to customers own PC (Windows 7). Callisto v4.03.0 (modified)

Set up software. Comms all OK.
CETAC responds – All OK
FlushBox valves resond – All OK
Checked CETAC alignment – All OK

Demonstrated to customer how software is used and how methods are built.
Adjusted needle depth for 4.5ml vial flushing and created method.
Customer to experiment with timing and flush lengths for best results.

Customer decided that a different PC was required for the software as there was interference with other instruments.

Installed software on 2nd PC – All comms okay.
CETAC responds – All OK
FlushBox valves resond – All OK
Checked CETAC alignment – All OK

Updated backup USB for Sercon blue book and customer's copy.

Install complete

Recommendations:

N/A

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11 – Installation Report

Client:	Northumbria University, Newcastle UK		
Quotation Number:	15102	Date:	24/02/2021
Job Number:	IN1256	Date:	12/04/2021

Faults and Shortages:

N/A

Follow up:

N/A

Engineer: David Harris Date: 20th July 2021

Signed: 

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12 – Installation Acceptance and Warranty Certificate

Client:	Northumbria University, Newcastle UK		
Quotation Number:	15102	Date:	24/02/2021
Job Number:	IN1256	Date:	12/04/2021

Contact:	Sebastian Breitenbach, Sevi Modestou
System:	FlushBox & CETAC autosampler
Software:	Callisto v4.03.0 (modified)
Engineer:	David Harris
Installation Date:	20th July 2021

Warranty commences:	20th July 2021
Warranty Expires:	19July 2022

Customer Acceptance:

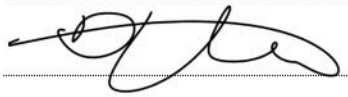
Name: .....

Signature: .....

Date: .....

Engineer's Signature:
On behalf of Sercon Limited

Name: David Harris

Signature: 

Date: 20th July 2021

Notes: N/A