

AfriRemoteLabs Itemized Station Sponsorship Budgets

Phase 1 JOOUST Remote Laboratory Demonstration Centre



October 2026

Overview

We seek manufacturer support for the 13 proposed stations detailed in this document. Each schedule identifies instruments, accessories, computing, software, remote integration and commissioning costs. Manufacturers may offer equipment donations, supported loans, discounted supply, installation or training, and should state the remaining funding requirement.

The prices are provisional allocations of the earlier planning allowances, not independently verified supplier quotations. The itemization reconciles to the earlier totals; this does not validate market prices. All proposed configurations and remote interfaces require supplier confirmation.

Budget interpretation

- One station is assumed for each schedule. A quantity of one for a package or service represents an allowance; quantities marked as hours are engineering hours.
- Shared instruments are purchased once. UV Vis serves optical and biological work; FTIR and Raman serve several disciplines.
- Deduct bundled computers, native controllers, software, cameras, calibration and training before agreeing sponsorship values.
- Client users supply their existing computers and connectivity. An institution owned laptop loan scheme would require an additional budget.
- Shared centre infrastructure, annual operations and contingency are separate from station requests. Freight, insurance, import charges and site work beyond allowances remain unpriced.

1 Physics Mechanics and Motion

Station sponsorship envelope US\$19,000. All line items are provisional allowances for scrutiny.

Item or service	Quantity	Unit cost USD	Subtotal USD
Dynamics track and carts	1	2,200	2,200
Motion detectors	2	300	600
Force sensors	2	250	500
Wireless acceleration sensors	2	200	400
Photogates and timers	2	200	400
Springs, masses and friction apparatus	1	600	600
DAQ and wireless interfaces	1	1,000	1,000
Guarded actuator and local stop	1	1,300	1,300
Mounts and experiment fixtures	1	1,000	1,000
Host workstation CPU/RAM/SSD	1	1,500	1,500
Monitor, keyboard, NIC and interface accessories	1	1,000	1,000
Acquisition/control licence allocation	1	1,500	1,500
Analysis/SDK/support allocation	1	1,000	1,000
Station gateway computer/interface	1	800	800
Demonstration camera and mounting	1	600	600
Driver/API development (engineering hours)	36	50	1,800
Station testing and recovery validation	1	800	800
Installation and acceptance allowance	1	1,000	1,000
Operator training allowance	1	600	600
Initial method validation/calibration allowance	1	400	400
Station total			19,000

2 Physics Thermal Measurements

Station sponsorship envelope US\$11,000. All line items are provisional allowances for scrutiny.

Item or service	Quantity	Unit cost USD	Subtotal USD
Temperature probes	4	100	400
Temperature DAQ/logger	1	900	900
Calorimetry and heating apparatus	1	800	800
Independent temperature cutoff	1	400	400
Approved heater controller	1	600	600
Fixtures and insulated vessels	1	400	400
Host workstation CPU/RAM/SSD	1	1,200	1,200
Monitor, keyboard, NIC and interface accessories	1	800	800
Acquisition/control licence allocation	1	900	900
Analysis/SDK/support allocation	1	600	600
Station gateway computer/interface	1	500	500
Demonstration camera and mounting	1	375	375
Driver/API development (engineering hours)	23	50	1,150
Station testing and recovery validation	1	475	475
Installation and acceptance allowance	1	750	750
Operator training allowance	1	450	450
Initial method validation/calibration allowance	1	300	300
Station total			11,000

3 Physics and Materials Science Optical Characterization

Station sponsorship envelope US\$23,500. All line items are provisional allowances for scrutiny.

Item or service	Quantity	Unit cost USD	Subtotal USD
Optical bench and alignment mounts	1	3,000	3,000
Light sources and holders	1	2,000	2,000
Optical sensors and meters	2	1,000	2,000
Motorized stage/filter assembly	1	2,000	2,000
Optical sensor DAQ	1	1,000	1,000
Filters, lenses and reference samples	1	2,000	2,000
Host workstation CPU/RAM/SSD	1	1,800	1,800
Monitor, keyboard, NIC and interface accessories	1	1,200	1,200
Acquisition/control licence allocation	1	1,200	1,200
Analysis/SDK/support allocation	1	800	800
Station gateway computer/interface	1	800	800
Demonstration camera and mounting	1	600	600
Driver/API development (engineering hours)	36	50	1,800
Station testing and recovery validation	1	800	800
Installation and acceptance allowance	1	1,250	1,250
Operator training allowance	1	750	750
Initial method validation/calibration allowance	1	500	500
Station total			23,500

4 Materials Science Atomic Force Microscopy AFM

Station sponsorship envelope US\$119,000. All line items are provisional allowances for scrutiny.

Item or service	Quantity	Unit cost USD	Subtotal USD
AFM including native scanner controller	1	78,000	78,000
Vibration isolation allowance	1	5,000	5,000
Probe starter stock	20	150	3,000
Reference specimens and calibration standards	1	2,000	2,000
Sample mounts and preparation kit	1	2,000	2,000
Host workstation CPU/RAM/SSD	1	3,000	3,000
GPU allowance	1	1,000	1,000
Monitor, keyboard, NIC and interface accessories	1	1,000	1,000
Acquisition/control licence allocation	1	3,600	3,600
Analysis/SDK/support allocation	1	2,400	2,400
Station gateway computer/interface	1	900	900
Demonstration camera and mounting	1	700	700
Driver/API development (engineering hours)	118	50	5,900
Station testing and recovery validation	1	2,500	2,500
Installation and acceptance allowance	1	4,000	4,000
Operator training allowance	1	2,400	2,400
Initial method validation/calibration allowance	1	1,600	1,600
Station total			119,000

5 Physics and Materials Science Scanning Tunnelling Microscopy STM

Station sponsorship envelope US\$67,000. All line items are provisional allowances for scrutiny.

Item or service	Quantity	Unit cost USD	Subtotal USD
STM including low-noise native controller	1	35,000	35,000
Vibration/acoustic isolation allowance	1	5,000	5,000
Conductive reference samples	1	1,500	1,500
Tip stock and preparation tools	1	2,000	2,000
Sample holders and mounts	1	1,500	1,500
Host workstation CPU/RAM/SSD	1	2,400	2,400
GPU allowance	1	800	800
Monitor, keyboard, NIC and interface accessories	1	800	800
Acquisition/control licence allocation	1	2,400	2,400
Analysis/SDK/support allocation	1	1,600	1,600
Station gateway computer/interface	1	900	900
Demonstration camera and mounting	1	700	700
Driver/API development (engineering hours)	90	50	4,500
Station testing and recovery validation	1	1,900	1,900
Installation and acceptance allowance	1	3,000	3,000
Operator training allowance	1	1,800	1,800
Initial method validation/calibration allowance	1	1,200	1,200
Station total			67,000

6 Chemistry Programmable UV Visible Spectrophotometry

Station sponsorship envelope US\$32,000. All line items are provisional allowances for scrutiny.

Item or service	Quantity	Unit cost USD	Subtotal USD
Programmable UV-Vis with native acquisition	1	13,500	13,500
Quartz cells	10	150	1,500
Automated sample accessory allowance	1	2,000	2,000
Standards, holders and sampling accessories	1	1,000	1,000
Host workstation CPU/RAM/SSD	1	1,800	1,800
Monitor, keyboard, NIC and interface accessories	1	1,200	1,200
Acquisition/control licence allocation	1	1,800	1,800
Analysis/SDK/support allocation	1	1,200	1,200
Station gateway computer/interface	1	900	900
Demonstration camera and mounting	1	700	700
Driver/API development (engineering hours)	48	50	2,400
Station testing and recovery validation	1	1,000	1,000
Installation and acceptance allowance	1	1,500	1,500
Operator training allowance	1	900	900
Initial method validation/calibration allowance	1	600	600
Station total			32,000

7 Chemistry and Materials Science FTIR and Raman Spectroscopy

Station sponsorship envelope US\$128,000. All line items are provisional allowances for scrutiny.

Item or service	Quantity	Unit cost USD	Subtotal USD
FTIR with native acquisition	1	30,000	30,000
ATR sampling accessory	1	5,000	5,000
Raman with native detector/controller	1	45,000	45,000
Raman enclosure and laser safeguards	1	8,000	8,000
Reference standards	1	2,000	2,000
Sample holders and preparation tools	1	2,000	2,000
Mapping-stage allowance	1	3,000	3,000
Host workstation CPU/RAM/SSD	1	3,000	3,000
GPU allowance	1	1,000	1,000
Monitor, keyboard, NIC and interface accessories	1	1,000	1,000
Acquisition/control licence allocation	1	4,800	4,800
Analysis/SDK/support allocation	1	3,200	3,200
Station gateway computer/interface	1	900	900
Demonstration camera and mounting	1	700	700
Driver/API development (engineering hours)	146	50	7,300
Station testing and recovery validation	1	3,100	3,100
Installation and acceptance allowance	1	4,000	4,000
Operator training allowance	1	2,400	2,400
Initial method validation/calibration allowance	1	1,600	1,600
Station total			128,000

8 Chemistry Automated Titration

Station sponsorship envelope US\$44,500. All line items are provisional allowances for scrutiny.

Item or service	Quantity	Unit cost USD	Subtotal USD
Automated titrator and native controller	1	15,000	15,000
Sample changer	1	7,000	7,000
Dosing/burette assemblies	2	1,500	3,000
pH/conductivity probes	2	1,000	2,000
Reagent/waste containment	1	1,000	1,000
Reference buffers and accessories	1	2,000	2,000
Host workstation CPU/RAM/SSD	1	1,500	1,500
Monitor, keyboard, NIC and interface accessories	1	1,000	1,000
Acquisition/control licence allocation	1	1,800	1,800
Analysis/SDK/support allocation	1	1,200	1,200
Station gateway computer/interface	1	900	900
Demonstration camera and mounting	1	700	700
Driver/API development (engineering hours)	48	50	2,400
Station testing and recovery validation	1	1,000	1,000
Installation and acceptance allowance	1	2,000	2,000
Operator training allowance	1	1,200	1,200
Initial method validation/calibration allowance	1	800	800
Station total			44,500

9 Biological Sciences Digital Microscopy and Remote Imaging

Station sponsorship envelope US\$27,000. All line items are provisional allowances for scrutiny.

Item or service	Quantity	Unit cost USD	Subtotal USD
Digital microscope optical system	1	6,000	6,000
Microscope camera	1	2,500	2,500
Motorized stage/focus controller	1	3,000	3,000
Calibration slide	1	500	500
Illumination accessories	1	1,000	1,000
Prepared specimens and mounts	1	1,000	1,000
Host workstation CPU/RAM/SSD	1	2,400	2,400
GPU allowance	1	800	800
Monitor, keyboard, NIC and interface accessories	1	800	800
Acquisition/control licence allocation	1	1,500	1,500
Analysis/SDK/support allocation	1	1,000	1,000
Station gateway computer/interface	1	800	800
Demonstration camera and mounting	1	600	600
Driver/API development (engineering hours)	36	50	1,800
Station testing and recovery validation	1	800	800
Installation and acceptance allowance	1	1,250	1,250
Operator training allowance	1	750	750
Initial method validation/calibration allowance	1	500	500
Station total			27,000

10 Biological Sciences Assays and Measurements

Station sponsorship envelope US\$51,000. All line items are provisional allowances for scrutiny.

Item or service	Quantity	Unit cost USD	Subtotal USD
Multimode reader with native controller	1	25,000	25,000
Temperature-controlled incubation	1	3,500	3,500
Precision pipette set	1	1,500	1,500
Plate and reagent starter stock	1	1,500	1,500
Temperature probes/logger	1	1,000	1,000
Sample-preparation bench equipment	1	1,500	1,500
Small ancillary assay equipment	1	1,000	1,000
Host workstation CPU/RAM/SSD	1	1,800	1,800
Monitor, keyboard, NIC and interface accessories	1	1,200	1,200
Acquisition/control licence allocation	1	2,400	2,400
Analysis/SDK/support allocation	1	1,600	1,600
Station gateway computer/interface	1	900	900
Demonstration camera and mounting	1	700	700
Driver/API development (engineering hours)	48	50	2,400
Station testing and recovery validation	1	1,000	1,000
Installation and acceptance allowance	1	2,000	2,000
Operator training allowance	1	1,200	1,200
Initial method validation/calibration allowance	1	800	800
Station total			51,000

11 Materials Science Scanning Electron Microscopy SEM

Station sponsorship envelope US\$304,000. All line items are provisional allowances for scrutiny.

Item or service	Quantity	Unit cost USD	Subtotal USD
SEM with native imaging/detector controllers	1	210,000	210,000
Specimen coating equipment allowance	1	12,000	12,000
Preparation tools	1	10,000	10,000
Stubs, standards and starter supplies	1	3,000	3,000
Vacuum/chiller accessories allowance	1	10,000	10,000
Sample fixtures	1	5,000	5,000
Host workstation CPU/RAM/SSD	1	3,600	3,600
GPU allowance	1	1,200	1,200
Monitor, keyboard, NIC and interface accessories	1	1,200	1,200
Acquisition/control licence allocation	1	6,000	6,000
Analysis/SDK/support allocation	1	4,000	4,000
Station gateway computer/interface	1	900	900
Demonstration camera and mounting	1	700	700
Driver/API development (engineering hours)	258	50	12,900
Station testing and recovery validation	1	5,500	5,500
Installation and acceptance allowance	1	9,000	9,000
Operator training allowance	1	5,400	5,400
Initial method validation/calibration allowance	1	3,600	3,600
Station total			304,000

12 Materials Science Transmission Electron Microscopy TEM

Station sponsorship envelope US\$751,000. All line items are provisional allowances for scrutiny.

Item or service	Quantity	Unit cost USD	Subtotal USD
Conventional TEM with native controls	1	520,000	520,000
Digital TEM camera allowance	1	70,000	70,000
Thin-specimen preparation allowance	1	30,000	30,000
Holders and reference specimens	1	15,000	15,000
Grids and preparation supplies	1	5,000	5,000
Vacuum/chiller accessories allowance	1	10,000	10,000
Host workstation CPU/RAM/SSD	1	4,800	4,800
GPU allowance	1	1,600	1,600
Monitor, keyboard, NIC and interface accessories	1	1,600	1,600
Acquisition/control licence allocation	1	10,800	10,800
Analysis/SDK/support allocation	1	7,200	7,200
Station gateway computer/interface	1	900	900
Demonstration camera and mounting	1	700	700
Driver/API development (engineering hours)	468	50	23,400
Station testing and recovery validation	1	10,000	10,000
Installation and acceptance allowance	1	20,000	20,000
Operator training allowance	1	12,000	12,000
Initial method validation/calibration allowance	1	8,000	8,000
Station total			751,000

13 Engineering Sensors and Data Acquisition

Station sponsorship envelope US\$21,000. All line items are provisional allowances for scrutiny.

Item or service	Quantity	Unit cost USD	Subtotal USD
Multi-channel DAQ development kit	1	3,000	3,000
Wireless gateway/receivers	1	1,000	1,000
Motion detectors	2	300	600
Force sensors	2	250	500
Temperature probes	4	100	400
Voltage/current/light sensor assortment	1	1,200	1,200
Calibration references	1	1,000	1,000
Isolated I/O and protection	1	1,500	1,500
Cables and connectors	1	800	800
Host workstation CPU/RAM/SSD	1	1,800	1,800
Monitor, keyboard, NIC and interface accessories	1	1,200	1,200
Acquisition/control licence allocation	1	1,200	1,200
Analysis/SDK/support allocation	1	800	800
Station gateway computer/interface	1	800	800
Demonstration camera and mounting	1	600	600
Driver/API development (engineering hours)	36	50	1,800
Station testing and recovery validation	1	800	800
Installation and acceptance allowance	1	1,000	1,000
Operator training allowance	1	600	600
Initial method validation/calibration allowance	1	400	400
Station total			21,000

Consolidated budget and funding boundaries

Station	USD
Physics Mechanics and Motion	19,000
Physics Thermal Measurements	11,000
Physics and Materials Science Optical Characterization	23,500
Materials Science Atomic Force Microscopy AFM	119,000
Physics and Materials Science Scanning Tunnelling Microscopy STM	67,000
Chemistry Programmable UV Visible Spectrophotometry	32,000
Chemistry and Materials Science FTIR and Raman Spectroscopy	128,000
Chemistry Automated Titration	44,500
Biological Sciences Digital Microscopy and Remote Imaging	27,000
Biological Sciences Assays and Measurements	51,000
Materials Science Scanning Electron Microscopy SEM	304,000
Materials Science Transmission Electron Microscopy TEM	751,000
Engineering Sensors and Data Acquisition	21,000
Total station budgets	1,598,000

Additional centre level allowances

Component	USD
Shared infrastructure	145,000
Capital subtotal	1,743,000
Contingency at 15 percent	261,450
Capital including contingency	2,004,450
One full operating year	210,000
Capital and one operating year	2,214,450

Unpriced costs

International freight and packing, cargo insurance, customs clearance, applicable duties and taxes, vendor travel beyond commissioning allowances, major construction, specialist facility upgrades and specialized biosafety infrastructure require quotations. These exclusions are not assumed to cost zero.

Send each manufacturer its relevant station schedule and the project summary. The full station total is a sponsorship envelope, rather than necessarily a payment to one supplier. Record donated equipment separately from cash needs.