

Please complete and return to:

NERC Field Spectroscopy Facility

University of Edinburgh

Crew Annexe

Alexander Crum Brown Road

Edinburgh

EH9 3JN

Tel: 0131 650 5926

Email: fsf@nerc.ac.uk



It is a condition of loan that all applicants are expected to present any results of their research with acknowledgement to NERC FSF, and all publications arising as a direct result of your loan should fully acknowledge the support of the facility. Failure to do so may jeopardise future loans. Further conditions can be found [here](#).

1. Principal Investigator (P.I.) / Supervisor

Name:
Status/job title:
Address:
Post code:
Telephone:
Email:

2. Instrument operator (if different from PI / Supervisor)

User (if different from PI):
Status/job title:
Address:
Post code:
Telephone:
Email:

3. Period of Loan Dates when equipment is required (inclusive)

1st choice: _____ 2nd choice: _____

4. Research Project Title (maximum of 12 words)

5. Proposed site(s) Please provide **place name** and **map hyperlink**

6. Other personnel involved in project (please provide the number of the following to aid us in reporting to NERC)

Academics (UK-based):

Academics (Non-UK-based):

_Students (UK-based):

Students (Non-UK-based):

Non-Academics as Project partners:

7. Science areas

Please indicate which ONE of the following science areas is the most fitting for your application.

Atmospheric

☐

Earth Observation

☐

Earth

☐

Science Based Archaeology

☐

Marine

☐

Polar

☐

Terrestrial & freshwater

☐

8. Equipment and measurements.

Please select the instrument(s) you wish to borrow and indicate what types of measurements you will be making. Detailed information regarding instrument specifications is available on our website at <http://fsf.nerc.ac.uk>

Instrument	Wavelength range		Type of measurement	
Full range field spectrometer (please specify if you have a model preference)	350 - 2500 nm	<input type="checkbox"/>	GHGs	<input type="checkbox"/>
Headwall Hyperspectral Imager flight (FSF will collect your data, please email us at fsf@nerc.ac.uk at least 1 month prior to our direct access deadline)	350 – 2500 nm	<input type="checkbox"/>	Multispectral/Hyperspectral Imagery	<input type="checkbox"/>
Bruker EM27 Sun		<input type="checkbox"/>	Reflectance	<input type="checkbox"/>
UAV-mounted MAIA 8/9 band Multispectral Camera (please also fill out this form)	Sentinel-2 WorldView3	<input type="checkbox"/> <input type="checkbox"/>	Radiance	<input type="checkbox"/>
OceanOptics QE Pro Fluorescence Spectrometer	600-800 nm	<input type="checkbox"/>	Irradiance	<input type="checkbox"/>
Cimel tracking sun photometer	7 / 8 channels	<input type="checkbox"/>	Underwater radiance/irradiance	<input type="checkbox"/>
Microtops ozone monitor	5 channels	<input type="checkbox"/>	Underwater reflectance	<input type="checkbox"/>
Microtops sun photometer	5 channels	<input type="checkbox"/>	Underwater absorption/attenuation/CTD	<input type="checkbox"/>
Midac FTIR spectrometer	5000 – 700 cm ⁻¹ (2.0 - 14.5 µm)	<input type="checkbox"/>	Underwater rad/irrad. & surface irrad.	<input type="checkbox"/>
Wetlabs AC-S	400-730nm	<input type="checkbox"/>	Aerosols	<input type="checkbox"/>
Hyper OCR radiometers	350-950nm	<input type="checkbox"/>	FTIR Gas analysis	<input type="checkbox"/>
Diving PAM		<input type="checkbox"/>	FTIR ground radiance/emissivity	<input type="checkbox"/>
2D MaxDOAS		<input type="checkbox"/>	Fluorescence	<input type="checkbox"/>
Other (please describe)				
Field Spectroscopy Accessories - Please Specify:				<input type="checkbox"/>

9. Is training required? (NB if the person USING the equipment has NOT already been trained by FSF, then attending a training course in Edinburgh is compulsory). We provide fully customised, one-to-one training courses tailored to individuals' needs. We also offer refresher courses for those who have not used the equipment for over 18 months, or if requested.

YES ☐ NO ☐ Refresher course ☐

10. Funding type (tick all that apply). Please note that loan priority will be assigned to those projects currently in receipt of a NERC Grant or studentship

a. Project funding

NERC Research Grant ☐
(specify in section c)

NERC other ☐
(specify in section c)

Other academic ☐
(please specify below)

Other ☐
(please specify below)

b. User/studentship funding

NERC studentship ☐
(including NERC CASE or tied studentships)

Other studentship ☐

No associated studentships ☐

c. Funding details. If in receipt of NERC funding please provide the full grant or studentship reference number and the title of the project. Please also state the value of your funding.

11. Previous FSF loans

a. Is this application associated with any previous applications to FSF? If so please provide the loan reference number(s), the name of the Principal Investigator(s), and the grade(s) of each.

b. Please list the outputs from your previous loan(s), in terms of publications, presentations etc?

12. Research Programme: Scientific background to your proposal

Please use the space below to give details of the scientific aims and objectives of the project. Please describe in full the purpose of the study and why it is important. You should place the study in the wider scientific context, and cite related work from the published literature. Make sure you provide adequate justification for how field spectroscopy will contribute to your research. Details of how the science you intend to undertake will contribute to scientific knowledge, and how it will fit with the aims of NERC's The Business of the Environment strategy should also be included. If your research will be conducted overseas you should provide justification for taking the equipment abroad.

Science Case:

13. Research Programme: Proposed Methodology

Please use the space below to provide details of the project methodology. This section should include details of how data will be **collected** and **analysed**, how the spectral data will contribute to the project and whether the spectral data will be related to other parameters (and if so what other parameters)

Please tick, to confirm this proposed work has undergone ethics approval at your home institute. Note that FSF adheres to the UKRI's Preventing harm (safeguarding) in research and innovation policy ([policy information](#)) and it is a [loan condition](#) that the receiving institution has similar safeguards in place. ☐

Methodology:

14. Your publication record

Please provide details of your publication record from the past five years in the space provided below. All publications are important, including conference proceedings, reports and poster papers. Those articles which are not directly related to remote sensing or field spectroscopy should also be listed. Please use the additional sheet at the back of the application form if you require more space.

Publication Record:

15. What output is expected from the research? (Please indicate time scale)

16. Declaration

Note. NERC FSF recommends, and in some cases requires, that FSF equipment be insured for 'all risks' for the duration of the loan. The duration of the loan is from receipt of equipment by the applicant until its return to FSF in Edinburgh, this includes during transportation

I have read and agree to abide by the Conditions of Loan.

Signature of Applicant _____ Date _____

Signature of Head of Department _____ Date _____
or Institute Director

17. Please use the additional space provided for adding further information you feel may support your application

Further information: