



## EPN 2024 RI

### EUROPLANET 2024 Research Infrastructure

H2020-INFRAIA-2019-1

Europlanet 2024 RI has received funding from the European Union's Horizon 2020 Research and Innovation Programme under

Grant agreement no: 871149

### Deliverable D1.6

## 2<sup>nd</sup> Evaluated proposals and approved access to TA Facilities

Due date of deliverable: 30/04/2021

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Nature:<sup>1</sup> R

Dissemination level<sup>2</sup> PU

Work package: WP1

Lead beneficiary: ESF

Contributing beneficiaries: VUA

Document status: Final

Start date of project: 01 February 2020. Duration: 48 months

Project Co-ordinator: Prof Nigel Mason, University of Kent

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#### Executive Summary / Abstract:

This deliverable provides the list of the 76 successful applications submitted to the second Transnational Access Call of the Europlanet 2024 RI project.

1. **Nature:** R = Report, P = Prototype, D = Demonstrator, O = Other

2. **Dissemination level:**

PU	PP	RE	CO
Public	Restricted to other programme participants (including the Commission Service)	Restricted to a group specified by the consortium (including the Commission Services)	Confidential, only for members of the consortium (excluding the Commission Services)

## 1 Evaluation of the submitted proposals

The ESF organised the assessment of the 101 applications submitted for first Transnational Access Call. Among these:

- 2 applications were rejected by the TA site operators as not technically feasible
- 1 application was declared ineligible as it focused on outreach and did not include a scientific proposal and could not be assessed by a scientific review panel (art-oriented application)
- 98 applications were assessed by 2 different reviewers, distributed in 4 thematic review panels. The review panels then proposed a ranked list of proposals and recommended to fund the first 40 proposals.

The ESF communicated the ranked list of proposals to the VUA TA office, along with the consensus report for each proposal. Based on the review panels' evaluations, the PMC decided on the cut off score and agreed to fund 76 proposals.

Subsequently, the VU TA office has:

- Sent out the notification to the successful candidates and to the TA site hosts.
- Requested details of the planned visit dates once finalised.
- Notified the successful applications that they will be contacted prior to the visit to discuss possible outreach activities associated or following the TA visit and communicated the consensus report summarizing the reviews.
- Contacted the unsuccessful applicants with the consensus report summarizing the reviews.

## 2 List of successful eligible applications

The list of the 76 successful applications submitted to the first Transnational Access Call of the Europlanet 2024 RI project is indicated below:

Project Number	Project Title	TA	Primary Site
20-EPN2-053	Noble gas (3He) analyses of iridium poor marine sediments to understand the astronomic process responsible for the late Eocene meteor shower	TA2 DPLF	Stable Rare Gas and Radiogenic Isotope Facility-SGRIF (FR)
20-EPN2-099	Bioaerosol generation at geothermal systems: Implications for the detection of biosignatures in cryovolcanic plumes at the ocean worlds	TA1 PAF	Iceland Field Sites (IS)
20-EPN2-052	Water in silica-bearing iron meteorites: implications for early Solar System dichotomy	TA2 DPLF	NanoSIMS 50L-NSIMS (UK)
20-EPN2-018	Structure of the radiocarbon calibration curve around	TA2 DPLF	Carbon-14 dating accelerator mass spectrometry laboratory

	Miyake effect in 660 BC, AD 775 and AD 994		(HU)
20-EPN2-123	Controls on the resuspension of dusts of different mineral composition in air flows: implications for aircraft engine damage mitigation	TA2 DPLF	Planetary Environment Facilities-PEF (DK)
20-EPN2-051	Evaluation of physical parameters influencing the ice particle transport by wind in a Martian-like environment	TA2 DPLF	Planetary Environment Facilities-PEF (DK)
20-EPN2-122	IceSCOPE - Iceland Subsurface Classification of Organics, PAHs, and Elements	TA1 PAF	Iceland Field Sites (IS)
20-EPN2-067	Investigating the water and volatile inventory of unequilibrated ordinary chondrites	TA2 DPLF	Ion probe facility-IPF (FR)
20-EPN2-072	Dynamics of the early inner solar system inferred from combined <sup>26</sup> Al- <sup>26</sup> Mg and Cr-Ti-O isotope systematics of non-carbonaceous chondrules	TA2 DPLF	Ion probe facility-IPF (FR)
20-EPN2-031	Determination of the timing of the final deglaciation and the depth of subglacial erosion using in-situ produced cosmogenic <sup>14</sup> C in combination with existing cosmogenic <sup>10</sup> Be data	TA2 DPLF	Carbon-14 dating accelerator mass spectrometry laboratory (HU)
20-EPN2-033	An experimental study of bromine partitioning between olivine, orthopyroxene and silicate melt	TA2 DPLF	Geo- and Cosmochemistry Noble Gas Laboratory (CH)
20-EPN2-078	Metagenomic analysis of the outstanding moonmilk speleothems from Grotta Nera, Majella National Park	TA2 DPLF	Center for Microbial Life Detection (AT)
20-EPN2-068	Primitive Space Materials (PriSMa)	TA2 DPLF	Light Gas Gun Laboratory (UK)
20-EPN2-116	HIDISCC (Hypervelocity Impacts for DISC Calibration)	TA2 DPLF	Light Gas Gun Laboratory (UK)
20-EPN2-073	Assessment of the aeolian dispersion and wind effects on cryptoendolithic microorganisms in the Martian environment	TA2 DPLF	Planetary Environment Facilities-PEF (DK)
20-EPN2-111	Proton Radiolysis of Astrochemically Relevant Formamide Ices Using A	TA2 DPLF	Ice Chamber for Astrophysics/Astrochemistry-ICA (HU)

	Formal Statistical Experimental Design		
20-EPN2-074	Titanium and chromium isotopes in individual chondrules and anomalous clasts in chondrite meteorites	TA2 DPLF	Geo- and Cosmochemistry Isotope Facility (CH)
20-EPN2-017	Resolving critical uncertainties in the impact of geomagnetism on in situ cosmogenic nuclide production via long-term calibration	TA2 DPLF	Stable Rare Gas and Radiogenic Isotope Facility-SGRIF (FR)
20-EPN2-075	Emissivity measurements of proposed source minerals for Venus anomalous regions	TA2 DPLF	Planetary Spectroscopy Laboratory-PSL (DE)
20-EPN2-081	Vis-NIR reflection spectroscopy of ammonium salts relevant for icy planetary surface characterization	TA2 DPLF	Cold Surfaces spectroscopy-CSS (FR)
20-EPN2-066	From Geitafell volcano (Iceland) to Mars: How hydrothermal alteration of basalt can guide our understanding of habitable environments on Mars	TA1 PAF	Iceland Field Sites (IS)
20-EPN2-061	Life in extreme environments: Distribution and importance of far-red light driven photosynthesis to primary productivity in Martian-like environments	TA1 PAF	Makgadikgadi Salt Pans (BW)
20-EPN2-030	The O-isotope signatures of aqueously altered micrometeorites - probing the CO-CM gap and the diversity of C-type asteroids	TA2 DPLF	NanoSIMS 50L-NSIMS (UK)
20-EPN2-014	Constraining CO <sub>2</sub> uptake and release through chemical weathering pathways in a young, active orogeny	TA2 DPLF	Stable Rare Gas and Radiogenic Isotope Facility-SGRIF (FR)
20-EPN2-025	Determining the C-14 ages of offshore groundwater by analyzing fluid samples with small quantities	TA2 DPLF	Carbon-14 dating accelerator mass spectrometry laboratory (HU)
20-EPN2-086	CAVESS-LIFE: Caves Analysis to Verify Extant Sedimented bioSignatures as proxies for searching LIFE in the solar system	TA2 DPLF	Petrology-Mineralogy Characterisation Facility-PMCF (UK)
20-EPN2-090	A search for thiols formation	TA2	Ice Chamber for

	pathways under space relevant conditions	DPLF	Astrophysics/Astrochemistry-ICA (HU)
20-EPN2-112	Aeolian saltation at Martian pressures and below	TA2 DPLF	Planetary Environment Facilities-PEF (DK)
20-EPN2-011	Water abundances and hydrogen isotopic ratios of pyroxenes in primitive achondrites	TA2 DPLF	NanoSIMS 50L-NSIMS (UK)
20-EPN2-091	Experimentally determined distribution of highly siderophile elements between sulfide- and silicate melts at highly reduced conditions: implications for terrestrial late accretion models	TA2 DPLF	High-Pressure, High-Temperature Laboratory (NL)
20-EPN2-038	UNDERCOOL – UNderstanding Deep Exchange Ratio of Carbon in the sOUThern Ocean during the Last deglaciation	TA2 DPLF	Geology and Geochemistry radiogenic and non-traditional stable Isotope Facility-GGIF (NL)
20-EPN2-064	High-precision isotope analysis of individual melt inclusions: reassessing the compositional variability of Earth's mantle	TA2 DPLF	Geology and Geochemistry radiogenic and non-traditional stable Isotope Facility-GGIF (NL)
20-EPN2-124	High resolution <sup>14</sup> C dating of last glacial loess deposits on Jersey, Channel Islands	TA2 DPLF	Carbon-14 dating accelerator mass spectrometry laboratory (HU)
20-EPN2-023	FLUME-ET: Fluidization of mass flows by metastable volatiles on extra-terrestrial bodies.	TA2 DPLF	Planetary Environment Facilities-PEF (DK)
20-EPN2-093	Sediment transport by sublimating ice - relevance to landscape evolution on Mars and other icy planetary surfaces	TA2 DPLF	Mars Chamber Facility (UK)
20-EPN2-097	Venus-Temperature Emissivity Experiments on Pure Minerals	TA2 DPLF	Planetary Spectroscopy Laboratory-PSL (DE)
20-EPN2-065	Characterizing dust lifting events using the ground-based Mars-2020-RDS and ExoMars-2022-SIS radiometers	TA1 PAF	Makgadikgadi Salt Pans (BW)
20-EPN2-070	Formation of Glycine and Alanine upon ion irradiation of space relevant ices	TA2 DPLF	Ice Chamber for Astrophysics/Astrochemistry-ICA (HU)
20-EPN2-098	Constraining the thermal history of water-rich Asteroids using Noble Gas analysis of heated CM Chondrites	TA2 DPLF	Geo- and Cosmochemistry Noble Gas Laboratory (CH)
20-EPN2-055	Sulphur isotope analysis of pyrite from the Transvaal	TA2 DPLF	Ion probe facility-IPF (FR)

	Supergroup, Botswana: a monitor of oxidation of the atmosphere at the Archaean-Proterozoic transition		
20-EPN2-108	Ultrastructure and nano-geochemistry of organic materials in 3.4-billion-year-old stromatolites: windows into biogeochemical cycling on the early Earth (and Noachian Mars?)	TA2 DPLF	Atomic-level STEM and EDX/EELS analysis (KR)
20-EPN2-045	Irradiation Effects of Energetic H+ and S+ Ion Implantation in Salts and Minerals Relevant to the Surface of Europa	TA2 DPLF	Ice Chamber for Astrophysics/Astrochemistry-ICA (HU)
20-EPN2-121	Constraining the movement of groundwater and fluid expulsion within playa environments on Mars	TA1 PAF	Makgadikgadi Salt Pans (BW)
20-EPN2-015	In-situ measurement and sampling of biosignature-hosting products in support of organics detection in the context of ExoMars/2022	TA1 PAF	Rio Tinto (ES)
20-EPN2-071	Deposition of organic matter as a factor controlling microbial colonization of analogue terrestrial surfaces	TA1 PAF	Iceland Field Sites (IS)
20-EPN2-009	High-precision oxygen isotope composition of Martian meteorites and their components – insights into the accretion history of Mars	TA2 DPLF	Laser Fluorination System (UK)
20-EPN2-042	Investigation of type 2 ungrouped carbonaceous chondrites to shed light on their origin, formation, and evolution	TA2 DPLF	Planetary Spectroscopy Laboratory-PSL (DE)
20-EPN2-046	Dust-carbon-climate feedbacks tested through detailed independent dating of Arctic wind-blown dust sequences on Greenland	TA1 PAF	Kangerlussuaq Field Site (DK)
20-EPN2-057	A zircon provenance study of the Kanye Basin (Botswana) to constrain terrestrial geodynamics across the Archaean-Proterozoic transition	TA2 DPLF	Sensitive High Resolution Ion MicroProbe / SHRIMP-IIe/MC (KR)
20-EPN2-085	Preservation of Organic	TA1 PAF	Makgadikgadi Salt Pans (BW)

	Matter in Paleo-Mega Lakes: Implications for Martian Biosignatures		
20-EPN2-035	Characterization of the composition and metabolic profiles of microbial communities in Antarctic dry soils as a model for Mars explorations	TA2 DPLF	Center for Microbial Life Detection (AT)
20-EPN2-100	Spectroscopic Identification of Experimental Basalt Alteration Products Under Venus Conditions	TA2 DPLF	Planetary Spectroscopy Laboratory-PSL (DE)
20-EPN2-044	Investigating molecular and isotopic fingerprints of life on Greenland Ice Sheet (GIS) cryo-ecosystems with astrobiological interest for icy worlds	TA1 PAF	Kangerlussuaq Field Site (DK)
20-EPN2-048	Heating effects on the spectral reflectance properties of carbonaceous chondrite meteorites	TA2 DPLF	Planetary Spectroscopy Laboratory-PSL (DE)
20-EPN2-088	High spectral resolution / low-temperature IR study of carbonates	TA2 DPLF	Cold Surfaces spectroscopy-CSS (FR)
20-EPN2-089	UPSIDES - Unravelling icy Planetary Surfaces: Insights on their tectonic DEformation from field Survey	TA1 PAF	Kangerlussuaq Field Site (DK)
20-EPN2-069	Challenging the adaptability of an anhydrobiotic cyanobacterium to Mars-like conditions	TA2 DPLF	Planetary Simulation Laboratory-PASLAB (DE)
20-EPN2-094	Miniature wind vanes on Mars: extracting wind flow properties from close-up images of sand grains	TA2 DPLF	Planetary Environment Facilities-PEF (DK)
20-EPN2-063	Investigating the abundance and isotopic composition of halogens in the early Solar System through analysis of chondritic meteorites	TA2 DPLF	Ion probe facility-IPF (FR)
20-EPN2-092	Characterising fine-grained rims in CO chondrites to understand the mineralogy of the protoplanetary disk	TA2 DPLF	Petrology-Mineralogy Characterisation Facility-PMCF (UK)
20-EPN2-012	Discovering the origin of dissolved gases in CO <sub>2</sub> -rich mineral groundwaters from	TA2 DPLF	Stable Rare Gas and Radiogenic Isotope Facility-SGRIF (FR)

	Aquae Spadanae (Spa, eastern Belgium)		
20-EPN2-034	Dormancy and revivability of cryophilic algae in Icelandic ecosystems	TA1 PAF	Iceland Field Sites (IS)
20-EPN2-082	Resolving microbial trophic networks in the cryptoendolithic communities inhabiting the cloSest Terrestrial MaRTian analogue (Acronym: RESTART)	TA2 DPLF	NanoSIMS 50L-NSIMS (UK)
20-EPN2-114	Microbial adaptation in the hypersaline environment of Sua Pan Evaporator Ponds in Botswana and implications for search for life on Mars. Part 2_Microbial characterization	TA2 DPLF	Center for Microbial Life Detection (AT)
20-EPN2-120	A molecular toolkit to hunt and resolve Fungal Dark Matter (FDM) in extreme planetary environments	TA1 PAF	Iceland Field Sites (IS)
20-EPN2-119	Distribution of sulfide-loving elements between major (mafic) mineral phases and silicate melts	TA2 DPLF	High-Pressure, High-Temperature Laboratory (NL)
20-EPN2-036	Chronology, evolution of CAIs in Ordinary chondrites	TA2 DPLF	Ion probe facility-IPF (FR)
20-EPN2-050	Turbulent suspensions of volcanic ash: an experimental simulation for eruptive and resuspension ash plumes	TA2 DPLF	Planetary Environment Facilities-PEF (DK)
20-EPN2-105	Uncrewed Aerial System (UAS) and LiDAR Survey of Relict and Active Periglacial Patterned Ground as Analogues for Mars	TA1 PAF	Iceland Field Sites (IS)
20-EPN2-117	To the root of a problem: exploring Mars' rootless cones based on the geomorphometry of Icelandic analogues	TA1 PAF	Iceland Field Sites (IS)
20-EPN2-102	A new source of water from Mars	TA2 DPLF	Ion probe facility-IPF (FR)
20-EPN2-095	Carbon isotopic fractionation and quantification in perennial cave ice	TA2 DPLF	Stable/Clumped Isotopes Laboratory-ISIL (HU)
20-EPN2-118	Solar activity studies around 660 BC and 800 BC by radiocarbon analysis of annual tree rings using accelerator mass spectrometry	TA2 DPLF	Carbon-14 dating accelerator mass spectrometry laboratory (HU)



20-EPN2-106	The effect of ice substrate to formation of mud flows in a low-pressure environment: insights for Martian sedimentary volcanism	TA2 DPLF	Mars Chamber Facility (UK)
20-EPN2-020	Towards prospecting ore deposits on Mars: remote sensing of the planetary field analogue in the Rio Tinto mining area, Spain	TA1 PAF	Rio Tinto (ES)
20-EPN2-021	Construction of lunar mineral maps using NIR hyperspectral data in combination with GRS and/or LIBS data	TA2 DPLF	Planetary Spectroscopy Laboratory-PSL (DE)