



# UNIVERSITÀ DEGLI STUDI DI MILANO

TO MAGNIFICO RETTORE OF UNIVERSITA' DEGLI STUDI DI MILANO

ID CODE 5994

I the undersigned asks to participate in the public selection, for qualifications and examinations, for the awarding of a type B fellowship at **Dipartimento di Scienze della Terra Ardito Desio dell'Università degli Studi di Milano**

Scientist- in - charge: Prof. Dr. Stefano Poli

**Cordula Pauline Haupt**

## CURRICULUM VITAE

### PERSONAL INFORMATION

Surname	Haupt
Name	Cordula Pauline

### PRESENT OCCUPATION

Appointment	Structure
PhD student	Universität Münster Institut für Mineralogie/ Experimental Petrology

### EDUCATION AND TRAINING

Degree	Course of studies	University	year of achievement of the degree
Degree			
Specialization			
PhD			
Master	Geosciences	Technical University Bergakademie Freiberg	2019
Bachelor	Geosciences	Universität Potsdam	2016
Degree of medical specialization			
Degree of European specialization			
Other			



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## REGISTRATION IN PROFESSIONAL ASSOCIATIONS

Date registration	of Association	City

## FOREIGN LANGUAGES

Languages	level of knowledge
German	Native speaker
English	Fluent
Spanish	Fluent
French	Basic

## AWARDS, ACKNOWLEDGEMENTS, SCHOLARSHIPS

Year	Description of award
2019	Agricola Medaille, Award for the best master thesis of the Faculty in the semester
2018	DAAD PROMOS Scholarship, Mobility grant for an academic exchange semester in Chile
2014	Studentship of the German Ministry for Education and Research (Deutschlandstipendium)

## TRAINING OR RESEARCH ACTIVITY

- TRR170 transregional research program (Late Accretion onto terrestrial planets), Uni Muenster, 2020-2023
- Understanding oxygen fugacity in Geosciences, Uni Trieste, 2022
- High-Pressure Experimental Techniques and Applications to the Earth's Interior, BGI Bayreuth, 2022
- Magmas, Melts, and Glasses, LMU Munich, 2019

## PROJECT ACTIVITY

Year	Project
2023-ongoing	$\mu$ -FTIR analyses of high-Ti lunar basaltic glass analogs
2023-ongoing	Modeling trace element compositions of mare basalts by combining state of the art modeling of mantle stratification, heat-convection, and melting models with trace element partitioning constraints (collaboration with DLR Berlin, FU Berlin, MfN Berlin)
2023-ongoing	Re-solubilities in Cl-bearing solutions with X-ray absorption and fluorescence spectroscopy in a hydrothermal autoclave at ESRF (France) in collaboration with Dr. Manuela Borchert
2022-ongoing	Crystal-size-frequency distribution in lunar basalts under controlled conditions (collaboration with Prof. Clive Neal)
2022-2023	Experimental insights into the origin of young lunar Chang'E-5 basalts
2021-ongoing	Experimental evidence for the origin of lunar high-Ti basalts



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2020-ongoing	Trace element partitioning between silicate minerals (clinopyroxene) and silicate melt at lunar conditions
2019-ongoing	Major and Trace element characterization of Scheelite from the Felbertal Tungsten Mine

## PATENTS

Patent

## CONGRESSES AND SEMINARS

Date	Title	Place
2023	Pyroxene/melt partition coefficients and their impact on models of lunar magma ocean evolution (Poster)	Goldschmidt Lyon (France)
2023	Modeling the trace element composition of the Moon's secondary crust (Poster)	54 <sup>th</sup> Lunar and Planetary Conference (Houston, USA)
2023	Experimental and petrological investigations into the origin of the lunar Chang'e 5 basalts (Talk)	54 <sup>th</sup> Lunar and Planetary Conference (Houston, USA)
2023	Infra-red spectroscopy on synthetic lunar glasses - an extension of the database towards high TiO <sub>2</sub> basalt compositions (Poster)	54 <sup>th</sup> Lunar and Planetary Conference (Houston, USA)
2023	Ilmenite crystal size distribution of experimental charges based on Chang'E5 sample CE-5 B1 (Poster)	54 <sup>th</sup> Lunar and Planetary Conference (Houston, USA)
2023	Using Plagioclase Crystal Size Distributions to Quantify Cooling Rates (Poster)	54 <sup>th</sup> Lunar and Planetary Conference (Houston, USA)
2023	Enhancing our understanding of the lunar magma ocean evolution using appropriate mineral/melt partition coefficients (Poster)	18th International Symposium on Experimental Mineralogy, Petrology and Geochemistry (Milano)
2022	The origin of high-Ti lunar picritic glasses: preliminary results from an experimental on partial melting of a lunar hybrid mantle (Poster)	53 <sup>th</sup> Lunar and Planetary Conference (Houston, USA), online
2022	Experimental Clinopyroxene-melt partition coefficients and its application in lunar science	International Mineralogical Association, 2022, Lyon, France
2021	Trace elements in the Lunar Magma Ocean: High-precision insights into partitioning behavior (Talk)	17th International Symposium on Experimental Mineralogy, Petrology and Geochemistry (Potsdam), online



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## PUBLICATIONS

### Articles

Haupt C.P., Renggli C.J., Klaver M., Steenstra E.S., Rohrbach A., Berndt J., Klemme S. Experimental and petrological investigations into the origin of the lunar Chang'e 5 basalts, **ICARUS**, 2023, DOI: <https://doi.org/10.1016/j.icarus.2023.115625>

### Articles in reviews

Haupt C.P., Schwinger S., Maurice M., Berndt J., Renggli C.J., Breuer D., Klemme S. New experimental trace element partition coefficients between clinopyroxene, plagioclase, pigeonite, and melts at reducing conditions, with implications for the evolution of the lunar magma ocean, **Contributions to Mineralogy and Petrology**, 2023

Haupt C.P., Reinhardt N., Aupers K., Schmidt S., Berndt J., Klemme S., Schulz B., Krause J. New insights on the formation of the polymetamorphic Felbertal tungsten deposit (Austria, Eastern Alps) revealed by CL, EPMA, and LAICP-MS, **Mineralium Deposita**, 2023

### Congress proceedings

Haupt C.P., Schwinger S., Maurice M., Berndt J., Renggli C.J., Breuer D., Klemme S. Enhancing our understanding of the lunar magma ocean evolution using appropriate mineral/melt partition coefficients

**18th International Symposium on Experimental Mineralogy, Petrology and Geochemistry**, 2023, Milano

Haupt C.P., Schwinger S., Maurice M., Berndt J., Renggli C.J., Breuer D., Klemme S. Pyroxene/melt partition coefficients and their impact on models of lunar magma ocean evolution

Goldschmidt Conference, 2023, Lyon, France

Alibert L., Schwinger S., Bernt I., Wiesehöfer T., Haupt C.P., Schmidt J., Plesa A.C. Modeling the trace element composition of the Moon's secondary crust

54th Lunar and Planetary Science Conference, 2023, Houston, USA

Haupt C.P., Renggli C.J., Klaver M., Steenstra E.S., Rohrbach A., Berndt J., Klemme S. Experimental and petrological investigations into the origin of the lunar Chang'e 5 basalts

54th Lunar and Planetary Science Conference, 2023, Houston, USA

Haupt C.P., Renggli C.J., Stojic A.N., Morlok A., Klemme S., Weber I., Hiesinger H. Infra-red spectroscopy on synthetic lunar glasses - an extension of the database towards high TiO<sub>2</sub> basalt compositions

54th Lunar and Planetary Science Conference, 2023, Houston, USA

Gallien L., Haupt C.P., Neal C., Klemme S. Using Plagioclase Crystal Size Distributions to Quantify Cooling Rates

54th Lunar and Planetary Science Conference, 2023, Houston, USA

Valenciano J., Haupt C.P., Neal C., Klemme S. Ilmenite crystal size distribution of experimental charges based on Chang'E5 sample CE-5 B1

54th Lunar and Planetary Science Conference, 2023, Houston, USA

Haupt C.P., Klemme S., Berndt J., Renggli C.J. The origin of high-Ti lunar picritic glasses: preliminary results from an experimental on partial melting of a lunar hybrid mantle

53rd Lunar and Planetary Science Conference, 2022, Houston, USA

Haupt C.P., Klemme S., Berndt J., Renggli C.J., Stracke A., Klaver M., Schwinger S. Experimental Clinopyroxene-melt partition coefficients and its application in lunar science

International Mineralogical Association, 2022, Lyon, France

Haupt C.P., Klemme S., Berndt J., Renggli C.J., Rorbach A., Stracke A., Boehnke M., Schwinger S. Trace elements in the Lunar Magma Ocean: High-precision insights into partitioning behavior

17th International Symposium on Experimental Mineralogy, Petrology and Geochemistry, 2021, Potsdam



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## OTHER INFORMATION

Analytical Methods: SEM, EPMA, Hot CL, Laser-Ablation ICP-MS, isotope dilution ICP-MS

Experimental Methods: 1-atm gas mixing furnace, Piston Cylinder, hydrothermal Autoclave (Synchrotrone)

Reviewer for: Communications Earth & Environment

Declarations given in the present curriculum must be considered released according to art. 46 and 47 of DPR n. 445/2000.

The present curriculum does not contain confidential and legal information according to art. 4, paragraph 1, points d) and e) of D.Lgs. 30.06.2003 n. 196.

Please note that CV WILL BE PUBLISHED on the University website and It is recommended that personal and sensitive data should not be included. This template is realized to satisfy the need of publication without personal and sensitive data.

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Place and date: Münster (Germany), 24.11.2023