



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

Scientist- in - charge: Prof. Stefano Poli

[Name and surname]

CURRICULUM VITAE

## PERSONAL INFORMATION

Surname	Das Gupta
Name	Rahul

## PRESENT OCCUPATION

Appointment	Structure
Post-doctoral Research Scientist, Department of Geochemistry, Freie Universität Berlin.	Research: Radiogenic Cr isotopes, using Total Evaporation Method on TIMS Management and operations of Element XR ICPMS Teaching: Data Interpretation and Geochemical Modelling (Summer 2023) Meteorites and the formation of the terrestrial planets (Winter 2023)

## EDUCATION AND TRAINING

Degree	Course of studies	University	year of achievement of the degree
PhD	Geochemical and isotopic analyses of terrestrial impact craters and jarosites, as analogs to understand planetary surface processes	Indian Institute of Science (IISc), Bangalore	2020
Master	Geology	Indian Institute of Technology (IIT) Kharagpur	2014
Other (Bachelor)	Geology	Presidency College (Calcutta University) Kolkata	2012



**REGISTRATION IN PROFESSIONAL ASSOCIATIONS**

Date of registration	Association	City
2009	Calcutta University	Kolkata
2012	Indian Institute of Technology, Kharagpur	Kharagpur
2014	Indian Institute of Science, Bangalore	Bangalore
2018	Geochemical Society	N.A.
2020	National Institute of Science Education and Research	Bhubaneswar
2021	Physical Research Laboratory	Ahmedabad
2023	Freie Universität	Berlin

**FOREIGN LANGUAGES**

Languages	level of knowledge
English	Fluent in speaking, writing and reading
Hindi	Fluent in speaking
Bengali	Fluent in speaking, writing and reading
Deutsche, Kannada, Gujarati	Can speak little or understand

**AWARDS, ACKNOWLEDGEMENTS, SCHOLARSHIPS**

Year	Description of award
2014-2020	Junior Research Fellowship (JRF) and Senior Research Fellowship (SRF) from the University Grants Commission (UGC) to pursue PhD at Indian Institute of Science
2018	Goldschmidt conference grant, including conference registration and abstract submission fees



## TRAINING OR RESEARCH ACTIVITY

Year	description of activity
2012-2014 (Masters)	Mineralogy and petrography of chondrites: Acfer 289, Dar al Gani 204, Sahara 97158, Gao Guenie 35, Sahara 98007 Mineralogy and petrography of chondrites: Acfer 289, Dar al Gani 204, Sahara 97158, Gao Guenie 35, Sahara 98007
2014-2020 (Doctoral)	Geochemical and isotopic study of the Lonar and Dhala impact craters and jarosites from Kutch, India as analogues to understand planetary surface processes
2020-2021 (Post-doc 1)	Mineralogy of the CM2 chondrite Jbilet Winselwan using SEM and XRD results, with particular emphasis on finding phyllosilicates and carbonates.
2021-2022 (Post-doc 2)	Petrographic and geochemical study of Calcium-Aluminum Inclusions, along with their relative chronology using Al-Mg isotopic decay system.
2023 (Post-doc 3)	Radiogenic Cr isotopes, using Total Evaporation Method on TIMS Teaching: Data Interpretation and Geochemical Modelling (Summer 2023) Meteorites and the formation of the terrestrial planets (Winter 2023)

## PROJECT ACTIVITY

Year	Project
2021-2022	Petrographic and geochemical study of Calcium-Aluminum Inclusions, along with their relative chronology using Al-Mg isotopic decay system (Post-doctoral Research Associate in Indo-French CEFIPRA project)
2020-2021	Mineralogy of the CM2 chondrite Jbilet Winselwan using SEM and XRD results, with particular emphasis on finding phyllosilicates and carbonates (Post-doctoral Research Associate in Max Planck-NISER partner project)

## CONGRESSES AND SEMINARS

Date	Title	Place
2023	GeoBerlin [volunteer]	Henry Ford Bau, Berlin, Germany
2023	Frontiers in Geoscience Research Conference (FGRC) (organised by PRL) [oral presentation]	Ahmedabad, India
2022	National workshop (online) on 'Chronological systematics and their applications in Earth Sciences, organized by Inter-University Accelerator Centre (IUAC), New Delhi [oral presentation]	Online
2021	Meteoroids, Meteors and Meteorites: Messengers from Space' (MetMeSS) (organised by PRL) [oral presentation]	Online
2021	Indian Planetary Science Conference (organised by PRL) [oral presentation]	Online



2019	Annual Review of SAC-STC Projects, organised by Space Applications Centre (SAC), Indian Space Research Organization (ISRO)	Ahmedabad, India
2018	Microscopy and Microanalysis [Poster presentation]	Baltimore Convention Center, Baltimore, USA
2018	Goldschmidt [Poster presentation]	Hynes Convention Center, Boston, US
2018	National Seminar on Dynamics on Surface and Sub-Surface Geological Processes [Oral presentation]	Pondicherry University, Pondicherry, India

## **PUBLICATIONS**

Evidence for a chondritic impactor, evaporation-condensation effects and melting of the Precambrian basement beneath the 'target' Deccan basalts at Lonar crater, India.	Geochimica et Cosmochimica Acta 215, pp.51-75
Understanding ejecta plume dynamics based on morphology, mineralogy, and chemistry of impact glasses from the Lonar Crater, India.	Icarus (under review)
Geochemical and Sr, Nd and Ca isotopic study of the Dhala Impact Crater, India: implications for the type of impactor, ages of crater formation and post-impact alteration, source of sediments in the Central Elevated Area	Under preparation for Meteoritics and Planetary Science

## **CONFERENCE ABSTRACTS**

Estimates of the ages of the Dhala impact crater and a post-impact alteration event at Dhala based on K-Ca, Rb-Sr, and Sm-Nd radiogenic isotope systematics	Frontiers in Geoscience Research Conference (FGRC - 2023)
Formation of carbonate-sulfide association in the martian meteorite ALH84001 and implications for the nature of water-rock interactions on the martian surface in the Noachian Era	Meteoroids, Meteors and Meteorites: Messengers from Space' (MetMeSS, 2021)
Constraints on the age and diameter of the Dhala crater based on the provenance of the sedimentary rocks on the Central Elevated Area and the morphological characteristics of the crater	Meteoroids, Meteors and Meteorites: Messengers from Space' (MetMeSS, 2021)
Aqueous alteration in CM2 chondrite Jbilet Winselwan as analog of alteration processes on asteroid Ceres	Indian Planetary Science Conference, 2021
Micro-CT Imaging for Understanding the Formation of Impact Spherules and Their Compositional Heterogeneity: A Case Study from Lonar Impact Crater, India	Microsc. Microanal. 24 (Suppl 1), 2112
Neodymium and Strontium isotopic compositions of jarosite and associated rocks at Kutch: implications for the source of Fe and role of seawater.	National Seminar on Dynamics on Surface and Sub-Surface Geological Processes, 2018
Geochemical and isotopic study of impact melts and spherules from the Lonar impact crater, India, indicate melting of the Precambrian basement beneath the 'target' Deccan basalts	AGU Fall Meeting 2016
Evidence of decarbonation process in a skarn deposit from Matanumadh formation, Kachchh Basin, India	Goldschmidt 2015



## OTHER INFORMATION

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.

Please DO NOT SIGN this form.

Place and date: Berlin, 22-November 2023