

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** <u>Scienze della Terra Ardito Desio</u>

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

SHASHI TAMANG

CURRICULUM VITAE

PERSONAL INFORMATION

Surname	TAMANG
Name	SHASHI

PRESENT OCCUPATION

Appointment	Structure

EDUCATION AND TRAINING

Degree		Course of studies	University	year of achievement of the degree
Degree		Master's Degree in Geology	Tribhuvan University, Nepal	2018
Specialization				
PhD		Earth Sciences	Università di Torino, Italy	2022
Master				
Degree of specialization	medical			
Degree of specialization	European			
Other				



REGISTRATION IN PROFESSIONAL ASSOCIATIONS

Date registration	of	Association	City
2019		Nepal Geological Society	Kathmandu

FOREIGN LANGUAGES

Languages	level of knowledge	
Neplai	Native	
English	C1	
Hindi	C1	
Italian	A1	

AWARDS, ACKNOWLEDGEMENTS, SCHOLARSHIPS

Year	Description of award
2019	PhD studentship grant, University of Torino, Torino
2020	Honourable Mention Poster Award: "Barrovian metamorphism in the Lesser Himalayan sequence of central Nepal seen through the eyes of aluminous metapelites." 3 rd European Mineralogical Conference 2020
2021	Vinci Grant (Italian-French mobility funding)

TRAINING OR RESEARCH ACTIVITY

My PhD research was supervised by Asst. Prof. Chiara Groppo and Asst. Prof Frédéric Girault entitled as "Along-strike variation of metamorphic CO_2 outputs from the Nepal Himalayas: Comparison between past production and present emissions". During my PhD, I focused on the past production of CO_2 through decarbonation reactions using thermodynamic modelling approaches. Perplex was used for the thermodynamic modelling to calculate the P-T pseudosections. Initially, the P-T condition and the metamorphic evolution of the metapelites were constrained based on the isocheimal phase diagram combined with isopleth thermobarometry, petrography, mineral chemistry, and the bulk compositions of the sampled rocks. Then, P/T-X(CO2) pseudosections were calculated for the carbonate-bearing lithologies from the same structural level. The P/T gradient has been defined based on the P-T evolution constrained from the associated metapelites. The quantitative microanalysis data were obtained using a Scanning Electron Microscope (SEM) equipped with Energy Dispersive Spectrometry (EDS). The present production of the CO_2 is calculated using the CO_2 flux dataset collected by the accumulation chamber methods and followed by kriging and interpolation procedures. Finally, the amount of CO_2 produced in the past produced through the decarbonation reaction is compared with the present production.

PROJECT ACTIVITY

Year	Project
2019- present	The project "Connect4Carbon". "Carbon cycling and Earth control on the livable planet: connecting deep key carbon sources to surface CO_2 degassing by transfer processes". Funded by the Italian Ministry of University and Research (MIUR).
2019- present	The "MYSTHIC" project funded by LabEX UnivEarthS (ANR-10–LABX-0023 and ANR-18-IDEX-0001), France.



PATENTS

Patent

CONGRESSES AND SEMINARS

	Oral Presentations				
Date	Title	Place			
2023	Dolomite- and magnesite-bearing lithologies from the Upper Lesser Himalayan Sequences: poorly investigated, yet significant, source of CO_2 in collisional orogens.	Oxford, UK. MSG Research in Progress (RiP) meeting.			
2022	Dolomite- and magnesite-bearing pelites: poorly investigated, yet significant, sources of CO_2 in collisional orogens.	Vienna, Austria. EGU			
2022	Dolomite-and magnesite-bearing lithologies from the Upper Lesser Himalayan Sequences: A petrological perspective in the framework of CO ₂ degassing during collisional orogeny	Pokhara, Nepal. HKT Conference,			
2022	Aluminous metapelites as a key to constraining the P-T evolution of the Upper Lesser Himalayan Sequence (Central Nepal)	Torino, Italy. SGI-SIMPS Congress.			
2021	Barrovian metamorphism in the Lesser Himalayan Sequence of Central Nepal seen through the eyes of aluminous metapelites.	Napoli, Italy. Be Geoscientist Congress.			
	Poster Presentations				
2022	Aluminous metapelites as a key to constraining the P-T evolution of the Upper Lesser Himalayan Sequence (Central Nepal). (Poster)	Pokhara, Nepal. 35 th HKT Conference.			
2022	Dolomite-and magnesite-bearing lithologies from the Upper Lesser Himalayan Sequences: A petrological perspective in the framework of CO_2 degassing during collisional orogeny. (Poster)	Torino, Italy. SGI-SIMPS Congress.			
2021	Barrovian metamorphism in the Lesser Himalayan sequence of central Nepal seen through the eyes of aluminous metapelites. (Poster)	Kraków, Poland. 3 rd European Mineralogical Conference.			

PUBLICATIONS

Books Himalaya, Dynamics of a Giant 1: Tectonic Units and Structure of the Himalaya (Chapter 8: Overview of hydrothermal systems in the Nepal Himalaya). UK and USA, ISTE Ltd. 2023 Himalaya, Dynamics of a Giant 2: Tectonic Units and Structure of the Himalaya (Chapter 7:

Università degli Studi di Milano – Direzione Trattamenti Economici e Lavoro Autonomo Ufficio Contratti di formazione e Ricerca Via Sant'Antonio 12 - 20122 Milano, Italia <u>assegni.ricerca@unimi.it</u> DTELA_M_CVAssegniENG_rev. 00 del 02/09/2021





Lithostratigraphy, Petrography and Metamorphism of the Lesser Himalayan Sequences). UK and USA, ISTE Ltd. 2023

Himalaya, Dynamics of a Giant 3: Tectonic Units and Structure of the Himalaya (Chapter 9: Crustal fluids in the Nepal Himalaya and sensitivity to the earthquake cycle). UK and USA, ISTE Ltd. 2023

Articles

Thapa, S., Girault, F., Deldicque, D., Losno, R., France-Lanord, C., Groppo, C., Rolfo, F., **Tamang, S.**, Rigaudier, T., Debret, B. and Paudyal, K.R., 2023. Metric, kilometric and large-scale coherence of metamorphic conditions from graphitic phyllite in the Upper Lesser Himalaya of Nepal: Contribution to the estimation of carbon stored during Himalayan orogeny. *Chemical Geology*, p.121378.

Tamang, S., Groppo, C., Girault, F., & Rolfo, F., 2022. Implications of garnet nucleation overstepping for the P-T evolution of the Lesser Himalayan Sequence of central Nepal. *Journal of Metamorphic Geology*. 10.1111/jmg.12695.

Tamang, S., Thapa, S., Paudyal, K. R., Girault, F., & Perrier, F., 2019. Geology and mineral resources of Khudi-Bahundanda area of west-central Nepal along Marshyangdi Valley. *Journal of Nepal Geological Society*.

Thapa, S., **Tamang, S.**, Paudyal, K. R., Girault, F., & Perrier, F., 2019. Geology and micro-structure analysis of the MCT zone along Khudi-Bahundanda area of Lamjung District, west-central Nepal. *Journal of Nepal Geological Society*, *58*, 105-110.

Articles in reviews

Tamang S., Groppo C., Rolfo F., Girault F., & Perrier F., 2023. Metamorphism of dolomitic and magnesitic rocks in collisional orogens: implications for orogenic CO_2 degassing and ore prospection. *Journal of Petrology*.

Congress proceedings

[title, structure, place, year]

[title, structure, place, year]

[title, structure, place, year]

OTHER INFORMATION

Lab Skills/Techniques:

Scanning Electron Microscope (SEM), PERPLEX (Thermodynamic Calculator), Cathodoluminescence, Microscopy, Raman Microscopy

Software Skill:

Corel DRAW, Microsoft Office, Arc GIS.

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: _____, ____,