

### TO MAGNIFICO RETTORE OF UNIVERSITA' DEGLI STUDI DI MILANO

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 per gli Alimenti, la Nutrizione e l'Ambiente.** 

Scientist- in – charge: **Prof.ssa Lucia Cavalca - Cod. ID: 4677** 

### **NISHA SHARMA**

### **CURRICULUM VITAE**

### PERSONAL INFORMATION

Surname	SHARMA
Name	NISHA
Date of birth	06/05/1989

## PRESENT OCCUPATION

Appointment	Structure
N/A	N/A

## **EDUCATION AND TRAINING**

Degree	Course of studies	University	year of achievement of the degree
Degree (PhD)	CROP SCIENCE	UNIVERSITY OF PADOVA	2020
Specialization	PLANT TOXICOLOGY		
Degree (Master)	MS BY RESEARCH IN BIOTECHNOLOGY	KATHMANDU UNIVERSITY	2015
Specialization	PLANT BIOTECHNOLOGY		
Degree (UNDERGRADUATE)	BACHELOR OF SCIENCE IN ENGINEERING	KATHMANDU UNIVERSITY	2012
Specialization	BIOTECHNOLOGY		
Other			

**ID CODE: 4677** 



## **REGISTRATION IN PROFESSIONAL ASSOCIATIONS**

Date registration	of	Association	City

## **FOREIGN LANGUAGES**

Languages	level of knowledge
NEPALI	NATIVE
ENGLISH	PROFESSIONAL
HINDI	GOOD
ITALIAN	FAIR

## AWARDS, ACKNOWLEDGEMENTS, SCHOLARSHIPS

Year	Description of award
2012	University Grant Commission (UGC) to complete the master projects
2014	Rewarded by Erasmus Mundus with Asia for nine months in student exchange 2014 programme to Italy.
2016	Cariparo Scholarship for Doctorate Course for 3 years in Italy
2017	Cleanup Conference Student Scholarship to attend the conference in Australia

## TRAINING OR RESEARCH ACTIVITY

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## **PROJECT ACTIVITY**

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Year	Project
2018	International Visiting Graduate Study, University of Toronto, Canada  Treatment of Arabidopsis with PFASs, NMR plant sample preparation, using NMR data processing and presentation package
2016	Research Associate, Center for Molecular Dynamics, Nepal  DNA extraction, e-DNA, gel electrophoresis, Innovating non-invasive fish monitors
2014	Student Exchange Programme, EMMA with Asia, University of Padova, Italy Proteomic and biochemical investigation on the effects of sulfadiazine in Arabidopsis thaliana
2013	Research Assistant, Kathmandu University, Nepal



	Plant Tissue Culture: Monitored and mentored undergraduate student in laboratory to evaluate the extensive study of plant tissue culture
2013	Research Assistant, Biotechnology Unit, Nepal  Tissue culture of tomato, molecular based techniques were used for the seeds improvement
2011	Trainee, Center for Molecular Dynamics, Nepal
	Molecular techniques like extraction Of DNA and RNA from animal and plant tissue, preparing the samples for the DNA sequencing.

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Patent		
N/A		

## **CONGRESSES AND SEMINARS**

CONDITIONS AND SEMINARY			
Date	Title	Place	
SEPTEMBER, 2019	Comprehensive multiphase NMR: a powerful technology to study the effects of PFASs on the model plant Arabidopsis thaliana.	BARI, ITALY	
AUGUST, 2019	Accumulation and effects of Perfluoroalkyl Substances (PFASs) in three Salix species.	SAN JOSE, UNITED STATE OF AMERICA	
FEBRUARY, 2019	NMR-Based Metabolomics for Arabidopsis thaliana treated with PFASs.	PADOVA, ITALY	
JUNE, 2019	Biodiversity and bioindicators in monitoring and management of contaminated soils	NAPOLI, ITALY	
SEPTEMBER, 2017	Biochemical and proteomic analyses in Arabidopsis thaliana plants treated with sulfadiazine	UDINE, ITALY	
SEPTEMBER, 2017	Plants treatment with Perfluoroalkyl Substances (PFASs): Uptake and effects on growth and morphology	UDINE, ITALY	
SEPTEMBER, 2016	Protein Composition Readjustment in Arabidopsis Thaliana following	PADOVA, ITALY	



	Sulfadiazine Treatment	
SEPTEMBER, 2017	Plants treatment with perfluoroalkyl substances (PFASs): uptake and effects on growth and morphology.	MELBOURNE, AUSTRALIA
MAY, 2017	Plant's adaptation to the environment: abiotic stress, antioxidant metabolism, "omics" tools.	PADOVA, ITALY

### **PUBLICATIONS**

### **PUBLISHED ARTICLES**

**Nisha Sharma,** Giuseppe Barion, Inisha Shrestha, Leonard Barnabas Ebinezer, Anna Rita Trentin, Teofilo Vamerali, Giustino Mezzalira, Antonio Masi, Rossella Ghisi.(2020). Accumulation and effects of perfluoroalkyl substances in three *Salix* L. species. *Ecotoxicology and Environmental Safety*, 191, 110150.

Pandey, Binayak Raj, Angela Shrestha, **Nisha Sharma**, and Bhupal Govinda Shrestha. "Evaluation of Phytochemical, Antimicrobial, Antioxidant Activity and Cytotoxic Potentials of Agave americana. (2019). *Nepal Journal of Biotechnology* 1, 30-38.

**Nisha Sharma**, Giorgio Arrigoni, Leonard Barnabas Ebinezer, Anna Rita Trentin, Cinzia Franchin, Sabrina Giaretta, Paolo Carletti, Sören Thiele-Bruhn, Rossella Ghisi, Antonio Masi. (2019). A proteomic and biochemical investigation on the effects of sulfadiazine in Arabidopsis thaliana. *Ecotoxicology and environmental safety*, 178, 146-158.

Amy Jenne, Ronald Soong, Wolfgang Bermel, **Nisha Sharma**, Antonio Masi, Maryam Tabatabaei Anaraki and Andre Simpson, 2018. Focusing on "the important" through targeted NMR experiments: an example of selective 13C–12C bond detection in complex mixtures. *Faraday discussions*.

**Sharma, Nisha**., Gauchan Dhurva Prasad, Dhakal, Ashna, Luitel, Anup. (2015). Establishment of Regenerative Callus, Cell Suspension System and Molecular Characterization of Stevia Rebaudiana Bertoni for the Production of Stevioside in In Vitro. International Journal for Research in Applied Science & Engineering Technology, 3(VIII): 133-141.

Gauchan, Dhurva Prasad, Dhakal, Ashna, **Sharma, Nisha**, Bhandari, Sabin, Maskey, Elina, Shrestha, Nayan, & Gurung, Sushma. (2014). Regenerative callus induction and biochemical analysis of Stevia rebaudiana Bertoni. Journal of Advanced Laboratory Research in Biology, 5(3): 41-45.



### Articles in reviews

**Nisha Sharma**, Sara De Vecchi, Leonard Barnabas Ebinezer, Anna Rita Trentin, Rossella Ghisi, Antonio Masi. Accumulation, Physiological and morphological alterations induced by perfluoroalkyl substances in Maize (*Zea mays*) plant.

Congress proceedings

N/A

### OTHER INFORMATION

### PROFESSIONAL SKILLS AND SOFTWARES

Proficient in plant molecular biology-based techniques, proteomics and metabolomics Microsoft Excel, Word, PowerPoint, SPSS, PRISM, R and R studio, Origin, AutoCAD, Adobe Photoshop, ArcGIS online, Google earth, LaTeX, MestRenova, Amix.

### **REFERENCES**

**Prof. Antonio Masi,** Associate Professor, DAFNAE, University of Padova, Legnaro, PD, Italy, E mail Id: antonio.masi@unipd.it.

**Prof. Andre Simpson,** Professor and Director, Environmental NMR Centre, University of Toronto, Canada. E mail Id: <a href="mailto:andre.simpson@utoronto.ca">andre.simpson@utoronto.ca</a>

**Prof. Stefano Dall'Acqua,** Assistant professor, DSF, University of Padova, Padova, Italy. E mail.ID : stefano.dallacqua@unipd.it

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.

Place and date: padova, 02/08/2020

**SIGNATURE**