



TO MAGNIFICO RETTORE OF UNIVERSITA' DEGLI STUDI DI MILANO

ID CODE 5953

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 Physics**

Scientist- in - charge: **Prof. Achilli Simona**

**Jeel Swami**

## CURRICULUM VITAE

### PERSONAL INFORMATION

Surname	Swami
Name	Jeel

### PRESENT OCCUPATION

Appointment	Structure
Research Scholar	Conduct research as a part of my PhD program, give research progress seminar every six months, first one year we have to learn course work and first three work as a Teaching Assistant at the Institute.

### EDUCATION AND TRAINING

Degree	Course of studies	University	year of achievement of the degree
PhD	Condensed Matter Physics	Institute of Infrastructure Technology Research and Management (IITRAM), Ahmedabad, Gujarat, India	PhD thesis will be submitted in December 2023
Master	Physics	Gujarat University, Ahmedabad, Gujarat, India	2018
Other	B.Sc. Physics	Gujarat University, Ahmedabad, Gujarat, India	2016



## REGISTRATION IN PROFESSIONAL ASSOCIATIONS

Date registration	of	Association	City

## FOREIGN LANGUAGES

Languages	level of knowledge
English	Good
Hindi	Good
Gujarati	Good

## AWARDS, ACKNOWLEDGEMENTS, SCHOLARSHIPS

Year	Description of award
2016	<b>The Best Performance Award</b> for Emission Inventory Campaign, SAFAR-Ahmedabad 2016, awarded by Indian Institute of Tropical Metrology (IITM) MoES, Pune and Indian Institute of Public Health (IIPH), Gandhinagar.
2016	<b>1<sup>st</sup> Position, Minaxi Lalit Science Award-2016</b> by Gujarat Science Academy, Gujarat.
2020	<b>1<sup>st</sup> position, Winter School</b> on 'Electronic structure and Molecular Dynamic Simulations from Open Source Software: From theory to Practice' awarded by Kathmandu University, Nepal

## TRAINING OR RESEARCH ACTIVITY

description of activity
As I was the first and only student of my supervisor, Computational Physics I have had learn from the trial and error method. Moreover, I tried to attend Quantum Espresso workshop to learn more about the concept and software. In experimental physics I get to work at IIT, Jodhpur where I get some insights from the research fellow.

## PROJECT ACTIVITY

Year	Project
2018	Density Functional Theory: Phonons in FCC-Ir and FCC-Rh as a part of MSc Project
2017	Design different order of Butterworth Highpass and Lowpass filters as a part of MSc Project

## PATENTS

Patent
One research work for patent is under preparation.



## CONGRESSES AND SEMINARS

Date	Title	Place
20 to 24 February 2023	International Conference on Advanced Materials: Properties and Applications	Goa University, Goa, India
16 to 18 December 2022	National Conference on Energy Materials and Devices	IIT Jodhpur, Rajasthan, India
9 to 11 November 2022	Advanced Quantum ESPRESSO tutorial: Hubbard and Koopmans functionals from linear response	Quantum ESPRESSO (Online)
22 August to 2 September 2022	Strongly Correlated Matter: from Quantum Criticality to Flat Bands	ICPT (online)
9 to 11, 2021	International Conference on Condensed Matter and Device Physics	PDEU, Gandhinagar (online)
24 and 25 August 2021	AtC-AtG Magnetics Conference 2021	IEEE Magnetics Society (online)
26 June 2021	National seminar on characterization and processing of advanced materials	Raipur (online)
28 to 30 December 2020	Winter School on Material Characterization Techniques	Manipal University, Jaipur (online)
21 to 30 September 2020	Winter School of DFT MD Workshop 2020	Parvatibai Chawgule college of Arts, Goa and Supercomputer Center, Kathmandu University, Nepal (online)
6 to 12 April 2020	Physics Webinar on Stay Home, Enjoy Physics	IAPT RC-7 and GUJCOST (online)
	31 <sup>st</sup> Workshop on Research Methodology on Physics and Electronics	KCG, Ahmedabd, India
19 to 24 August 2019	Materials Characterization: Structure, Spectroscopy and Microscopy	IITRAM, Ahmedabad, India
to 6 October 2018	National Conference on Advances in Spectroscopy: Molecules to Materials	IITRAM, Ahmedabad, India
28 and 29 December 2018	International Conference on Indo-Canadian Multidisciplinary Research: Trends and Prospects	IITRAM, Ahmedabad, India



PUBLICATIONS

Book Chapter
Swami, J., Dixit, A., & Tiwari, B. (2019). Effect of Magnetic Ordering on Phonon Raman Spectra in Magnetic Systems. In <i>Advances in Spectroscopy: Molecules to Materials: Proceedings of NCASMM 2018</i> (pp. 289-299). Springer Singapore. <a href="https://link.springer.com/chapter/10.1007/978-981-15-0202-6_21">https://link.springer.com/chapter/10.1007/978-981-15-0202-6_21</a>

Published Articles
Swami, J., Dixit, A., & Tiwari, B. Onset of antiferromagnetic insulator to ferromagnetic half-metal to antiferromagnetic metal transitions in $\text{La}_{1-x}\text{Ca}_x\text{CrO}_3$ and their microscopic origin. <i>physica status solidi (b)</i> . <a href="https://onlinelibrary.wiley.com/doi/abs/10.1002/pssb.202300065">https://onlinelibrary.wiley.com/doi/abs/10.1002/pssb.202300065</a>
Swami, J., Dixit, A., & Tiwari, B. Impact of Cr-O hybridization in $\text{ACrO}_3$ (A=La, Y): A Theoretical Investigation, <i>Modern Physics Letters B</i> . <a href="https://www.worldscientific.com/doi/abs/10.1142/S0217984923502287">https://www.worldscientific.com/doi/abs/10.1142/S0217984923502287</a>

Articles under reviews
CrSe <sub>2</sub> layered chalcogenide, Swami, & Tiwari, B.
Magnetic ordering of GdCrO <sub>3</sub> , Swami, J. & Tiwari, B.

OTHER INFORMATION

Underpreparation articles soon be submitted: Comparative study on $\text{ACrO}_3$ (A=La, Y): A Theoretical and Experimental Investigation, Swami, J. & Tiwari, B. Experimental study on $\text{La}_{1-x}\text{Ca}_x\text{CrO}_3$ , Swami, J., Dixit, A., & Tiwari, B. Investigation of Y doped $\text{LaCrO}_3$ , Swami, J., Dixit, A., & Tiwari, B. Study on Ilmenites $\text{ATiO}_3$ , Swami, J., Dixit, A., & Tiwari, B.
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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: 9 November 2023, Ahmedabad, India.