

TO MAGNIFICO RETTORE OF UNIVERSITA' DEGLI STUDI DI MILANO CODE _5532_____

ID

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** ___**Fisica "Aldo Pontremoli"**_____

Scientist- in - charge: ___Prof. Alessio Zaccone_____

[MANOJ KUMAR NANDI] CURRICULUM VITAE

PERSONAL INFORMATION

Surname	NANDI
Name	MANOJ KUMAR

PRESENT OCCUPATION

Appointment	Structure
NA	

EDUCATION AND TRAINING

Degree		Course of studies	University	year of achievement of the degree
Degree				
Specialization				
PhD		PHYSICAL SCIENCES	CSIR-NATIONAL CHEMICAL LABORATORY	2018
Master		PHYSICS	UNIVERSITY OF CALCUTTA	2010
Degree of specialization	medical			
Degree of specialization	European			
Other				

REGISTRATION IN PROFESSIONAL ASSOCIATIONS



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Date registration	of	Association	City

FOREIGN LANGUAGES

Languages	level of knowledge
ENGLISH	SPEAK, READ, WRITE

AWARDS, ACKNOWLEDGEMENTS, SCHOLARSHIPS

Year	Description of award
2012	Qualified in all India basis National Eligibility Test
2010	Qualified in all India basis Graduate Aptitude Test In Engineering
2008	West Bengal Government Merit-Cum-Means Scholarship

TRAINING OR RESEARCH ACTIVITY

1) Post Doctoral Researcher, Department of Engineering, University of Campania "Luigi Vanvitelli, Italy (2020-2022)

2) Research Associate, Polymer Science and Engineering Division, CSIR-National Chemical Laboratory, India (2019)

3) Post Doctoral Researcher, Department of Physics Nagoya University, Japan (2018-2019)

PROJECT ACTIVITY

Year	Project
	ΝΑ

PATENTS

Patent	
ΝΑ	

CONGRESSES AND SEMINARS

Date	Title	Place
7/11/2022	Brain Criticality Virtual Workshop 2022	Virtual Meeting



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6/10/2020	Brain Criticality Virtual Workshop 2020	Virtual Meeting	
2018	Advanced Research on Glass Transition and Related Fields-Meeting	University of Tokyo, Japan	
2016	CompFlu Conference	IIIT Hyderabad, India	
2016	CompFlu Conference	IISER Pune, India	
2014	Theoretical Chemistry Symposium	NCL, IISER Pune, India	
2014	Symposium on Fragility	JNCASR Bangalore, India	
2013	Current Trend in Theoretical Chemistry 2013,	BARC, Mumbai, India	
2012	Unifying Concepts in Materials': JA Krumhansl School and Symposium 2012	JNCASR and NCBS Bangalore, India	
2011	VIIIth SERC School on EXPERIMENTAL HIGH ENERGY PHYSICS 2011	VECC, India	
2009	UGC Sponsored Coference on LHC and New Frontiers of Particle Physics	University of Calcutta, India	
2008	UGC Sponsored National Seminar on PERSPECTIVES IN NUCLEAR PHYSICS	Ramakrishna Mission Vidyamandira in collaboration with Ramakrishna Mission Vivekananda University, India	

PUBLICATIONS

Books	
NA	

Articles in reviews

1) Fluctuation-Dissipation Relations in the imbalanced Wilson-Cowan model, Submitted to **Phys. Rev. E** (2022)

2) Scaling of avalanche shape and activity power spectrum in neuronal networks, **Phys. Rev. E 106**, 024304 (2022)

3) Identifying structural signature of dynamical heterogeneity via the local softness parameter, **Phys. Rev. E 105**, 044604 (2022)

4) Thermodynamics and its correlation with dynamics in a mean-field model and pinned systems: A comparative study using two different methods of entropy calculation, **J. Chem. Phys. 156**, 014503 (2022)

5) Microscopic Theory of Softness in Supercooled Liquids, **Phys. Rev. Lett. 126**, 208001 (2021)

6) Effective structure of a system with continuous polydispersity, J. Chem. Phys. 154, 034503 (2021)

7) Continuous time random walk concepts applied to extended mode coupling theory: A study of the Stokes-Einstein breakdown, **J. Phys. Condens. Matter 32**, 064001 (2019)

8) A Comparative Study of a Class of Mean Field Theories of the Glass Transition, **J. Stat. Mech.: Theory Exp 2019**, 084008 (2019)

9) Analysis of the anomalous mean-field like properties of Gaussian core model in terms of entropy, **J. Chem. Phys. 148**, 034504 (2018).

10) Role of the Pair Correlation Function in the Dynamical Transition Predicted by Mode Coupling Theory, **Phys. Rev. Lett. 119**, 265502 (2017)





11) Determination of onset temperature from the entropy for fragile to strong liquids, **J. Chem. Phys. 147**, 024504 (2017)

12) Validity of Rosenfeld relationship: A comparative study of the network forming NTW model and other simple liquids, **J. Chem. Sci. 129**,793 (2017)

13) Effect of total and pair configurational entropy in determining dynamics of supercooled liquids over a range of densities, **J. Chem. Phys. 145**, 034502 (2016)

14) Unraveling the success and failure of mode coupling theory from consideration of entropy, **J. Chem. Phys. 143**, 174504 (2015)

15) Diffusion of Small Solute Particles in Viscous Liquids: Cage Diffusion, a Result of Decoupling of SoluteSolvent Dynamics, Leads to Amplification of Solute Diffusion, J. Phys. Chem. B, 119, 11169 (2015)

16) Non-monotonic size dependence of diffusion and levitation effect: A mode- coupling theory analysis, **J. Chem. Phys. 138**, 124505 (2013)

Congress proceedings

NA

OTHER INFORMATION

Computer Skills OS: Linux, Windows

Languages: F77, F90, Shell Script, C++

Parallel Programming language: OpenMP, MPI

Softwares: LAMMPS, VMD, GRACE, LATEX, GNUPLOT, MATHEMATICA

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: __KUSHMURI, INDIA____, __10/12/2022___