TO MAGNIFICO RETTORE OF UNIVERSITA' DEGLI STUDI DI MILANO   ID CODE ___5854_____

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. Zaccone Alessio _____

[Name and surname]

CURRICULUM VITAE

PERSONAL INFORMATION

Surname	LIU
Name	Hongwei

PRESENT OCCUPATION

Appointment	Structure

EDUCATION AND TRAINING

Degree	Course of studies	University	year of achievement of the degree
Degree	Engineering Mechanics	HeFei University of Technology	2015
Specialization	Polymer Physics		
PhD	Ingegneria dei Prodotti e dei Processi Industriali	Università degli Studi di Napoli Federico II	2022
Master	Mechanics	South China University of Technology	2018
Degree of medical specialization			
Degree of European specialization			
Other			

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

REGISTRATION IN PROFESSIONAL ASSOCIATIONS

Date of registration	Association	City

FOREIGN LANGUAGES

Languages	level of knowledge
English	C1
Italian	A1

AWARDS, ACKNOWLEDGEMENTS, SCHOLARSHIPS

Year	Description of award
2018	Marie Skłodowska-Curie Actions ITN followship (Grant N。765811-DoDyNet)
2018	Excellent Master theses at SCUT
2017	Outstanding students of Guangdong province
2016	National Scholarship for Graduate Students

TRAINING OR RESEARCH ACTIVITY

description of activity

PROJECT ACTIVITY

Year	Project
2022-2023	Synthesizing a novel material, polymer-nanoparticle composites, characterizing the nanoparticles and composites (TEM, XPS, FTIR, DLS, BLS, etc) and performing rheological and adsorption measurements (SAOS, UV-vis). Modeling the diffusion of pollutants within the composites is another part of this project.
2018-2022	This Ph.D. project was aiming at developing molecular models (coarse-grained modeling) to enhance our understanding of the rheological behavior of associating polymers and of polymer melts in fast flows. A multi-chain model and a single-chain model were proposed to predict the static and dynamic response of polymer networks by examining their topological structure and the 3D motion of chains. In the nonlinear regime, I worked on a friction-reduction model, bead friction reduction probably happening in fast flows due to the co-alignment of polymer chains, to investigate the viscoelastic response of polymer melts in fast steady flows. In both two parts, Modern Fortran programs were developed and submitted to HPC for simulating.
2015-2018	Modeling large deformations of smart materials (a solid-solid phase transition accounts for it), and seeking analytical solutions to coupled ODEs.

PATENTS

Patent

CONGRESSES AND SEMINARS

Date	Title	Place
26/01/2023	Journées de Physique Statistique	École Normale Supérieure de Paris
5-9 Sep. 2022	Topology, Physics, and Chemistry of Soft Matter	Università degli Studi di Trento
27 June – 6 July 2022	Eutopia Summer School	Université Paris Cité
22 – 31 July 2019	workshop and Summer School of DoDyNet	Capri

PUBLICATIONS

Books
[title, place, publishing house, year …]
[title, place, publishing house, year …]
[title, place, publishing house, year …]

Articles in reviews
Liu, Hongwei, Giovanni Ianniruberto, and Giuseppe Marrucci. "A single-chain model for the linear viscoelasticity of unentangled melts of associating polymers." *Journal of Rheology* 66.6 (2022): 1183-1190.
Hongwei Liu and Jiong Wang and Hui-Hui Dai, 2017. Analytical study on stress-induced phase transitions in geometrically graded shape memory alloy layers. Part I: Asymptotic equation and analytical solutions. Mechanics of Materials. 112, 40-55.
Hongwei Liu and Jiong Wang and Hui-Hui Dai, 2017. Analytical study on stress-induced phase transitions in geometrically graded shape memory alloy layers. Part II: Analyses on geometrical shapes, loading procedures and boundary conditions. Mechanics of Materials. 112, 114–128.
Dynamics of nonlinear viscoelastic behavior of unentangled polymer melts in fast flows is in progress.
A novel absorbent: Poly(N-isopropylacrylamide)/Carboxylated Graphene Oxide composite is in progress.

Congress proceedings
International Congress on Rheology, Modeling the Nonlinear Rheology of Reversible Double Dynamics Networks, 2020
2021 Annual European Rheology Conference, Modelling the Linear Viscoelastic Response of Unentangled Associating Polymer Melts, 2021

International Conference on Applied Mathematics, CityU LBY, Hong Kong, 2018.

OTHER INFORMATION

Work experience: June 2022-June 2023, postdoc at Laboratoire Matière & Systèmes Complexes (MSC)

Université Paris Cité

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: _____Paris_____, __19/09/2023_____