europass

Giorgio Moscato

WORK EXPERIENCE

11/2019 – 12/05/2023 Italy

PHD STUDENT - THEORETICAL AND APPLIED MECHANICS SAPIENZA UNIVERSITÀ DI ROMA

PhD project focused on the study of multiphase flows. Strictly speaking, water plunging jets issuing horizontally in air from orifices of different geometry are investigated. The interaction between the liquid phase and air bubbles is studied through the use of time-resolved Particle Image Velocimetry technique (PIV) and a dedicated digital image processing algorithm.

Additional tasks:
- teaching support activity for the courses "Experimental Fluid Mechanics" and "Experimental Aerodynamics" in the context of the Master Degree of Energy Engineering and Aerospace/Aeronautical Engineering

Italy

WIND ENERGY ENGINEER SR INTERNATIONAL

Wind farm layout and assessment (WindSim and WindFarm), Wind analyst (Windographer), GIS analyst, italian constraint analyst, VIA documents, site suitability

05/2018 – 09/2019

CURRICULAR AND EXTRACURRICULAR INTERNSHIP AT INM (INSTITUTE OF MARINE ENGINEERING) CNR (NATIONAL COUNCIL OF RESEARCH)

Master thesis and internships focused on the use of temperature sensitive paint (TSP) for the measurement of skin friction on bluff bodies inside a water flow, in the context of the research program RitMare.

EDUCATION AND TRAINING

2019

PROFESSIONAL QUALIFICATION'S CERTIFICATE FOR INDUSTRIAL ENGINEERS Consiglio Nazionale degli Ingegneri - Università La Sapienza

2016 – 01/2019 Rome, Italy

MASTER'S DEGREE IN ENERGY ENGINEERING Sapienza Università di Roma

Advanced thermodynamics, electrical machines/generators and grid, energy technologies (renewables, steam etc.), heating and cooling system, passive systems for sustainable buildings, electrical markets.

Address Rome, Italy | **Final grade** 110/110 with honors |

Thesis Characterization of the fluid dynamic field over a NACA 0015 profile using the Temperature Sensitive Paint technique

BACHELOR'S DEGREE IN ENERGY ENGINEERING Sapienza Università di Roma

Thesis Sedimentation Chambers' design using CFD Fluent-Ansys

LANGUAGE SKILLS

Mother tongue(s): **ITALIAN**

Other language(s):

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken production	Spoken interaction	
ENGLISH	B2	C1	B2	B2	B2

Levels: A1 and A2: Basic user; B1 and B2: Independent user; C1 and C2: Proficient user

ADDITIONAL INFORMATION

PUBLICATIONS

A comparative study of circular and rectangular bended plunging jets – 2023

In the present work we study the topology, mixing properties, turbulence quantities, dependence on the outlet
geometry of a sharp-edged orifice plunging jet which first issues horizontally in air and then plunges in a water
pool.

Experimental Thermal and Fluid Science

Role of density ratio on particle dispersion in a turbulent jet – 2023

The behavior of dispersed particles in a turbulent round jet is experimentally investigated. The role of particle-to-fluid density ratio is analyzed by inspecting particle velocity fields and preferential concentration at four different ratios, from 0.7 to 19.3. The jet near-field region, i.e., up to X/D=11, is analyzed and compared to the unladen case.

Improving performances of biomimetic wings with leading-edge tubercles – 2022

The present study aims investigating experimentally wing/blade geometries in which the leading edge is modified by the presence of artificial bumps, following examples in nature (“biomimetics”).

Experiments in Fluids

Plunging jets from orifices of different geometry – 2021

Conference paper published for the 14th International Symposium on Particle Image Velocimetry.

G. Moscato, G.P. Romano

DRIVING LICENCE

Driving Licence: B

CONFERENCES AND SEMINARS

13/09/2022 – 16/09/2022 – Athens
14th European Fluid Mechanics Conference-EFMC14 Oral presentation of the work "Experimental study of circular and rectangular water plunging jets".

Link https://www.erasmus.gr/microsites/1240/abstract-book

01/08/2021 – 05/08/2021 – Online
14th InternationalSymposiumonParticleImageVelocimetry–ISPIV2021 Oral presentation of the work "Plunging jets from orifices of different geometries".

HONOURS AND AWARDS

10/2019
Premio di Laurea Giulio Guj – Università degli studi di Roma 3, associazione AIVELA, Univeristà La Sapienza, CNR I won the prize in honor of Prof. Giulio Guj for my master thesis "Characterization of the fluid dynamic field over a NACA 0015 profile using the Temperature Sensitive Paint technique"

COMMUNICATION AND INTERPERSONAL SKILLS

Communication and interpersonal skills Ability of interface with people in a positive way. Will to create or be part of a team, acquired during my work at the university, at the company and having played music in several bands.

JOB-RELATED SKILLS

Software

Great knowledge of Microsoft Office, MATLAB, Simulink, WindSim, WindFarm, Windographer, QGIS, Global Mapper, AutoCAD