Marwa MASMOUDI

I am an Engineer in Mechanics and doctor graduated from the Higher Institute of Mechanics of Paris (SUPMECA) in the field of passive vibration damping. Today, I am actively looking for a new professional challenge. I have a solid technical background in mechanics (mechanical design, material resistance, mechanical manufacturing) and mastery of several mechanical design software (SOLIDWORKS, CATIAV5).



EDUCATION

ATION | 2012 – 2016 PhD degree in Mechanics - SUPMECA Paris

Topic: Simulation of a granular material for vibration suppression with DEM and its comparison with experience Mission:

- Experiment protocol definition: Granular media, granular types, Young Modulus, Poisson coefficient, etc
- Several Experimental studies have been finalized to analyze the granular damping behavior in collaboration with the Laboratory of Systems and Materials at the higher institute of mechanics of Paris (SUPMECA)
- Damping analysis and its relation with the loss factor, granular mass &velocity
- Two numerical models have been developed
- An analytical study was achieved to validate experimental and numerical results found
- Publication of an article "Granular Matter" with an Impact Factor 1.775

EDUCATION | 2009 – 2012 Engineering degree in Mechanics - ENIS

National engineering School of Sfax - ENIS, Honourable degree

EDUCATION | 2007 – 2009 First cycle - Preparatory classes

Preparatory school for engineer studies of Sfax — IPEIS

Option: Maths / Hhysics (MP)

Admission to the national contest to entrance to engineering school in June 2009



PROFESSIONAL EXPERIENCE

IPEIN | Assistant | 2017 - 2018

Mechanical design Course teacher: Study of technical systems, Dimensional specifications, geometric and surface condition, Analysis of mechanisms, Assembly function, Dimensioning of a technical solution, Motion transformation systems by screw-nut, Guiding function in translation/Rotation, Dimensioning a rotation guide

ISTMT | Assistant | 2015 – 2016

CAD teacher (Computer-Aided Drafting) with Solidworks: Introduction to SOLIDWORKS and basic functionality, Creating 3D part using the software SOLIDWORKS, Component assembly, RDM application with SOLIDWORKS

ENIS | Assistant | 2013 - 2015

CAD teacher (Computer-Aided Drafting) with Solidworks: Creating a volume part, Creation of a sheet metal part, Using the repeat function, Creating the handle of a ski Stick, Creation of a scissor lift





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INTERNSHIP

IET Groupe SOCOMENIN | End of Studies' Project | 2012

Mission: Study, design and sizing of a gas filtration system

IET Groupe SOCOMENIN | engineer Internship | 2011

Mission: Study of a conveyor belt of a belt conveyor

PUBLICATION

- Experimental and Analytical Analysis of Particle Damping Nov 25th 2017, Springer
- Experimental and numerical investigations of dissipation mechanisms in particle dampers july 2016, Granular Matter
- Granular material for vibration suppression March 19th 2014, Springer

LANGUAGES

+ INFOS

English: Read, written, spoken French: Read, written, spoken Arabic: Native Language Hobbies Travel, Music, Reading

Certification

Certification SolidWorks Essential CSE

Key COMPETENCES

CAD Software: SOLIDWORKS, CATIAV5, AUTOCAD

RDM Software: RDM6

Study and Modeling of mechanical systems

Programming software: MATLAB, MAPLE,

RDM Analytical calculation

FAO Software: MASTERCAM

Mechanical design

Mechanics of non-deformable solids

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