

JOSEBA MENDIGUREN

Metal Forming Researcher

Researcher/lecturer at Mondragon Unibertsitatea with +10 years of research experience on metal forming field from material characterization and model developing activities to in-company consulting and advance process monitoring activities. Capable of creating, managing, and developing academia and industry based large consortium.

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KEYWORDS

Plasticity, sheet metal forming, springback, stamping, forming simulation, dislocation, fracture, DIC, testing, recrystallization, heat transfer, aluminium, steel, titanium, Inconel, elastoplastic algorithm, FEM, try-out, process monitoring, industrial benchmark, roll forming, hot stamping, forging

WORK EXPERIENCE

Lecturer/Researcher

June 2014- Present

- PI on regional, national and international projects. Involved in 66 R&D projects
- Self-funded (+1.2 M€)
- Master's/bachelor's degree lecturing (142 ECTS)
- Master's/bachelor's degree thesis (51)
- Metal forming research
- Post-doc, PhD and group supervision

Associated Research Fellow

Mar 2013- April 2014

- Research group managing
- Material characterization
- FLC/plasticity/fracture
- MSC Marc material subroutines
- Ref. *Prof. Bernard Rolfe*

Predoctoral Researcher

Sep 2008- Dec 2012

- Material modelling
- Elasto-plasticity
- Springback
- Sheet metal forming
- UMAT/Fortran programming
- Ref: *Dr. Lander Galdos*

Researcher Asisstant

Oct 2007- June 2008

- Numerical simulation
- Python /Abaqus program
- Composite mass diffusion
- Ref: *Dr. Pierre Gilormini*

EDUCATION

PhD Degree- *Experimental and numerical analysis of the elastic behaviour of the TRIP700 steel form springback predictions*

Master's degree- *Diplôme d'Ingénieur*

Master's degree- *Mechanics and Materials*

Master's degree- *Numerical Methods in Eng.*

Master's degree- *Industrial Engineering*

Bachelor's degree- *Mechanical Engineering*

TECHNICAL SKILLS

FEM Codes

ABAQUS, MSC-MARC, STAMPAK, PAMSTAMP, AUTOFORM, FORGE

Programming Language

Python, Fortran, Matlab

Testing facilities software

MTS Testing facilities, Zwick testing, Erichsen testing, GOM Aramis

Experimental testing experience

Tensile test, tension-compression, shear test, hole expansion, FLD, DIC, stamping, forging, HTC, ring compression, EBSD, micro-hardness, ductile fracture, biaxial testing, …

JOURNAL REVIEW TASKS

Topic editor board

- Materials Journal
- Materials Science
- Frontiers in Manufacturing Technology

Regular manuscript review

- Software X
- International Journal of Mechanical Sciences
- Mechanics of materials
- International Journal of Heat and Mass Transfer
- Part L: Journal of Materials: Design and Applications journal
- Sensors
- Materials and Design
- Journal of Mechanical Engineering Science
- International Journal of Solids and Structures
- DYNA
- International Journal of Material Forming

Member of the youth editorial board

- International Journal of Minerals, Metallurgy and Materials

AWARDS

- Symposium organizer at the CMN conference (since 2018)
- Conference Committee member of the World Symposium on Materials Science and Engineering (2017)
- Invited Speaker "Fractional Calculus, Probability and Non-Local Operators: Applications and Recent Developments" (2014)
- TALENTIA member, Bizkaia:xede (2012)
- PhD grant (2009-2013)
- CIMNE's master's degree grant (2009)
- Medaille d'Argent, Arts et Métiers ParisTech (2008)
- GOIER Master's degree grant (2006-2008)/
- Degree thesis grant (2005)
- Official project reviewer of the FONCyT (Argentina) and National Science Centre Poland