▶Juan Pablo Torres

Nationality: Argentine/Spaniard

e-mail: jptorres@fi.mdp.edu.ar

Education

▶ **University**

- **Materials Engineering Degree: Materials Engineer**, December 2009, School of Engineering, National University of Mar del Plata.

▶ **Computer Skills**

- SolidWorks and Autodesk Inventor, 3D CAD Design Software
- ABAQUS Standard/Explicit, Finite Element Analysis Simulation Software
- Moldflow and Moldex, Injection Molding Simulation Software
- FORTRAN 90 Language Programming , Mathcad and Matlab Enviroment

▶ **Language Skills**

- TOEFL ITP, October 2010, Score Obtained: 640 points
- First Certificate in English, University of Cambridge, December 1997

Professional Experience

▶ **Materials Engineering Internship,** January 2008 to April 2008
TenarisSiderca Steel Manufacturing Facility, Techint Group, Buenos Aires, Argentina

Supervisor: Dr. Guillermo Echaniz (gechaniz@siderca.com)

Developed Tasks:
- Monitoring of the various stages of production procedures and activities taken during the manufacturing process of a proprietary grade steel at the TenarisSiderca facilities.
- Evaluation of laboratory test results (Uniaxial Tensile Test, Charpy Impact and Hardness Tests).
- Metalographic studies by optical microscopy for steel microstructure characterization
- Failure Analysis using Electron Microscopy (SEM)
- Exhaustive bibliographical search of information related to the mentioned steel.
- Drafting and preparation of a final report in English language.

▶ **Electronics and design,** February 2009 to December 2009
Zen Effects, Mar del Plata, Argentina

Developed Tasks:
- Development of electronic audio and sound effects.
- SolidWorks and Autocad design of metal housings for electronic circuits.

Teaching and Research Experience

▸ **Graduate Teaching Assistant**, March 2010 to Present

  - Polymer Mechanics course (Structural Properties II)
    Materials Department, School of Engineering, National University of Mar del Plata, Argentina

  - Physics II (Electromagnetism) course
    Physics Department, School of Engineering, National University of Mar del Plata, Argentina

▸ **Undergraduate Teaching Assistant**, March 2007 to March 2010

  Physics I and Physics II courses
  Physics Department, School of Engineering, National University of Mar del Plata, Argentina

▸ **Undergraduate Research Assistant**, December 2006 to May 2007

  Research Institute for Materials Science and Technology (INTEMA), National University of Mar del Plata, Argentina
  Assistant to Professor José Manuel Porto López (jmplopez@fi.mdp.edu.ar)

Awards and Scholarships

▸ **Erasmus Mundus EUROTANGO scholarship,** May 2011 to November 2011
  Postgraduate research stay at the Product and Automated Manufacturing Design Institute, Polytechnic University of Valencia, Spain

  Supervisor: Dr. Juan A. Garcia (jugarcia@mcm.upv.es)

▸ **Polymer Mechanics Scholar,** April 2010 to present
  Research Institute for Materials Science and Technology (INTEMA), National University of Mar del Plata, Argentina

  Supervisor: Dr. Patricia Frontini (pmfronti@fi.mdp.edu.ar)

  Developed Tasks:
  - Mechanical testing and failure analysis of polymeric materials.
  - Modeling and finite element simulation of the mechanical behavior of complex geometry parts.
  - Preparation of technical reports.

  Thesis Proposal: Software Implementation and calibration of constitutive equations for polymers subject to high strain rate and impact conditions

  Postgraduate courses taken include: Advanced Continuum Mechanics, Finite Element Analysis on ABAQUS for Solid Mechanics, Applied Mathematics for Indirect Measurements and Damage Mechanisms on Solid Materials.

▸ **Distinguished Graduate Diploma,** March 2010
  School of Engineering, National University of Mar del Plata, Argentina

  Diploma granted in recognition for obtaining a final grade average well above the historic average for the carrer (8.10 on a scale of 10.0)

Conference Proceedings

▶ **3rd SAM (Argentine Society of Materials) young researchers meeting,** 18-19 August 2010, National Technological University (UTN), Entre Rios, Argentina
"Atomistic Model Simulations for etching processes in Si", Presentation of career final project

▶ **3rd Workshop on Soft Matter,** November 2010, Mar del Plata, Argentina
"Constitutive equations for polymers in compression and confined compression load modes"
Poster Presentation