#### **CURRICULUM VITAE**

# NICOLA PETRONE, Ph.D.



**Nationality**: Italian

**Date of Birth:** March 27<sup>th</sup> 1966 **Place of Birth:** Padova-ITALY

**Foreign languages:** Fluent English, very good French.

#### **EDUCATION:**

1985: High school diploma at Scientific Lyceum in Padova, final mark: 60/60.

1992: Degree in Mechanical Engineering at University of Padova, final mark 110/110 with mention. Final year project about crashworthiness of composite nosebox for racing cars.

1992-1995: Ph.D. degree in Machine Design at Padova University about Multiaxial Fatigue Design Criteria.

1995-1996: 11 months stage at Sheffield University – UK with EC grant for research about the biaxial in-phase and out of phase testing of Al 6082 alloy.

#### **ACADEMIC CAREER:**

1997-1998: Postdoctoral fellowship on Biomedical Engineering at University of Ferrara – Italy.

1998-2014: Assistant Professor in Machine Design at University of Padova-Italy.

November 2014: Associate Professor in Machine Design at University of Padova-Italy

### **ACADEMIC TASKS:**

Lecturer on "Machine Design with Laboratory" to 3<sup>rd</sup> year students of Mechanical Engineering (50 students per year).

Lecturer on "Sport Engineering and Rehabilitation Devices" to 5<sup>th</sup> year students of Mechanical Engineering (50 students per year).

2010-2015 Lecturer on "Biomechanics" to 4<sup>th</sup> year students of Exercise Science at Verona University (90 students per year).

Supervisor of PhD students in Machine Design and Construction since 2000.

#### RECENT RESEARCH ACTIVITIES

• Analysis of vibration transmissibility of racing bicycle saddles.

- Field data acquisition of load spectra and variable amplitude fatigue testing of motorcycle and bicycle frames.
- Analysis of the structural behaviour of innovative ski-boots.
- Design of dynamometric platforms for the measure of ski and snowboard loads.
- Structural Analysis of Safety Helmets.
- Field data acquisition on manual and power wheelchairs for the definition of drop and drum tests.
- Biomechanical analysis of wheelchair rugby players and structural analysis of rugby wheelchairs for optimization
- Analysis of active and passive exoskeletons.

## **EXTRA-ACADEMIC ACTIVITIES:**

Member since 1994 of the ISO/TC149/SC1/WG4 on international safety standards for mountain bikes for UNI.

Convenor since 1999 on behalf of UNI of the CEN/TC333/WG3 on European safety standards for racing bikes.

Member from 2008 to 2014 and from 2016 to present of the ISEA (International Sports Engineering Association) Executive Committee.

Member from 2011 of the ISSS (International Society for Skiing Safety) National Representatives Committee.

Convenor since 2008 of the UNI subcommittee "Technical Aids for Persons with Disability".

Member since 2008 of the ISO/TC173 Technical Aids for Person with Disability on behalf of UNI. Chairman since 2012 of the ISO/TC173/SC1 – wheelchairs.

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