Prof. Ciro Santus

Current Position: Full Professor IIND-03/A (former ING-IND/14) – Progettazione meccanica e costruzione di macchine at University of Pisa – DICI, Dept. of Civil and Industrial Engineering

Email: ciro.santus@unipi.it

Phone: +39 050 2218007

Address: Largo Lucio Lazzarino 1, 56122 - Pisa

Orcid: https://orcid.org/0000-0003-0859-626X

WORK EXPERIENCE

- Nov. 2023 – ongoing: Full Professor ING-IND/14 at University of Pisa – DICI
- May 2015 – Oct. 2023: Associate Professor ING-IND/14 at University of Pisa – DICI
- Feb. 2006 – Apr. 2015: Researcher ING-IND/14 at University of Pisa – DIMNP
- May 2003 – Dec. 2023: Scholarship at University of Pisa – DIMNP
- Aug. – Sep. 2001: Summer student at Fermilab di Chicago, IL (USA)

EDUCATION

- 2004-2008: PhD in Mechanical Engineering, University of Pisa, Dept. DIMNP
- 2003: Master's degree in Mechanical Engineering with honours, University of Pisa
- 1998-2003: Admitted and graduated at SSSA - Scuola Superiore Sant'Anna di Pisa

SCIENTIFIC / ACADEMIC POSITIONS - AFFILIATIONS

Member of Quality Assurance Committee "Presidio della Qualità" of the University of Pisa

Scientific responsible of "Curriculum Meccanica" within the "Dottorato in Ingegneria Industriale"

Member of the Editorial board of Machines - MDPI

Reviewer for several journal, such as: International Journal of Fatigue and Fatigue & Fracture of Materials and Structures

MAIN RESEARCH PROJECTS / ACTIVITIES / LABS

Head of the Research Unit for the PRIN2022 project: CALLIOPE: https://www.calliope-hand.it/

Recent collaboration with:

- Japanese agency JAMSTEC - https://www.jamstec.go.jp/e/ topic of the research: Full Scale Drill Pipe fatigue testing with resonance testing machine

- SINT Technology, Florence - https://www.sintechnology.com/ topic of the research: Hole-Drilling Method with Strain Gage Rosette or Digital Image Correlation

Research topics:

- Fatigue and fracture of metal components,
- Additive manufacturing technologies,
- Contact mechanics and fretting fatigue,
- Gear dynamics, gear tooth fatigue and rolling contact fatigue,
- Residual stress measurement with the hole-drilling method,
- Mechanical design of machine elements,
- Finite element modelling for structural applications,
- Experimental modal analysis of bladed wheels.

TEACHING ACTIVITIES

Professor of "Elementi Costruttivi delle Macchine / Fundamentals of Machine Design" (9 CFU)

Professor of "Metodi Computazionali per l'Analisi Strutturale / Computational Methods for Structural Analysis" (6 CFU)

Lecturer of "Elementi Costruttivi del Prodotto Industriale / Fundamentals of Industrial Component Design"

PUBLICATIONS

Publications indexed in Scopus can be found at the following link:

https://www.scopus.com/authid/detail.uri?authorId=8988566700

Scopus data (November 2025): Documents 93, Citations 2006, H-index 25

A complete list of publications can be found at the following link:

https://arpi.unipi.it/cris/rp/rp07916

SCIENTIFIC AWARDS

- 2011, IMechE CEGB Prize Winning Paper (best paper selected of the Journal of Strain Analysis for Engineering Design in the year 2010).

- 2012, AIAS Capocaccia prize as best paper by a young researcher of the AIAS conference in the year 2011.

- 2023, Best Paper Award in Experimental Solid Mechanics at the conference WECM'23