CV Prof. Antonio Testa

- Address: Department of Engineering University of Messina, Contrada Di Dio (Sant'Agata), 98166, Messina, Italy
- □ Email: atesta@unime.it
- □ Date of Birth: 29/08/1962 Nationality: Italian

EDUCATION

Degree in Electrical Engineering - University of Catania (A.Y. 1986-87).

ACADEMIC CAREER

[03/03/2000 – Present] - University of Messina - Full Professor - SC 09/E2 "Electrical Energy Engineering" – s.s.d. ING-IND/32 "Converters, Machines and Electric Drives".

Main activities and responsibilities:

- Teaching courses on: Power Electronics, Electric Machines, Electric Drives, Sensors and Actuators, Renewable Energy Generation, Wind and Photovoltaic Systems, Power Electronics for Renewable Energies and Electric Mobility (2000 - Present).
- Coordinator of the Computer Engineering and Telecommunications Engineering Degree Program (2006 2012).
- Coordinator of the Industrial Engineering Degree Program (2012 2015).
- Coordinator of three Second Level Master programs on "Efficiency in energy conversion" e su "Renewable energy sources" (2008 - 2014).

[01/11/1998 – 02/03/2000] - University of Messina - Associate Professor - s.s.d. ING-IND/32 "Converters, Machines and Electric Drives".

Main activities and responsibilities:

• Teaching courses on: Power Electronics and Electric Machines.

[04/10/1990 – 31/10/1998] - University of Catania - Researcher - s.s.d. ING-IND/32 "Converters, Machines and Electric Drives".

Main activities and responsibilities:

- Visiting researcher at the University of Madison, Wisconsin (U.S.A.), working with Prof. T.A. Lipo (1991).
- Teaching courses on: Electric Energetics and Industrial Electrical Applications (1994 -1998).
- Teaching courses on: Electric Machines and Power Electronics at the University of Messina (1994 - 1998).

PARTICIPATION IN ADVISORY COMMITTEES

- Coordinator of the "Energy" working group at the University of Messina (2014 2023).
- Member of the Technical Scientific Committee for the updating of the "Energy and Environmental Plan" of the Sicilian Region (2016-2021).
- Member of the committee appointed by the Ministry of University and Research to develop the "National Research Program 2021-2027" in the "Industrial Energy" sector (2020).
- Member of the "Energy Thematic Working Group of the S3 Sicily Regional Innovation Strategy for Smart Specialization" appointed by the Sicilian Region (2021 - 2023).
- Member of the "Energy Working Group" of the Network of Universities for Sustainable Development (2021 - Present).

RESEARCH PROJECTS

Principal investigator in research contracts with:

- ST-Microelectronics Development of innovative power converters for fuel cell systems (2009-2011).
- ENEA High voltage pulse generators for food treatment (2017-2018).
- CNR Converters for distributed generation with fuel cell systems (2007-2009).

Responsible for the research unit of the University of Messina in the projects:

- PRIN 1999: Actuators and Systems for Home Automation Applications (26/11/1999 20/12/2001).
- PRIN 2002: Large-Scale Applications of Modular Electric Power Generators with Fuel Cells

 (16/12/2002 18/01/2005).
- PRIN 2006: Sensorless Drives for Integrated Systems in Industrial and Automotive Applications (09/07/2007 31/03/2009).
- PRIN 2008: Electric Drives with High Operating Robustness (22/03/2010 21/11/2012).

National coordinator of the project and responsible for the research unit of the University of Messina in the project:

• PRIN 2003: Innovative conversion topologies for electric drives - (20/11/2003 - 20/12/2005).

Coordinator of Work Packages and responsible for the research unit in the projects:

- PON 02 00355 3391233 Energetic (01/01/2012 31/12/2015).
- PON 02 00153 2939517 Teseo (01/07/2012 31/12/2015).

Member of the research team of the University of Messina in the project:

• ECSEL JU WInSiC4AP (2017-2020).

Coordinator of the research team of the University of Messina and responsible for the research unit in the project:

• JU, GAN4AP "GaN for Advanced Power Applications" (2021 - Present).

Responsible for the research unit in the project:

JU, KDT "NEUROKIT2E" (2023 - Present).

SCIENTIFIC ACTIVITIES

Research interests of Prof. Testa lie in the fields of control of electric drives, electric power generators from renewable sources, energy storage systems, electric vehicles, electromagnetic emissions, power electronic devices, and switching power converters. Among these topics, sensorless control techniques, based on mathematical models, or high-frequency signal injection, have been of great interest since 1991 when he collaborated with Prof. T.A. Lipo at the University of Madison, Wisconsin (U.S.A.).

Prof. Testa is the author of 66 papers published in international technical journals and 155 in international conference proceedings. He is also a co-author of an international patent in the field of electric drive control and a national one for high-voltage pulse systems for food treatment.

Since 1991, he has been an IEEE member and serves as a reviewer for the international scientific societies IEEE IAS, IEEE IES, IEEE PELS, and EPE Journal.

SCOPUS DATA (21-4-2024)

3,685 citations in 2,921 documents

213 publications

h-index 31

Awards

1998 – Third best paper award, 33rd IEEE-IAS Annual Meeting (1998 St. Louis MO. USA)

2000 - Best Paper Award, IEEE Transactions on Power Electronics, Electric Drives Committee.

2020 - Best Paper Award, IEEE ELEKTRO 2020.