

## **CURRICULUM**

**CLAUDIO LEONE**

### **EDUCATION, PROFESSIONAL ACTIVITY AND ACADEMIC POSITION**

- Master engineer degree in 1993 (Aeronautical Engineering).
- PHD in Production Technology and Industrial Plant in 1997.
- From 1999, Researcher of " Production Technology and System " at University of Naples Federico II.
- From 2015, Associate Professor of " Production Technology and System " at University of Campania Luigi Vanvitelli.

### **RESEARCH FIELDS**

The main research fields are the following:

- Conventional and non conventional production system.
- Non conventional materials (composite) production, machining and characterisation.
- Application of laser in manufacturing (cutting, drilling, milling, marking, surface texturing and surface treatments).

### **PRINCIPAL INVESTIGATOR OF THE FOLLOWING NATIONAL PROJECT:**

Project title: Study and use of high-brightness and energy efficiency laser sources for micro-drilling of aerospace components. Participants: AVIO, Department of Industrial Engineering University of Naples and University Consortium CIRTIBS. Research funded by MISE - Italian Ministry of Economic Development. Research program: Fondo Speciale rotativo per l'Innovazione Tecnologica (FIT), DM 24 settembre 2009 (Sportello FIT con fondi PON). Grant No PON-FIT B01/0707/03/X17. Years 2010-2015.

### **MANAGEMENT OF RESEARCH CONTRACTS**

He was scientific manager for the following research contract:

Research contract with GE AVIO (Pomigliano D'Arco, Italy). Years: 2020-21.

Research contract with OMI (Avellino, Italy). Years: 2015-18.

Research contract with Società AROMA (Bologna, Italy). Years: 2017-18.

Research contract with Automobili Lamborghini S.p.A. (Modena, Italy). Years: 2014-15.

Research contract with MBDA Italia S.p.A. (Bacoli, Naples, Italy). Years: 2014-2015.

Research contract with MBDA Italia S.p.A. (Bacoli, Naples, Italy). Year: 2014.

Research contract with WIRES ENGINEERING (Lessolo, Torino, Italy). Research founded by Research Program of Regione Piemonte. Years: 2012-2013.

Research contract with SCM Group (Rimini, Italy). Research funded by MIUR - Italian Ministry of Education, University and Research, DM29080 Law 297/99 - Bando MIUR - PNR 2005. Years: 2010-2011.

Research contract with CMS (Bergamo, Italy). Research funded by Research Program of MIUR - Italian Ministry of Education, University and Research, DM29080 Sistemi di Produzione High Tech per la competitività del Made in Italy. Law 297/99 - Bando MIUR - PNR 2005. Years: 2008-2011.

Research contract with SCM Group (Rimini, Italy). Research funded by MIUR - Italian Ministry of Education, University and Research, DM29080 Sistemi di Produzione High Tech per la competitività del Made in Italy. Law 297/99 - Bando MIUR - PNR 2005. Years: 2008-2011.

Research contract with PROSIT srl (Ercolano, Na, Italy). Research funded by Research Program of Regione Campania 2007-2008.

### **COLLABORATION IN THE ACTIVITY OF RESEARCH CONTRACTS.**

He has collaborate to the following Research Contracts:

Research contract with SIM Srl (Siracusa, Italy). Years: 2012-2015.

Research contract with CND Project Srl (Siracusa, Italy). Years: 2012-2015.

Research contract with Mastrotto (Vicenza, Italy). Years: 2012-2013.

Research contract with SAATI (Milano, Italy). Years: 2012-2013.

Research project funded by MISE - Italian Ministry of Economic Development.. Research program: Fondo Speciale rotativo per l'Innovazione Tecnologica (FIT), DM 24 settembre 2009 Grant No PON-FIT B01/0630/03/X17. Project title: TIG - Innovative Junction and Finishing Technologies for the Furniture. Participants: SCM, LASIT and University Consortium CIRTIBS.– University of Naples (years 2010-2015).

Research project funded by MIUR - Italian Ministry of Education, University and Research, FIRB: (DM25949). Project title: Enabling technologies for manufacturing processes and products with high added value. Activity title: Study of surface treatments and processes to be carried out on traditional and innovative materials using laser sources Years: 2007-2008.

Research project funded by MIUR - Italian Ministry of Education, University and Research, PRIN 2005 n° 2005092544\_005: Activity title: Application of laser technologies in micro manufacturing. Years: 2006-2007.

Research project funded by MIUR - Italian Ministry of Education, University and Research, Progetto Art. 10, L 46/82, Project n°65787. Project title: Study and development of innovative and clean technologies for the improvement and rationalization of the tanning production cycle and a system of recovery of by-products and waste deriving from the leather. Activities title: "Identification of a Model and an Innovative Methodology for Leather Tanning" and "Development, fabrication and testing of a new leather tanning machine". Years: 2002-05.

Research project funded by MIUR - Italian Ministry of Education, University and Research, Cluster 19, Law 488, Project title: Innovative materials and components for capital goods. Years: 2002-2004.

### **DIRECTION OR PARTICIPATION IN THE ACTIVITIES OF RESEARCH GROUPS**

2004 - Member of Scientific Council of TIBS Laboratory, section of the Department of Aerospace Science and Engineering, University of Naples Federico II.

2008 - Founder member of the University Consortium CIRTIBS". CIRTIBS was born on 2008 with the aim to collaborate in the field of materials and innovative technologies for capital goods. CIRTIBS has the administrative office at University of Naples Federico II. The universities joint to the Center are: University of Naples Federico II; University of Roma Tor Vergata; University of Roma La Sapienza; University of Modena Reggio Emilia and the Politecnico di Torino.

From 2010 to 2015 it was Member of Scientific Council of the CIRTIBS.

From 07-11-2010 until today, he was "vice Director" of the University Consortium CIRTIBS.

## **INTERNATIONAL RESEARCH ACTIVITY**

2014 -2016 collaboration with Fraunhofer Institute for Machine Tool and Forming Technology IWU (Kemnitz) e la Kemnitz University of Technology of (TUC), prof.s Matthias Putz and Martin Dix.. Activity: Development of Innovative Machine Technology for Ceramic Components (Cutting, milling, turning and surface finishing) by way of unconventional process (Water Jet, Laser Assisted Machining, Laser Milling, Fluidised Bed Machining).

## **TEACHING**

From 1999 Professor for the following courses:

- "Material Technology" for Mechanical Engineering and Naval Engineering.
- "Special Technology" and "Special Technology II" for Aerospace Engineering.
- "Mechanical Technology" for Management Engineering and Mechanical Engineering.
- "Mechanical Technology II" for Mechanical Engineering.
- "Production systems" for Design for Innovation.

## **PUBLICATIONS**

Author of over 135 publications including:

- 51 in international refereed journals indexed on Scopus or Web of Science;
- 70 in international conference proceedings (32 indexed on Scopus or Web of Science);
- 4 in national journals;
- 10 in national conference proceedings.

## **PATENTS**

- Italian patent n° 0001260764 (1992). Inventors: Leone C., Leone P.. Title: Pneumatic linear servoactuator and relative hydraulic control circuit for controlled movements in position, speed and acceleration).

- Italian patent n° 0001364792 (2005). Inventors: Leone C., De Iorio I., Tomaselli M., Bargiggia G. C.. Title: Continuous-running machine for the wet treatment of leather in the tanning process and leather tanning plant including this machine.
- Italian patent n° 0001382912 (2007). Inventors: Leone C., Lopresto V, De Iorio I, Bargiggia G. C.. Title: Method for the production of charged polymers and of polymer foams by using by-products and / or scraps of the tanning industry.
- Italian patent n° 0001395843 (2009). Inventors: Leone C., Lopresto V, De Iorio I.. Title: Method for the production of charged polymers and polymeric foams.
- Italian patent n° 102015000014635 (2015). Inventors: Leone C., Genna S., Tagliaferri V.. Title: New method for the production of brooms, brushes or brushes.
- Italian patent n° 102015000012593 (2015). Inventors: Coltro D., De Iorio I., Greselin S., Leone C.. Title: Apparato di bordatura (Edging apparatus).
- Austrian patent n° AT 517183 A2 2016-11-15 (2016). Inventors: Coltro D., De Iorio I., Greselin S., Leone C.. Title: Umleimapparat (Edging apparatus).
- Italian patent n° 102016000118515 (2016). Inventors: Leone C., Genna S., Tagliaferri V.. Title: New method for making joints between polymeric material components or between polymeric material components with other materials.
- Italian patent n° 102017000020695 (2017). Inventors: Leone C., Genna S., Tagliaferri V., Ucciardello N. Title: Electric or data transmission cables having high electrical conductivity and/or high data transmission speed (PCT/EP2018/056205, WO 002018/167041 A1).

Aversa (Ce), Italy, 29/07/2021

PhD Prof. Claudio Leone

