

## RESUME – CV

**Luigi T. DeLuca, PhD. Professor (Retired) of Aerospace Propulsion at  
Politecnico di Milano, Milan, Italy**



### Professional Career

- 2017 Spring Semester: Visiting Professor of Rocket Propulsion at Nanjing University of Science & Technology (NUST), Nanjing, China.
- 2015 Fall Semester: Visiting Professor of Rocket Propulsion at NUST, Nanjing, China.
- 2015 Spring Semester: Brain Pool Program Korean Government and Visiting Professor of Propulsion and Combustion at Konkuk University, Seoul, Korea.
- 2014: Honorary Fellowship by High-Energy Materials Society of India (HEMSI), India.
- 2014: Retired by law (maximum age) from Politecnico di Milano with a two-year part-time extension.
- 2013: Guest Professor NUST, Nanjing, China.
- 2010: Honorary Professor OmSTU (Omsk State Technical University), Omsk, Russia.
- 1998-2004: National Representative, NATO RTO AVT/TCPPS (Applied Vehicle Technology / Technical Committee Propulsion and Power Systems).
- 1984-1997: National Representative, NATO AGARD PEP (Propulsion and Energetics Panel).
- 1998: Visiting Scholar, Kyushu Institute of Technology, Japan.
- 1993: Visiting Scholar, Brigham Young University, Provo, UT, USA.
- 1977: Visiting Scientist, Princeton University, Princeton, NJ, USA.
- 1990-2014: Full Professor of Aerospace Propulsion, Politecnico di Milano, Milan, MI, Italy.
- 1984-1989: Associate Professor of Aerospace Propulsion, Politecnico di Milano.
- 1975: Founded Space Propulsion Laboratory (SPLab), Politecnico di Milano.
- 1973-1983: Assistant Professor of Aerospace Propulsion, Politecnico di Milano.

### Education

- 1976: Ph.D. Aerospace and Mechanical Sciences, Princeton University, Princeton, NJ, USA under the supervision of Prof. Martin Summerfield, titled "Solid Propellant Ignition and Other Unsteady Combustion Phenomena Induced by Radiation".
- 1967: Laurea (MSc.) Aeronautical Engineering, Politecnico di Milano, Milan, MI, Italy.
- 1962: High School Diploma Liceo Classico D'Annunzio, Pescara, Italy.

## **Responsibilities**

- Associate Fellow, AIAA (American Institute of Astronautics and Aeronautics).
- Past Vice-President EuCASS (European Conference for AeroSpace Sciences), 2005-2015.
- Editorial Board of several Chinese Journals, different periods
- Editorial Board, Journal of Space Safety Engineering, 2017-2022
- Editorial Board, Omsk Scientific Bulletin, Omsk State Technical University, 2013-2016.
- Editorial Board, IJEMCP (International Journal of Energetic Materials and Chemical Propulsion), 2010-2015. Editorial Board, Aerotecnica Missili e Spazio, Propulsion Section, 1990-1998 and 2009-2012.
- Editorial Board, FGV (Combustion Explosion and Shock Waves), Russian Academy of Sciences, 2005-2019.
- Editorial Board Progress Series, AIAA (American Institute of Astronautics and Aeronautics), 1992-2000.
- Referee for international peer-reviewed scientific journals.
- Referee for PhD Theses submitted all around the world.
- Referee for international scientific projects (CNR, RAS, INTAS, ISTC)
- Organizer of several international workshops (IWCP).

## **Scientific Activity**

For years, the scientific activity has mostly been devoted to fundamental combustion problems of solid-phase energetic materials, from both experimental and theoretical viewpoints, with specific attention to nonsteady burning. In the more recent times, interests have moved to combustion of innovative high-energy condensed materials, nanoenergetics for propulsion, performance of metallized formulations, agglomeration and aggregation, dual metal formulations, quasi-steady regression rates, solid and hybrid rocket motors, space launchers, in-space propulsion.

**06 Special Issues of International Journals (IJEMCP, FGV, AIAA-JPP, European AST)**

**15 Edited Books for International Publishers (AIAA, Springer, CRC Press, Begell House)**

**17 Chapters for International Publishers (Wiley-Scrivener, Elsevier, Taylor & Francis, IGI)**

**Hundreds of Research and Review Papers for International Journals**