

Curriculum Vitae of Alberto Doria

Alberto Doria graduated in Mechanical Engineering at the University of Padua on 21st February 1984 (110/110 e Lode).

In 1986 he entered the National Research Council as a researcher a contract of the RFX project, a large experiment on nuclear fusion. He designed and built the robot for the maintenance of the first wall of the RFX machine. In 1987 he obtained the "Advanced Course in Engineering of Plasma and Controlled Thermonuclear Fusion" at the University of Padua. In 1988 he spent a period at the Sandia National Lab in Albuquerque (USA), to conduct thermal shock tests on the elements of the RFX machine.

In 1990 he became researcher in Machine Mechanics (ING-ING / 13) University of Padua, with research in the fields of robotics, synthesis of mechanisms and control of vibration and noise, dynamics of 2-wheel vehicles.

In the academic years 1991-92 and 1992-93 he spent periods at the Technical University of Gdansk as a lecturer in the intensive robotics module (Tempus program). From 1995 to 1998 he taught various courses of the Engineering Faculty of Trento.

In 2002 he became an associate professor of Machine Mechanics of the University of Padua. He carried out specific researches in the fields of bicycle dynamics and identification of vehicle properties, creating specific equipment for the laboratory of Mechanics of vibration.

In 2007 he took part and in 2008 he won the 2008 Formula Electric & Hybrid Italia student competition, as an academic tutor.

In 2014 and 2018 Alberto Doria obtained the National Scientific Qualification as a full professor for sector 09/A2 Machine Mechanics.

In 2014, as part of the LLP Erasmus program, he was called at the Technische Universität Wien (AT), as teacher of the "Advanced topics in vehicle dynamics" course with the qualification of Univ. Lektor.

In 2014 he started the construction of the Modal Analysis Laboratory.

In 2014 he launched a new line of research on energy harvesting from vibrations with piezoelectric harvesters.

In 2016 he started a research activity on the optimization of the bicycle in collaboration with the Universidad de los Andes (Colombia).

In 2018 he was invited to the Universidad de los Andes and the Pontificia Universidad Javeriana (Bogotá) to plan joint research activities.

Since 2019 Alberto Doria has extended his research on vibrations and systems identification to the fields of robotics and automatic machines.

Alberto Doria is full professor of Machine Mechanics of the University of Padua since April 2021. He belongs to the Group of Machine Mechanics of the DII, and coordinates the activities of the Mechanical Vibration sector, which take place in the laboratories of Modal Analysis and Vibration Mechanics. The main research topics are mechanics and vibration control, identification, robot vibrations, vibration energy harvesting with piezoelectric devices, stability and comfort of bicycles.

Alberto Doria is author of 167 scientific papers.

Alberto Doria has been the principal investigator of various research projects funded by public institutions. The most recent are:

H2020 "Innovative Polymer-Based Composite Systems for High-Efficient Energy Scavenging and Storage" (InComEss call H2020-NMBP-ST-IND-2019, proposal 862597-2), principal investigator of the research unit of Padua.

FSE 2014 - 2020 - Asse I Occupabilità – "La ricerca a sostegno della trasformazione aziendale - Innovatori in azienda - Assegni di ricerca 2018" - DGR 11 DEL 05/01/2018. Progetto Intra-ateneo

interdisciplinare 2105-24-11-2018 “Optimization of the infusion process through the innovative combination of vibro-chemical methodologies (OIVC)”.

FSE 2014 - 2020 - Asse I Occupabilità – “La ricerca a sostegno della trasformazione aziendale Innovatori in azienda” - DGR 2216 DEL 23/12/2016, Progetto tipo A 2105-22-2216-2016 2105 “Multiphysics methodologies for producing horns for different vehicles (MMPAT)”. FSE 2007/2013, Asse capitale umano, Dgr n. 1148 del 05/07/2013 "Assegni di Ricerca", progetto 2105/1/27/1148/2013: “Advanced design methodologies for the reduction of vibrations and noise generated by coffee machines”.

Alberto Doria carries out an important part of his research activity in the industrial field, as PI of research projects of Padua University with industries. The most recent research projects are those with De'Longhi Appliances Srl, STEM Srl and Fiamm Components Accessories-F.C.A. S.p.A.

Alberto Doria is member of international scientific organizations and committees (ASME and IFToMM), and helped to organize international congresses (ASME AVT, EVER and BMD).