

Dr David Oliva Uribe

SUMMARY

20 years of international experience in higher education and research in three different countries: Belgium, Germany and Mexico:

- Coordinator of a strategic action to enhance university-industry collaboration in digital technologies at European Union level to foster research-based innovation & entrepreneurship, through industrial doctorates running in 9 different European cities.
- Advisor to the Mexican federal government for public policies in science, technology and innovation.
- Founder of a consulting agency with focus on academic international collaboration between European (and neighbouring countries) and Latin American Institutions.
- Team leader and team manager of a research group in Germany. Management of research projects from fundamental research to industry-oriented projects and multidisciplinary projects with international partners.
- European policies in Research & Innovation, internationalisation of higher education institutions, global trends in doctoral education, and researcher career development, capacity building, university-business collaboration, and global research collaboration.
- Management of membership services of the largest European university network in doctoral education, covering more than 230 universities in 35 countries.
- Academic administration at university level, design of student recruitment campaigns, academic career mentoring for undergraduate students, management of academic facilities and teaching.
- International relations and mobility in academia. Organizer of exploratory academic missions to Mexico for German and Belgian Universities.
- Founder and coordinator of the Mexican Global Network, a professional diaspora network (12 European countries) with the support of the Mexican government to establish strategic cooperation in business, R&D, and academia with European partners.

STRENGTHS

- Team-oriented leader with a combination of strong academic research and organizing, administrative and networking skills.
- Eager to solve a broad range of complex issues, where international skills and multicultural talents are a fundamental key to assure the success.
- Deep understanding of higher education and research policies.
- Motivated, goal oriented, efficient, well organized, flexible and with strong negotiation skills. Strong ability to identify opportunities and establish synergies.
- Efficient communication skills to address different public, from face-to-face to a broad audience for international and multicultural environments.

- 08/2020- Present- **Secretary General.** *European Power Electronics Association EPE*
 As Deputy Secretary General, I provide support to the Association's Board of Directors and the Secretary General (long time on sick leave) with the general activities:
 - General Management of the Association
 - Administration and accounting
 - Management of the Association Committees
 - Conference and Journal Management
 - Liaison with partners and scientific societies

- 02/2019- Present- **Principal Advisor to the Director-General of the Mexican National Science & Technology Council CONACyT.** *Federal Agency of the Mexican Government, (Freelance)*
 CONACyT is the main federal agency of the Mexican government in charge of the policies for Science, Technology and Innovation. The Director General reports directly to the Mexican President. As principal advisor, the main related topics are:
 - Public policies for innovation
 - Regional development policies
 - Effective international collaboration in science, technology and innovation
 - Talent management and place-branding
 - Open science and open innovation

- 09/2018- 08/2020- **Head Industrial Doctoral School.** *EIT Digital, Brussels, Belgium.*
 EIT Digital is part of the European Institute for Innovation and Technology (EIT), European Union body responsible for the development of Innovation Ecosystems in the EU to foster digital transformation and digital deep tech. The EIT Digital Industrial Doctoral School prepares young researchers with both excellent technical knowledge and the capability to transform technology into business, combining a deep expertise in key digital areas and a strong background in Innovation and Entrepreneurship. The EIT Digital IDSL fosters University-Industry collaboration.
 - Coordination of the Doctoral School in 9 different European cities
 - Design and development of strategic business plan for co-financing of industrial doctorates with European Union funds.
 - Coordination of local staff in 9 different EIT Digital Co-location Centres in Europe
 - Relationships with industrial and academic partners, as well with governmental entities for higher education, research and innovation.
 - Participation in policy and lobbying expert groups for Doctoral Education, Research career assessment and innovation

- 01/2018- Present- **Founder / Senior Advisor on Education, Research and & Innovation**
. EUMex-Connect, Brussels, Belgium.
 EUMex-Connect provides representation and consulting services for international, interdisciplinary and intersectoral collaborations between European (and neighbouring countries) and Latin American Institutions in the following areas:
 - Higher education
 - Research and innovation
 - Talent attraction management

- 10/2016- 08/2020- **Invited Senior Researcher.** *Vrije Universiteit Brussel, Belgium.*
Department of Engineering Technology from 02/2018
Department of Fundamental Electricity and Instrumentation. 10/2016 – 01/2018.
 Researcher in the following areas:
 - System Identification

- PiezoelectricSensors
 - Sensors for Assisted Robotic Surgery
 - Mechanical characterization of biological tissues and phantoms
- 09/2016- 09/2017- **Head of the Council for Doctoral Education.** *European University Association. Belgium.*
 - Management of the largest European university network working on doctoral education. The CDE is a membership service for higher education institutions with interest in the development of doctoral schools, doctoral programmes and researcher career programmes.
 - Responsible of the management of the membership services, and the organisation of workshops, conferences, focus groups and networking events for the members of the Council, as well as, the preparation of relevant policies and studies in the field of doctoral education and early-stage researcher career development.
 - Research on policies and global trends for doctoral education, researcher careers and professional training for professionals in doctoral education.
- 01/2011- 09/2016- **Researcher / Academic Coordinator of the ELEC Spring Doctoral School.** *Vrije Universiteit Brussel. Department of Fundamental Electricity and Instrumentation. Belgium.*
 - Researcher in the following areas:
 - SystemIdentification
 - PiezoelectricSensors
 - Sensors for Assisted Robotic Surgery
 - Mechanical characterization of biological tissues and phantoms

Coordinator of the ELEC Doctoral school on advanced modeling and simulation techniques of (non)linear dynamic systems:

 - Promotion of the doctoral school in different forums and professional networks.
 - Admission and selection process.
 - General logistics for the doctoral school: elaboration of the course schedule and course and laboratory room reservations.
 - Welcome to the participants, mentoring during the doctoral school and organization of social events, complementary to the academic program.
 - Realization and evaluation of participants' feedback.
 - Taking care of the daily operation.

Other activities:

 - Master thesis daily advisor.
 - Support to the International Office for activities related to collaboration and exchange with Mexican Universities.
- 04/2007-12/2010- **Scientific Research Manager (Team Leader).** *Leibniz University of Hannover. Institute of Dynamics and Vibration Research. Germany.*
 - Coordinating the researchers associated to the team and supervising the status of the team's research projects.
 - Generating a team vision and defining objectives.
 - Preparation of grant proposals for different agencies (EU, DFG)
 - Planning the annual budget and designing the resources scheme.
 - Designing and installing three new research facilities: Piezoelectric Transducers Laboratory, Power Ultrasonics Laboratory, and Sensor and Actuators Laboratory.
 - Teams managed during this period:

- Medical Engineering and Mechatronics Systems Research Group (10/2009-12/2010)
- Sensors and Actuators Research Group (09/2008-10/2009)
- Actuators, Piezoelectric and Ultrasonics Research Group (04/2007-09/2008) Researcher in the following areas:
 - Piezoelectric actuators and sensors
 - Ultrasonic actuators for industrial applications
 - Biomedical actuators and sensors using piezoelectric actuators
 - Mechanical characterization of biological tissues and phantoms
- 10/2005-03/2007- **Visiting Researcher.** *University of Paderborn. Mechatronics and Dynamics Research Department. Germany.*
 - Doing research and carrying out experimental measurements in the field of Ultrasonic Wire Bonding and Piezoelectric Actuators.
 - Developing electronic systems for the actuation of piezoelectric transducers and for the acquisition and signal conditioning of piezoelectric sensors.
- 08/2001-07/2005- **Director of the Academic Program of B.Sc. Mechatronics Engineering.** *Instituto Tecnológico y de Estudios Superiores de Monterrey. School of Engineering and Architecture. Mexico.*
 - Management and updating the program curriculum.
 - Planning the budget and resources for the associate facilities.
 - Designing and coordinating the Instrumentation and Measurement Laboratory.
 - Achieving the program's recognition of national and international accreditation boards.
 - National coordinator of the Academy of Mechatronics of the ITESM, 2002-2003
- 08/2001-07/2005- **Full time Lecturer, Department of Mechanical and Mechatronic Engineering.** *Instituto Tecnológico y de Estudios Superiores de Monterrey. School of Engineering and Architecture. Mexico.*
 - Lectures:
 - Introduction to Mechatronics Engineering
 - Instrumentation and Measurement Laboratory
 - Logical Systems Design Laboratory
 - Electronics
 - Applied Electronics
 - Microcontrollers
- 01/2000-07/2001- **Part time Lecturer.** *Instituto Tecnológico y de Estudios Superiores de Monterrey. Department of Electrical and Electronic Engineering. Mexico.*
 - Lectures:
 - Electronics Laboratory.
 - Robotics
 - Radio Frequency Circuits
 - Television Theory
- 08/1998-12/1999- **Freelance Consultant.** *Mexico.*
 - Designing control systems for gasoline vehicles in order to use compressed natural gas as a fuel alternative.
- 01/1998-07/1998- **Project Engineer.** *Condutel S.A. de C.V. Condumex Group. Mexico.*
 - Developing projects for productivity improvement of industrial processes and operation.

EDUCATION

- **PhD in Mechanical Engineering (Doktor-Ingenieur)** *Leibniz University of Hannover, Germany*
- **PhD in Engineering Sciences.** *Vrije Universiteit Brussel, Belgium.*
- **Master in Sciences with Specialization in Manufacturing Systems,** *Instituto Tecnológico y de Estudios Superiores de Monterrey, Mexico.* Thesis with Honorable Mention.
- **B.Sc. Electronics and Communications Engineering,** *Instituto Tecnológico y de Estudios Superiores de Monterrey, Mexico.* With Honors.

LANGUAGE SKILLS

- Spanish (native speaker),
- English (excellent writing and oral),
- German (excellent writing and oral),
- Dutch (basic)

RESEARCH INTERESTS

- System identification techniques
- Sensors and actuators for biomedical applications
- Mechanical Characterisation of biological Tissues and Biomechanics
- Piezoelectric actuators and self-sensing systems
- Power electronics for ultrasonic systems

LIST OF PUBLICATIONS

- A complete list of publications can be found in the following link:
 - <http://bit.ly/DOUPublications082017>

AFFILIATIONS

- European Commission Expert and Member of the Horizon 2020 Advisory Group for the Marie Skłodowska-Curie actions on skills, training and career development (E02952) January-July 2017.
- Senior Member of the **IEEE** since 1994.
- Founder and member of the **Mexican Society on Mechatronics** since 2001.
- Member of the **Mexican Global Network** since 2009.

AWARDS AND HONORS

- **Prize to the Best Visiting Researcher in the Mechanical Engineering Area.** *Leibniz University of Hannover, Germany.* 30 January 2009
- **Appointment by the Mexican Government as Member of the Mexican Network of Talents Abroad** and personal invitation to attend its Annual Conference, *organized by the Mexican Ministry of Foreign Affairs, the World Bank Institute and SaberEsPoder.* Mexico. 12 -15 August 2009

The following persons can be contacted to ask more reference about my professional performance and experience:

- Prof Dr Romain Meeusen, Vice rector for International Policy, Vrije Universiteit Brussel. (romain.meeusen@vub.be)
- Dr Lidia Borell-Damián, Secretary General, Science Europe. (lidia.borreldamian@scienceeurope.org)
- Prof Johan Schoukens, Dept INDI, Vrije Universiteit Brussel. (Johan.Schoukens@vub.be)
- Prof Dr.-Ing. habil. Jörg Wallaschek, Dean of the Faculty of Mechanical Engineering, Leibniz University of Hannover. (wallaschek@ids.uni-hannover.de)
- Dr Ralf Stroop, Senior Neurosurgeon, St. Barbara Clinic in Hamm. (ralf@stroop.de)