

PROF. ENG. MAURIZIO CRISPINO

ACADEMIC PROFILE

---

*May, 2016*

## ACADEMIC ACTIVITIES

### KEY FEATURES

*Professor Maurizio Crispino is Full **Professor of Roads, Railways and Airports** at the Polytechnic University of Milan (namely, Politecnico di Milano), Department of Civil and Environmental Engineering (DICA) - Italy.*

*He got a M.Sc. degree in Civil Engineering, Transport Infrastructures, and a Ph.D. in Transport Engineering and won numerous grants to study both abroad and in Italy.*

*His main areas of expertise include design, construction and maintenance of roads, railways and airport infrastructures. He developed several projects about roads and airports, especially in the field of pavements.*

*He has been Coordinator of Transportation Infrastructures and Geoscience Section up to 2013, within the Department of Civil and Environmental Engineering of Politecnico di Milano.*

*He was and is still principal investigator of many research projects concerning transport infrastructures (innovative materials and pavements, maintenance and rehabilitation techniques and treatments, design methods, new technologies for road monitoring, etc.), specifically in airports as well as in roads and highways.*

*He has published around 130 papers in international conferences and peer-reviewed journals, concerning innovative materials, construction, design, maintenance and rehabilitation of transport infrastructures. He is the co-inventor of 7 patents concerning innovative materials for pavements.*

*Due to 20 years worldwide activity (academic, scientific, working group and committees membership, professional activities), he is very well known internationally.*

## ACADEMIC TRACK

Institution	University of Naples "Federico II"
Date	1992
Degree	Master Degree in Civil Engineering - Transport Section (110/110 <i>with honors</i> )
Institution	University of Rome La Sapienza
Date	1992 – 1996
Degree or Diploma obtained	Ph.D in Transportation Engineering
Institution	University of Naples "Federico II"
Date	1997 – 1999
Degree or Diploma obtained	Post Doctoral fellowship
Institution	Politecnico di Milano
Date	1999 – 2002
Position	Assistant Professor in ROADS, RAILWAYS AND AIRPORTS
Institution	Politecnico di Milano
Date	2002-2007
Position	Associate Professor in ROADS, RAILWAYS AND AIRPORTS
Institution	Politecnico di Milano
Date	march 2007 – present
Position	<u>Full Professor</u> in ROADS, RAILWAYS AND AIRPORTS

## PUBLICATIONS

Prof. Eng. Maurizio Crispino collaborated in the development of several patents under the agreements between Politecnico di Milano and various companies. The methodological approach and the results obtained by different research studies are regularly described in journal publications and conference papers both nationally and internationally. Prof. Eng. Crispino is the author of about **130 scientific papers**.

## COURSES

### *Teaching*

---

Since 1996 Prof. Crispino has taught many academic courses in the scientific field Roads, Railways and Airports such as Road Design, Road-Airports-Railways Construction, Road and Airport Pavements.

Currently, Prof. Crispino teaches the following class at the Polytechnic University of Milan (Politecnico di Milano):

- "Road and Airport Pavements" at Master of Science Degree in Civil Engineering.

### *Laboratory*

---

- 1999-2001 Scientific Coordinator of the Road Experimental Laboratory at Politecnico di Milano
- 2001-2013 Director of the Road Experimental Laboratory at Politecnico di Milano
- Actually he is scientific coordinator of the such Laboratory

### *University teaching activities abroad*

---

#### **Invited Lectures and Seminars:**

- **"Technological innovation in the field of Road Infrastructures"** at Monterrey Tech, Mexico, October 2008.
- **"Floating (And On Water), Desert Areas And Extreme-Civil Airports"**, Monterrey Tech, Mexico, October 2008.

## WORKING GROUPS AND COMMITTEES

The academic activity is carried out in important contexts, national and International networks, participating at numerous committees and working groups both nationally and internationally. The consequent cultural exchanges have significantly contributed to the development of scientific themes and analysis methodologies.

- Since 2016 Member of the Technical Committee for Infrastructures Development of Italian Ministry of Transports (Struttura Tecnica di Missione del Ministero delle Infrastrutture);
- Since 2011 President of UNI Commission on "Road Construction and Civil Works for Infrastructures" - Italy
- Since 2008 President of UNI Commission "Road Materials Subcommittee" - Italy
- Since 2012 President of PIARC Italian Committee (Permanent International Association of Road Congress - World Road Association) TC 1.5 – Risks Management

- **Since 2012 Member of PIARC International Committee (Permanent International Association of Road Congress- World Road Association) TC 1.5 – Risks Management**
- **Since 2011 Member of TRB (Transportation Research Board) Technical Committee AFD10 “Pavement Management System”; Washington D.C. - USA**
- **Since 2011 Member of TRB (Transportation Research Board) Technical Committee AV070 “Airport-Aircraft Compatibility”; Washington D.C. – USA**
- **Since 2011 Member of TRB (Transportation Research Board) Technical Committee AF000 Pavement Materials and the Urban Climate; Washington D.C. – USA**
- 2010-2013 Member of Public Works Unit at Lombardy (Italian Region)
- 2008-2011 President of the "National Committee" TCA.4 "Rural Roads System and Accessibility" PIARC (Permanent International Association of Road Congress)
- **2008-2011 Member of the International Technical Committee TCA.4 "Rural Roads" PIARC (Permanent International Association of Road Congress)**
- 2008-2011 Member of Technical Committee D.1 "Management of Road Infrastructure Assets" PIARC (Permanent International Association of Road Congress)
- 2008-2011 Member of Technical Committee D.2b "Flexible and Semi-rigid Pavements" PIARC (Permanent International Association of Road Congress)
- 2008-2011 Member of Technical Committee D.2a "Road Surface Characteristics" PIARC (Permanent International Association of Road Congress)
- **2001-2004, he was member of the International Committee CERTU “Revêtements des plates-formes tramway”**
- 1996-2003 Member of the Italian National Committee “Surface Characteristics” AIPCR - PIARC (Permanent International Association of Road Congress)
- Since 2001 member of the InterUniversity Center of Research for Studies on Road Safety
- **1996-99 Associate Member of the International “Technical Committee” C1 “Surface Characteristics” AIPCR - PIARC (Permanent International Association of Road Congress)**
- **2000-03 Associate Member of the International “Technical Committee” C1 “Surface Characteristics” AIPCR - PIARC (Permanent International Association of Road Congress)**
- Member of the Experts Groups – Transports Area of the “Progetto Finalizzato Trasporti 2” - CNR for the Coordination of the National Politics for the 5th Framework Programme

- 2004-2007 Vice President of the National Technical Committee C.4.2. Interaction Vehicle-Road AIPCR - PIARC (Permanent International Association of Road Congress)
- **Member of the Working Group "Railway Transport" for the preparation of the Italian Proposal for the 5th Framework Programme of the European Community**
- Member of the Working Group: Improving Road safety for roads and Motorways; Progetto Finalizzato Trasporti 2, Febbraio 1998
- Member of the Scientific Board of the Conference "Environmental impact of road pavement unevenness" held in Porto (Portugal) in 1999
- Member of the Working Group 7 of UNI "Materials from Demolition and Construction"
- Member of the Working Group of UNI "Bound and Unbound Materials"
- Italian Delegate at 6° International Conference on Managing Pavements, Australia, Brisbane, 2004
- Member of the Ministerial Committee for Railway Accidents, 2005
- Coordinator of the Working Group WGA of the National Committee AIPCR TC 4.2. Interaction Vehicle-Road.

#### FURTHER ACADEMIC ACTIVITIES

##### **Attendance at restricted forums (on invitation base)**

- International Forum on Innovation in Paving and Compaction, Stockholm (SWEDEN), December 2008
- USA - Europe Forum on Sustainable Pavements (organized by the National Science Foundation and the Federal Highway Administration) - Warrenton (Virginia - USA), January 2010
- New Technologies in asphalt pavements, Poana Brasov, ROMANIA, 2010

##### **Chairman at international conferences**

- International Conference Enviroad, Warsaw, POLAND, 2009
- International Symposium on Life Cycle in Civil Engineering IALCEE, Varenna, 2008
- International Conference on Road Safety and Simulation, Roma 2007
- Transportation Research Board Annual Meeting, Washington DC, 2014
- International Workshop on Road Risk Management (PIARC), Milano 2014
- Transportation Research Board Annual Meeting, Washington DC, 2016

##### **Member of the scientific committees of conferences / workshops**

- International Conference Enviroad, Warsaw, POLAND, 2009
- International Conference on Managing Pavements Assets (ICMPA), CHILE, 2011

##### **Seminars / meetings organized internationally**

- International Seminar on Rural Roads, Hyderabad (Andhra Pradesh, INDIA), January 2010

- World Road Association PIARC TC A4 Rural Roads International Meeting, Milan, September 2009
- Warm Asphalts (with the participation of prof. Darius Sybilsky), Polytecnic University of Milan, March 2009
- International Workshop on Road Risk Management (PIARC) in Milan, 2014
- President of the World Conference on Pavement and Asset Management, 2017

**International invited presentations**

- Innovation in Airport Management, TRB, Washington DC - USA, January 2010
- Innovative Photocatalytic Pavements at Subcommittee AF000 (2) Pavement Materials and the Urban Climate, TRB, Washington DC - USA, January 2010
- Pavement Maintenance and Management in Airports, TRB Washington - USA, January 2011
- The World Conference on Pavements and Assets Management, TRB, Washington DC - USA, January 2016

**Attendance at International Conferences**

- 25th World Road Congress (PIARC), Seoul, SOUTH KOREA, 2015
- Transportation Research Board Annual Meeting, Washington, USA, Years: 2009, 2010, 2011, 2012, 2013, 2014, 2015, 2016
- International Seminar on Rural Roads, Hyderabad, INDIA January 2010
- Mairepav6, Turin, July 2009
- PMS European Users Conference, Rust am Neusiedlersee, AUSTRIA, October 2009
- Enviroad, Warsaw, POLAND, October 2009
- International Conference on Managing the Pavement Assets, ICMPA, Calgary, CANADA, 2008
- 23rd ARRB Conference, Adelaide, AUSTRALIA, 2008
- International Gulf Conference on Roads, Doha, QATAR, 2008
- International Symposium on Life Cycle in Civil Engineering, IALCEE, Varenna, 2008
- International Conference on Road Safety and Simulation, RSS2007, Rome, November 2007
- PIARC (World Road Association) World Congress, Paris, FRANCE September 2007
- International Conference on Managing Pavement Assets, ICMPA8, Brisbane, AUSTRALIA, 2006

**Some Other International Scientific Collaborations**

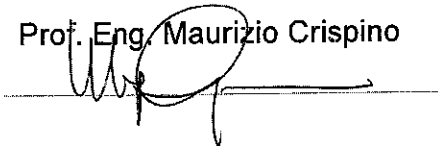
- Cooperation with Prof. B. Psarianos – Technical University of Athens, GREECE, (since 1994)
- Framework Agreement of Cooperation between the University and the ARRB (Australian Road Research Board) Melbourne AUSTRALIA (since 2008)

- International exchange program for researchers "Researchers Transport Exchange" TRex, Melbourne AUSTRALIA
- Dual Doctoral / PhD Agreement with Virginia Tech (USA)
- Research activities on Life Cycle Analysis with Virginia Tech, Prof. Gerardo Flintsch, USA (since 2005)
- Research on High Modulus Materials and Pavement Design, Technical University of Delft, prof. Andree Molenaar, THE NETHERLANDS, 2010
- Research activities on Photocatalytic Pavements, Preventive Maintenance, the Road and Bridge Institute - IBDM, prof. Dariusz Sybilsky, Warsaw, POLAND, (since 2010)
- Cooperation with Romania National Laboratories for Road Material Testing, ROMANIA (2012),
- Cooperation with prof. Valeriy Zhdaniuk, Kharkiv National Automobile and Highway University, UKRAINA (since 2012)
- Cooperation with Prof. Park, Seoul Technical University, SOUTH KOREA (since 2016)
- Other direct cooperation: CHINA (prof. Li Ningyuan – Chang'an University, JAPAN (prof. K.Tamura), INDIA (dr. K. Katari), ALBANIA (Dr. F. Kaba and others), SPAIN (prof. A. H. Martinez), PORTUGAL (prof. P. Pereira), GERMANY (prof. Stefan Bald).

*Signature*

---

Prof. Eng. Maurizio Crispino







**POLITECNICO**  
MILANO 1863

DIPARTIMENTO DI  
INGEGNERIA CIVILE E  
AMBIENTALE

## SINTESI del PROFILO ACCADEMICO del Prof. Maurizio CRISPINO

Professore Ordinario del Politecnico di Milano (Dipartimento di Ingegneria Civile ed Ambientale "DICA") nel settore Strade Ferrovie ed Aeroporti (dal 2007). Dal gennaio 2016 è membro della Struttura Tecnica di Missione del Ministero delle Infrastrutture. E' Presidente di diversi Comitati e GL (TC A.3 della World Road Association/PIARC "Gestione del Rischio delle Infrastrutture". Presidente della Commissione Nazionale dell'UNI "Costruzioni di Strade ed Opere Civili delle Infrastrutture", Sottocommissione Nazionale dell'UNI U7102 "Materiali Stradali") nonché Membro effettivo dei Technical Committee AV070 - AFD10 - AFD0001 del Transportation Research Board (Washington D.C.), e del TC A.3 Internazionale dell'AIPCR. E' Presidente della World Conference on Pavement and Asset Management – WCPAM2017. I temi di studio e di ricerca concernono le infrastrutture stradali ed aeroportuali. E' autore di 6 brevetti e di circa 120 articoli.