

## Rosolino Vaiana

Palermo (Italy), August 1<sup>st</sup>, 1972

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87100 Cosenza (Italy)



Researcher and Aggregate Professor of Highways, Railways and Airports Engineering  
Scientific Director of Road, Railway and Airport Materials Research Laboratory

DINCI | Department of Civil Engineering  
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### CURRICULUM STUDIORUM

**April 2000.** Single-cycle master's degree in Civil Engineering (Transportation) cum laude, University of Palermo, Italy.

**October 2000.** Qualified to practice as an Civil Engineer, University of Palermo, Italy.

**February 2004.** Ph.D. in Road Infrastructure Engineering, University of Palermo, Italy.

### ACADEMIC CURRICULUM

**June 2004.** Research fellow (6 months) about “Innovative techniques for the productive use of industrial waste in road construction”  
| University of Palermo, Italy,

**January 2005.** Researcher (Assistant professor) for Italian Scientific Sector ICAR/04 - Roads, Railways, Airports | University of Calabria, Faculty of Engineering.

**January 2008.** Confirmed in the role of Researcher (Assistant professor).

**March 2017.** Associate Professor National Scientific Qualification | Competition sector 08/A3 - Infrastructure and Transport Systems, Estimate and Evaluation | Scientific Sector ICAR/04 - Roads, Railways, Airports.

### TEACHING

#### **Academic Years since 2004/2005 to 2008/2009 | University of Calabria**

Road Construction (6 credits, Bachelor's Degree in Geomatics-Cartographic, Estimative, Territorial and Building Sciences).

#### **Academic Year 2009/2010 | University of Calabria**

Road, Railways and Airports Construction (Courses A and B) (7 credits, Bachelor's Degree in Civil Engineering).

Road Construction (6 credits, Bachelor's Degree in Geomatics-Cartographic, Estimative, Territorial and Building Sciences).

#### **Academic Years 2010/2011 and 2011/2012 | University of Calabria**

Road, Railways and Airports Construction (Courses A and B) (6 credits, Bachelor's Degree in Civil Engineering).

Design and Maintenance of Road Pavements (6 credits, Master's Degree in Civil Engineering).

#### **Since Academic Year 2012/2013 to present | University of Calabria**

Fundamentals of Road Infrastructures Design (6 credits, Bachelor's Degree in Civil Engineering).

Design and Maintenance of Road Pavements (6 credits, Master's Degree in Civil Engineering).

#### **Since 2000 to present | University of Palermo and University of Calabria.**

Supervisor of more than 150 bachelor and master theses.

#### **Since 2005 to present | University of Calabria.**

Academic tutor of more than 100 students in curricular internship (3/6/12 credits, bachelor's and master's Degrees)

### ***TEACHING in ADVANCED TRAINING COURSES***

- September 2003** SIIV (Società Italiana Infrastrutture Viarie) 1<sup>st</sup> Summer School "Le pavimentazioni stradali flessibili" | Cingoli (MC), Italy.
- March 2008** 2<sup>nd</sup> Level University Master "Road Quality Management" (Project n ° 1999 / IT.16.I. PO.011 / 3.07 / 9.2.14 / 0329) | Faculty of Engineering, Kore University of Enna (Italy).
- October 2015** Study Day "Prove di laboratorio sulle terre e sui materiali per applicazioni di geotecnica e di costruzioni stradali" | Faculty of Engineering, University of Messina (Italy).
- November 2015** Training Seminar "Road friction: theoretical and technical aspects in post-accident scenarios". Briefing Room "Enzo e Dino Ferrari" International Circuit IMOLA (BO). Event Organized and Accredited by the Bologna Engineers Order | Sponsor: AIIT (Emilia Romagna-Marche Section); SIIV (Società Italiana Infrastrutture Viarie) and "Enzo e Dino Ferrari" International Circuit.
- May 2016** Safety & Health Conference "Safe cycling". Within the Giro d'Italia 2016 passage (4<sup>th</sup> Tappa of the Giro d'Italia, from Catanzaro to Praia a Mare, 10 May 2016) | Council Chamber Praia a Mare Municipality (CS), Italy.
- November 2017** Seminar "Gestione della sicurezza nelle Infrastrutture Viarie: dalla progettazione all'esercizio con riferimento all'art. 8 del decreto legislativo n. 35/2011". Event organized by AIIT (Calabria Section). | Sponsor: DINCI, Department of Civil Engineering, University of Calabria. Event Accredited by Cosenza Engineers Order | Arcavacata Campus, University of Calabria (Italy)
- May 2018** Study Day "Active and Passive Safety in Road Infrastructure" within the 2018 Road Safety Campus. Event sponsored by DINCI, Department of Civil Engineering, University of Calabria and SIIV (Società Italiana Infrastrutture Viarie). Event Accredited by Cosenza Engineers Order | Arcavacata Campus, University of Calabria (Italy).
- December 2018** Seminar "La ripartizione delle risorse nella gestione delle infrastrutture stradali". Event organized by AIIT (Calabria Section). | Sponsor: DINCI, Department of Civil Engineering, University of Calabria. Event Accredited by Cosenza Engineers Order | Arcavacata Campus, University of Calabria (Italy)

### ***RESEARCH INTERESTS***

Road pavement surface performances  
Environmental sustainability of road pavements  
Bituminous mixtures  
Recycled and alternative road materials  
Geometric design and performance analysis of roundabouts  
Road safety and driver behaviour

### ***Ph.D. SUPERVISOR***

- 2007-2009 Luigi Rosalbino TURCO** - Mix-design of asphalt concretes with innovative methodologies and techniques for energy saving and environmental protection | Ph.D. in "Technologies and environmental planning" - Cycle XXII University of Calabria.
- 2009-2011 Teresa IUELE** - The intrinsic properties of road transport infrastructures: study of a decay model of the road surface characteristics | Ph.D. in "Technologies and environmental planning" - Cycle XXIV University of Calabria
- 2010-2012 Venant MINANI** - Hot mix asphalt composition versus surface characteristics: optimization processes | Ph.D. in "Technologies and environmental planning" - Cycle XXV University of Calabria
- 2019-2022 Giusi PERRI** - Control and management of road infrastructure safety | Ph.D. in "Civil and Industrial Engineering" - Cycle XXXIV University of Calabria
- 2020-2023 Manuel DE ROSE** - Environmental eco-sustainability of road pavements: recycling scenarios for raw-secondary materials and bio-waste | Ph.D. in "Civil and Industrial Engineering" - Cycle XXXVI University of Calabria

### ***AFFILIATIONS AND ACADEMIC SOCIETY MEMBERSHIPS***

- Since 2003 - present.** Member of the SIIV (Italian Society of Transportation Infrastructures). Society no profit founded in 1990 that it represents the Academic Community of research on "Road, Railway, Airport Infrastructures".
- Quadriennium 2000-2003.** Expert Member of the Italian Technical Committee Surface Characteristics C.1, PIARC (World Road Association).
- Quadriennium 2008-2011.** Expert Member of the Italian Technical Committee Road Pavement: D.2a Road Surface Characteristics. Strategic Theme D: Quality of Road Infrastructure PIARC (World Road Association).
- Quadriennium 2020-2023.** Expert Member of the Italian Technical Committee: 4.1 Pavements. Strategic Theme ST4. Resilient Infrastructure PIARC ITALIA (World Road Association).

### **REVIEWING ACTIVITIES FOR JOURNALS**

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- Construction and Building Materials, Elsevier.
- Transportation Research Part D: Transport and Environment, Elsevier.
- International Journal of Pavement Research and Technology, Elsevier.
- Journal of Traffic and Transportation Engineering, Elsevier.
- Measurement, Elsevier.
- Materials and Design, Elsevier.
- International Journal of Pavement Engineering, Taylor & Francis
- Journal of Materials in Civil Engineering, ASCE
- Advances in Transportation Studies, Aracne.
- Materials, MPDI.
- Sensors, MPDI.
- Applied Sciences, MPDI.
- Water, MPDI

### **FUNDED RESEARCH AS CO-PRINCIPAL INVESTIGATOR (Co-PI)**

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**Since 2000-2006 PON-National Operational Program 2000-2006** "Scientific Research, Technological Development and Higher Education" (Measures 2.3 and 3.2 ), Laboratory for the Characterization of Asphalt Concrete by Gyrotory Compactor within the Center of Technological Competence on Transport - Calabria Node.

**2010-2012 PRIN 2008** Research Projects of Relevant National Interest: "Drenante da drenante/Porous asphalt from Porous asphalt" | (Prot. 2008SC3ATN\_002)

**2019-2022 PRIN 2017** Research Projects of Relevant National Interest: "USR342 | Urban safety, Sustainability, and Resilience: 3 paving solutions, 4 sets of modules, 2 platforms" | (Prot. 2017XYM8KC)

### **SCIENTIFIC AWARDS**

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**September 2006 Le Strade SIIV2006 Award**, Paper mentioned by Scientific Committee of XVI S.I.I.V National Conference "Manutenzione e adeguamento delle strade esistenti" | Arcavacata Campus, University of Calabria (Italy)

### **AWARDS TO M.S. THESIS**

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**October 2010 Giulio Sitongia**: winner of the Piero Maggiorotti 2010 Award – PIARC World Road Association. Session: "Sicurezza del sistema stradale: progettazione, costruzione, manutenzione e gestione del sistema, esame dei rischi nell'esercizio: proposte innovative e migliorative". Thesis title: "Studio teorico-sperimentale delle performance superficiali di conglomerati bituminosi addensati mediante l'uso di pressa a taglio giratorio" | Rome, Italy.

**February 2018 Anselmo Filice**: winner of the ANPAM 2018 Award – ANPAM Associazione Nazionale Produttori Armi e Munizioni Sportive e Civili. Thesis title: "Studio Teorico-Pratico degli Effetti Indotti (Onda D'urto e Vibrazioni) da Abbattimenti Controllati con Esplosivi, Inquadramento Normativo Internazionale e di Sicurezza" | Vicenza, Italy.

### **PAPERS**

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Link to: [IRIS by UNICAL Data Base](#)

Link to: [ORCID Data Base](#)

Link to: [Google Scholar](#)

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"Code concerning the protection of personal data"

Arcavacata di Rende (CS), Italy | October 16<sup>nd</sup>, 2020