



Prof. Antonio Coppola

Curriculum Scientifico

TEACHING

2001 - 2008

- *Forestry Hydraulics and Soil Conservation* - Potenza
- *Hydrological Modeling* – Potenza
- *Agricultural Hydraulics* – Matera

2008 - now

- *Basin Hydrology and Water Resources Management* - Potenza
- *Agricultural Hydraulics* – Matera

Doctorate Board member (Food, Agricultural and Forestry Economics and Engineering)

Doctorate Thesis:

1. “Modellistica idrologica a scala di versante: determinazione dei parametri equivalenti in mezzi porosi strutturati mediante modelli fisico-empirici bimodali per la stima delle proprietà idrauliche;
2. “Field-scale experimental and modeling studies: investigation on soil hydrological behavior response to irrigation with saline water”;
3. Stochastic methodology for predicting groundwater vulnerability to non-point source contamination at regional scale: The Metaonto case study
4. Accounting for Spatial and Temporal Variability of Soil Hydraulic and Hydrodispersive Properties for interpreting soil water flow and solute transport processes at field scale”.

Doctorate Board member (DICEM)

Doctorate Thesis:

1. “Distribution Uniformity and Application Efficiency of Irrigation Systems Based on Space-Time Analysis of Soil Moisture Patterns in Soils With Different Hydrological Behaviors”.”.

2007-2008

Guest Professor at Cold and Arid Regions Environmental and Engineering Research Institute, Chinese academy of Sciences

UNIVERSITÀ DEGLI STUDI DELLA BASILICATA - POTENZA
Scuola di Scienze Agrarie, Forestali, Alimentari e Ambientali



2010

Guest Professor at Renewable Resources Dept., University of Alberta (CANADA) -- Faculty of Agricultural, Life and Environmental Sciences

2014

Guest Professor at The University of Western Australia, (Civil, Environmental and Mining Engineering)

NATIONAL AND INTERNATIONAL RESEARCH PROJECTS

1996-1999 - University of Napoli "Federico II"

Project MEDALUS (Mediterranean Desertification and Land Use)

1999-2000 – University of Napoli "Federico II"

Project FLUMENDOSA (Effects of Wastewater Reuse for Irrigation on Soil Properties – Sardinia Region)

PRIN 2002 – University of Basilicata

(Studio del trasporto dei metalli pesanti in suoli irrigati con acque reflue urbane – Esperimenti e modellizzazione alla mesoscala);

PRIN 2004 - University of Basilicata

(Dinamica di inquinanti di origine agricola in parcelle sperimentali)

PRIN 2007 - University of Basilicata

(Valutazione dei fenomeni di inquinamento da fitofarmaci dei suoli alla scala di campo)

2007-2008 – National Research Council (CNR)

Project National Research Council (CNR) - Cold and Arid Regions Environmental and Engineering Research Institute -Chinese Academy of Sciences (CAREERI/CAS). "Irrigation using saline water: contribution to increase productivity and yield quality of traditional crops in Chinese N.W. oasis" (Minquin basin):

2010 - CIHEAM/IAM Bari and "Cooperazione Italiana", Italian Government

Project "Rational use of natural resources to improve agricultural productions in Syria"

Aree di interesse scientifico:



Soil Hydrology, Watershed Hydrology, Irrigation and Drainage

Attuali interessi di ricerca:

MAIN RESEARCH ACTIVITIES

Research focuses on measuring and modeling water and solute transport in unsaturated heterogeneous and layered porous media. Specific topics include:

- *Soil Hydrological characterization;*
- *Spatial variability of soil hydrological properties and stochastic approaches in natural porous media;*
- *Measuring and modelling of preferential flow on forest and agricultural hillslopes;*
- *Numerical modelling of soil water and solute transport in the Soil-Plant-Atmosphere continuum system;*
- *Irrigation in arid conditions and with non-conventional water resources;*
- *Mapping groundwater pollution risk within agricultural watershed using modelling, geostatistics and GIS;*
- *Groundwater resources estimates in arid zones;*
- *Remote sensing of soil salinity*

Affiliazioni:

Orario e Sede di ricevimento:

GIORNO	DALLE ORE	ALLE ORE	PRESSO
LUNEDI	11.00	13.00	Studio SAFE
MARTEDI	14.30	16.00	Studio SAFE
MERCOLEDI	11.30	13.30	Studio SAFE
GIOVEDI			
VENERDI			

Indirizzo E-mail: antonio.coppola@unibas.it

Telefono:

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