

PERSONAL INFORMATION



Giuseppe Modica

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Residenza Viale Aldo Moro Trav. Neri, 89129 – Reggio Calabria (Italy)

Sex Male | **Date of birth** 05/03/1973 | **Nationality** Italian

WORK EXPERIENCE

from 2005

Assistant Professor, PhD

Mediterranea University of Reggio Calabria, Italy (www.unirc.it)

▪ Scientific research and teaching

Scientific Sector Rural buildings and Agro-Forestry Landscape

EDUCATION AND TRAINING

(2001 – 2004)

PhD

Mediterranea University of Reggio Calabria, Italy (www.unirc.it)

▪ PhD in Environmental and Agro-forestry Engineering

(1993 – 1999)

Degree

Mediterranea University of Reggio Calabria, Italy (www.unirc.it)

▪ Graduated cum laude in Forestry Sciences

PERSONAL SKILLS

Mother tongue(s)

Italian

Other language(s)

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
English	C1	C1	C1	C1	C1
French	A2	B1	A2	A1	A1

Communication skills

▪ Good communication skills gained through my experience in national and international scientific conferences, meetings and seminars.

Organisational / managerial skills

From 2008, Member of the Teaching Staff of the PhD Course on “Rural Development, Sciences and technologies for agroforestry and animal farming” at ‘Mediterranea’ University of Reggio Calabria.

Job-related skills

▪ good organisational skills in coordinating research groups
Since January 2010, person in charge of the GIS and cartographic section in the research Laboratory “AGROMATER-LAB” (Technological Innovation, Research and Services for quality and typical Agro-food products and for the Valorisation of the typical labour places)

- Computer skills
- OSs (Windows, Ubuntu Linux, MacOS)
 - Office packages (LibreOffice, Microsoft Office™)
 - GIS and Image processing packages (ArcGIS, QGIS, SAGA GIS, Idrisi, Erdas)
 - Graphic packages (Corel Draw Suite, Photoshop)
 - Digital photogrammetry: Erdas Photogrammetry, Pix4d, Photoscan
 - Statistical packages: SPSS, Past
- Driving licence
- B

ADDITIONAL INFORMATION

Scientific Projects

Participation on PRIN projects (Research Projects of National Relevance) funded by Italian Ministry for University and Research (MIUR):

- 2008-2010 – PRIN 2007 member of the Research Unit (RU) involved on the research “New guidelines for building design and landscape planning in Italian rural areas” Principal investigator Prof de Montis;
- 2004-2006 – PRIN 2003 member of the RU involved on the research “The rural landscape between conservation and innovation: analysis of the evolution trends and definition of strategies and tools for a sustainable planning” Principal investigator Prof de Montis;
- 2004-2006 – PRIN 2003 member of the RU involved on the research “Models for the sustainable landscape development areas with differentiated typology: the case of Aeolian islands” Principal investigator Prof Mennella

International projects

- From 2016 Principal Investigator in the Project entitled “Application of GIS and Remote Sensing in the Formulation of Strategies for Mitigation and Adaptation to Climate Variability in Arid and Semi-arid Zones in Mozambique” Project Partners: Department of Geography, Eduardo Mondlane University, Mozambique (Lead Ptnr); Università degli Studi Mediterranea di Reggio Calabria (Italy) and Department of Geography of the Federal Fluminense University (Brazil).
- From 2014, member of working group (WG) 3 “Conceptual reflection” and of the Managing Committee of the project CYBERPARKS (*Fostering knowledge about the relationship between Information and Communication Technologies and Public Spaces supported by strategies to improve their use and attractiveness*), funded in the intergovernmental framework for European Cooperation in Science and Technology (COST) - Transport and Urban Development (TUD) COST Action TU1306 (www.cost.eu/domains_actions/tud/Actions/TU1306 - <http://cyberparks-project.eu>).
- 2011-2013 Project Manager of the Project Partner 4-University of Reggio Calabria on the ESPON project SIESTA (Spatial indicators for a Europe 2020 Strategy Territorial Analysis). SIESTA has been funding on ESPON2013 Programme (European Observation Network for Territorial Development and Cohesion) priority 1 (Applied Research Projects). Lead Partner, research group ANTE of the University Institute for the Study and the Development of Galicia (IDEGA); international Project coordinator Prof Lois.
- 2007-2008 member of the RU in the Herodot project “Tourism uses of the historic environment. Know-how transfer and quality management practices at community level” (EU Community Initiative Interreg IIIB Archimed). Resp. sc. Prof Di Fazio;
- 2005-2006 member of the RU in the Rural-Med II project “Paysages de la ruralité contemporaine / Actions paysageres pour l’innovation rurale” (Interreg III-Medocc). (coordinator Prof Pizziolo);
- 2005-2006 member of the RU in the project “Technological Innovation and valorisation of the typical product in the rural areas in Calabria” funded By Italian Ministry for the Environment (Coordinator Prof Bianchi; responsible Prof Fichera);
- 2002-2004 member of the RU on a Rural-Med I “Permanent Workshop and network of centers to the rural development in the Mediterranean”, Interreg III-Medocc Programme. Thematic lines “El patrimonio como elemento articulador del desarrollo rural” e “Los SIGs como instrumentos de la diversificación del desarrollo rural”.

Selected Publications

2017

- Barreca F, Modica G, Di Fazio S, Tirella V, Tripodi R, Fichera CR. 2017. Improving building energy modelling by applying advanced 3D surveying techniques on agri-food facilities. *Journal of Agricultural Engineering* 48: 203–208. DOI: 10.4081/jae.2017.677.
- De Montis A, Modica G, Arcidiacono C. 2017. AgInformatics. In: Schintler LA and McNeely CL (eds) *Encyclopedia of Big Data*. Springer International Publishing: Cham, 1–4. DOI: 10.1007/978-3-319-32001-4_218-1.
- Lanucara S, Oggioni A, Modica G, Carrara P. 2017. Interoperable Sharing and Visualization of Geological Data and Instruments: A Proof of Concept. *Computational Science and Its Applications – ICCSA 2017. Lecture Notes in Computer Science, vol 10407*. Springer: 584–599. DOI: 10.1007/978-3-319-62401-3_42.
- Modica G, Praticò S, Di Fazio S. 2017. Abandonment of Traditional Terraced Landscape: A Change Detection Approach (A Case Study in Costa Viola - Calabria, Italy). *Land Degradation & Development* (8): 2608–2622. DOI: 10.1002/ldr.2824.

2016

- De Montis, Andrea, Simone Caschili, Maurizio Mulas, Giuseppe Modica, Amedeo Ganciu, Antonietta Bardi, Antonio Ledda, Leonarda Dessena, Luigi Laudari, and Carmelo Riccardo Fichera. 2016. "Urban–rural Ecological Networks for Landscape Planning." *Land Use Policy* 50 (January). Elsevier Ltd: 312–27. doi:10.1016/j.landusepol.2015.10.004.
- Modica, G., Solano, F., Merlino, A., Di Fazio, S., Barreca, F., Laudari, L., & Fichera, C. R. (2016). Using Landsat 8 imagery in detecting cork oak (*Quercus suber* L.) woodlands: a case study in Calabria (Italy). *Journal of Agricultural Engineering*, 47(4), 205–215. <http://doi.org/10.4081/jae.2016.571>.
- Modica, G., Pollino, M., Lanucara, S., La Porta, L., Pellicone, G., Di Fazio, S., & Fichera, C. R. (2016). Land Suitability Evaluation for Agro-forestry: Definition of a Web-Based Multi-Criteria Spatial Decision Support System (MC-SDSS): Preliminary Results. In O. Gervasi, B. Murgante, S. Misra, A. C. A. M. Rocha, M. C. Torre, D. Taniar, S. Wang (Eds.), *Computational Science and Its Applications - ICCSA 2016. Lecture Notes in Computer Science, vol 9788* (pp. 399–413). Cham: Springer International Publishing. http://doi.org/10.1007/978-3-319-42111-7_31

2015

- Fichera, Carmelo Riccardo, Luigi Laudari, and Giuseppe Modica. 2015. "Application, Validation and Comparison in Different Geographical Contexts of an Integrated Model for the Design of Ecological Networks." *Journal of Agricultural Engineering* 46 (2): 52–61. doi:10.4081/jae.2015.459.
- Modica, Giuseppe, Angelo Merlino, Francesco Solano, and Roberto Mercurio. 2015. "An Index for the Assessment of Degraded Mediterranean Forest Ecosystems." *Forest Systems* 24 (3): e037. doi:10.5424/fs/2015243-07855.

2014

- Barreca F, Cardinali G, Fichera CR, Lamberto L, Modica G (2014). A fuzzy-based model to implement the global safety buildings index assessment for agri-food buildings. *Journal of Agricultural Engineering*, vol. 45, p. 24-31, ISSN: 2239-6268, doi: 10.4081/jae.2014.227
- De Montis A, Bardi MA, Ganciu A, Ledda A, Caschili S, Mulas M, Dessena L, Modica G, Laudari L, Fichera CR (2014). Landscape Planning and Ecological Networks. Part A. A Rural System in Nuoro, Sardinia. *TEMA*, vol. Special Issue June 2014, p. 297-307, ISSN: 1970-9870, doi: 10.6092/1970-9870/2485
- De Montis A, Bardi MA, Ganciu A, Ledda A, Caschili S, Mulas M, Dessena L, Modica G, Laudari L, Fichera CR (2014). Landscape Planning and Ecological Networks. Part B. A Rural System in Nuoro, Sardinia. *TEMA*, vol. Special Issue June 2014, p. 309-320, ISSN: 1970-9870, doi: 10.6092/1970-9870/2488
- Modica G, Praticò S, Pollino M, Di Fazio S (2014). Geomatics in Analysing the Evolution of Agricultural Terraced Landscapes. In: (a cura di): Murgante B, Misra S, Rocha AM, Torre C, Rocha JG, Falcão MI, Taniar D, Apduhan BO, Gervasi O, *Computational Science and Its Applications – ICCSA 2014. Lecture Notes in Computer Science*, vol. 8582, p. 479-494, Springer International, doi: 10.1007/978-3-319-09147-1_35
- Modica G, Laudari L, Barreca F, Fichera CR. 2014. A GIS-MCDA Based Model for the Suitability Evaluation of Traditional Grape Varieties: The Case-Study of "Mantonico" Grape (Calabria, Italy). *International Journal of Agricultural and Environmental Information Systems* 5(3): 1–16. DOI: 10.4018/ijaeis.2014070101.

2013

- Modica G, Zoccali P, Di Fazio S (2013). The e-participation in tranquillity areas identification as a key factor for sustainable landscape planning. In: (a cura di): Murgante B, Misra S, Carlini M, Torre CM, Nguyen HQ, Taniar D, Apduhan BO, Gervasi O, *Computational Science and Its Applications – ICCSA 2013. Lecture Notes in Computer Science*, vol. 7973, p. 550-565, Springer-Verlag, doi: 10.1007/978-3-642-39646-5_40
- Vizzari M, Modica G. 2013. Environmental effectiveness of swine sewage management: a multicriteria AHP-based model for a reliable quick assessment. *Environmental management* 52(4): 1023–39. DOI: 10.1007/s00267-013-0149-y.
- Barreca F, Cardinali G, Fichera CR, Lamberto L, Modica G. 2013. Safety performance assessment of food industry facilities using a fuzzy approach. *Journal of Agricultural Engineering*. DOI: 10.4081/jae.2013.(s1):e58.

2012

- Fichera CR, Modica G, Pollino M. 2012. Land Cover classification and change-detection analysis using multi-temporal remote sensed imagery and landscape metrics. *European Journal of Remote Sensing* **45**(1): 1–18. DOI: 10.5721/EuJRS20124501.
- Modica G, Vizzari M, Pollino M, Fichera CR, Zoccali P, Di Fazio S. 2012. Spatio-temporal analysis of the urban–rural gradient structure: an application in a Mediterranean mountainous landscape (Serra San Bruno, Italy). *Earth System Dynamics* **3**(2): 263–279. DOI: 10.5194/esd-3-263-2012.

2011

- Di Fazio S, Modica G, Zoccali P. 2011. Evolution Trends of Land Use/Land Cover in a Mediterranean Forest Landscape in Italy. *Computational Science and Its Applications - ICCSA 2011, Part I, Lecture Notes in Computer Science*. Springer **6782/2011**: 284–299. DOI: 10.1007/978-3-642-21928-3_20.
- Fichera CR, Modica G, Pollino M. 2011. GIS and Remote Sensing to Study Urban-Rural Transformation During a Fifty-Year Period. In: Murgante B, Gervasi O, Iglesias A, Tanir D and Apduhan BO (eds) *Computational Science and Its Applications - ICCSA 2011, Part I, Lecture Notes in Computer Science*. Springer Berlin Heidelberg: Berlin, Heidelberg, 237–252. DOI: 10.1007/978-3-642-21928-3.

Reggio Calabria, 21 January 2018

sign
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