

Curriculum Vitae et Studiorum
VINCENZO AMATO
Researcher GEO/04 *Physical Geography and Geomorphology*

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Citizenship: Italian

Permanent Resident: Italy

Gender: Male

Languages: Italian and English

Primary Field of Specialization: Geoarchaeology of coastal sites: paleolandscape and paleoenvironmental reconstructions

Research Interests:

Quaternary geology. My past and current researchs has focused primarily on quaternary geological and geomorphological evolution of the Southern Apennine (Italy). The research topics include:

- Coastal geomorphology and paleoenvironments: Late Pleistocene-Holocene evolution, Relative Sea Level, Long and Short Terms climatic changes
- Quaternary evolution of the intermontane basins of the Apennine chain, also in relation to their tectonic evolution and recent seismicity,
- Geoarchaeological approaches to the reconstructions of the landscapes and environments of archaeological sites.
- Geological hazards: coastal erosion, landslides and floods.
- Geological heritage: identification, study, evaluation, promotion and valorizazion of the Southern Italy geological heritage and geodiversity.

Present professional and research summary

- Researcher of “Physical Geography and Geomorphology”. Bioscience and Territory Department, Molise University (Italy).
- Adjunct Professor of “Marine Geology”. Science, Engineering and Health Interdepartmental School, Naples University “Parthenope”.
- Adjunct Professor of “Stratigraphy and sedimentary geology”, Graduate School in “Archaeological Heritage”, Cultural Heritage Science Department (Salerno University) and Naples University “L’Orientale” (Italy).
- Research grant for “Geological map (1:25.000 and 1:100.000 in scale) of soft sediments and cover terrains of the Southern Italy”. Marine Science Institute, National Research Council, Naples, Italy.
- Qualification for Professor in Applied Geology, Physical Geography and Geomorphology.
- Freelance geologist

Education

- 2006- PhD in Earth Science (University of Naples “Federico II”, Italy). Title: “The response of the morphodynamic systems of the Campania Region (Southern Italy) to the Holocene climatic changes”.
- 2004- Advanced School of “Geoarchaeology”
- 1999- Advanced Formation School of “Physic of the sedimentary processes”.
- 1996- Degree in Geological Sciences (University of Naples “Federico II”, Italy).

Work history

- 2018-2019 and 2020-2021: *Researcher Geologist*, Pompei Archaeological Park (Cultural Heritage Minister of Italy)
- 2019-2020: *Researcher Geologist*, Paestum-Velia Archaeological Park (Cultural Heritage Minister of Italy)
- 2012-2018: *Research grants*, Molise University (Italy). Title: “*Field-geology and mapping of the Quaternary Geology of the Molise Region (Southern Italy) aimed to the evaluation of the seismic hazard*”
- 2010-2015: *Researcher Advisor*, Local Public Administration Offices (Campania and Molise Regions, Southern Italy) for the evaluation of the hydro-geological hazards and archaeological heritage.
- 2007-2012: *Scholarship*, Molise University (Italy). Title: *Geological and geomorphological features of the Molise intramontane basins: quaternary chrono-stratigraphy and paleoenvironment of the sedimentary infilling*”.
- 2009-actually: *Geologist*, Professional Order of Geologists (n.160, Molise Region).

Teachings experience

- 2020-present: Adjunct Professor of “*Marine Geology*”. Science, Engineering and Health Interdepartmental School, Naples University “Parthenope”.
- 2007-present: Adjunct Professor of “*Stratigraphy and sedimentary geology*”. Graduate School in “Archaeological Heritage”, Cultural Heritage Science Department (Salerno University) and Naples University “L’Orientale” (Italy).
- 2007-present: Assistant Professor of “*Geomorphology, Stratigraphical geology, Geopedology, Hydrogeology and Geoarchaeology*”, Molise University (Italy)
- 2013-2014: Adjunct Professor of “*Physical Geography and Geomorphology*”, Molise University (Italy)
- 2009-present: *Tutoring and co-tutoring* of Degree, PhD, Masters and Special Schools at University of Naples “Federico II”, Molise and Salerno University (Italy).

Research Projects

- Actually: *Field geologist* for Italian CARG Project (new 1:50.000 Geological Map of Italy), Molise University and Naples University “Parthenope” (Italy)
- Actually: *Assistant Researcher* (Geomorphology and archaeo-tephro-stratigraphy), Pompei VII 5, 29, Université Côte d’Azur, France
- Actually: *Assistant Researcher* (Borehole and archaeological stratigraphy), “In search of tsunami along Campanian Coasts” Project, National Research Council.
- Actually: *Assistant Researcher* (Geomorphology and archaeostratigraphy), Abellinum Project, (Abellinum Archaeological Park, Southern Italy), Cultural Heritage Science Department (Salerno University)
- 2015-2020: *Assistant Researcher* (Geomorphology and Archaeostratigraphy), Athena Sanctuary Project (Paestum Archaeological site, Southern Italy), Cultural Heritage Science Department (Salerno University)
- 2009-2019: *Assistant Researcher* (Geomorphology), Phestos Project (Crete Island, Greece), Cultural Heritage Science Department (Salerno University)
- 2015-2018: *Assistant Researcher* (Geomorphology, Landscape archaeology and Paleoenvironments), Arpi Project (Foggia, Apulia, Southern Italy), Maison Méditerranée des Sciences des Hommes, Aix-en-Provence (France)
- 2010-2020: *Assistant Researcher* (Geomorphology, Landscape archaeology and Paleoenvironments) SiUrBe Project and Ancient Appia Landscape Project (Benevento, Campania, Southern Italy)
- 2009-2012: *Assistant Researcher* (Geomorphology and Archaeostratigraphy) for the Laos Project (Calabria, Southern Italy), Cultural Heritage Science Department (Salerno University)

- 2008-2009: *Assistant Researcher* (Geomorphology) for the Thouria Project (Messenia, Greece), Cultural Heritage Science Department (Salerno University)

Awards

- *Start-up Award* for the Creation of Spin-Off “GAIA Business s.r.l., Services for the Geology, Archaeology and Environment
- *Grant Award* for the Young Researcher Project of the University of Naples Federico II with the research “Holocene climatic changes in Campania and Apulia regions”.

Scientific and cultural activities and meetings

- *Editorial Board Member* of Geosciences Open Access Journal
- *Scientific Committee Member* of the Exhibition “Poseidonia città d’acqua: archeologia e cambiamenti climatici”, Paestum Archaeological Park, Southern Italy.
- *Guest Editor* of Geosciences review of the Special Issue “Geoarchaeology: a review of case-studies in the Mediterranean Sea”.
- *Co-editor* of the Volume 109 (2009) of the “Mediterranee, Revue geographique des pays mediterraneens” and Volume I (2009) of the “Il Quaternario, Italian Journal of Quaternary Science”.
- *Editorial Member Board* of the Journal of Geological Research.
- *Reviewer* of several works on international peer-review journals.
- *Scientific and Organizing Committee Member* of several Italian and international workshops, meetings, conferences, congresses, and field-trips.
- *Guide* of the Museum of Paleontology (University of Naples Federico II).
- *Speaker and convener* of thematic sessions in Italian and International congresses, conferences and workshops.

Main Peer-Reviewed Publications

- **AMATO V.**; Covolan M.; Dessales H.; Santoriello A. (2022). Seismic Microzonation of the Pompeii Archaeological Park (Southern Italy): Local Seismic Amplification Factors. *Geosciences* 2022, 12, 275. <https://doi.org/10.3390/geosciences12070275>
- Boncio P., Auciello E., **AMATO V.**, Aucelli P., Petrosino P., Tangari A.C., Jicha B.R., (2022) Late Quaternary faulting in the southern Matese (Italy): implications for earthquake potential and slip rate variability in the southern Apennines. *Solid Earth*, 13, 553–582, 2022 <https://doi.org/10.5194/se-13-553-2022>
- **AMATO V.**, CICALA L., VALENTE E., RUELLO M.R., ESPOSITO N., RUSSO ERMOLLI E., (2021) Anthropogenic amplification of geomorphic processes along the Mediterranean coasts: A case-study from the Graeco-Roman town of Elea-Velia (Campania, Italy). *Geomorphology* 383 (2021) 107694, <https://doi.org/10.1016/j.geomorph.2021.107694>
- **AMATO V.** (2021). Geoarchaeology: A Review of Case Studies in the Mediterranean Sea. *Geosciences*, *Geosciences* 2021, 11, 42. <https://doi.org/10.3390/geosciences11020042>
- Aiello G., **AMATO V.**, Barra D., Caporaso L., Caruso T., Giaccio B., Parisi R., Rossi A. (2020). Late Quaternary benthic foraminiferal and ostracod response to palaeoenvironmental changes in a Mediterranean coastal area, Port of Salerno, Tyrrhenian Sea. *Regional Studies in Marine Science* 40 (2020) 101498, <https://doi.org/10.1016/j.rsma.2020.101498>
- **AMATO V.**, Aucelli PPC, Cesarano M., Rosskopf CM., Cifelli F., Mattei M. (2020) A 900 m-deep borehole from Boiano intermontane basin (southern Apennines, Italy): Age constraints and palaeoenvironmental features of the Quaternary infilling. *Geological Journal*. 2020;1–19.
- Santangelo S., **AMATO V.**, Ascione A., Russo Ermolli E., Valente E. (2020). Geotourism as a Tool for Learning: A Geoitinerary in the Cilento, Vallo di Diano and Alburni Geopark (Southern Italy). *Resources* 2020, 9, 67; doi:10.3390/resources9060067
- Aucelli P. P. C., Valente E., Di Paola G., **AMATO V.**, Cesarano M., Cozzolino M., Pappone G., Scropio V. & Rosskopf C. M. (2020): The influence of the geological-geomorphological setting on human settlements and historical urban development: the case study of Isernia (southern Italy), *Journal of Maps*, DOI:10.1080/17445647.2020.1794989

- **AMATO V.**, AUCELLI P.P.C., CORRADO G., DI PAOLA G., MATANO F., PAPPONE G., SCHIATTARELLA M., (2020) Comparing geological and Persistent Scatterer Interferometry data of the Sele River coastal plain, southern Italy: Implications for recent subsidence trends. *GEOMORPHOLOGY*, 351 (2020) 106953, <https://doi.org/10.1016/j.geomorph.2019.106953>
- **AMATO V.**, AIELLO G., BARRA D., CAPORASO L., CARUSO T., GIACCIO B., PARISI R., ROSSI A. (2019) Holocene paleogeographic evolution of an ancient port city of the central Mediterranean area: natural and anthropogenic modifications from Salerno city, southern Italy. *GEOARCHAEOLOGY*, DOI: 10.1002/gea.21658
- Cozzolino M., Longo F., Pizzano N., Rizzo M.L., Voza O., **AMATO V.** (2019) A Multidisciplinary Approach to the Study of the Temple of Athena in Poseidonia-Paestum (Southern Italy): New Geomorphological, Geophysical and Archaeological Data. *GEOSCIENCES* 2019, 9, 324; doi:10.3390/geosciences9080324
- FILOCAMO F., ROSSKOPF C.M. **AMATO V.** (2019) A Contribution to the Understanding of the Apennine Landscapes: the Potential Role of Molise Geosites. *GEOHERITAGE*, DOI: 10.1007/s12371-019-00365-2
- GHILARDI M., PSOMIADIS D., ANDRIEU-PONEL V., COLLEU M., SOTIROPOULOS P., LONGO F., ROSSI A., **AMATO V.**, GASSE F., SINIBALDI L., RENARD M., BICKET A., DELANGHE D., DEMORY F., FLEURY J. (2018). A reconstruction of the landscape configuration near Ancient Phaistos (Messara Plain, South Central Crete, Greece) from Minoan to Roman times.. *HOLOCENE*, p. 1-20, doi: 10.1177/0959683618771473
- **AMATO V.**, AUCELLI P.P.C., CESARANO M., FILOCAMO F., LEONE N., PETROSINO P., ROSSKOPF C.M. , VALENTE E., CASCIELLO E., GIRALT S., JICHA B. (2018). Geomorphic response to late Quaternary tectonics in the axial portion of the Southern Apennines (Italy): a case study from the Calore River valley. *EARTH SURFACE PROCESSES AND LANDFORMS*, doi: 10.1002/esp.4390
- **AMATO V.**, CIARCIA S., ROSSI A., SANTORIELLO A (2018). The urban geoarchaeology of Benevento, Southern Italy: Evaluating archaeological potential. *GEOARCHAEOLOGY*, vol. 33, p. 100-111.
- **AMATO V.**, AUCELLI PPC, MATTEI G., PENNETTA M., RIZZO A., ROSSKOPF CM, SCHIATTARELLA M (2018). A geodatabase of Late Pleistocene - Holocene palaeo sea-level markers in the Gulf of Naples . *ALPINE AND MEDITERRANEAN QUATERNARY*, vol. 31, p. 5-9.
- **Vincenzo Amato** and Mario Valletta (2017)) *Wine Landscapes of Italy*. In : Landscapes and Landforms of Italy. Mauro Soldati and Mauro Marchetti Editors. Springer Book, cap. 45, 523-536
- **AMATO V.**, PIETRO P.C. AUCELLI, VITO BRACOME, MASSIMO CESARANO and CARMEN MARIA ROSSKOPF (2017) *Long-term landscape evolution of the Molise sector of the central-southern Apennines, Italy*. *GEOLOGICA CARPATHICA*, FEBRUARY 2017, 68, 1, 29 – 42
- **VINCENZO AMATO**, PIETRO P.C. AUCELLI, ELIANA BELLUCCI SESSA, MASSIMO CESARANO, PIETRO INCONTRI, GERARDO PAPPONE, ETTORE VALENTE, GIUSEPPE VILARDO (2017) *Multidisciplinary approach for fault detection: Integration of PS-InSAR, geomorphological, stratigraphic and structural data in the Venafro intermontane basin (Central-Southern Apennines, Italy)*. *Geomorphology* 283 (2017) 80–101
- PAOLO GALLI, BIAGIO GIACCIO, PAOLO MESSINA, EDOARDO PERONACE, **VINCENZO AMATO**, GIUSEPPE NASO, SEBASTIAN NOMADE, ALISON PEREIRA, SABATINO PISCITELLI, JESSICA BELLANOVA, ANDREA BILLI, DOMINIQUE BLAMART, ANTONIO GALDERISI, ALESSANDRO GIOCOLI, TONY STABILE, FRANCOISE THIL. (2017) *Middle to Late Pleistocene activity of the northern Matese fault system (southern Apennines, Italy)*. *Tectonophysics* 699 (2017) 61–81;
- **AMATO V.**, AUCELLI P.P.C., CESARANO M., JICHA B., LEBRETON V., ORAIN R., PAPPONE G., PETROSINO P., RUSSO ERMOLLI E. (2014) *Quaternary evolution of the largest intermontane basin of the Molise Apennine (central-southern Italy)*. *Rend. Acc. Lincei*, DOI 10.1007/s12210-014-0324-y
- **AMATO V.**, AUCELLI P. P.C., CIAMPO G., CINQUE A., DI DONATO V., PAPPONE G., PETROSINO P., ROMANO P., ROSSKOPF C., RUSSO ERMOLLI E (2013). *Relative sea level changes and paleogeographical evolution of the southern Sele plain (Italy) during the Holocene..* *Quat. Int.* 288, 112-128
- **AMATO V.**, AUCELLI P., CAPOZZI A., DE BENEDITTIS G.F., PAPPONE G., ROSSKOPF C.M. (2013) *Environmental changes in the Boiano intramontane basin (Molise, Italy) since the times of Ancient Bovianum (IVth century BC)*. *Alpine and Mediterranean Quaternary*, 26 (1), 2013, 15-29
- **AMATO V.**, AUCELLI P.P.C., RUSSO ERMOLLI E., ROSSKOPF C.M., CESARANO M., PAPPONE G. (2012) *Quaternary morpho-evolution, tectonic and environmental changes in the Boiano intermontane basin (central-southern Italy)*. *Rend. Online Soc. Geol. It.*, Vol. 21 (2012), pp. 1225-1227,
- **AMATO V.**, AUCELLI PPC, D'ARGENIO B, DAPRATO S, FERRARO L, PAPPONE G, PETROSINO P, ROSSKOPF CM, RUSSO ERMOLLI E (2012). *Holocene environmental evolution of the coastal sector in front of the Poseidonia-Paestum archaeological area (Sele plain, Southern Italy)*. *Rendiconti Lincei. Scienze Fisiche e Naturali*, vol. 23; p. 45-60, ISSN: 2037-4631, doi: 10.1007/s12210-011-0161-1
- AUCELLI P. P.C., **AMATO V.**, BUDILLON F., SENATORE M.R., AMODIO S., D'AMICO C., DAPRATO S., FERRARO L. PAPPONE G., RUSSO ERMOLLI E. (2012) *Evolution of the Sele river coastal plain (southern Italy) during the late Quaternary by inland and offshore stratigraphical analyses*. *Rendiconti Lincei. Sc. Fis. Naturali*, vol. 23; p. 81-102, ISSN: 2037-4631, doi: 10.1007/s12210-012-0165-5

- ALBERICO I., **AMATO V.**, AUCELLI P.P.C., DI PAOLA G., PAPPONE G. ROSSKOPF C.M. (2012) *Historical and recent changes of the Sele river coastal plain (southern Italy): natural variations and human pressures*. Rendiconti Lincei. Scienze Fisiche E Naturali, vol. 23; p. 3-12, ISSN: 2037-4631, doi: 10.1007/s12210-011-0156-y
- **AMATO V.**, ANZALONE E., AUCELLI P.P.C., D'ARGENIO B., FERRERI V., ROSSKOPF C.M. (2012) *Sedimentology and depositional history of the travertine outcropping in the Poseidonia-Paestum archaeological area*. Rendiconti Lincei. Scienze Fisiche E Naturali, vol. 23; p. 61-68, ISSN: 1720-0776, doi: 10.1007/s12210-011-0155-z
- ALBERICO I., **AMATO V.**, AUCELLI P.P.C., D'ARGENIO B., DI PAOLA G., PAPPONE G. (2011) *Historical shoreline change of the Sele plain (southern Italy): the 1870-2009 time window*. Journal of Coastal Research, DOI: 10.2012/JCOASTRES-D-10-00197.1
- **AMATO V.**, AUCELLI P.P.C., CESARANO M., PAPPONE G., ROSSKOPF C.M. RUSSO ERMOLLI E. (2011) *The Sessano intra-montane basin: new multi-proxy data for the quaternary evolution of the Molise sector of the Central-Southern Apennines (Italy)*. Geomorphology 128, 15-31
- AUCELLI P.P.C., **AMATO V.**, CESARANO M., PAPPONE G., ROSSKOPF C.M. RUSSO ERMOLLI E., SCARCIGLIA F. (2011) *New morphostratigraphic and chronological constraints for the quaternary palaosurfaces of the Molise Apennines (southern Italy)*. Geologica Carpathica 62, 1, 17-26
- **AMATO V.**, AUCELLI P.P.C., CESARANO M., PAPPONE G., PETROSINO P., ROSSKOPF C.M., RUSSO ERMOLLI E., (2010) *New chrono-stratigraphic data on the Boiano basin infilling (Molise, Italy)*. Rend online Soc. Geol. It., 11, 616-617
- **AMATO V.**, AVAGLIANO G., CINQUE A., CIPRIANI M., DI PAOLA G., PONTRANDOLFO A., ROSSKOPF M. C. & SANTORIELLO A. (2009). *Geomorphology and geoarchaeology of the Paestum area: modifications of the physical environment in historical times*, Mediterranee 112, 129-135
- **AMATO V.**, Di PASQUALE G., AURINO P., AIELLO G., RUSSO ERMOLLI E., BAILO MODESTI G., BARRA D., BASILE F., Di PASQUALE L., MANCUSI M., SCHIANO Di COLA C., CERCHIAI L., NEGRO D., PELLEGRINO C., ROSSI A., VISCIONE M., D'ANDREA M. (2009) *Holocene climate forcing and man-induced environmental changes of Abitato Antico di Pontecagnano area (Salerno – Southern Italy)*, Mediterranee 112, 119-128
- ALLOCCA F., **AMATO V.**, COPPOLA D., GIACCIO B., ORTOLANI F., PAGLICA S. (2000) *Cyclical climatic-environmental variations during the Holocene in Campania ed Apulia; geoarcheological and palethnological evidence*. Memorie. Società. Geologica Italiana vol. 55, (2000), 345-352.