

# European curriculum vitae

## Personal information

Surname / First name

Address

Telephone

E-mail

Web site

Nationality

Date of birth

Gender

## SAPIENZA VINCENZO

via del Bosco, 60 - 95125, Catania (Italy)

Office: (+39) 095.7382531

Mobile: (+39) 320.1803401

[vincenzo.sapienza@unict.it](mailto:vincenzo.sapienza@unict.it)

<http://www.dicar.unict.it/docenti/vincenzo.sapienza>

Italian

March 5, 1967

Male



## Work Experience

### main activities

Dates

Qualification

Dates

Occupation or position held

Main activities and responsibilities

Name and address of employer

Type of business or sector

Dates

Occupation or position held

Main activities and responsibilities

Name and address of employer

Type of business or sector

FROM: 2019 TO: 2025

Italian National Scientific Qualification (ASN) as Full Professor, by 2025

FROM: 2006 TO: present

Associate Professor of Architecture Technology.

### TEACHING ACTIVITY

Several chairs of the Architecture Techniques sector are relied on him as duty, in the different years.

From 2017 since now, he has the chair of "Architecture Technology II" and the related Designer Laboratory for Degree Course of Building Engineering-Architecture. From 2012 to 2016 he has the chair of "Architecture Technology I" and the related Designer Laboratory for Degree Course of Building Engineering-Architecture. From 2010 to 2012 he has the chair of "History of Modern Architecture" and the related Laboratory of Design for Building Engineering-Architecture.

From 2010 to 2012 he has the chair of "History of Modern Architecture" and the related Laboratory of Design for Building Engineering-Architecture.

### SCIENTIFIC ACTIVITY

He carries out various studies about evolution of the historical building techniques and energy sustainability of contemporary architecture.

University of Catania.

Department of Civil Engineering and Architecture.

University education and scientific research.

FROM: 1997 TO: 2006

Researcher of Architecture Technology.

### SCIENTIFIC ACTIVITY

He carries out various studies about life cycle assessment, geometry and evolution of the historical building techniques.

### TEACHING ACTIVITY

He supports the chair of "Architecture Technology II" for the course of Degree Course of Building Engineering (changed in Building Engineering-Architecture since 2002), undertaking a series of lectures and weekly exercises.

University of Catania.

Department of Architecture.

University education and scientific research.

## Work Experience

secondary activities

<b>Dates</b>	FROM: 2016 TO: Present
<b>Occupation or position held</b>	Scientific Director
<b>Name and address of employer</b>	Enabling Techniques for Architecture Laboratory of University of Catania (ETA-Lab).
<b>Type of business or sector</b>	Scientific Research and University Education
<b>Dates</b>	FROM: 2020 TO: Present
<b>Occupation or position held</b>	Responsible of Double Degree Agreement between "Laurea Magistrale a ciclo unico in Ingegneria Edile-Architettura" and "Grado en Edification"
<b>Name and address of employer</b>	University of Catania and Polytechnic University of Madrid
<b>Type of business or sector</b>	University education
<b>Dates</b>	FROM: 2009 TO: 2020 (with short interruptions)
<b>Occupation or position held</b>	Vice Head of the Department
<b>Name and address of employer</b>	Civil Engineering and Architecture University of Catania (called Department of Architecture before 2013 and Department of Architecture and Urbanism before 2011)
<b>Type of business or sector</b>	University education and scientific research
<b>Dates</b>	FROM: 2020 TO: Present
<b>Occupation or position held</b>	Technical-Scientific Consultant for the energy and seismic renovation project of the Boscarino Building in Catania
<b>Name and address of employer</b>	University of Catania
<b>Type of business or sector</b>	Professional activity
<b>Dates</b>	FROM: 2019 TO: Present
<b>Occupation or position held</b>	Director of the Summer School
<b>Name and address of employer</b>	Engineers' Association of Catania
<b>Type of business or sector</b>	Professional and post-lauream education
<b>Dates</b>	FROM: 2018 TO: Present
<b>Occupation or position held</b>	Coordinator of international research group
<b>Name and address of employer</b>	University of Catania, "Ion Mincu" University of Architecture and Urban Planning of Bucharest, URBAN INCD INCERC – National Institute for Research and Development in Construction, Urban Planning and Sustainable Spatial Development, Bucharest.
<b>Type of business or sector</b>	Scientific research
<b>Dates</b>	FROM: 2012 TO: 2015
<b>Occupation or position held</b>	Coordinator and Teacher of Active Training Internship (TFA) – A016 group
<b>Name and address of employer</b>	University of Catania
<b>Type of business or sector</b>	Post-lauream education
<b>Dates</b>	FROM: 2013 TO: 2015
<b>Occupation or position held</b>	Coordinator and Teacher of Active Training Internship (TFA) – A016 group
<b>Name and address of employer</b>	University of Catania
<b>Type of business or sector</b>	Post-lauream education
<b>Dates</b>	FROM: 2013 TO: present
<b>Occupation or position held</b>	Member of the Corporation of Professors of PhD course on "Evaluation and Attenuation of Urban and Environmental Risks".
<b>Name and address of employer</b>	University of Catania.
<b>Type of business or sector</b>	University education and scientific research
<b>Dates</b>	FROM: 2020 TO: Present
<b>Occupation or position held</b>	Member of the Topic Board and Guest Editor
<b>Name and address of employer</b>	Journal Sustainability – MDPI, Bern
<b>Type of business or sector</b>	Divulagation of knowledge in Building Construction and Architecture sectors
<b>Dates</b>	FROM: 2014 TO: Present
<b>Occupation or position held</b>	Member of the Editing Committee
<b>Name and address of employer</b>	Journal TECNICA E RICOSTRUZIONE - Engineers' Association of Catania

<b>Type of business or sector</b>	Divulcation of knowledge in Building Construction and Architecture sectors
<b>Dates</b>	FROM: 2015 TO: 2018
<b>Occupation or position held</b>	Associated Editor
<b>Name and address of employer</b>	Journal TeMa - Studies on Architectural Engineering - Italian Scientific Society of Architectural Engineering, Bologna
<b>Type of business or sector</b>	Divulcation of knowledge in Building Construction and Architecture sectors
<b>Dates</b>	FROM: 2015 TO: Present
<b>Occupation or position held</b>	Member of the Scientific Committee
<b>Name and address of employer</b>	AS Multidisciplinary Research Journal – AS Publisher.
<b>Type of business or sector</b>	Divulcation of knowledge in Building Construction and Architecture sectors
<b>Dates</b>	FROM: 2013 TO: present
<b>Occupation or position held</b>	Member of the Scientific Committee
<b>Name and address of employer</b>	Journal MODULO - Be-Ma Editor, Milan
<b>Type of business or sector</b>	Divulcation of knowledge in Building Construction and Architecture sectors
<b>Dates</b>	FROM: 2009 TO: 2013
<b>Occupation or position held</b>	Component of Directors' Board
<b>Name and address of employer</b>	Foundation of Engineers' Association of Catania
<b>Type of business or sector</b>	Professional education
<b>Dates</b>	FROM: 2013 TO: 2018
<b>Occupation or position held</b>	Member of the Corporation of Professors
<b>Name and address of employer</b>	Scuola Superiore di Catania
<b>Type of business or sector</b>	Higher school of excellence of Catania's University
<b>Dates</b>	FROM: 2005 TO: 2008
<b>Occupation or position held</b>	Member of Corporation of the Professors of PhD course on "Architectural, urban and environmental design and refurbishment"
<b>Name and address of employer</b>	University of Catania
<b>Type of business or sector</b>	University education and scientific research

## Education and training

Dates	1997
Title of qualification awarded	PhD course in Building Engineering: Technical Design and Production Building
Principal subjects/Occupational skills covered	Scientific research about the evolution of the historical building techniques in Sicily
Name and type of organisation providing education and training	University of Palermo.
Dates	1993
Title of qualification awarded	Engineering degree
Principal subjects/Occupational skills covered	Civil engineer, architectural survey and design, building technology, town-planning
Name and type of organisation providing education and training	University of Catania
Dates	1982
Title of qualification awarded	General Certificate of Education
Principal subjects/Occupational skills covered	Greek and Latin languages and literature, Italian literature, history, philosophy
Name and type of organisation providing education and training	High school Lyceum "N. Spedalieri" – Catania

## Personal skills and competences

Other language

Self-assessment

European level

**English**

Understanding		Speaking		Writing
Listening	Reading	Spoken interaction	Spoken production	
B1	B1	B1	B1	B1

Social skills and competences

He has participated in several International and National Scientific Meetings to report the results of his researches. He has been invited in numerous local meetings as a lecturer of refurbishment.

More important and recent presentations:

- *Introduction of the Round Table*, Colloqui.A.Te, Architecture Techniques Italian Annual Meeting, Catania – 2020.
- *ICARO - Innovative Cardboard Architecture Responsive Object*, Consultation Forum for Sustainable Energy in the Defence and Security Sector, Berlin, 2020.
- *Shading innovative technology system*, European Photovoltaic Solar Energy Conference and Exhibition EU PVSEC 2020, Naples, 2020.
- *Final report of UNICT activities*, VVITA Final Meeting, Trondheim, 2019.
- *Intermediate report of UNICT activities*, VVITA Interim Meeting, Catania - 2019.
- *Introduction*, VVITA Short-Term Joint Staff Training Events - Catania, 2018.
- *Seismic and energy renovation: an innovative approach to historic preservation*, Seismic and energy renovation for sustainable cities, Catania, 2018.
- *Reuse and preservation of industrial archaeology in rural landscape, Sicilian peculiarity*, The Importance of place conference, Sarajevo, 2017.
- *Proposal of UNICT activities*, VVITA Kick Off Meeting, Bucharest, 2017.
- *Kinetic Responsive Envelope by Origami – KREO*, Colloqui.A.Te, Architecture Techniques Italian Annual Meeting, Bologna - 2016.
- *Kinetic Architecture and Foldable Surface*, 5<sup>th</sup> Annual International Conference on Architecture of Athens Institute for Education and Research ATENER Atene, 2015.
- *Thermal performance of existing buildings in Mediterranean climate area*, Changing needs, adaptive buildings, smart cities, MILAN, 2013.
- *Il Palazzo Centrale dell'Università. Lava, Earthquake and Baroque – presentation of the University of Catania through its main building*, jornada precongressual del BIMIC-2018, Madrid - 2018.
- *Archicart business plan*, Premio Nazionale per l'Innovazione, Sassari 2014.
- *Riqualificazione energetica dell'edilizia abitativa nel territorio etneo*, 21° SAEM, Catania – 2013.
- *Thermal performance of existing buildings in Mediterranean climate area*, 39th IAHS, Milan, 2013.
- *Spontaneous architecture and energetic sustainability: the Aeolian houses of Filicudi Isle*, ZEMCH-12, Glasgow – 2012.
- *The rural architecture of the Duce: the villages of Sicilian Latifundium*, 1-ICAUD, Tirana – 2012.
- *La figura del progettista strutturale nell'ambito della Storia dell'Architettura*, 4 AISI, Napoli – 2012.
- *The anti-seismic system of historical buildings of Catania*, Colloqui.A.Te, Architecture Techniques Italian Annual Meeting, Messina - 2009.

## Organisational skills and competences

He is coordinator for the University of Catania of several financed research projects.

Title: *ArchiCart Life House*

Project Leader: Tecnotenda srl

Partners: University of Catania, National Research Center (CNR), Format srl, Area srl.

Financing: program PO FESR Sicilia misura 1.1.5 – Innovative Materials

Budget: 1.285.000,00€

Duration: March 2021 – September 2023

Title: *Solar Lightweight Intelligent Component for Envelopes - SLICE*

Project Leader: University of Catania.

Partners: "Ion Mincu" University of Bucharest, Meridionale Impianti spa.

Financing: PON RI 2014-2010, Axes 1 - Action 1.1

Budget: 52.000€

Duration: February 2018 – April 2021

Title: *An Early Warning System for cultural heritage - EWAS*

Project leader: Italian National Institute of GeoVulcanology (INGV)

Partners: University of Catania, University KORE of Enna, Meridionale Impianti spa, NTET Group spa, Colombrita Engineering srl, Lr srl

Financing: National Program for Research (PNR) 2015-2020 of Ministry of Instruction, of University and Research

Budget: € 8.346.578,02

Duration: October 2017 - January 2022

Title: *Modernizing Learning and Teaching for Architecture through Smart and Long-lasting Partnerships leading to sustainable and inclusive development strategies to Vitalize heritage Villages through Innovative Technologies - VVITA*

Project Leader: "Ion Mincu" University of Bucharest

Partner: University of Catania, Norwegian University of Science and Technology of Trondheim.

Financing: ERASMUS + KA2 (Cooperation for Innovation and the Exchange of Good Practices)

Budget: € 224.419.00

Duration: from October 2016 to December 2019

He belonged to several scientific and organizing committee of national and international meetings.

- Colloqui.A.Te, Architecture Techniques Italian Annual Meeting - Catania, 2020.
- ReUSO International Conference - Messina, 2018.
- Building and Management International Conference (BIMIC) - Madrid, 2018.
- Seismic and Energy Renovation for Sustainable Cities International Conference (SER4SC), Catania - 2018.
- VVITA Interim Meeting, Catania - 2019.
- 4th Biennial of Architectural and Urban Restoration (BRAU) - Catania, 2018.
- VVITA Short-Term Joint Staff Training Events - Catania, 2018.

## Didactic skills and competences

Every year he plans exercises his courses (about 50 people). The students (in groups of 2-3 members) have to design a residential building (from architectural and technological point of view), under his direction.

For his students, he organises internships with other professors, and training visits.

More recent activities:

- Intensive Programme VVITA in Delta Danuble – 2019.
- Training visit of some building sites and buildings of Renzo Piano Building Workshop (RPBW), in Genova and in Paris - 2019.
- Intensive Programme VVITA in Aeolian Islands – 2019, with final exhibition.
- Intensive Programme VVITA in Lofoten Islands – 2019, with final exhibition.
- Training visit of Madrid and participation in some seminaries at Universidad Politécnica de Madrid – 2018.

- Training visit Bucarest and Transilvania, participation in some seminars at Ion Mincu University, organization of the final exhibition Bucharest\_2k17 – 2017.
- Research visit in Malta – 2016.
- Training visit to the Made-Expo of Milan – 2015.
- Training visit to the factory of cement and concrete BUZZI – 2015.
- “OpenING” open day of the Faculty of Engineering – 2014
- Training visit to the Torre del Grifo sporting center – 2014.
- Internships eng. Paolo Colonna of RPBW – 2013.
- Exhibition “Entropia Negativa / Thesis” – 2013.
- Training visit to the admirable examples of contemporary architecture in Vittoria – 2013.
- Design competition “Entropia Negativa” – 2012.
- Training visit to the Rural Villages of the Sicilian Latifundium – 2012.
- Internships arch. Maria Giuseppina Grasso Cannizzo – 2012.
- Internships arch. Lorenzo Carmassi – 2012.

In 2019 and in 2015 he was nominated member of the Commission for the access exams to the Engineer’s Association of Catania.

In 2019 he had a Masterclass in the Escuela Técnica Superior de Edificación of the Universidad Politécnica de Madrid on “Digital Architecture”.

In 2017 he had a series of seminars to the ION MINCU University of Bucharest on the innovative building technologies.

In 2015 he was guest lecturer in the Master in “Climate and Built Form” of NTNU (Norwegian University of Science and Technology) of Trondheim.

He was tutor of some international traineeships.

List of the more recent ones:

- Aneta Wilczyńska, project “Dobry staż – pewna przyszłość” 2017
- Aleksandra Wątroba, project “Dobry staż – pewna przyszłość” 2017
- Ali Rammal, MedMobil program 2016.

## Technical skills and competences

The scientific activity of Vincenzo Sapienza is essentially divided in the following thematic areas.

### *INNOVATIVE BUILDING TECHNOLOGIES*

He is inventor of KREO (Kinetic, Responsive Envelope by Origami) an innovative lightweight, folded smart building envelope; it was developed in collaboration with CNR of Catania and Meridionale Impianti group.

He is inventor of Archicart innovative building technology; it is based on alveolar panels in corrugated cardboard, which is covered by a patent (EP2927385A1). He has realized a test-box, to prototype it in real scale and to optimize its performance.

He is inventor of SETS (Self-Erecting Temporary Shelter), that is a temporary pavilion based on vacuumatics technology.

He has done a series of experimentation on an innovative reinforcement technology, based on FRP (Fiber Reinforced Polymers) nets, for lava stone masonries.

### *BUILDING SUSTAINABILITY*

He works on the seismic and energy building renovation, with particular attention on the public estate of the Sixties and Seventies.

He is inventor of SLICE (Solar Lightweight Intelligent Component) that is a responsive shading off grid system (patent 2A19000025819); it was developed in collaboration with Meridionale Impianti group.

He studies energy sustainability of local historical architecture.

He carries out an experimentation on an innovative ceramic paint to verify its insulating proprieties in Mediterranean climate, both in winter and in summer.

### *HISTORICAL EVOLUTION OF THE BUILDING TECHNIQUES*

He is interested in several buildings in Catania belonging to different historical periods.

He compares the different construction elements through analyses, both traditional and ND. He studies Industrial Archeology Buildings, especially located in rural contexts. He also investigates on the Rural Villages of Sicilian Latifundium, a group of buildings of the 1940s representing an important landscape resource.

He analyzes the geometry of complex vault surfaces, through the construction of a virtual model. This procedure was applied to various cases.

He was tutor of three PhD students and he is tutor of a post-doc student.

He won several prizes for his works.

- First prize in Archiprix 2015 with the degree thesis: "GREEN OVER THE BARS, an "open prison" in the ancient mines of Grottacalda".
- Finalist in the PNIcube 2014 –Ideas Award for Innovation, with ArchiCart project.
- First prize in the START CUP SICILY 2014 - business idea competition with ArchiCart business plan.
- Second prize in the THE BEST RESEARCH AWARD 2013, with PARAMETRIC ARCHITECTURE AND VACUUMATICS: project of lightweight SETS.
- Third prize in the OUTSIDE THE BOX - Low and High Technologies for Emergencies 2012, with PARAMETRIC ARCHITECTURE AND VACUUMATICS: project of lightweight SETS.
- First prize in Academy Gioena 1996 award for young researchers.
- First in the competition for the grant offered by the Foundation Rosario Toscano-Scuderi in 1996.

He has published about 110 works among articles, papers, chapters of book and monographies regarding the results of his research.

Complete list at:

[https://www.iris.unict.it/browse?type=author&order=ASC&rpp=20&authority=rp08084#.X\\_3jJmg\\_IU](https://www.iris.unict.it/browse?type=author&order=ASC&rpp=20&authority=rp08084#.X_3jJmg_IU)

### Computer skills and competences

Very good knowledge in Office Windows. He conversant with drawing software (such as Autocad by Autodesk, CorelDRAW by Corel Co.), publishing (such as QuarkXPress by Quark), et al. graphics software.

He knows the main parametric design software (i.e. Grasshopper, Ladybug, Honeybee)

In order to advertise his activities, he designs internet pages, posters and brochures.

He was Web Site Administrator of his department.

### Driving licence

Yes, since 1985.

Catania, February 2021

