

# 2<sup>nd</sup> REUNICE Workshop “MULTIFUNCTIONAL MATERIALS AND SUSTAINABILITY”

3 - 5 July 2024  
Scuola Superiore di Catania, Catania, Italy



We are looking forward to welcoming you in Catania for the **2<sup>nd</sup> REUNICE Workshop “Multifunctional Materials and Sustainability”**.

In the following, you will find all practical information to simplify your coming: registration, hotel reservation, contact address, venue, transportation, instruction for the preparation of contributes, programme.

Please do not hesitate to contact us if you need further information ([eunice@unict.it](mailto:eunice@unict.it), subject ‘**REUNICE 2<sup>nd</sup> Workshop Multifunctional Materials and Sustainability**’).



## REGISTRATION

Please read carefully the info and instruction below and **fill in at your earliest convenience** the following **REGISTRATION FORM (mandatory)**:  
<https://forms.office.com/e/wqCeFKbyjA>



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## Accommodation

Catania offers a variety of options for accommodation. Please find below a small selection that you might want to consider for your stay in Catania. Below is a list of hotels affiliated with UNICT located in Catania City Center.

Feel free to introduce yourself as a member of UNICT affiliated institutions. If you need help with your reservations, please do not hesitate to contact us: [eunice@unict.it](mailto:eunice@unict.it) with subject: **“Hotel Booking – REUNICE Workshop.”**

### Suggested hotels

<b>Hotel name</b> (6 nights, June 30 <sup>th</sup> –July 6 <sup>th</sup> , booking.com)	<b>Address</b>	<b>Contact</b>
<i>B&amp;B Casa Barbero</i> (Single room: 65 €; Double room: 85 €)	<i>Via Caronda 209, 95128 Catania</i>	 <a href="#">website</a>  <a href="mailto:info@casabarbero.it">info@casabarbero.it</a>  +39 095 580514
<i>Hotel Centrale Europa</i> (Single room: 349 €)	<i>Via Vittorio Emanuele II 167, 95124 Catania</i>	 <a href="#">website</a>  <a href="mailto:info@hotelcentraleuropa.it">info@hotelcentraleuropa.it</a>  +39 095 311309
<i>Casa Provenza</i> (Single room: 402 €)	<i>Via della Loggetta 13, 95131 Catania</i>	 <a href="#">website</a>  <a href="mailto:casaprovenza13@gmail.com">casaprovenza13@gmail.com</a>  +39 095 2865984
<i>The Artist's Home Catania Centro</i> (Single room: 332 €)	<i>Via Penninello 6, 95124 Catania</i>	 <a href="#">website</a>  <a href="#">booking.com</a>  +39 095 379 116 7894
<i>Dimora De Mauro</i> (Single room: 446 €)	<i>Via Gesualdo Clementi 5, 95124 Catania</i>	 <a href="#">website</a>  <a href="mailto:reception@dimorademauro.com">reception@dimorademauro.com</a>  +39 095 715 9270  +39 335 8112939

## TRANSPORTATION

### From the airport “Vincenzo Bellini” to Catania center

**BUS:** You can take the **Alibus shuttle** from Fontanarossa “Vincenzo Bellini” airport (‘Capolinea’ bus stop) to Catania ([route of the Alibus line](#)). The ticket price is 4.00 € and is also valid on all other urban lines (AMT) for a total of 90 minutes. Rides are scheduled from 4:40 am to 24 am (CET). The bus with an average frequency runs every 20 minutes and the ride lasts about 20/30 minutes. The ticket can be purchased: a) on the bus in cash or with payment cards; b) through the AMT Catania app (link to download: [IOS](#); [Android](#)); c) at the subscription office and AMT resellers; d) at the affiliated hotels. All the info is available [here](#).

**TAXI:** You can take a **Taxi** from Fontanarossa “Vincenzo Bellini” airport to Catania. The cost of a ride is about 50.00 €. If you book via [radiotaxicatania](#) website or  **Call center:** +39 095.88.33  **Whatsapp:** +39 342.073.6541 the cost of the ride to downtown is around 22.00 €.

**RENTAL CAR:** You can rent a car. Main car rental are located in the airport. More information is available [here](#).


### Moving around in Catania

**BUS:** Catania bus company is named [Azienda Municipale Trasporti – AMT](#).

**METRO LINE:** [Ferrovia Circumetnea – FCE](#) offer metropolitan line services. Integrated AMT/FCE travel tickets are available. Find detailed information [here](#).

**CAR & BIKE SHARING:** AMIGO is the car and bike sharing service offered by Azienda Municipale Trasporti – AMT. Information is available [here](#).

**TAXI:** There are plenty of taxis available in the city (night&day). Please, contact

[RADIO TAXI CATANIA](#).  Call center: +39 095.88.33.  Whatsapp: +39 342.073.6541



## Shuttle transport from city center to the Workshop seat

NOTE: A free shuttle transfer service is organized from the city center to the Scuola Superiore di Catania – School of Excellence (SSC), Via Valdisavoia, 9, 95123 and return.

	From city center to SSC (hh:mm, CET)	From SSC to city center (hh:mm, CET)
Wednesday July 3 <sup>rd</sup>	12:30	17:45
Thursday July 4 <sup>th</sup>	09:00	17:30
Friday July 5 <sup>th</sup>	09:00	17:30

### Contacts:

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## Other info:

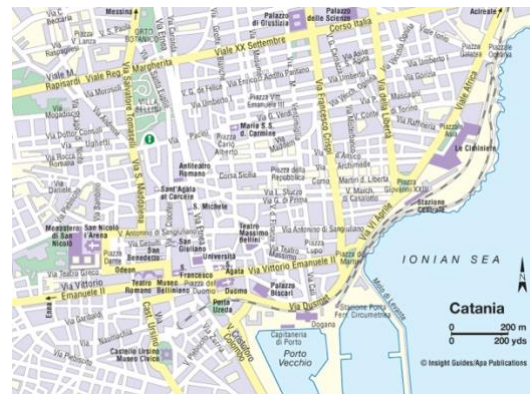
### Catania

Catania is the second largest city in Sicily, with a population of approximately 300,000 inhabitants. It is located on the Ionian Sea, in the shadow of Mount Etna, or A Muntagna, as the locals call it.

[Etna](#) is ever-present and has to a large extent shaped both the history and actual existence of Catania. On several occasions, volcanic eruptions destroyed the city, the most devastating of which occurred in the 17<sup>th</sup> century. In 1669 Catania was covered in lava and then, just 24 years later, in 1693, an earthquake shook the city to its foundations.



The reaction to this latest catastrophe was surprising: the entire old part of the city was rebuilt in Baroque style, with large squares and wide-open avenues. The most notable aspect, however, was the building material used: lava! Catania is essentially a "grey" city and unique in the world for this.



### University of Catania

With an average enrolment of 38,000 students, the [University of Catania](#) has been around for hundreds of years since 1434 and is oldest one in Sicily.

The educational system is run and overseen by [17 departments](#), the Medical School for starters, and by two other educational units



respectively located in the city of Ragusa and in Syracuse. Download [here](#) the brief presentation of our university.

## Scuola Superiore di Catania (SSC)

The [Scuola Superiore di Catania](#) is a higher education center of the University of Catania, which was founded in 1998 on the model of the Normal School of Pisa, with the aim of selecting the best young people and offering them a study path that includes in-depth, research and experimentation activities. The Scuola Superiore is based in Catania, in the residential complex called Villa San Saverio. The construction of Villa San Saverio dates back to 1880: it was a holiday home for about twenty years.

In 1898 the Villa was purchased by the Istituto Agrario Siciliano Valdisavoia, which used it as a boarding school and took care of the expansion work as a result of which the building has taken on its current size.





## Practical info for preparing the presentation

### Oral presentation:

Reccomendations for the oral presentation duration, **including discussion**, are:

- 45+10 minutes for invited keynote talk,
- 30+10 minutes for invited talks,
- 15+2 minutes for contributed talks.

The standard audio-visual package in the session room consists of:  
LCD projector;

Laptop with Microsoft office Pack (including powerpoint);

Remote control including laser pointer;

Microphone.

**You can either use your own laptop or put your presentation (widescreen format) on a memory stick and use the computer at your disposal in the room.**

### Poster presentation:

The viewable size of the poster board is: vertical 1.20 m and horizontal 0.90 m. Please prepare your poster in A0 format (841 x 1189 mm). The boards are full white. Please use tape. Pins are not allowed!

**Authors need to be present at their posters for discussion with attendees during the session. Subsequently, it is each author's responsibility to remove his/her poster immediately at the end of the session.** We do not assume responsibility for posters left up after this time.



## Programme

### Wednesday 03/07

Wednesday 03/07	12:30-	shuttle transfer to SSC	
Wednesday 03/07	13:00-	Registration + Lunch break	
	14:30- 14:45	Welcome	
	14:45- 15:40	Invited Keynote	<b>Sabrina Sartori</b> (Univ. Oslo) Materials and systems for green hydrogen production and storage: challenges and opportunities
	15:40- 17:30	poster session in the courtyard, open coffee break during the whole session	
Wednesday 03/07	17:40-	shuttle transfer from SSC to Monastero Benedettini	
	18:00- 20:00	guided tour Monastero Benedettini	
	20:00-	Social dinner, city center	

### Thursday 04/07

Thursday 04/07	09:00-	shuttle from city center to SSC (collection point tbd)	
Thursday 04/07	9:30- 10:10	Invited talk	<b>Rosica Mincheva</b> (UMONS) Plastic sustainability : old methods – new trends
	10:10- 11:00	Contr. talks	<b>Giovanna Pellegrino</b> (UNICT) Sol-Gel elution synthesis of bismuth oxide thin film for high energy storage performance <b>Oliwia Roźnowska</b> (PUT) Formation of an inorganic membrane-enzyme system for environmental applications <b>Gabriele Trovato</b> (UNICT) Characterization of SiC free-standing membrane for X-rays intensity monitor in synchrotron radiation beamlines
	11:00-	coffee break	
	11:30- 12:20	Contr. talks	<b>Assan Abdirakhmanov</b> (UMONS) Study of the carbon materials formation during the plasmolysis of methane in a gliding arc discharge <b>Francesca Lo Presti</b> (UNICT)



			<p><i>Comprehensive Analysis of Energy Conversion in MOCVD-Deposited Eu-Doped Barium Fluoride Thin Films</i></p> <p><b>Hongyang Dang</b> (UNICT) <i>High-performance Graphene/PVA Spray-Coated Electrode for Wearable Triboelectric Nanogenerators</i></p>
	12:30-	lunch + break	
	14:30- 15:10	Invited talk	<p><b>Martin Holicky</b> (Imperial College, London) <i>Microneedle graphene field-effect transistors for wearable biosensing</i></p>
	15:10- 16:00	Contr. talks	<p><b>Julia Sroczynska</b> (PUT) <i>Biocidal compounds – effects on cell membrane</i></p> <p><b>Matteo Bombaci</b> (UNICT) <i>Production and characterization of nanostructured spinel ferrite mocvd films and their application for water splitting</i></p> <p><b>Maria Josè Lo Faro</b> (UNICT) <i>Light-emitting Silicon nanowires array as versatile optical biosensors</i></p>
	16:00-	coffee break	
	16:30- 17:20	Contrib. talks	<p><b>Aleksandra Rybak</b> (PUT) <i>Application of aluminium-coated membranes for the immobilization of enzymes: model reactions for the evaluation of enzyme activity</i></p> <p><b>Uswah Yasin</b> (UNICT) <i>Graphene and Copper Nanoparticles based electrochemical sensors for the detection of Glyphosate in Water</i></p> <p><b>Salvatore La Manna</b> (UNICT) <i>Sputtered MoO<sub>x</sub> Films: A Dopant-Free Approach to Passivation and Hole Selectivity in SHJ Solar Cells</i></p>
04/07	17:30	shuttle from SSC to city center	
04/07	18:00	Free time - autonomous dinner	

## Friday 05/07

Friday 05/07	09:00-	shuttle from city center to SSC (collection point tbd)	
Friday 05/07	9:30- 10:10	Invited talk	<b>Mario Urso</b> (UNICT) <i>Nature-mimicking intelligent micro/nanorobots</i>
	10:10- 11:00	Contr. talks	<b>Federico Ursino</b> (UNICT) <i>Facile synthesis of sulfurized MoO<sub>3</sub> nanostructures from industrial waste powder for energy storage application</i> <b>Pierre Nickmilder</b> (UMONS) <i>On the Electromechanical Properties of Hybrid Piezoelectric Nanocomposites by Scanning Probe Microscopy</i> <b>Angelo Ferlazzo</b> (UNICT) <i>Impact of rare earth doping in transition metal oxide nanoparticles and electrochemical sensing of aromatic alcohols in polluted wastewater</i>
	11:00-	coffee break	
	11:30- 12:20	Contr. talks	<b>Ernestino Lufrano</b> (UNICT) <i>Utilizing contact lens-TiO<sub>2</sub> Nanocomposites for sustainable wastewater remediation</i> <b>Michał Niemczak</b> (PUT) <i>Creative management of waste from production of sugar - glycine betaine as the future for the agrochemicals and surfactants market</i> <b>Alfio Samuele Mancuso</b> (UNICT) <i>Fluka Monte-Carlo simulations of Neutron Detection for Fusion Reactors</i> <b>Adriana Olejniczak</b> (PUT) <i>New lidocaine derivatives showing antimicrobial activity as new APIs with low environmental impact</i>
	12:30-	lunch + break	
14:30- 16:00	Contr. talks	<b>Philippe Leclere</b> (UMONS) <i>Exploring the Nanoscale Electromechanical Properties of Lead-free Thin Films and Nanostructures for Energy Harvesting Applications</i> <b>Cristiano Lo Po'</b> (UNICT) <i>Cu Nanoparticles by Laser Ablation in Liquid for green hydrogen production</i> <b>Amelia Klimek</b> (PUT) <i>Design of porous carbon electrodes for energy storage systems</i> <b>Vanna Torrisi</b> (UNICT)	



			<p><i>Iron Oxide based Nanocomposites for sustainable fertilization</i></p> <p><b>Gabriela García-Basté (UC)</b> <i>Photocatalysts for Green Hydrogen Production: Electrochemical and Morphological Study</i></p>
	16:00-	coffee break	
	16:30- 17:20	Contr. talks	<p><b>Andrea Lo Mastro (UNICT)</b> <i>Intrinsic Doping and Ageing of Sputter Deposited In<sub>2</sub>O<sub>3</sub> thin films</i></p> <p><b>Daniel Aragón (UC)</b> <i>Magnetic nanoparticles with green surface modifications for the efficient capture of polyethylene microplastics</i></p> <p><b>Giulia Raciti (UNICT)</b> <i>Photocatalytic Thermoplastic Coatings Layered onto Cement Surfaces for Gaseous Pollutants Abatement</i></p>
	17:20	Closing works	
05/07	17:30	shuttle from SSC to city center	
05/07	18:00	Free time - autonomous dinner	

