

Summer Workshop

PRIN PNRR P2022PZ8JE project

Noble metal complexes with heterocyclic nitrogen ligands: application as antimicrobials.

25 JUNE 2025 > Aula 111 – Blocco A

9:00 – 13:00 > Cittadella Universitaria di Monserrato

The project>>

The project arises from the need to tackle the threat of **antimicrobial resistance**, one of the most pressing public health problems worldwide. The research program is focused on the **design and synthesis of new inorganic and organometallic complexes of noble metals as promising novel antimicrobial drugs**. The medium-term workshop is part of the communication and dissemination activities of the project and reports the preliminary results regarding the synthesis of new ligands, complexes and their biological activity.

SCIENTIFIC RESPONSIBLES:

Dott.ssa Alessandra Scano, Department of Surgical Sciences – UNICA

Research unit responsible (alessandra.scano77@unica.it)

Prof. Antonio Zucca – Principal investigator (zucca@uniss.it)

Dott. Maurizio Solinas – CNR-ICB Research unit responsible

(maurizio.solinas@cnr.it)

RESEARCH UNITS INVOLVED IN THE PROJECT:

- The Cagliari University Unit **UNICA-BIO**, studies of **antimicrobial activity and toxicity**
- The Sassari University Unit **UNISS-INORG**, synthesis of inorganic and **organometallic complexes**
- The Sassari CNR-ICB Unit **CNR-ORG**, **organic synthesis**

SPEAKERS:

• **Prof. emerito Gavino Faa** - University of Cagliari

Artificial intelligence and clinical laboratory

• **Prof. Germano Orrù** – University of Cagliari

New antimicrobials for emerging pathogens in the clinical field

• **Prof. Pierpaolo Coni**

Genetic, Epigenetic and artificial intelligence

• **Prof. Antonio Zucca** - University of Sassari

Noble metal complexes with nitrogen ligands: a novel class of antimicrobials

• **Prof.ssa Maria Pilo** - University of Sassari

Electrochemical investigation of platinum and gold complexes with nitrogen ligands

• **Prof. Sergio Stoccoro** - University of Sassari

Synthesis and characterization of imidazo-pyridine ligands and their metal complexes

• **Dott. Maurizio Solinas and Dott.ssa Daniela Giunta** – CNR-ICB

Chemistry, synthesis and application of triazole derivatives

• **Dott.ssa Alessandra Scano and Prof. Giuseppina Pichiri** - University of Cagliari

Evaluation of antimicrobial and antitumor activity of noble metal complexes