

Innovative Multifunctional Metal Compounds

Pettinari Claudio, Pettinari Riccardo, Alessia Tombesi

Inorganic Chemistry Unit

School of Pharmaceutical Sciences and Health Products

Rapporto strutturati/non strutturati: 2 PO, 1 RTDA / 1 Post-doc, 1PhD, 2 Fellowships



Research Day UNICAM
Camerino 12 dicembre 2024



Characterizing studies

- 1) Synthesis and characterisation of new metal complexes and evaluation of their antitumour and antimicrobial activity.
- 2) Design of new porous materials for use in gas capture and conversion
- 3) Scientific dissemination and public engagement

National Impact: The research conducted by the Inorganic Chemistry Group has a significant impact at national levels, with the discovery of new molecules for use as anti-cancer or anti-bacterial agents. This also involves Unicam 'researchers' working with clinical microbiologists in the screening of metal compounds as potential metal antibiotics and metal anticancer agents.

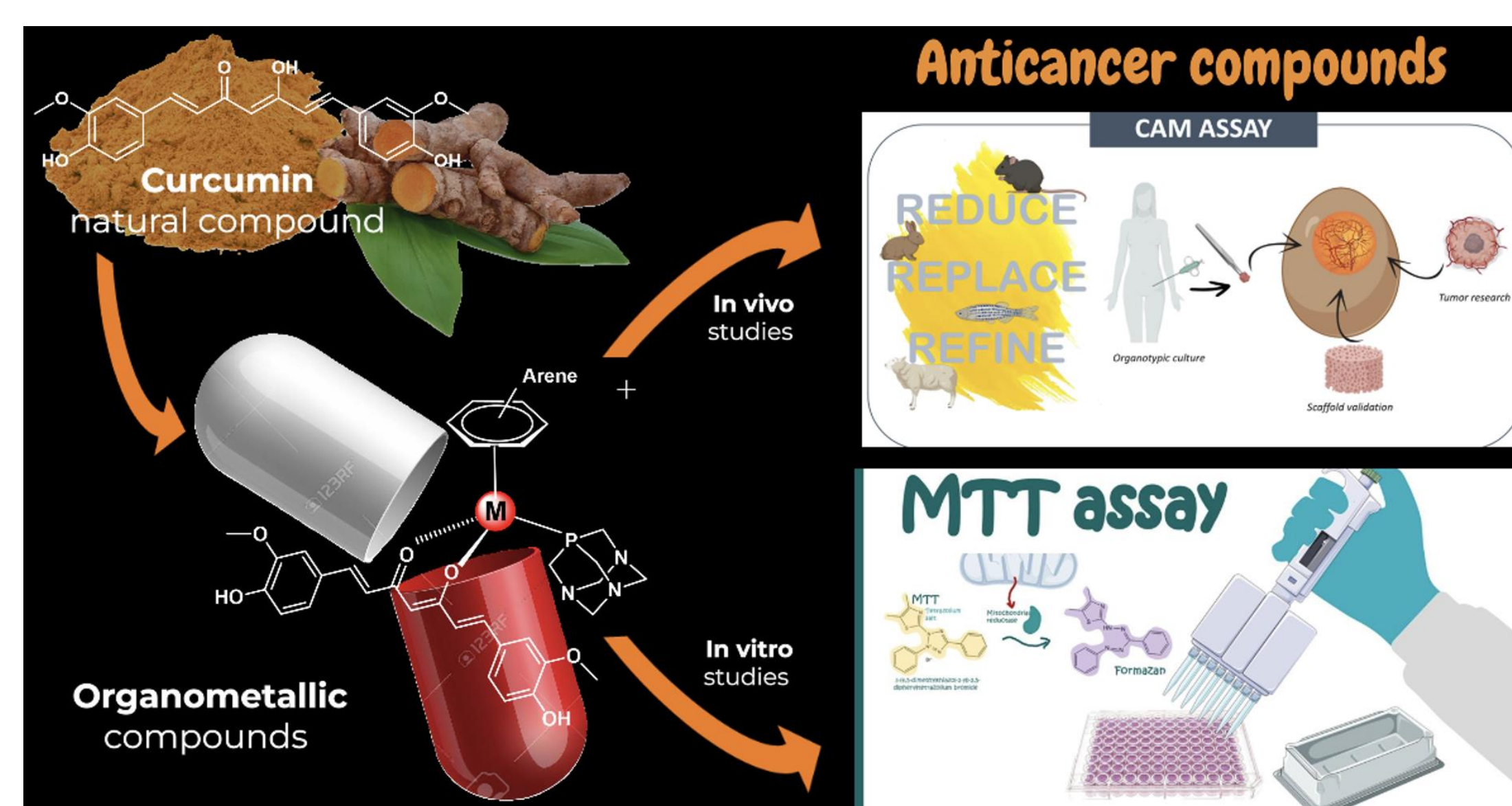
International Impact: Furthermore, the research has a notable global influence, as it advances the creation of cutting-edge metal-based pharmaceuticals and innovative porous and non-porous materials for storage and conversion into fine chemicals.



Relations with SME:

Manifattura, Pesaro, PU

Haiki+ (ex PuliEcol) , San Severino Marche, MC



International collaborations:

EPLF Losanna, Losanna, Switzerland

University of Berkley, California, USA

University of Granada, Granada, E

University of Siviglia, Granada, E

Instituto Superior Técnico-University of Lisbon, P

Université Laval, Québec, Canada

McGill University, Montreal, Canada

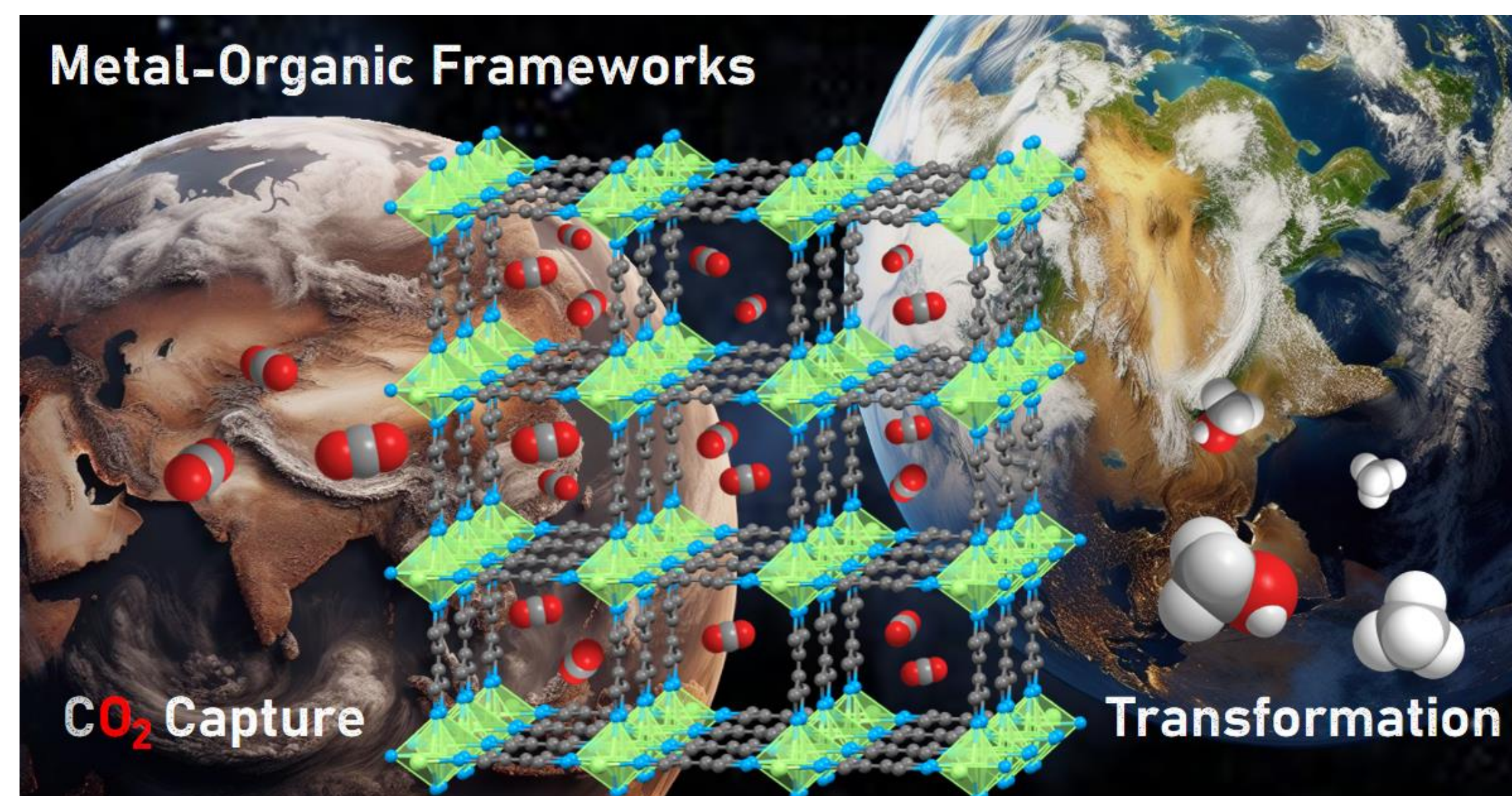
Lomonosov Moscow State University, Moscow, Russia

Nikolaev Institute of Inorg. Chem. Novosibirsk, Russian

Université Cadi Ayyad, Marrakech, Marocco

Zhengzhou University, Zhengzhou, China

University of Wrocław, Wrocław, Poland



Sources of funding:

EU (PRIMA, Nano4Fresh)

Ministerial (MUR Prin PNRR 2022, TheCURA, Partenariato Esteso PNRR "NEST - NETWORK 4 ENERGY SUSTAINABLE TRANSITION",)

Erasmus KA171 project

Roles in scientific societies/Networks/Research centers:

Prof. Claudio Pettinari: Vice Presidente SCI, Presidente NSQTI, membro del CDA Università di Siena e del Consorzio ALMALAUREA, membro del Consiglio Direttivo APRE, Membro della Commissione Nazionale NAO-CNR IUPAC; Direttore della Scuola Internazionale di Chimica Organometallica (ISOC); Membro dell'Accademia delle Scienze di Libona, Bologna e membro eletto dell'Accademia ITATEC. Associato CNR e INSTM.