

CURRICULUM VITAE

FORMATO EUROPEO/EUROPEAN FORMAT

PERSONAL INFORMATION

Name, Surname **Raffaele Morrone**
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Nationality Italian

WORK EXPERIENCE

From february 2001 to date: Researcher at the Istituto di Chimica Biomolecolare, Catania, Italy, of CNR.

From january 1984 to january 2001 : Technician at the Istituto per lo Studio delle Sostanze Naturali di Interesse Alimentare e Chimico-Farmaceutico, Catania, Italy, of CNR.

EDUCATION AND TRAINING

1983 - Degree in Biological Sciences at the Faculty of Science, University "Federico II" of Naples, Italy.

Thesis carried out at the CNR-ICMIB (Arco Felice, Na) and entitled "Chemistry and Defense Behavior of some Mediterranean Nudibranchs".

Thesis Supervisor: Prof. Ernesto Fattorusso and Prof. Guido Sodano.

TRAINING

1988 - Attended the 44th edition of course of "Radioisotopic Techniques" at the Institute of Nuclear Engineering-Centro Studi Nucleari Enrico Fermi of the Politecnico di Milano.

1989 – Attended the course of "MSD con sistema Pascal" della Hewlett-Packard.

RESEARCH ACTIVITIES

Actually, the research activity is focused on use of **biocatalytic procedures** in organic synthesis with the following aims:

recovery of substances with high added value from food waste through sustainable biocatalytic procedures;

enantiomeric separation of principles of pharmaceutical interest by biocatalyzed processes or chemo-enzymatic procedures;

development of biocatalytic methodologies for efficient resolution / preparation of active principles of chiral and non-chiral acids.

In addition, the use of enzymes also made it possible to prepare organometallic compounds enantiomerically pure.

At the beginning of the activity, the research interest was directed to the **study of natural**

substances from marine origin. In this context, the isolation and characterization of compounds present in different marine species has been carried out. In addition, for some of the isolated compounds, the biosynthetic pathways and their role within the organism of origin were determined.

ADDITIONAL INFORMATIONS

Patents

Morrone, R.; Nicolosi, G.; Piattelli, M.

“The Use of Orthoesters for the Synthesis of Chiral Acids in Biocatalyzed Irreversible Esterification Processes”, **2001**, WO 01/07564 A2;

Nicolosi, G.; Piattelli, M.; Morrone, R.; Patti, A.

“Procedimento biocatalitico per l'ottenimento degli enantiomeri otticamente puri del Flurbiprofen”, **1995**, MI 95/A 000959.

Scientific dissemination

From 2019 to date – European Researchers' Night, responsible for the organization and participation of the ICB-Catania;

From 2019 to date – European Biotech Week, responsible for the organization and participation of the ICB-Catania.

From 2014 member of PREDIR, Public relations with the territory, result dissemination and scientific formation (one of the Services of Common Interest of ICB).

Main Research projects

From 2019 to date – “Design and synthesis of new excipients for a nanotechnological approach” within the POR project "New Therapeutic Strategies in Ophthalmology: Bacterial, Viral and Microbial Infections". P.O. FESR SICILIA 2014/2020. Ricerca, Sviluppo Tecnologico e Innovazione; Incremento dell'attività di innovazione delle imprese Azione 1.1.5 – Workpackage coordinator.

2013-2016 – “Biomolecular and energy enhancement of residual biomass from the agro-industrial and fish sector”. PON R&C 2007-2013 Asse 1 – Azione I – Workpackage coordinator.

In addition, he has participated in several other research projects.