

Curriculum Vitae

Personal information

First name / Surname **Tommaso Mecca**
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Nationality Italian
Date and place of birth Potenza, 11/08/1969
Researcher unique identifier: <http://orcid.org/0000-0001-6157-7442>



Current position

Dates 28/12/2001 – present
Occupation or position held Chemistry Researcher
Main activities and responsibilities Mainly working in the field of supramolecular chemistry and biomolecular recognition, development of polymeric cryogels for biomedical uses (dialysis) and in environmental chemistry (detoxification of wastewater).
Name and address of employer CNR – Institute of Biomolecular Chemistry (ICB).
Type of business or sector Research and Development.
Dates 2009 – present
Occupation or position held Responsible (Preposto) of the "Laboratory for organic synthesis" at the Institute of Biomolecular chemistry (ICB), Catania

Education and training

Dates 19-23/11/2012 – 4-8/02/2013
Title of training course followed "Scuola di Microscopia Elettronica "Piergiorgio Merli""
Principal subjects covered Theory and practice of TEM microscopy.
Name and type of organisation providing education and training CNR, Area della Ricerca di Bologna, Italy
Dates 12-16/11/2007
Title of training course followed *Seminario Scientifico* "Tecnologia delle Biointerfacce: preparazione, caratterizzazione e applicazioni"
Principal subjects covered Advanced methodologies for studying biological interaction and molecular recognition.
Name and type of organisation providing education and training CNR – IMM, Lecce, Italy.
Dates November 2003 – Dicembre 2004
Title of qualification awarded Fellowship CNR - Estero
Principal subjects covered "Homooxalix[3]arene as scaffold for development of new antiangiogenic and anticancer molecules"
Name and type of organisation providing education and training Yale University, New Haven, CT, USA. Supervisor Prof. A. D. Hamilton
Dates 28/02/2002
Title of qualification awarded PhD in Chemistry
Principal subjects covered "Synthesis and applications of new optically pure atropisomeric compounds"
Name and type of organisation providing education and training Università degli Studi della Basilicata, Potenza, Italy. Supervisor Prof C. Rosini
Dates 18/04/2001 – 29/08/2001
Title of qualification awarded Formative training for PhD studies.
Principal subjects covered "Synthesis and application of new chiral atropisomeric molecular optical switches".
Name and type of organisation providing education and training University of Groningen, The Netherlands. Supervisor Prof. B. L. Feringa
Dates 12/03/1997
Title of qualification awarded Master degree 110/110 cum Laude in Chemistry.
Name and type of organisation providing education and training Chemistry department, Università degli Studi della Basilicata, Potenza, Italy. Supervisor Prof A. Degl'Innocenti.

Work experience (last 10 years)

Dates	2021 – present
Main activities and responsibilities	Working in the project AMICO call, MISE Proof of Concept (PoC) 2020, "Criogel Polimerici per la Purificazione dell'Acqua da metalli tossici" CRIOPURA, CrioPurA aims to increase the TRL from 4 to 7 of a CNR patented materials (PCT/EP2020/069695)
Dates	2016 – present
Main activities and responsibilities	Starting from 2016 working within the project DCM.AD003.035: "Riconoscimento molecolare e sue conseguenze biologiche".
Dates	2014 – 2015
Main activities and responsibilities	Working in the project POR Sicilia 2007-2013 "Rafforzare l'occupabilità nel sistema della R&S e la nascita di spin off di ricerca in Sicilia", "Dai composti naturali ai sistemi nano strutturati: applicazioni e prodotti per la salute" as teacher and tutor.
Dates	2013 - 2015
Main activities and responsibilities	Working in the project PON – "Ricerca e Competitività 2007/2013" PON02_00355_2964193 "HIPPOCRATES" – "Sviluppo di Micro e Nano-Tecnologie e Sistemi Avanzati per la Salute dell'uomo" del Distretto Tecnologico di Micro e Nano-Sistemi, for the development of Calixarene-based hydrogel for the controlled release of drugs for ophthalmic use.
Dates	2013 - 2015
Main activities and responsibilities	Working in the project "Valorizzazione Biomolecolare ed Energetica di Biomasse residuali del Settore Agroindustriale ed Ittico" denominato "Bio4Bio" PON 02_00451_3362376 del Distretto Tecnologico Agro-Bio-Pesca, for the development of procedures for the detoxification of olive oil waters.
Dates	2011 – 2013
Main activities and responsibilities	Working in the project "EFOR – Energia da Fonti rinnovabili", WP2: ENOTRIA – Energie da Biomasse e Fonti Rinnovabili, for the development of innovative trans-esterification processes for used vegetable oils for the production of biodiesel and useful glycerol derivatives.
Dates	2011 – 2013
Main activities and responsibilities	Working within the project PON – "Ricerca e Competitività 2007-2013" "Una piattaforma tecnologica per lo sviluppo di nuovi farmaci per malattie rare", for the synthesis and development of new glycerophosphoinositol.

Additional informations

Currently author of 18 publications in international journals in the field of Chemistry and Materials, 3 patents, and numerous posters and oral communication in international congresses and conferences.

Most relevant publications of last 10 years

1. Mecca, T.; Ussia, M.; Caretti, D.; Cunsolo, F.; Dattilo, S.; Scurti, S.; Privitera, V.; Carroccio, S. C.; «N-methyl-D-glucamine based cryogels as reusable sponges to enhance heavy metals removal from water», *Chem. Eng. J.* **2020**, 399, 125753.
2. Ussia, M.; Di Mauro, A.; Mecca, T.; Cunsolo, F.; Cerruti, P.; Nicotra, G.; Spinella, C.; Impellizzeri, G.; Privitera, V.; Carroccio, S. C. «ZnO-pHEMA nanocomposites: an eco-friendly and reusable material for water remediation», *ACS Appl. Mater. Interfaces* **2018**, 10, 40100.
3. Spina R.L.; Tripisciano C.; Mecca T.; Cunsolo, F.; Weber, V.; Mattiasson, B. «Chemically modified poly(2-hydroxyethyl methacrylate) cryogel for the adsorption of heparin», *J. Biomed. Mater. Res. B*, **2014**, 102, 1207.
4. Mecca T.; Messina G. M. L.; Marletta G.; Cunsolo F. «Novel pH responsive calix[8]arene hydrogelators: self-organization processes at a nanometric scale», *Chem. Commun.*, **2013**, 49, 2530.
5. Mecca, T.; Cunsolo F. «Polycationic calix[8]arene receptors grafted onto polymeric matrix: smart material for heparin neutralization», *Polymers for Advanced Technologies*, **2010**, 21, 752.

Patents

1. Cunsolo F.; Consoli G. M. L.; Geraci C.; Mecca T. (2005), "Abiotic Heparin Antagonists" PCT/EP2004/010358.
2. Cunsolo F.; Mecca T.; La Spina, R.; Spitaleri, F. (2017), "Cryogel for the removal of heparins and heparinoids from aqueous solutions, physiological solutions and biological fluids, preparation process and uses thereof", PCT/IB2017/050712
3. Carroccio S. C., Cunsolo F., Mecca T., Privitera V., Ussia M., Caretti D., Scurti S. "N-alkyl-D-glucamine based macroporous polymeric cryogel for sequestering and/or removing toxic contaminants", Italian Application n° 102019000012339, PCT/EP2020/069695.

Autorizzo il trattamento dei dati personali ai sensi del D.Lgs. 196/2003 e s.m.i.

Catania, 11 Ottobre 2021

In fede
Tommaso Mecca