

Name Carmine Coluccini, PhD

**Current Positions** Assistant Professor, Institute of New Drug Development,

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**E-Portfolio Website** https://webap.cmu.edu.tw/TchEportfolio/index\_1/carminecoluccini

**Personal Website** 

#### **Education**

Bachelor's degree in Chemistry, University of Selerno

Ph.D. in Chemical Science, University of Bologna, Italy

Post-doc Researcher in Univesita di Pavia, Pavis, Italy (0950501~0980831)

Post Doc Researcher in Universita di Milano Bicocca, Milan, Italy (0981001~1030228)

Post-doc Researcher in IMDEA MATERIALES, Madrid, Spain (1030310~1050610)

## **Expertise**

Organic Synthesis, Organic Material Science, Photonic Material, Drug Delivery, Supramolecular Chemistry

#### **Research Interests**

My research interests concern the preparation of molecular shuttles for the simultaneous delivering of different therapeutic agents (genes and/or drugs) for the treatments of cancer and the preparation of innovative fluorescent biomarkers.

#### **Selected Grants:**

- 1. Preparation of new biomimicry systems, exhibiting a flexible and dynamic coordinative space, for the efficient encapsulation and controlled releasing of the drug toward cancer cells. CMU109-N-25 (2020.11.2 ~ 2021.7.31)
- 2. Design and synthesis of novel push-pull and propeller-like organic molecules for producing photonic materials. MOST 107-2113-M-039-008-MY3 (2020.8.1 ~ 2021.7.31) (3/3)

### **Selected Publications**

- 1. Coluccini, C.; Ng, Y.; Reyes, Y.; Chen, H.; Khung, Y. Functionalization of Polyethyleneimine with Hollow Cyclotriveratrylene and Its Subsequent Supramolecular Interaction with Doxorubicin. *Molecules* 2020, 25(22), 5455.
- 2. Coluccini C., Anusha P.T., Chen, HY.T., Liao S.L., Ko Y. K., Yabushita A., Luo C. W., Ng Y.M., Khung Y.M. Tuning of the Electro-Optical Properties of Tetraphenylcyclopentadienone via Substitution of Oxygen with Sterically-Hindered Electron Withdrawing Groups. *Sci Rep* 9, 12762 (2019).
- 3. Coluccini C., Caricato M., Cariati E., Righetto S., Forni A., Pasini D., Synthesis, chiroptical and SHG properties of polarizable push–pull dyes built on  $\pi$ -extended binaphthyls , RSC Advances , 2015 Feb , 5(28): 21495-21503

# **Selected Patents**

1. Coluccini C., Abbotto A., Manfredi N., Roberto D., Ugo R., Dragonetti C., Valore A., Colombo A., New cyclometalated complexes for solar cells WO2012013719A1