

PHẠM THÀNH CHUNG

Học bổng sau Tiến sĩ trong nước năm 2022

HƯỚNG NGHIÊN CỨU CHÍNH

- Design and develop heavy-atom-free photosensitizers for photodynamic application.
- Study and synthesize colorimetric and fluorometric polydiacetylene-based chemosensors for metals cation and biothiol detections.
- Develop fluorescent probes and chemosensors based on small organic molecules for reactive oxygen species (ROS) and biothiol sensing.
- Synthesize organic photothermal agents and their nanomaterials for photothermal therapy and photoacoustic imaging in vitro and in vivo.
- Develop several fluorophore and dyes for high two-photon absorption, solar cell, and thermally activated delayed fluorescence (TADF) materials.
- Investigate photophysical properties, ground state and excited states of fluorophore, photosensitizers and photothermal agents by time-dependent density functional theory (TD-DFT) calculation.
- Study and isolate natural products in *Balanophora laxiflora* and *Helicteres hirsuta* plants (Master's degree)

THÀNH TÍCH NỔI BẬT

- Front cover, Visual simultaneous detection and real-time monitoring of Cadmium ion based on conjugated polydiacetylenes; ACS Omega/ American Chemical Society
- BK21 scholarship for graduate students, National Research Foundation of Korea, Korea (9/2020 – 2/2022)
- The Philosopher of Next Generation, Pukyong National University, Korea (9/2020).



CHUYÊN NGÀNH:

Công nghiệp 4.0 – Kỹ thuật sinh học hội tụ

TÊN ĐỀ TÀI NGHIÊN CỨU:

Join experimental/theoretical molecular design towards innovative heavy-atom-free photosensitizers for photodynamic cancer therapy and fluorescent chemosensor

ĐƠN VỊ CHỦ TRÌ NGHIÊN CỨU:

Viện Kỹ thuật nhiệt đới, Viện Hàn lâm Khoa học và Công nghệ Việt Nam

TỐT NGHIỆP TIẾN SĨ TẠI:

Pukyong National University

Kết quả tài trợ

1. Bài báo tạp chí - Sau Tiến sĩ

THÔNG TIN BÀI BÁO	NGƯỜI NHẬN HỌC BỔNG	LINK	MÃ HỌC BỔNG
Pham, T.C., Lee, D.J., Kim, D.H., Yoon, J., Dai Lam, T., Kim, H.M. and Lee, S., 2023. Imidazole–carbazole conjugate for two-photon-excited photodynamic therapy and fluorescence bioimaging. Chemical Communications, 59(30), pp.4503-4506.	Phạm Thành Chung	https://doi.org/10.1039/D3CC00VINIF.2022.STS.10108C	
Pham, T.C., Hoang, T.T.H., Tran, D.N., Kim, G., Nguyen, T.V., Pham, T.V., Nandanwar, S., Tran, D.L., Park, M. and Lee, S., 2023. Imidazolium-Based Heavy-Atom-Free Photosensitizer for Nucleus-Targeted Fluorescence Bioimaging and Photodynamic Therapy. ACS Applied Materials & Interfaces, 15(41), pp.47969-47977.	Phạm Thành Chung	https://doi.org/10.1021/acsami.VINIF.2022.STS.103c10200	
Tran, D.N., Hoang, T.T.H., Nandanwar, S., Ho, V.T.T.X., Vu, H.D., Nguyen, X.H., Nguyen, H.T., Van Nguyen, T., Van Nguyen, T.K., Park, M. and Lee, S., 2023. Dual anticancer and antibacterial activity of fluorescent naphthoimidazolium salts. RSC advances, 13(51), pp.36430-36438.	Phạm Thành Chung	https://doi.org/10.1039/D3RA06VINIF.2022.STS.10555C	

Kết quả tài trợ:

<https://vinif.org/sponsor-result-post-doctor/category/bai-bao-tap-chi-sau-tien-si?postgraduate=12264>