

Tan Le-Hoang Doan

Center for Innovative Materials & Architectures (INOMAR)

Address: 42/2 Le Truc Street, Ward 7, Binh Thanh District, HCM City

Phone: +84 975457549, email: tandoan@inomar.edu.vn and dlhtan@hcmus.edu.vn

EDUCATION:

Bachelor of Science, Chemistry: September 2009

University of Science, Ho Chi Minh City

Adviser: Prof. Thach Ngoc Le

RESEARCH AND TEACHING EMPLOYMENT:

Postdoctoral researcher **10/2017 – present**

Institute for Integrated Cell-Material Sciences (iCeMS), Kyoto University, Japan

Duties: Research associate

Researcher **03/2017 – present**

Center for Innovative Materials & Architectures (INOMAR), Vietnam National University, Ho Chi Minh City (VNU-HCM), Vietnam

Duties: Group leader

Lecturer **03/2017 – present**

University of Science, Ho Chi Minh City, Vietnam

Duties: Lecturing

PhD. Student **09/2010 – 03/2017**

Center for Molecular and Nanoarchitecture (MANAR), Vietnam National University, Ho Chi Minh City (VNU-HCM), Vietnam

Duties: PhD. training

Teaching assistant **11/2009 – 03/2017**

University of Science, Ho Chi Minh City, Vietnam

Duties: Teaching and tutoring

Research assistant **11/2009 – 01/2012**

Organic Chemistry Lab, University of Science, Ho Chi Minh City, Vietnam

Duties: Studied effects of solvents and linear alkane substrates in Gilman reaction; Synthesis of MOF-5 under microwave irradiation and using MOF-5 as a solid catalyst in Friedel-Crafts alkylation between toluene and benzyl bromide

Undergraduate student **03/2009 – 07/2009**

Organic Chemistry Lab, University of Science, Ho Chi Minh City, Vietnam

Duties: Undergraduate Honors Thesis, Studied effects of solid support and ultrasound on reaction between benzyl bromide and potassium cyanide in toluene

RESEARCH PUBLICATIONS IN PEER REVIEWED JOURNALS:

1. Linh H. T. Nguyen, The T. Nguyen, Ha L. Nguyen, **Tan L. H. Doan**, Phuong Hoang Tran. A new superacid hafnium-based metal-organic framework as a highly active heterogeneous catalyst for the synthesis of benzoxazoles under solvent-free conditions, *Catalysis Science & Technology*, **2017**, 7, 4346-4350.

2. Thuan V. Tran, Hanh T. N. Le, Hiep Q. Ha, Xuan N. T. Duong, Linh H. T. Nguyen, **Tan L. H. Doan**, Ha L. Nguyen, Thanh Truong. A five coordination Cu(II) cluster-based MOF and its application in the synthesis of pharmaceuticals via sp^3 C–H/N–H oxidative coupling, *Catalysis Science & Technology*, **2017**, 7, 3453-3458.
3. Ha L. Nguyen, Thanh T. Vu, Dinh Le, Tan L. H. Doan, Viet Q. Nguyen, Nam T. S. Phan. A titanium–organic framework: engineering of the band gap energy for photocatalytic property enhancement, *ACS Catalysis*, **2017**, 7, 338-342.
4. Ha L. Nguyen, Filipe Gándara, Hiroyasu Furukawa, **Tan L. H. Doan**, Kyle E. Cordova, Omar M. Yaghi. A titanium-organic framework as an exemplar of combining the chemistry of metal- and covalent-organic frameworks, *Journal of the American Chemical Society*, **2016**, 138, 4330-4333.
5. **Tan L. H. Doan**, Thong Q. Dao, Hai N. Tran, Phuong H. Tran, Thach N. Le. An efficient combination of Zr-MOF and microwave irradiation in catalytic Lewis acid Friedel–Crafts benzoylation, *Dalton Transactions*, **2016**, 45, 7875-7880.
6. **Tan L. H. Doan**, Ha L. Nguyen, Hung Q. Pham, Nguyen-Nguyen Pham-Tran, Thach N. Le, Kyle E. Cordova. Tailoring the optical absorption of water stable Zr(IV)- and Hf(IV)-based metal-organic framework photocatalysts, *Chemistry-An Asian Journal*, **2015**, 10, 2660-2668.
7. **Tan L. H. Doan**, Thach N. Le. The switch of reaction pathway induced by solid support and ultrasound, *Synthetic Communication*, **2012**, 42, 337-340.

ORAL PRESENTATIONS:

1. **Tan L. H. Doan**. *Chemically Stable Zr and Hf-MOFs Used as Heterogeneous Catalysts for Friedel-Crafts Benzoylation under Microwave Irradiation*. Presented at **8th International Workshop on Advanced Materials Science and Nanotechnology 2016**, Ha Long city, Vietnam.
2. **Tan L. H. Doan**, Ha L. Nguyen, Hung Q. Pham, Nguyen-Nguyen Pham-Tran, Thach N. Le, Kyle E. Cordova. *A chemically stable Zr-based metal-organic framework used as a photocatalyst for degradation of organic dyes*. Presented at **International Workshop on Nanoscience and Nanotechnology: Opportunities for Academia and High-Tech Industry - Joint 4th Asia-Pacific Chemical and Biological Microfluidics Conference 2015**, Da Nang city, Vietnam.
3. **Tan L. H. Doan**, Thach N. Le. *Study of selectivity of solid support and activated methods on nucleophilic and electrophilic substitution reaction*. Presented at the **Second Symposium on Green Chemistry 2009**, University of Science, Ho Chi Minh City, Vietnam.

POSTER PRESENTATIONS:

1. **Tan L. H. Doan**. *A new zirconium-based metal-organic framework functionalized with amide group for carbon dioxide capture*. Presented at **The Third International Workshop on Nano Materials for Energy Conversion 2017**, Ho Chi Minh city, Vietnam.
2. **Tan L. H. Doan**. *New, Chemically Stable Zr- and Hf-based Metal-Organic Frameworks Used as Photocatalysts for Degradation of Organic Dyes*. Presented at **8th International Workshop on Advanced Materials Science and Nanotechnology 2016**, Ha Long city, Vietnam.
3. **Tan L. H. Doan**; Linh H. T. Nguyen, Hoang T. Nguyen, Kyle E. Cordova, Hiroyasu Furukawa. *Zirconium-Based Metal-Organic Frameworks for Highly Efficient Photocatalytic Degradation of Organic Dyes*, **International Conference of 150 Years of Beautiful Structure and Defects 2014**, Ho Chi Minh City, Vietnam.
4. **Tan L. H. Doan**, Anh T. Nguyen, Thanh D. Le, Thao N. N. Dinh, Thach N. Le. *Synthesizing methods of MOF-5: influence on characteristics and catalytic activity in Friedel-Crafts alkylation*. Presented at **Conference proceeding of Green Technology and Sustainable Development 2012**, Ho Chi Minh City, Vietnam.
5. Tran T.-T. Nguyen, Khiem N.-D. Chau, Phuong H. Tran, Cuong M.-Q. Le, Thi T.-X. Luu, Nhuan N. Doan, **Tan L. H. Doan**, Tan K. Nguyen, Thu N.-H. Tran, Thach N. Le. *Analysis of chemical*

-
- composition of leaf and peel Citrus oils in Southern Vietnam*. Presented at **Conference proceeding of the 2nd Analytica Vietnam Conference 2011**, Ho Chi Minh City, Vietnam.
6. **Tan L. H. Doan**, Anh T. Nguyen, Thach N. Le. *Synthesis of MOF-5 under microwave irradiation and using as catalyst in Friedel-Crafts alkylation*. Presented at the **Scientific Conference in University of Science 2010**, Ho Chi Minh City, Vietnam.
 7. **Tan L. H. Doan**, Thach N. Le. *Selectivity in reaction between benzyl bromide and potassium cyanide in the presence of alumina and activated method*. Presented at **93rd Canadian Chemistry Conference and Exhibition 2010**, Toronto, Canada.

BOOKS:

1. Thach N. Le, Nhuan N. Doan, Thi T.-X. Luu, Tran T.-T. Nguyen, Phuong H. Tran, **Tan L. H. Doan**. *Organic Chemistry (Functional Groups) Episode 2*, Publisher of Vietnam National University-Ho Chi Minh city, 2017.

FELLOWSHIPS AND AWARDS:

Outstanding Young Lecturer (excellent in research, teaching, and social activities) University of Science, Ho Chi Minh City
Winner of "Chemistry and I" Contest, Faculty of Chemistry, University of Science, Ho Chi Minh City

TEACHING RECORD – SFSU (*) and USF (^):

11/2009-present

Science Concepts: Labwork on Organic Chemistry I and II

PROFESSIONAL SOCIETIES:**LANGUAGE PROFICIENCY:**

-Native Vietnamese Speaker

CHEMISTRY INSTRUMENTATION EXPERTISE:

Single + Powder X-ray Diffraction
Gravimetric and Volumetric Gas Adsorption
GC-MS, FT-IR, UV-VIS, SEM, TEM
High Pressure Adsorption
Microwave Synthesis
Air-Free techniques including Glovebox + Schlenk Line