

Name	TRAN Nguyen Lan		
Position	Lecturer, Department of Theoretical Physics		
Academic Career		<i>Institution</i>	<i>Year</i>
	Postdoctoral fellow	The University of California, Berkeley, USA	2021
	Postdoctoral fellow	The University of Michigan, Ann Arbor, USA	2018
	Doctoral degree	The Graduate University for Advanced Studies, Japan	2014
	Master degree	University of Engineering and Technology, VNUHN	2010
	Undergraduate/bachelor degree	Hue University of Sciences	2007
Employment	<i>Position</i>	<i>Employer</i>	<i>Period</i>
	Lecturer	Department of Physics, International University, VNUHCM	2022-2024
	Lecturer	Faculty of Physics - Engineering Physics, University of Science, VNUHCM	2024-Present
Research and development projects over the past 5 years	<i>Name of project or research focus</i>	<i>Body funding</i>	<i>Role/Period</i>
	Development of self-consistent perturbation theory for excited states of molecules and materials	VNUHCM	PI/2024-2025
	Studying excited-state dynamics and excitonic effects in molecules and materials using novel computational quantum methods	NAFOSTED	PI/2025-2028
	Research on the oxidation	NAFOSTED	Senior member/20

	reaction mechanism of hydrocarbon compounds with a circular structure that automatically form OH using a combination of multi-model calculation, modeling and simulation tools		25-2029
Industry collaborations over the past 5 years	<i>Project titles</i>	<i>Partners</i>	
	None	None	
Patents and proprietary rights	<i>Title</i>	<i>Year</i>	
	None	None	
Important publications over the last 5 years	<i>Selected recent publications from a total of approx. 34:</i>		
	1. Vu Tuan Hai, Nguyen Tan Viet, Jesus Urbaneja, Nguyen Vu Linh Nguyen, Tran Nguyen Lan , Le Bin Ho: Multi-target quantum compilation algorithm. Machine Learning: Science and Technology 5 (4): 045057 (December 2024) 2. Tran Tri Nhan, Nguyen Thanh Hoang, Tran Nguyen Lan : Reaching high accuracy for energetic properties at second-order perturbation cost by merging self-consistency and spin-opposite scaling, he Journal of Physical Chemistry A 128: 1543 (June 2024) 3. Tran Nguyen Lan , Eric Neuscamman: Exploring Ligand-to-Metal Charge-Transfer States in the Photo-Ferrioxalate System Using Excited-State Specific Optimization. The Journal of Physical Chemistry Letters 14: 7454-7460 (August 2023). 4. Le Trong Nhan, Tran Nguyen Lan : Correlated reference-assisted variational quantum eigensolver. The Journal of Physical Chemistry A 127: 5222 (June 2023). 5. Tran Nguyen Lan : Can second-order perturbation theory accurately predict electron density of open-shell molecules? The importance of self-consistency. Physical Chemistry Chemical Physics 24(32): 19393-19400 (July 2022) 6. Quoc Chuong Nguyen, Le Bin Ho, Tran Nguyen Lan , Hung Quoc Nguyen: 2632- 2153. Machine Learning: Science and Technology 3 (1): 015034 (March 2022) 7. Tran Nguyen Lan : Improving excited state potential energy surfaces via optimal orbital shapes. The Journal of Physical Chemistry A 125(41): 9242-9250 (October 2021). 8. Tran Nguyen Lan , Eric Neuscamman: Improving excited state potential energy surfaces via optimal orbital shapes. The Journal of Physical Chemistry A 124(40): 8273-8279 (September 2020). 9. Kiel T. Williams, Yuan Yao, Jia Li, Li Chen, Hao Shi, Mario Motta, Chunyao Niu, Ushnish Ray, Sheng Guo, Robert J. Anderson, Junhao Li, Tran Nguyen Lan , Chia-Nan Yeh, Bastien Mussard, Sandeep Sharma, Fabien Bruneval, Mark van Schilfgaarde, George H.		

	Booth, Garnet Kin-Lic Chan, Shiwei Zhang, Emanuel Gull, Dominika Zgid, Andrew Millis, Cyrus J. Umrigar, and Lucas K. Wagner: Direct Comparison of Many-Body Methods for Realistic Electronic Hamiltonians. Physical Review X 10(1): 011041 (February 2020). 10. Alexander A Rusakov, Sergei Iskakov, Tran Nguyen Lan, Dominika Zgid: Self-energy embedding theory (SEET) for periodic systems. Journal of chemical theory and computation 15(1): 229-240 (December 2019)		
Activities in specialist bodies over the last 5 years	<i>Organization</i>	<i>Role</i>	<i>Period</i>
	None	None	None
Website	https://phys.hcmus.edu.vn/		