

**Van-Duong Dao, PhD**

Associate Professor

Faculty of Biotechnology, Chemistry, Environment Engineering,
Phenikaa School of Engineering,

Phenikaa University,

Ha Noi, 12116

Tel) +84-978-346-461

Email: duong.daovan@phenikaa-uni.edu.vn

Homepage: <https://recslab.phenikaa-uni.edu.vn/home>

Honors & Awards

2015-2020 Advanced International Grant for research and development of highly efficient next-generation solar cells. The National Research Foundation, Ministry of Science, Republic of Korea fund grant.

2014-2015 Research Fellowship Grant for developing a strategy for synthesis of graphene-based hybrid materials and their applications in next-generation solar cells. The National Research Foundation, Ministry of Science, Republic of Korea fund grant.

2019 Top 1% of Peer Reviewers in Cross-Field (2018-2019) on Publons global reviewer database

2019-2024 Ranked one of the world's top 2 % scientists, as stated by Stanford University & Elsevier

2022~present: Associate Editor of Advances in Natural Sciences: Nanoscience and Nanotechnology

2022~present: Associate Editor of VNU Journal of Science: Natural Sciences and Technology

2025~present: Editor Board of Desalination

2022~present: Editor Board of Energy Materials

2022~present: Review Editor of Frontiers in Photonics

2018~present: Associate Editor of Peer Review Journal of Solar & Photo Energy Systems (PRSP)

2017 Outstanding KRF Fellow of National Research Foundation

Education Background

Feb. 2013 **Ph.D.** in Chemical Engineering

Chungnam National University, Korea

Jul. 2007 **BS** in Chemical Engineering

Hanoi University of Technology, Vietnam

Professional Experiences

2025-present: Vice-Reactor

Phenikaa School of Engineering, Phenikaa University, Vietnam

2018-present: Dean of Faculty of BCEE

Phenikaa University, Vietnam

2016- 2018: Research Professor

Chungnam National University, Korea

2015-2020: Korea Research Fellowship

Chungnam National University, Korea

2015-2017: Postdoc, declined

University of Hyogo, Japan

2014-2015: NRF Postdoc Fellowship

Chungnam National University, Korea

2013-2014: Invited Scientist

Korea Institute of Science and Technology, Korea

2013-2014: Postdoc

Chungnam National University, Korea

Research Interests

- Energy conversion: Next-generation solar cells; Solar to steam; Solar-driven oil spills recovery; CO₂ reduction; Photocatalysis;
- Energy Storage: Lithium-ion batteries; Lithium metal batteries; Solid-state electrolyte; Supercapacitor.

Publications

175 main author publications in peer-reviewed international journals (4 featured covers)

55 co-author publications in peer-reviewed international journals (**2** featured covers)

2 invited book chapters; **2** books

25 review papers in peer-reviewed international journals with Impact Factor from 10 to 40

Total citations: **6344**; H-index: **42**; i10-index: **136** (updated Dec. 2025)

Patents: 08 registrations and **6** applications

Invited talks: over 50

Professional service reviewer of journals: over 60 (Nature Communications, Nature Water, Nano Letters, Applied Catalysis B: Environmental, Applied Energy, Joule, ACS Nano, Advanced Functional Materials, Advances Science, Chemical Engineering Journal, ChemSusChem, Journal of Materials Chemistry A, Nanoscale, Journal of Catalysis, ACS Applied Materials & Interfaces, Journal of Power Sources, Carbon, Nanotechnology, Scientific Report, Journal of Alloys and Compounds, Solar Energy, Materials Chemistry and Physics, Journal of The Electrochemical Society, etc.)

Professional service committees of proposal: National Foundation for Science and Technology Development (NAFOSTED) in Vietnam, Ministry of Science and Technology, Vietnam National University, Vingroup Innovation Foundation (VINIF).

Professional service reviewer of proposal: National Foundation for Science and Technology Development (NAFOSTED) in Vietnam, Ministry of Science and Technology.

Conference talks and presentations: 65 (MRS, ECS, KICChE, FNANO, Nano Energy, GPVC, KPVS)

Teaching Experience: Lecturer: *Chemical Process Simulation, skill seminars, Chemistry, Polymer Chemistry, Coating and Paint Technology, Polymer-Composite, Renewable Energy.*

Supervision experience: Ph.D students supervision (3 completed, 7 in progress) and Master's students (5 completed and 2 in progress)

Grant History

Phenikaa Innovation Foundation grant, PI (**in progress**)

Fabrication and optimization of multi-layer pouch-cell solid-state lithium batteries

Phenikaa Innovation Foundation grant, PI (**Completed**)

Study and development of polymer electrolyte for all-solid-state lithium-ion battery

NAFOSTED grant, PI (**in progress**)

Basic research on solar-driven water evaporation generation based on highly efficient, broadband plasmonic absorbers

MOST (Italia-Vietnam) grant, Co- PI (**in progress**)

Cellulose-Based Aerogel Materials as nature-based solutions for the environmental management and mitigation of oil spills

Phenikaa grant, PI (**Completed**)

Study and development of hand sanitizer

NAFOSTED grant, PI (**Completed**)

Study and development of hybrid materials as low-cost counter electrodes for dye-sensitized solar cells

NRF grant: Co-PI (**Completed**)

Synthesis of graphene-based hybrid materials and their applications in next-generation solar cells

NRF grant: Co-PI (**Completed**)

Research and development of highly efficient next-generation solar cells

Languages

Vietnamese (mother tongue), English (fluent), Korean (working knowledge)