



VIETNAM ASSOCIATION OF CATALYSIS AND ADSORPTION
HỘI KHOA HỌC CÔNG NGHỆ XÚC TÁC VÀ HẤP PHỤ VIỆT NAM

VIETNAM
JOURNAL OF CATALYSIS AND ADSORPTION

ISSN 0866 - 7411

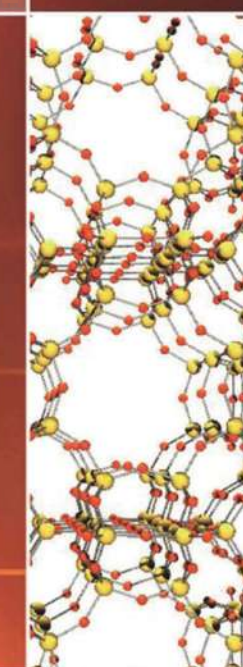
TẠP CHÍ XÚC TÁC VÀ HẤP PHỤ VIỆT NAM

Vol 10 issue 2 / 2021

Hội thảo **LẦN THỨ V**

KHOA HỌC VÀ CÔNG NGHỆ HÓA VÔ CƠ

Vol 10 issue 2 / 2021



Vietnam Journal of Catalysis and Adsorption

Address: Room 302, C4-5 Building
Hanoi University of Science and Technology
1 Dai Co Viet, Hanoi, Vietnam

Email: jca@hust.edu.vn

Tel: (+84-24) 3868 0070 / 24

Website: [//chemeng.hust.edu.vn/jca](http://chemeng.hust.edu.vn/jca) FB: JCA.VNACA

TẠP CHÍ XÚC TÁC VÀ HẤP PHỤ VIỆT NAM



Hanoi 2021

Vietnam Journal of Catalysis and Adsorption

Editorial Board

Editor-In-Chief

Ta Ngoc Don, Vietnam Ministry of Education and Training, Vietnam

Deputy Editor-In-Chief

Luu Cam Loc, VAST, HCM University of Technology, Vietnam

Managing Editor

Pham Thanh Huyen, Hanoi University of Science and Technology, Vietnam

Editorial Board

Le Minh Cam, Hanoi National University of Education, Vietnam

Trong-On Do, Laval University, Canada

Nadine Essayem, IRCELYON, France

Vu Thi Thu Ha, Vietnam Institute of Industrial Chemistry, Vietnam

Taufiq-Yap Yun Hin, Universiti Putra Malaysia, Malaysia

Nguyen Khanh Dieu Hong, Vietnam Union of Science and Technology Associations

Cristina Martlnez, Instituto de Tecnología Química, UPV-CSIC, Spain

Chung-Yuan Mou, National Taiwan University, Taiwan

Phan Thanh Son Nam, HCMC University of Technology, Vietnam

Pham Van Nui, Hanoi University of Mining and Geology, Vietnam

Vasile I. Parvulescu, University of Bucharest, Romania

Eun Woo Shin, University of Ulsan, Korea

Le Thanh Son, Vietnam National University, Vietnam

Le Minh Thang, Hanoi University of Science and Technology, Vietnam

Vo Vien, Quy Nhon University, Vietnam

Editorial Advisory Board

Pham Van Bac, Vietnam

Dinh Thi Ngo, Vietnam

Ho Sy Thoang, Vietnam

Ngo Kim Dinh, Vietnam

Dang Tuyet Phuong, Vietnam

Ngo Thi Thuan, Vietnam

Tran Thi Nhu Mai, Vietnam

Editor Secretary

Nguyen Thi Hong Phuong, Hanoi University of Science and Technology, Vietnam

Phan Thi To Nga, Hanoi University of Science and Technology, Vietnam

Publication Information

Vietnam Journal of Catalysis and Adsorption (ISSN 0866-7411) is a peer review journal published by The Vietnam Association of Catalysis and Adsorption, hosted by School of Chemical Engineering, Hanoi University of Science and Technology. Further information and instruction to prepare the manuscript can be found on <http://chemeng.hust.edu.vn/jca/>

Publication permit No 765/GP-BTTTT, issued 7/5/2012 Printed at HOANGGIA PM ., JSC in 07/2021