QUARTERLY JOURNAL

# JOURNAL OF BUILDING SCIENCE AND TECHNOLOGY

51TH YEAR, N0. 1/2023 (199)
ISSN 1859 - 1566

MINISTRY OF CONSTRUCTION
VIET NAM INSTITUTE FOR BUILDING SCIENCE AND TECHNOLOGY - IBST

**Editor-in-Chief**
Dinh Quoc Dan

**Deputy Editor-in-Chief**
Nguyen Nam Thang

**Science Council**
**Chairman**
Tran Chung

**Vice Chairman**
Nguyen Hong Hai

**Members**
Vu Ngoc Anh
Nguyen Ngoc Ba
Nguyen Dang Bich
Nguyen Thanh Binh
Nguyen Xuan Chinh
Nguyen Thai Chung
Nguyen Tien Chuong
Nguyen Cao Duong
Hoang Minh Duc
Pham Minh Ha
Tan Kang Hai
Ngo Van Hoi
Le Viet Hung
Le Quang Hung
Nguyen Ba Ke
Pham Van Khoan
Yukio Tamura
Pham Quyet Thang
Le Trung Thanh
Nguyen Son Lam
Tran Van Lien
Tran Manh Lieu
Le Minh Long
Nguyen Dai Minh
Phan Quang Minh
Nguyen Ngoc Quang
Nguyen Vo Thong
Nguyen Thi Bich Thuy
Ngo Tuan
Cao Duy Tien
Nguyen Hoang Tuan
Doan The Tuong
Do Nhu Trang
Vu Thanh Trung
Tran Ba Viet
**Head of management board**
Nguyen Nam Thang

**Editorial Office**
Vietnam Institute for Building Science and Technology - IBST
81 Tran Cung-Nghia Tan-Cau Giay-Ha Noi
Phones: 024.37556 098;
Fax: 84.24.38361197

**Email:** tapchi@ibst.vn
**Website:** http://www.ibst.vn

Publication permit:
Nr.442/GP-BTTTT
Dated Sep 27th, 2016

# CONTENTS

## STRUCTURAL - CONSTRUCTION TECHNOLOGY

***Vu Thanh Trung***
*doi.org/10.59382/j-ibst.2023.en.vol1-1*
- Determination of wind loads on porous sunshade roof cover sheets using conversion factor — 3

***Vu Dinh Huong***
***Ta Duc Tuan***
*doi.org/10.59382/j-ibst.2023.en.vol1-2*
- Developing a method for determining the natural frequency of a structure using multiple combined measurements in the frequency domain — 11

## BUILDING METERIALS - ENVIRONMENT

***Vu Van Tuan***
*doi.org/10.59382/j-ibst.2023.en.vol1-3*
- A comparative investigation using artificial neural network (ANN) and decision tree (DT) methods in the prediction of slump and strength for concrete samples — 21

## GEOTECHNICAL - SURVEYING

***Tran Huy Tan***
***Tran Duc Hieu***
***Bui Dang Luong***
*doi.org/10.59382/j-ibst.2023.en.vol1-4*
- Some issues about the foundation design of wind power tower in actual conditions in Vietnam — 30

***Nguyen Thanh Sang***
***Nguyen Tuong Lai***
***Pham Duc Tiep***
*doi.org/10.59382/j-ibst.2023.en.vol1-5*
- Experimental study of interface shear characteristics between calcareous soil and steel, application to estimate axial bearing capacity of steel pile — 41

## REGULATIONS - STANDARD

***Nguyen Manh Cuong***
***Vu Thanh Trung***
*doi.org/10.59382/j-ibst.2023.en.vol1-6*
- Key changes to wind load provisions of the draft TCVN 2737:202x — 49

***Do Tien Thinh***
*doi.org/10.59382/j-ibst.2023.en.vol1-7*
- New contents in the draft version of TCVN 9386:2023 — 58

Printed in Golden star tradinh advertisement and printing company limited. Printing completed and deposited on March 2023