## Denys L. Volchok, Ph.D.

### **CONTACT ADDRESSES**

Office: Prydniprovska State Academy of Civil Engineering and Architecture, 24-a Chernyshevskogo Str., Dniepropetrovsk 49600, Ukraine.

Home: fl.60, h.149, Mandrikovskaya str., Dnipropetrovsk 49094, Ukraine.

E-mail: Denys.L.Volchok@gmail.com

### PERSONAL

Citizenship: Ukrainian Date of birth: 16<sup>th</sup> February 1980

Sex: male

Marital status: unmarried

### **EMPLOYMENT AND EXPERIENCE**

2021 Associate Professor. Department of Theoretical Mechanics and Strength of Materials. Deputy of the department head. Teaching theoretical mechanics, strength of materials, basic theories of

structures, numerical methods: lection classes, training classes, consultation classes

- 2013-2020 Deputy Dean for Science and Academic Work, Faculty of Industrial and Civil Engineering
- 2006-2021 Associate Professor. Department of Structural Mechanics and Strength of Materials.Teaching structural mechanics and strength of materials: lection classes, training classes, consultation classes.
- 2005-2006 Assistant, Department of Structural Mechanics and Strength of Materials. Research in the field of stresses and deformations of revolution shells. Teaching building mechanics and strength of materials: training classes, consultation classes.
- 2005-2013 Deputy Dean for Science, Faculty of Industrial and Civil Engineering

### **EDUCATION**

- 2021-2023 Doctoral study at PSACEA. Preparation of doctoral thesis (main specialty: civil engineering, structural mechanics, uncertainty and optimal design).
- 2002-2005 Postgraduate study at PSACEA. Doctor of Philosophy (main speciality: structural mechanics).
- 1997-2002 Undergraduate study at PSACEA. Master's degree in Mechanic Engineering.
- 1994-1997 High school, Dnipropetrovsk, Ukraine.
- 1986-1994 Secondary school, Dnipropetrovsk, Ukraine.

## LANGUAGES

Ukrainian: excellent; Russian, English: good.

#### **PUBLICATION**

More than 60 papers; more than 21 presentations on conference.

### **GRANDS AND AWARDS**

- Alexander von Humboldt Foundation (Institutional academic co-operation programme, grant no. 3.4-Fokoop-UKR/1070297).

- Eugen Ionescu scholarship (2015-2016)

# LIST OF PUBLICATIONS

### A) Articles in journals/Contributions to books

1. Baranenko V., Volchok D. Application of various uncertainty measures in the problem of critical force searching for orthotropic shell in conditions of the carrying capacity // Strength of Materials and Theory of Structures. Vol. 106. - 2021. - P. 201 - 220. (Web of Science)

2. Baiev S.V., Volchok D.L. Nonlinear oscillations of a prestressed concrete bridge beam subjected to harmonic perturbation in the conditions of indeterminacy of parameters // of Materials and Theory of Structures. Vol. 104. - 2020. - P. 147 - 163. (Web of Science)

3. Baranenko V., Volchok D. Evaluation of the maximum axial force on a cylindrical shell structure in terms of stability and strength using fuzzy quantities of chosen geometric parameters // Roads and Bridges-Drogi i Mosty.  $-2016. - T. 15. - N_{\odot}. 1. - C. 71-81.$  (Scopus)

### **B)** Proceeding of academic conferences

1. **Volchok Denys,** Baranenko Valeriy, Syvash Nataliia, Stadnyk Mykyta Méthode de programmation dynamique pour une conception optimale des fermes statiquement déterminées // "Langues, sciences et pratiques" Actes du 2 colloque international francophone en Ukraine, 3-4 Octobre, Dnipro, 2018. p. 206-207

2. V.O.Baranenko, **D.L.Volchok** The application of various types measures of uncertainty to the problem of finding the critical force for an orthotropic shell under load-bearing conditions // Stability of structures XV symposium, Zakopane, 2018. p. 43-44

3. Volchok D., Baranenko V. Estimation of maximal displacements of a truss node under conditions of strength and fuzzy goal of volume // Proceeding of the RCEPB, Bucarest, 2018. p. 45-46.

### C) Abstracts of academic conferences

1. **D.Volchok**, E. Kvasha, R. Schmidt (2012) Special Mathematical Model for Laminated Shells (ESMS), Graz, Austria.

2. Volchok D., Kvasha E., Schmidt R. (2011) Design properties numeral and experimental research of laminated extra big tyre shells. *Abstracts of the 82nd Annual Scientific Conference of the International Association of Applied Mathematics and Mechanics (GAMM)*, Graz, Austria, 152.

3. Volchok D., Schmidt R., Weichert D (2010) Modeling of extra big tire shells properties. *Abstracts of the 81nd Annual Scientific Conference of the International Association of Applied Mathematics and Mechanics (GAMM)*, Karlsruhe, Germany.