# Pyskunov Sergii

Ph.D., Dr.Sci., Prof.

National Technical University of Ukraine "Igor Sikorsky Kyiv

Polytechnic Institute"

Institute of Mechanical Engineering

Head of the Department Dynamics and Strength of Machines and Strength of Materials

37, Peremohy ave., Kyiv Ukraine 03056

(050) 962-66-14 (044) 204-96-56

E-mail s\_piskunov@ua.fm



## **Curriculum Vitae**

#### PERSONAL DETAILS

Place of birth: Kyiv, Ukraine Date of birth: 09.02.1971 Citizenship: Ukraine

LANGUAGES: English

## **EDUCATION:**

1988 - 1994

Kyiv Polytechnic Institute, Mechanical Engineering department,

Speciality- «Dynamics and Strength of Machines»,

Qalification – mechanical research-engineer, honors degree diploma

2001 – Ph.D (speciality 01.02.04 - mechanics of deformable solid body);

2005 – Associate Professor diploma;

2011 – D.Sc. (speciality 05.23.17- structural mechanics);

2013 – Professor on structural mechanics department

#### **CAREER**

1994-2018 – Kyiv National University of Construction and Architecture (KNUCA), Assistant Professor, Associate Professor (since 2000), Professor (since 2011) of Department of Structural Mechanics. Lectures on the following subjects: "Structural Mechanics", "Fundamentals of Theory of Structures", special courses for masters "Computer Technologies for Stress-Deformed State of Spatial Structures"; supervision masters diploma work, post-graduate students.

from 2018 – Igor Sikorsky Kyiv Polytechnic Institute, Head of the Department Dynamics and Strength of Machines and , Strength of Materials.

Supervision and defence of 8 Masters, 2 Ph.D, 1 D.Sc.

Scientific work - development of finite element method technique for solving problems of nonlinear deformation, continual fracture and fracture mechanics, software implementation, testing, solving model problems. participation in the implementation of basic research work at

the expense of state funding, projects in frame of program "Lifeassesement" of the Ministry of Education and Science of Ukraine, projects for ensuring the safety of nuclear energy.

Author and co-author more than 150 published papers, including: 6 monographs; 1 tutorial; 12 articles in the international scientific and technical journals "Strength of Materials" (Springer), "Applied Mechanics" ("International Applied Mechanics", Springer). Member of specialized scientific councils for the doctoral thesis defence - «Д26.056.04» at KNUCA and «Д26.241.01» at G.S. Pisarenko Institute of Strength Problems of NAS of Ukrainy

## MAIN PUBLICATIONS

#### Articles

- 1. V.A. Bazhenov, S.O. Pyskunov, A.A. Shkryl' Modelling of crack growth process in spatial bodies under cyclic loading // MOTROL An International Journal on Operation of Farm and Agri-Food Industry Machinery, 2014. Vol. 16, No 8. p.29-35.
- 2. Pyskunov S.O., Valer V.V.Finite Element Analysis of Influence of Non-homogenous Temperature Field on Designed Lifetime of Spatial Structural Elements under Creep Conditions // Applied Mathematics and Nonlinear Sciences Volume 1, Issue 1, 2016. PP 253–262.
- 3. Bazhenov, V.A., Sakharov, A.S., Maksimyuk, Y.V., Shkryl' A.A. A Modified Method for Evaluating the Invariant J-Integral in Finite-Element Models of Prismatic Bodies // International Applied Mechanics, 2016, Volume 52, Issue 2, pp 140-146.
- 4. Bazhenov, V.A., Pyskunov S.O., Maksimyuk, Y.V., Shkryl' A.A. Reliability of Modified Method of Definition of Invariant J-integral under Elastoplastic Deformation of Prismatic Bodies // International Applied Mechanics, 2018, Volume 53, Issue 5, pp. 310-317.
- 5. Гуляр О.І, Пискунов С.О., Андрієвський В.П., Шкриль О.О. Розв'язання просторової задачі нестаціонарної теплопровідності на основі HMCE [Solving the spatial problem of non-stationary thermal conductivity based on SFEM]// Technology audit and production reserves Vol 3, No 2(23), 2015. pp.61-67. (in Ukrainian)
- 6. Пискунов С.О., Валер В.В. Оцінка впливу режиму нагріву на термонапружений стан деталей конструкцій [Assessment of the influence of the heating mode on the thermal stress of structural parts]// Опір матеріалів і теорія споруд: наук.-техн. зб. К.:КНУБА, Вип.99, 2018. С.194-204. (in Ukrainian)

## **Books**

- 1. Баженов В.А., Гуляр О.І., Сахаров О.С., Пискунов С.О. Напіваналітичний метод скінчених елементів в задачах континуального руйнування просторових тіл [Semi-analytic finite element method in problems of continuous destruction of spatial bodies.]. Монографія Київ, Каравела, 2014. 230 с. (in Ukrainian)
- 2. Баженов В.А., Пискунов С.О, Шкриль О.О. Напіваналітичний метод скінчених елементів у задачах руйнування тіл з тріщинами [Semi-analytic finite element method for problems of fracture of bodies with cracks]. Монографія Київ, Каравела, 2017. 208 с. (in Ukrainian)
- 3. Баженов В.А., Пискунов С.О, Максимюк Ю.В. Метод скінченних елементів у задачах деформування та руйнування тіл обертання при термосиловому навантаженні [Finite element method in problems of deformation and destruction of bodies of rotation under thermal force loading]. Монографія Київ, Каравела, 2018. 312 с. (in Ukrainian)
- 4. Bazhenov V.A., Pyskunov S.O., Solodei I.I., Continuum mechanics: Semi-analytical finite element method. Cambridge Scientific Publisher, 2019. 300 p.