

CURRICULUM VITAE

PERSONAL DATA:

SURNAME: PAVLOVIĆ
 FIRST NAME: RATKO
 ORGANIZATION: Faculty of Mechanical Engineering, A.Medvedeva 14, 18000 Niš,
 Serbia
 NATIONALITY: Serbian, member of the Orthodox church
 ADDRESS: Bul. Z. Đinđića 79/16, 18000 Niš, Serbia
 DATE OF BIRTH: 19. 10. 1950.
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EDUCATION

1969 – 1974. Bachelor of Mechanical Engineering, Five year course
 Faculty of Mechanical Engineering, University of Niš
 1982. Master's thesis: **“Nonlinear oscillations of shallow cylindrical shells”**
 1990. Doctoral Dissertation: **“Dynamic stability of continuous systems
 made from composite materials subjected to random excitation”**

WORK EXPERIENCE

1975 – 1976. Tire Industry “Tigar”, Pirot
 1976 - 1990. Research assistant, Faculty of Mechanical Engineering, Niš
 1990 – 1995. Assistant professor
 1995 – 2000. Associate professor
 2000 – up to – date Full professor

HEAD OF SCIENTIFIC PROJECTS:

2002 - 2005. *Stability and nonlinear oscillations of viscoelastic and
 composite continuous systems, 1409 MZNTR Serbia.*
 2006 – 2010. *Deterministic and stochastic stability of mechanical systems,
 OI 144023 MNTR Serbia.*

LANGUAGES: Serbian (native language), English, Russian, Polish

SCIENTIFIC JOURNALS PUBLICATIONS

- **International Journal of SOLIDS and STRUCTURES,**
- **European Journal of Mechanics A/Solids,**

- **International Journal of Mechanical Sciences,**
- **Transaction of the ASME Journal of Applied Mechanics,**
- **Journal of Sound and Vibration,**
- **Archive of Applied Mechanics,**
- **Meccanica,**
- **Theoretical and Applied Mechanics,**
- **"Facta Universitatis",** series Mechanics, Automatic Control and Robotics,
- **Mašinoznavstvo,**
- **Journal of mechanical engineering design.**

SCIENTIFIC JOURNALS REVIEWER:

- **International Journal of SOLIDS and STRUCTURES,**
- **"Facta Universitatis",** series Mechanics, Automatic Control and Robotics.

SELECTED PAPERS

1. R. Pavlović: *Dynamic stability of antisymmetrically laminated angle-ply rectangular plates subjected to random excitation*, **Journal of Sound and Vibration**, Vol.171/1, pp 87-97, Academic Press Limited, 1994.
2. R. Pavlović, P. Kozić: *Influence of rotatory inertia and shear on dynamic nonstability of beams subjected to random excitations*, **Theoretical and Applied Mechanics**, 19, pp 107-115, 1993., UDK 539.3.
3. R. Pavlović, P. Kozić: *Influence of the Transverse Shear Deformation on Stochastic Instability of Isotropic Plates*, **"Facta Universitatis"**, Series Mechanics, Automatic Control and Robotics, Vol. 1, No. 5, pp 605-612, 1995.
4. P. Kozić, R. Pavlović: *Lyapunov exponents and stochastic stability of coupled linear systems subjected to wide-band correlated random processes*, **"Facta Universitatis"**, Series Mechanical Engineering, Vol. 1, No. 4, pp 459-468, 1997.
5. P. Kozić, R. Pavlović: *The stability of a thin moving elastic strip subjected to random parametric excitations*, **Journal of Sound and Vibration**, 206(2), pp 280-285, 1997.
6. R. Pavlović, P. Kozić: *Vpliv poperečnoj deformacii na stohastičnu nestiikistê izotropnih plastin*, **Mašinoznavstvo**, No 2, pp 38-41, 1997, Ukraina, UDK 534.1+538.56.
7. R. Pavlović, P. Kozić. Sn. Mitić: *Stochastic stability of a viscoelastic beam under time and space-dependent loading*, **Theoretical and Applied Mechanics**, 25, pp 91-106, 1999., UDK 539.3.
8. A. Igić, R. Pavlović, A. Steas, S. Igić: *Biomechanical analysis of forces and moments generated in the mandible*, **"Facta Universitatis"**, Series Medicine and Biology, Vol. 8, 2001.
9. R. Pavlović, P. Kozić, P. Rajković: *Influence of transverse shear on the stochastic instability of viscoelastic beam*, **International Journal of Solids and Structures**, Vol 38, 6829-6837, 2001.
10. R. Pavlović, P. Kozić: *Almost sure stability of the thin-walled beam subjected to end moments*, **Theoretical and Applied Mechanics**, 30 (3), pp 193-207, 2003.
11. P. Kozić, R. Pavlović: *Stochastic stability of torsion oscillations in moving thin elastic bands*, **Journal of Sound and Vibration**, 274, pp 1103-1109, 2004.
12. R. Pavlović, P. Kozić, P. Rajković: *Influence of randomly varying damping coefficient on the dynamic stability of continuous systems*, **European Journal of Mechanics A/Solids**, 24, pp 81-87, 2005.

13. R. Pavlović, P. Kozić, S. Mitić: *Influence of transverse shear on stochastic instability of the elastic beam*, **Meccanica**, 39, pp 407-414, 2004.
14. R. Pavlović, I. Pavlović: *Influence of rotatory inertia and transverse shear on stochastic instability of the cross-ply laminated beam*, **International Journal of Solids and Structures**, 42, pp 4913-4926, 2005.
15. R. Pavlović, P. Kozić, P. Rajković, I. Pavlović: *Dynamic stability of a thin-walled beam subjected to axial loads and end moments*, **Journal of Sound and Vibration**, 301, pp 690-700, 2007.
16. R. Pavlović, P. Rajković, I. Pavlović: *Dynamic stability of the viscoelastic rotating shaft subjected to random excitation*, **International Journal of Mechanical Sciences**, 50, pp. 359-364, 2008.
17. P. Kozić, R. Pavlović, P. Rajković: *Moment Lyapunov exponent and stochastic stability of parametrically excited oscillator*, **Meccanica**, 42, pp 323-330, 2007.
18. R. Pavlović, P. Rajković, I. Pavlović: *Almost sure stability of a moving elastic band*, **Transaction of the ASME Journal of Applied Mechanics**, Vol. 75, (4), pp 041016-1 - 041016-4, July 2008.
19. P. Kozić, R. Pavlović, G. Janevski: *Moment Lyapunov exponents of the stochastic parametrical Hill's equation*, **International Journal of Solids and Structures**, 45, pp 6056-6066, 2008.
20. R. Pavlović, P. Kozić, S. Mitić, I. Pavlović: *Stochastic Stability of a Rotating Shaft*, **Archive of Applied Mechanics**, 79, pp 1163-1171, 2009.
21. P. Kozić, G. Janevski, R. Pavlović: *Moment Lyapunov exponents and stochastic stability for two coupled oscillators*, **Journal of Mechanics of Materials and Structures**, 4, pp 1689-1701, 2009.
22. P. Kozić, G. Janevski, R. Pavlović: *Moment Lyapunov exponents and stochastic stability of a double-beam system under compressive axial loading*, **International Journal of Solids and Structures**, 47, pp 1435-1442, 2010.
23. P. Kozić, R. Pavlović, G. Janevski, Z. Golubović: *Influence of the mode number on the stochastic stability regions of the elastic beam*, (accepted for publication), **Meccanica**, DOI: 10.1007/s11012-009-9272-5.
24. G. Janevski, P. Kozić, R. Pavlović, Z. Golubović: *The moment Lyapunov exponent of a Timoshenko beam under bounded noise excitation*, (accepted for publication), **Archive of Applied Mechanics**, DOI: 10.1007/s00419-010-0417-8.

BOOKS AND MONOGRAPHS:

- D. Stokić, R. Pavlović: *Collection of problems in Mechanic II with excerpt from theory*, 1990. (first edition), 1996. (second supplement edition),
 R. Pavlović: *Mechanics I - Statics*, 1999. (first edition), 2001. (second edition)
 R. Pavlović: *Stability of continuous systems subjected to random excitation*, Mechanical Engineering Faculty Niš, 2000., pp 168, ISBN 86-80587-25-7, (monograph).