

June 2005.
(A Short Survey)

KATICA (Stevanović) HEDRIH

*Full professor and the Head of the Chair for Mechanics (1977-1979, 1981-1983, 1986-2004)
Head of Centre of Nonlinear Dynamics and Active Structure (2005-)
at the Mechanical Engineering Faculty of the University of Niš*

*Academician of Ukrainian Higher Education Academy of Sciences
Academician of the Academy of Nonlinear Sciences
Scientific Secretary of the Yugoslav Section of Academy of Nonlinear Sciences
Member of American Academy of Mechanics*



Katica (Stevanović) HEDRIH, Ph.D Professor, Bachelor Mechanical Engineer, full professor and the Head of the Chair for Mechanics at the Mechanical Engineering Faculty of the University of Niš and a Full professor of the Mechanical Engineering Faculty, University of Priština, Project Leader of a republic's scientific projects: Subproject – Current problems of mechanics with applications (1995-2000), Project 1616 - Real Problems on Mechanics (2001-2004) at the Mathematical Institute of SASA in Belgrade, Project 1828 –Dynamics and Control of Active Structure (2001-2004) at Faculty of Mechanical Engineering Niš, an academician of the *Higher Education Academy of Sciences of Ukraine* (since 1996) and an academician of the *International Academy of Nonlinear Sciences ANS. – Moscow* (since 1997). Editor-in-chief of the University of Niš scientific journal “**FACTA UNIVERSITATIS**” (since 1989-2001) and Editor-in-Chief of the Series Mechanics, Automatic Control and Robotics (1990-), member of Editorial Board of *Int. Journal Nonlinear Sciences and Numerical Simulations*, *Freund Publishing House LTD* (1999), and *J. Mathematical Problems in Engineering*, Hindawi Publishing Corp. <http://www.hindawi.com/> (2004-) and *Journal of Non Linear Modelling in Science and Engineering*, <http://www.demon.co.uk/cambsci/ijnms.html>, member of GAMM and Tensor Society, member of International ASME and a European Society for Mechanics Member. She is also reviewer and referee of the numerous university scientific publications and papers published by Elsevier, Springer, Hindawi Press, Freund Publishing House and other. Referee of *Zentralblatt* (with more than 100 reviews). She is the author of the monographies: *Vectors of the Mass Moments (1998)*, *Analytical Dynamics of Discrete Hereditary Systems (co-author O.A. Goroshko, 2001)*. and *The Vector Method of the Heavy Rotor Kinetic Parameters Analysis and Nonlinear Dynamics (2001)*. She was the chief and project-leader of a number of scientific projects in areas of mechanics and mechanical engineering. She is one of co-authors of the research project and a SASA edition-publication - The Life and Work of Serbian Scientists with four published biobibliographies. She is the author of a number scientific papers, and of university study books and textbooks in the area of Oscillations Theory, Theory of Elasticity, Strength of Materials, Mechanics, Philosophy of Natural Sciences, History of Mechanics. She was a supervisor of a number of magisterium (Master) and doctoral dissertations (7) in the area of technical sciences – nonlinear and deformable body mechanics. Her papers and books were cited many times and two paper was cited by *Yu.A.Mitropolskiy and B.I.Moseenkov in Monograph: Asimptotičeskie rešenija uravnenij v časnih proizvodnih*, Kiev 1976, (Listed under No. 138 and 139).

Katica (Stevanović) HEDRIH was born on August 28th 1944 in Bobovište. As a member of the first Yugoslav competition team she was a contestant of the Fifth Mathematical Olympics in Vroclav. Poland, in 1963. She graduated mechanical engineering, the first in generation, as the best graduated student of the faculty and the University of Niš in 1966/67. She carried the “štafeta mladosti” in 1969. She got a Magisterium degree in the area of mechanics (1972) and became a Ph. Doctor of the technical sciences (1975) at the Mechanical Engineering Faculty in Niš, and she also took and passed the candidate minimum (1971) in Mathematical Physics, the area of Nonlinear Oscillations and Nonlinear Differential

Equations at the Mathematical Institute of the Ukrainian Academy of Science in Kiev. She is a full professor since 1986.

She was the organizer of two Yugoslav congresses on theoretical and Applied Mechanics (YUCTAM Niš-1995 and Vrnjačka Banja 1997), as well as of a number of minisymposia of international rank ((YUSNP Niš 1991 and YUSNM Niš 2000, ISNM NSA Niš 2003, Integrity of Dynamical Systems at IFNA WCNA, Orlando, 2004; Integrity of Dynamical Systems –European Fracture Conference EFC16-Greece 2006; and other.).

She is the author of a number (10) of university study books and textbooks in the area of Oscillations Theory, Theory of Elasticity, Strength of Materials, Mechanics, Philosophy of Natural Sciences, History of Mechanics. She was a supervisor of a number of magisterium and doctoral dissertations in the area of technical sciences – nonlinear and deformable body mechanics.

She attended, with invited lectures or as invited participant, numerous University Mechanics Seminars or Scientific Meetings in the area of nonlinear mechanics (University of Rochester Seminar 1989, USA; University of Waterloo Seminar on Mechanics 1989., Canada; Rochester Institute of Technology, 1989.; IUTAM Symposium-Nonlinearity and Chaos in Engineering Dynamics, UCL 1993.; Inter. Conf.: *Stability, Control and Rigid Bodies Dynamics - ICSCD 96*, Donetsk – Mariupol; Seminar on *National Technical University of Athens, 1986.*; *SANU - Serbian Greek Symposium on Solid Mechanics 1997.*; *Greek-Germany-Polish-Serbian Symposium on Mechanics - Recent Advances in Mechanics, Xanthi, 1998, Democritus University of Thrace*; Third International Symposium on Classical and Celestial Mechanics, Velikie Luki, Russia, 1998; *Parallel General Lecture-Third International Conference on Nonlinear Mechanics ICNM 1998, Shanghai, China*; *5th National Congress on Mechanics, Ioannina, 1998.*; *Int. IEEE-Conference Control Oscillations and Chaos COC 2000 Saint Petersburg, Russia*; *ISUMEL Lvov 2001, Ukraine*; Int. Symposium *Dynamical Systems and Applications-Lodz 2001*. Poland; Int. Conf. *Differential Geometry and it's Applications*, Tensor Society Tsukuba, Japan 2002.; Int. Symposium *Analysis, Manifolds and Mechanics*, Calcutta, 2003, University of Kalyani, India, 2003, IUTAM Symposium Chaotic Dynamics and Control of Systems and Processes in Mechanics , Roma 2003. and other) and contribution papers, of a large number of leading international congresses and scientific meetings, as well as of university scientific seminars (Ukraine, Canada, USA, Germany, Byelorussia, Greece, Israel, Austria, Bulgaria, Chesz, China, England, Denmark, Russia, Poland, Japan, Romania, India,...) in the area of mechanics and she is the author of over 300 bibliographical units in areas of mechanics, technical sciences and mathematics. Her papers were referenced to in well-known reference journals. She is the author of the monographies: *Vectors of the Mass Moments (1998)*, *Analytical Dynamics of Discrete Hereditary Systems (co-author O.A. Goroshko, Ukraine 2001)*. and *The Vector Method of the Heavy Rotor Kinetic Parameters Analysis and Nonlinear Dynamics (2001)*. She was the chief and project-leader of a number of scientific projects in areas of mechanics and mechanical engineering.

She was, as a student a member of the first University Council in Niš (1975), and as a full professor a member of the first Educational-scientific Council of the University in Niš (1987-1988), and a member of the governing board (1994) of the Mathematical Institute SASA in Belgrade.

Books:

Vectors of the Mass Moments (Topics from Mathematics and Mechanics), *Selected Chapters of Nonlinear Oscillation Theory*, *Selected Chapters of Elasticity Theory*, *Collections of solved exams problems of Elasticity Theory*, *Collections of solved exams problems of Oscillation Theory*, *Collections of solved exams problems of Oscillation Theory (co-autor P. Kozić)*, *Collections of solved exams problems of Strength of Materials (co-author M.Maksić)*, *Natural Sciences today (co-authors M.Antić and D.Djordjević)*, *Ljubomir Klerić (SASA Life and work of Serbian Scientists – First volume)*, *Kosta Alković (SASA Life and work of Serbian Scientists – Third volume)*, *Tatomir P. Andjelić (SASA Life and work of Serbian Scientists – Sixth volume)* and *Danilo P. Rašković (SASA Life and work of Serbian Scientists – Tenth volume)* and *Tatomir P. Andjelić (CD – 125 anniversary of Mathematical Institute Belgrade)*, *Partial Differential and Integral Equations with Applications (co-authors S. Janković and P. Protić)*, *Analytical Dynamics of Discrete Hereditary Systems (co-author O.A. Goroshko)*, *The Vector Method of the Heavy Rotor Kinetic Parameters Analysis and Nonlinear Dynamics*, and other.

Editor in Chief of the Following Journals: *Facta Universitatis (1990-2001)*, *Facta Universitatis Series Mechanics*, *Automatic Control and Robotics*, University of Niš (1991-), and Editor of a number of Scientific Proceedings.

Member of Editorial Board of the following Journals: *International Journal of Nonlinear Sciences and Numerical Simulations*, Freund Publishing House LTD (od 1999-), *Facta Universitatis Series Living and Working Environmental Protection*, University of Niš (2001-), *Nauka Tehnika Bezbednost (Science Technique Security)*, Institut bezbednosti, Beograd (2001-), *J. Mathematical Problems in Engineering*, Hindawi Press (2004-), *Journal of Non Linear Modelling in Science and Engineering*, <http://www.demon.co.uk/cambsci/ijnms.html>.

Referee of *Zentralblatt für Mathematik und ihre Grenzgebiete Berlin* (more than 100 reviews) and Journals *Theoretical and Applied Mechanics*, *JDM*, Beograd.(1975-1997, 2003-), *Facta Universitatis Series Mechanics, Automatic Control and Robotics*, University of Niš (1990-), *Facta Universitatis Series Living and Working Environmental Protection*, University of Niš (1995-), *Facta Universitatis Series Mechanical Engineering, University of Niš* (1993-), *Neurosciences letters*, Elsevier, *Journal of Sound and Vibrations*, Elsevier, *European Polymer Journal*, Elsevier, *FME Transaction*, Faculty of Mechanical Engineering University of Belgrade, *Material Letters*, Elsevier, *Journal Nonlinear Analysis - Theory, Methods and Applications*, Series B: Real-world Applications, Pergamon Press, *The Proceedings of Shanghai International Symposium on Nonlinear Science & Applications'03*, as a special issue of *International Journal of Bifurcation & Chaos* published by World Scientific Co., *Archive of Applied Mechanics - Manuscript Central Account Info (SY-23)*-Springer, *Workshop Preprints/Proceedings No 2004-1 IFAC workshop on Fractional Differentiation and its Applications FDA 04*, ENSEIRB, Bordeaux France, July 19-21, 2004. *Signal Processing*, Elsevier, ENOC 2005, EuroMech, and other.

Professors: *Draginja Nikolić, professor of Mathematics*

Professor Dr Ing. Math. Danilo P. Rašković, Academician Yuriy Alekseevich Mitropoljskiy, Academician Tatomir P. Andjelić, Academician ANS Veljko A. Vujičić, Professor dr Dragoslav Mitrinović, Profesasor dr Jurij Korobov,...

Subject Reference: *Mechanics, Nonlinear Mechanics, Theory of Oscillations, Theory of Elasticity, Elastodynamics, Photoelasticity, Piezoelectricity, Ultrasonics, Electromechanical Systems, Mechanical Engineering, Applied Mathematics, Physical Mathematics; Strength of Materials, Machine Dynamics, Computational Mechanics, Control Motions and Nonlinear Dynamical Systems, Analytical Dynamics, Damage and Fracture Dynamics, Active Structure Dynamical Systems, History and Philosophy of Sciences.*

Honours and Awards: Best graduate student of 1967 at Faculty of Mechanical Engineering, and Best graduate student of 1967 at University of Niš.

Best Thesis of Bachelor's degree at Yugoslav Faculties of Engineering, 1967.

Member of the Olympic Team of Yugoslavia at International Mathematical Olympiad in Vroclav Poland (1963)

“Štafeta mladosti” in 1969 and Gold Watch Prize-present of Yugoslav President with Signature Tito, 1969.

Gold Medallion of Faculty of Mechanical Engineering of Niš. 1985,

Medallion of Faculty of Mechanical Engineering of Niš for First Postgraduate Student 1995.

Prize of Local Editorial *Zentralblatt* Belgrade 1999;

First Prize of the Yugoslav Association of Pedagogues for Pedagogical Critique 2000;

Fact: For period of 33 years (from 1960 to 1993) between students at Mechanical Engineering Faculty University of Niš K. (Stevanović) Hedrih is student with best examine evaluations (9,67) and all exams in first examination term.

Short lectures at Scientific Congresses and Symposiums approximately 150; Invited Scientific Lectures at Scientific Congresses and Symposiums, and Seminars: approximately 35. Invited Plenary Lectures 10.

Supervisor of Master Theses 9; Supervisor of Ph.D. Theses 7.

Scientific Project Leader 6 and Scientific Sub Project Leader 3; Researcher at Projects of Technology 5; Professional Projects in Mechanical Engineering (Project Leader (4) or Researcher(3).

Scientific Papers in International and National Journals: approximately 50.

Scientific Visits: multiple visits to Ukraine-Kiev, Lvov and Kharkov (1969, 1970, 1996, 1998, 2001, 2003), Russia-Moscow State University and Institute on Mechanics (1995, 97, 98, 2000, 2002), Poland- University of Cracow, Warsaw and Poznanj (1963, 1999, 2001), Germany GAMM, England (1993, 2003), Byelorussia, University of Waterloo, (1989), Canada, Institute of Technology Rochester (1989), Cornell University (1989) USA., Israel Institute of Technology (1992), Technical University of Athens (1997), Shanghai University China (1998, 2002), Poland Technical University Lodz (2000), Technical University of Denmark, Lyngby, Copenhagen Denmark (1977, 1999), Tsukuba University and Tensor Society Japan (2002), M.C. Chaki Centre for Mathematics and Mathematical Sciences, Calcutta, India, 2003, University of Kalyani, India, 2003., University La Sapienza Roma IUTAM (2003), Romania Politehnika Timisoara (2002), Technical University of Wien (2003), Greece Aristotelian University Thessaloniki (2003), Tianjin University China 2004, University of Ljubljana (2002), ENSEIRB Bordeaux 2004, USA 2004, University Otto von Geuricke 2004., Politehnika Warsaw 2004, University of Luxembourg 2005,

Prof. Dr K. (Stevanović) Hedrih has been further honored with inclusion in Who's Who in Serbia and as a fellow of the American Biographical Institute Research Association. The American Biographical Institute also named her “Woman of the Year” for 1997, with biographical listings in *Five Thousand Personalities of the World* and the *International Directory of Distinguished Leadership*.

International Directory of Distinguished Leadership (by the Editorial Board ABI)- Eighth Edition 1998. Member of the ABI's Research Board of Advisors -RBA 1998.

Distinguished biographee of the MILLENNIUM HALL OF FAME 1998- ABI. (Hall of Fame Testimonial PLaque).

2000 Millenium MEDAL OF HONOR - ABI 1998.

ABI - American Biographical Institute - Research Fellow Recognition 1996 - 24K gold-plated coin engraved ABI Research Fellow.

K. Hedrih are listed in the Directory of the European Research and Development and the Who's Who in European Research and Development 2003.

2000 Outstanding People of the 20th Century - Incorporating the Outstanding Achievement Awards, International Biographical Centre Cambridge, CB2 3QP, England.(1998)
IBC

Professional Career:

Assistant, Faculty of Mechanical Engineering, University of Niš, (1968-1975)

Assistant Professor, Faculty of Mechanical Engineering, University of Niš, (1975-1981)

Associate Professor, Faculty of Mechanical Engineering, University of Niš, (1981-1985)

Full Professor, Faculty of Mechanical Engineering, University of Niš, (1986-....)

Full Professor on Mechanics at Technical Faculty in Bor University of Belgrade (1986-1989)

Full Professor on Theory of Vibrations Mechanical Engineering University of Priština (1994-)

Elected for Full Professor on Mechanics at Technical Academy of Yugoslav National Army (1998)

Head of the Chair for Mechanics (1977-1979, 1981-1983, 1986-2004)

Vice-dean of Faculty of Mechanical Engineering University of Niš (1978-1980).

Seminar Leader: Theoretical and Applied Mechanics at Faculty of Mechanical Engineering University of Niš (1976-1995)

Project leader in area of Mechanics at Mathematical Institute SANU - Belgrade (1990 - 2004);

Project leader in area of Mechanical Engineering and Mechanics at Faculty of Mechanical Engineering University of Niš (1976 – 1995, 2001-2004);

Expert of Yugoslav Ministry of Sciences, Technology and Development in area 1111 Mathematics, 1113 Physics and 1223 Mechanical Engineering.

President of Organizing Committee and Member of Scientific Committee of XXI Yugoslav Congress of Theoretical and Applied Mechanics Niš 1995 and XXII Yugoslav Congress of Theoretical and Applied Mechanics Vrnjačka Banja 1997; Symposium of Serbian Society of Mechanics "Nonlinear Problems in Mechancs" Arandjelovac 1983; "YUGOSLAV CONFERENCE ON NONLINEAR DETERMINISTIC AND ATOCHSTIC PROCESES IN DYNAMICAL SYSTEMS WITH APPLICATIONS" Niš 1991; Minisimposium "Nonlinearity and Chaos in Engineering Dynamics" Niš 1995., The Fifth Symposium on Nonlinear Mechanics – The Nonlinear Sciences at the Threshold of Third Millennium Niš 2000.

Member of Governing Board of Mathematical Institute SANU Beograd (1994).

LIST OF PAPERS and Monographs and Chapters in Monograph (from 2001 to 2005)

Part IA* Monographs and Chapters in Monograph:

1.1* Hedrih (Stevanović) K., (2005), *Nonlinear Dynamics of a Heavy Material Particle Along Circle which Rotates and Optimal Control*, Chaotic Dynamics and Control of Systems and Processes in Mechanics (Eds: G. Rega, and F. Vestroni), p. 37-45. IUTAM Symp. Book, **in Series Solid Mechanics and Its Applications, Edited by G.M.L.Gladwell, Springer**, 2005, XXVI, 504 p., Hardcover ISBN: 1-4020-3267-6

Seriya IUTAM Symp. Book knjiga u seriji **Solid Mechanics and Its Applications, Edited by G.M.L.Gladwell, (Kluwer)**

Springer, je jedna od najznacajnijih serija u oblasti savremene nelinearne mehanike a pod pokroviteljstvom IUTAM-

Interancionalne unije teorijske i primenjene mehanike pod UNESCO-om i može se porediti sa radovima u časopisima **10% sa vrha ISI liste.**

Kategorija R21 = R51.

[http://www.springeronline.com/sgw/cda/frontpage/0,11855,5-40356-69-33113256-
detailsPage%253Dbookseries%257Ctitles%257Ctitles%2526DISPLAY_TYPE%253DDISPLAY_TYPE_TITLES,00.html](http://www.springeronline.com/sgw/cda/frontpage/0,11855,5-40356-69-33113256-detailsPage%253Dbookseries%257Ctitles%257Ctitles%2526DISPLAY_TYPE%253DDISPLAY_TYPE_TITLES,00.html)
<http://www.springeronline.com/sgw/cda/frontpage/0,11855,5-40106-69-33113256-0,00.html?changeHeader=true>

1*2. Katica (Stevanović) Hedrih: *Vector Method of the Heavy Rotor Kinetic Parameter Analysis and Nonlinear Dynamics, University of Niš 2001, Monograph, p. 252.* (in English), (Reviewers: Academician NANU Ju. A. Mitropol'skiy, Ukraina, academician ANN Veljko Vujčić, academicina UHEAS Oleg Aleksandrovič Goroshko, Ukraina, and prof. dr Vlatko Brčić), YU ISBN 86-7181-046-1 UDC 531.38:514.742.4

Monografija na engleskom, recenzije medjunarodne, recenzent akademik Mitropol'ski je ključno ime nelinearne mehanike među živim naučnicima pripadnik poznate škole asimptotskih metoda nelinearne mehanike Krilov Bogoljubov Mitropol'skij

- Kategorija R11=R51.

1*3. Oleg Aleksandrovič Goroško (Ukrajina) i Katica (Stevanović) Hedrih (Jugoslavija): *Analitička dinamika (mehanika) diskretnih naslednih sistema, (Analytical Dynamics (Mechanics) of Discrete Hereditary Systems)*, University of Niš, 2001, Monograph, p. 426 (in Serbian), YU ISBN 86-7181-054-2. (recenzenti: Veljko A. Vujičić - Srbija, Jeremiah Jaredam Rushickij - Ukrajina, Milivoje Simonović - Srbija) UDC 531.011:531.391

Medjunarodna recenzija, Savezno Ministarstvo za nauku SRJ je bilo sufinansijer i monografija je dobila pozitivnu recenziju i Eksperta Saveznog Ministarstva Dragoslava Šumarca.

Ova monografija je medjunarodnog karaktera, te s obzirom da je na srpskom treba da se vrednuje bar sa R51.

1* 4. Katica (Stevanovic) Hedrih, (2005), *Partial Fractional Order Differential Equations of Transversal Vibrations of Creep-connected Double Plate Systems, Fractional Differentiation and its Applications Edited by Alain Le Mahaute, J. A. Tenreiro Machado, Jean Claude Trigeassou and Jocelyn Sabatier*, Volume 2 - Econophysics, mechanics, material modelling, thermal systems, electronics, electrical systems, France-Portugal, 2005., pp. 25-38. (prihavecno za stampu)

Poglavlje-članak u trotomnoj naucnoj knjizi.

Kategorija R21 = R51.

1* 5* Hedrih (Stevanović) K., (2004), *Contribution to the coupled rotor nonlinear dynamics, Advances in nonlinear Sciences, Monograph, Belgrade*, Academy of Nonlinear Sciences, 229-259. (engleski). ISBN 86-905633-0-X UDC 530-18299(082) 51-73:53(082) UKUP. STR. 261.

Monografija finansirana od Ministarstva nauke Srbije i u bazi podataka je.

Kategorija R51.

<http://www.masfak.ni.ac.yu/sitegenius/article.php?lang=SR&id=2958>

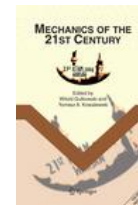
1.6*. Katica (Stevanovic) Hedrih i Dragan Jovanovic: *Mehanika loma i oštećenja-Matematička teorija -Recnik pojmova i prilozi*, recenzent prof. dr Mirko Vukobrat. Naucno-nastavno vece usvojilo pozitivnu recenziju i kategorisalo rukopis : pomocni univerzitetski udzbenik za posleddiplomske studije. Rukopis procitala i prof. dr Rizica Nikolic i dala pozitivnu ocenu kao rukovodilac teme na projektu 1616, Mašinski fakultet Niš. 2003, str. 210. ISBN 86-80587-34-6 UDC 539.42:51-7(031)

1.7*. Hedrih (Stevanović), K., *Discrete Continuum Method*, Symposium, Recent Advances in Analytical Dynamics Control, Stability and Differential Geometry, Proceedings Mathematical institute SANU Edited by Vladan Djordjević, p.151, 2002, pp.30-57. ISBN 86-80593-32-X. <http://www.mi.sanu.ac.yu/publications.htm>

Kategorija R52.

1.8* Katica Stevanović Hedrih (Serbia): *Homoclinic Orbits Layering in the Coupled Rotor Nonlinear Dynamics and Chaotic Clock Models*, SM17 – Multibody Dynamics (M. Geraldin and F. Pfeiffer), p. Lxiii – CD - SM10624, Mechanics of the 21st Century (21st ICTAM, Warsaw 2004) - CD ROM INCLUDED, edited by Witold Gutkowski and Tomasz A. Kowalewski, IUTAM, Springer 2005, ISBN 1-4020-3456-3, Hardcover., p. 421+CD. ISBN-13 978-1-4020-3456-5 (HB), ISBN-10 1-4020-3559-4(e-book), ISBN-13-978-1-4020-3559-3 (e-book). www.springeronline3.com.

<http://www.springeronline.com/sgw/cda/frontpage/0,11855,5-185-22-48265835-detailsPage%253Dppmmedia%257Ctoc%257Ctoc,00.html>



Part I. B* Selected Publications International Rank (ISI):

2*1. Hedrih (Stevanović) K., *A Trigger of Coupled Singularities*, MECCANICA, Vol.38, No. 6, 2003., pp. 623-642.

International Journal of the Italian Association of Theoretical and Applied Mechanics, CODEN MECC B9, ISSN 025-6455,

Kluwer Academic Publisher.

(Journal Citation Reports – JRC- Science Edition Journal Rankings Sorted by Journal Abbreviation; Rank 4001; Impact Factor IF=0.442).

(na listi MNTR RS je citiran sa sledecim podacima

IF=0.422 0025-6455 MECCANICA)

<http://www.kluweronline.com/issn/0025-6455>

<http://www.springerlink.com/app/home/contribution.asp?wasp=ddefdd004a224ad7bd78087cafb21c2&referrer=parent&backto=issue.4.19:journal.8.47:linkingpublicationresults.1:102958.1>

2*2. Hedrih (Stevanović) K., *A Trigger of Coupled Singularities*, MECCANICA, Vol.39, No. 3, 2004., pp. 295-314.

International Journal of the Italian Association of Theoretical and Applied Mechanics, Meccanica, Publisher: Springer

Science+Business Media B.V., Formerly Kluwer Academic Publishers B.V.

ISSN: 0025-6455 (Paper) 1572-9648 (Online) DOI: 10.1023/B:MECC.0000022994.81090.5f, Issue: Volume 39, Number 3, Date:

June 2004

Pages: 295 - 314

<http://www.springerlink.com/app/home/contribution.asp?wasp=ddefdd004a224ad7bd78087cafb21c2&referrer=parent&backto=issue.6.12:journal.5.47:linkingpublicationresults.1:102958.1>

2* 3. Hedrih (Stevanović) K., (2005), *Integrity of Dynamical Systems, Journal Nonlinear Analysis, (in press)*

Prihvaceno za stampu u decembru 2004 i nalazi se na Author Gateway Elseviera ISSN: 1468-1218

http://authors.elsevier.com/trackpaper.html?add_art=myarticles&from_source=notlogged&trk_article=NA4382&trk_surname=Hedrih&Go.x=16&Go.y=9

<http://authors.elsevier.com/JournalDetail.html?PubID=620392&Precis=DESC>

2*. 3. Hedrih (Stevanović) K., (2005), *Integrity of Dynamical Systems*, *Journal Nonlinear Analysis*, 63(2005) 854-871 Elsevier, ISSN: 1468-1218, <http://www.elsevier.com/locate/na>

2*. 4. Hedrih (Stevanović) K., (2006), Transversal Vibrations of Double-Plate Systems, *Acta Mechanica Sinica*, Springer, (to appear, accepted for Publication)

2*. 5. Hedrih (Stevanović) K., Vukota Babović, Dragan Šarković, (2006), An auxiliary size distribution model for the ultrasonically produced water droplets, *Experimental Thermal and Fluid Science*, Elsevier, (to appear, accepted for Publication) <http://www.elsevier.com/locate/etfs>

3* Part III. Selected Publications International Rank in other Aboard International Journals and Scientific Academies and important Scientific Societies in World:

3*1. Hedrih (Stevanović) K., The Dissipation Function of a Nonconservative System of Mass Particles, *Tensor*, N.S., Vol.63, No.2(2002), pp.176-186. (Izašlo iz štampe u 2004). **Tensor Society, Japan**. ISSN 0040-3504

3*2 Hedrih (Stevanović) K., (2003), Frequency equations of small oscillations mixed systems of the coupled discrete and continuous subsystems, *Mehanika tverdogo tela (Rigid Body Mechanics)*, Donetsk, UDC 531.1:534.012:534.013:, ISSN 0321-1975, vip. 33, pp. 174-189. Ukraine.

3*3 Hedrih (Stevanović) K. and Perić, Lj., *Application of Function of Complex Variable and MATLAB to Analysis of Piezoelectric Body Stress and Strain State with Crack*, *Int. Journal of Nonlinear Sciences and Numerical Simulations*, Vol.4, No.4, 2003, pp. 339-360. Freund Publishing House, LTD, ISSN 1565-1339. <http://www.cs.uky.edu/~jzhang/nsns.html> <http://www.cs.uky.edu/~jzhang/NSNS/2003-04-04.html> UDC 539.42

3* 4. Hedrih (Stevanović) K., Knežević and Cvetković, R., *Dynamics of Planetary Reductoe with Turbulent Damping*, *Int. Journal of Nonlinear Sciences and Numerical Simulations*, Vol. 2.N.3, 2001, pp. 265-277, ISSN 1565-1339. (in English), Freund Publishing House L.T.D. <http://www.cs.uky.edu/~jzhang/NSNS/2001-02-03.html>

3.5* Hedrih (Stevanović) K., (2005), Partial Fractional Differential Equations of Creeping and Vibrations of Plate and their Solutions (First Part), *Journal of the Mechanical Behavior of Materials*, [Freund Publishing House Ltd.](http://www.freundpublishing.com/JOURNALS/materials_science_and_engineering.htm) (accepted for publishing).2005, pp. 305-314. ISSN 0334-8938 http://www.freundpublishing.com/JOURNALS/materials_science_and_engineering.htm

Journal of the Mechanical Behavior of Materials



ISSN 0334-8938
Vol. 16 (2005) six
issues: \$350.00

Editors:
E. C. Aifantis, USA and Greece
S. Murakami, Japan

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3.6* Hedrih (Stevanović) K., The Transversal Creeping Vibrations Of A Fractional Derivative Order Constitutive Relation of Non-Homogeneous Beam, *Journal Mathematical Problems in Engineering*, Special Issue on Nonlinear Dynamics and Their Applications to Engineering Sciences, Hindawi Publishing Corp., http://www.hindawi.com/2006_pp. (accepted for publishing). <http://www.hindawi.com/journals/mpe/forthcoming/S1024123X05501133.html>
ISSN: 1024-123X, e-ISSN: 1563-5147

3*.7. Hedrih (Stevanović), K. and Simonović, J., *Phase Portraits and Homoclinic Orbits – Visualization of Nonlinear Dynamics of Reductor*, *Journal of Politehnica University Timisoara, Romania, Mechanical Vibrations, Transaction on Mechanical Engineering, Tom 47(61), Suplement, May 2002., Editura Politehnica., pp.76-86. ISSN 124-6077.*

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ISBN 7-89494-512-9
Urednici: Z.H.Zao, M.W.Zuang, W.X.Zhong
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ISBN 7-89494-512-9

Urednici: Z.H.Zao, M.W.Zuang, W.X.Zhong

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Одзив на autoreferate doktorskih disertacija

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(УДК 539.3) ЧИСЛЕННО-АНАЛИТИЧЕСКИЙ МЕТОД РЕШЕНИЯ ЗАДАЧ СТАТИКИ НЕТОНЫХ ОРТОТРОПНЫХ ОБОЛОЧЕК С ОТВЕРСТИЯМИ ПРОИЗВОЛЬНЫХ РАЗМЕРОВ И ФОРМ - 01.02.04 – *Механика деформируемого твердого тела*

Bogdan Ilch Kindratskiy

Киндрацкий Богдан Ильич, «МНОГОКРИТЕРИАЛЬНЫЙ СТРУКТУРНО-ПАРАМЕТРИЧЕСКИЙ СИНТЕЗ МАШИНОСТРОИТЕЛЬНЫХ КОНСТРУКЦИЙ», ученой степени доктора технических наук по специальности 05.02.02 — машиноведение, УДК 621.001.2:519.168

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* IFNA WCNA 2004. jednom plenarnom sednicom i Minisimpozijumom, Član naučnog odbora (GOC-WCNA 04)

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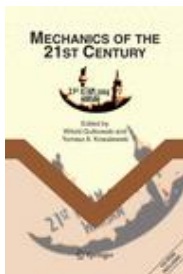
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