



Научно стручно веће за природно математичке науке

**Предмет:** Образац о испуњавању услова за избор у звање наставника

ЕЛЕКТРОНСКИ ФАКУЛТЕТ

У НИШУ

Примљено 30.12.2015

Број

03/01-075/15-002

Име и презиме

Dušan M. Milošević

Datum рођења

16 / 6 / 1963

Naziv i sedište ustanove/organizacije u kojoj je kandidat zaposlen

Elektronski fakultet u Nišu

Radno mesto

vanredni profesor

Datum prvog izbora u sadašnje zvanje

4.7.2011

Datum raspisivanja konkursa

17.12.2015

Način (mesto) objavljivanja

Narodne novine

Zvanje za koje je raspisan konkurs

Vanredni profesor ili redovni profesor

Uža naučna oblast

matematika

1. Doktorat nauka iz oblasti za koju se bira

(naziv doktorske disertacije, naučna oblast, godina i mesto odbrane)

Dušan M. Milošević: Iterativni metodi za simultanu inkluziju nula polinoma, matematika, Prirodno matematički fakultet u Nišu, Univerzitet u Nišu, Niš, jun 2005.

2. Pozitivna ocena nastavnog rada

(naziv dokumenta, naziv ustanove/organizacije koja je izdala dokument, datum izdavanja)

3. Ostvarene aktivnosti bar u četiri elementa doprinosa široj akademskoj zajednici iz člana 4. kriterijuma  
(opis aktivnosti, podaci o dokumentima)

podržavanje vannastavnih akademskih aktivnosti studenata  
učešće u vannastavnim aktivnostima koje ne nose EPS bodove  
učešće u u radu tela fakulteta  
rukovođenje aktivnostima na fakultetu  
recenziranje radova  
organizacija naučnih konferencija



učešće u radu zakonodavnih tela  
učešće u značajnim telima zajednice

#### 4. Mentorstvo ili komentorstvo bar jedne doktorske disertacije

4 zamena: Jedan naučni rad u časopisu kategorie M21 ili M22, ili jedan udžbenik ili jedna monografija (rad, udžbenik i monografija se ne računaju u stavovima 6., 8. i 9.)

Dušan M. Milošević, Miodrag S. Petković: Odabrana poglavlja iz više matematike, udžbenik, Elektronski fakultet u Nišu, 2008, ISBN 978-86-85195-70-9,

5. Ostvareni rezultati u razvoju naučno-nastavnog podmlatka, i to u barem jednom od sledećih elemenata: učešćem u komisijama za odbranu doktorske disertacije, magistarske teze ili master rada, držanjem nastave na doktorskim studijama, držanjem priprema studenata za studentska takmičenja, učešćem u završnim radovima na specijalističkim i master studijama i slično

Držanje nastave na doktorskim studijama iz predmeta:  
Kvantitativne metode,  
Statistički programi.

Priprema studenata za studentska takmičenja

6. Od izbora u prethodno zvanje objavljen udžbenik ili monografija iz oblasti za koju se bira

Dušan M. Milošević, Lidija Z. Rančić, Miodrag S. Petković: Matematika IV, udžbenik, Elektronski fakultet u Nišu, 2015, ISBN 978-86-6125-120-7,

Mimica R. Milošević, Dušan M. Milošević: Matematika I, udžbenik, Studentski kulturni centar Niš, 2015, ISBN 978-86-7757-217-4.

7. Učešće u međunarodnim ili domaćim naučnim projektima

Numerička matematika i optimizacija (1988--1990),  
Savremeni problemi matematike (1991--1995),  
Metodi i modeli u teorijskoj, industrijskoj i primenjenoj matematici (1996--2000),  
Ortogonalni sistemi i primene (2001--2005),  
Numeričko rešavanje i analiza nelinearnih jednačina (2006--2010)  
Konstrukcija i analiza efikasnih algoritama za rešavanje nelinearnih jednačina (2011-- )

8. Od izbora u prethodno zvanje najmanje jedan rad objavljen u časopisu koji izdaje Univerzitet u Nišu ili fakultet Univerziteta u Nišu ili sa SCI liste, u kojem je prvopotpisani autor rada

Dušan M. Milošević, Miodrag S. Petković, Mimica R. Milošević: On an interval method for the inclusion of one polynomial zero, Facta Universitatis Series: Mathematics and Informatics, University of Niš, Vol. 28, No 4 (2013), 403--416, ISSN: 0352 - 9665. [http://facta.junis.ni.ac.rs/mai/mai2804/fumi2804\\_06.pdf](http://facta.junis.ni.ac.rs/mai/mai2804/fumi2804_06.pdf).

9. Od prvog izbora u prethodno zvanje najmanje 18 poena ostvarenih objavljivanjem naučnih radova u časopisima kategorija M21, M22, M23, u skladu sa načinom bodovanja Ministarstva prosvete, nauke i tehnološkog razvoja Republike Srbije. Bar na jednom radu kandidat mora biti prvopotpisani autor.

Dušan M. Milošević, Mimica R. Milošević, Jovana Džunić: On an efficient inclusion method for finding polynomial zeros, Journal of Computational and Applied Mathematics, Elsevier BV North-Holland, 290, pp. 298--309, 15 December 2015, ISSN: 0377-0427, <http://www.sciencedirect.com/science/article/pii/S037704271500309X>, M21.

Dušan M. Milošević, Miodrag S. Petković, Mimica R. Milošević: Improved methods for the simultaneous inclusion of multiple polynomial zeros, Applied Mathematics and Computation, Elsevier Inc., 241, pp. 332--346, 15 August 2014, ISSN: 0096-3003, <http://www.sciencedirect.com/science/article/pii/S009630031400695X>, M21.



Miodrag S. Petković, Mimica R. Milošević, Dušan M. Milošević: New higher-order methods for the simultaneous inclusion of polynomial zeros, *Numerical Algorithms*, Springer-Verlag Dordrecht, 58, Issue 2, pp. 179--201, October 2011, ISSN: 1017-1398, <http://link.springer.com/article/10.1007/s11075-011-9452-y>, M21.

Miodrag S. Petković, Mimica R. Milošević, Dušan M. Milošević: Efficient methods for the inclusion of polynomial zeros, *Applied Mathematics and Computation*, Elsevier Inc., 217, Issue 19, pp. 7636--7652, 1 June 2011, ISSN: 0096-3003, <http://www.sciencedirect.com/science/article/pii/S0096300311002694>, M21.

Miodrag S. Petković, Dušan M. Milošević: Higher order methods for the inclusion of multiple zeros of polynomials, XIII International Symposium on Scientific Computing, Computer Arithmetic and Validated Numerical Computations, El Paso (USA), September 29--October 3, 2008, *Reliable Computing*, Springer-Verlag Dordrecht, 15 (2011), pp. 91--108, 2011, ISSN: 1385-3139, <http://interval.louisiana.edu/reliable-computing-journal/volume-15/no-2/reliable-computing-15-pp-91-108.pdf>, M23.

#### 10. Najmanje šest naučnih radova radova saopštenih na međunarodnim ili domaćim naučnim skupovima

Dušan M. Milošević, Miodrag S. Petković, Mimica R. Milošević: On an interval method for the inclusion of one polynomial zero, II International Conference Mechanical Engineering in XXI Century, June 20-21. 2013, Faculty of mechanical engineering, University of Niš, pp. 409--414, 2013.

Dušan M. Milošević, Ljiljana D. Petković, Miodrag S. Petković: Self-validated methods for the simultaneous inclusion of polynomial zeros, Invited Lecture Delivered at Fourth International Conference of Applied Mathematics and Computing (Plovdiv, Bulgaria, August 12--18, 2007), *International Journal of Pure and Applied Mathematics*, Volume 46, No. 2 (2008), 171--180, ISSN: 1311-8080,

Miodrag S. Petković, Dušan M. Milošević, Lidija Z. Rančić: Family of iterative methods for computing the zeros of analytic function, Invited Lecture Delivered at Fourth International Conference of Applied Mathematics and Computing (Plovdiv, Bulgaria, August 12--18, 2007), *International Journal of Pure and Applied Mathematics*, Volume 46, No. 2 (2008), 181--189, ISSN: 1311-8080, ,

Miodrag S. Petković, Dušan M. Milošević: Higher order methods for the inclusion of multiple zeros of polynomials, XIII International Symposium on Scientific Computing, Computer Arithmetic and Validated Numerical Computations, El Paso (USA), September 29--October 3, 2008, *Reliable Computing*, Springer-Verlag Dordrecht, 15 (2011), pp. 91--108, 2011, ISSN: 1385-3139

Miodrag S. Petković, Dušan M. Milošević: The improved convergence conditions of the inclusion Laguerre-like method, Proceedings of the XVII Conference on Applied Mathematics, Kragujevac 2006, (Dj. Herceg, H. Zarin, eds.), Departement of Mathematics and Informatics, Novi Sad, pp. 85--96, 2007.

Dušan M. Milošević: The accelerated Halley-like method for the inclusion of polynomial zeros, Proceedings of the XVI Conference on Applied Mathematics, Budva 2004, (N. Krejić, Z. Lužanin, eds.), Institute of Mathematics, Novi Sad, pp. 83--91, 2006.

Dušan M. Milošević, Ljubiša M. Kocić: About some data interpolation methods, Proceedings of the XI Conference on Applied Mathematics, Budva 1996, (D. Herceg, Lj. Cvetković, eds.) Institute of Mathematics, Novi Sad, pp. 225--234, 1997.

Dušan M. Milošević, Ljubiša M. Kocić: Method for Scalar Field Vizualization, Proceedings of the X Conference on Applied Mathematics, Budva 1995, (D. Herceg, Lj. Cvetković, eds.), Institute of Mathematics, Novi Sad, pp. 33--37, 1996.

Dušan M. Milošević: Vizualization of the Bernstein-Bezier operators, Proceedings of the II International Mathematical Conference in Priština, Priština, pp. 245--252, 1996.

Dušan M. Milošević: Vizualizacija ekvipotencijalnih linija električnog polja, Zbornik XXXIX Koferencije za ETRAN, Zlatibor 1995, sveska II, str. 312--315, 1995.

#### 11. Ostvarenih najmanje deset citata naučnih radova kandidata u drugim naučnim radovima objavljenim u naučnim časopisima kategorija M21, M22, M23 (izuzimajući autocitate i citate saradnika, odnosno kocitate)

Rad:



Miodrag S. Petković, Dušan M. Milošević: Improved Halley-like methods for the inclusion of polynomial zeros, *Applied Mathematics and Computation*, Elsevier Inc., 169, Issue 1, pp. 417--436, October 2005.

citiranje:

Ramandeep Behl, Kapil K. Sharma: Optimal equi-scaled families of Jarratt's method, *International Journal of Computer Mathematics*, Volume 90, Issue 2, 2013, pages 408-422.

Zhang Ying, Zeng Zhe-zhao: Neural Network Algorithm for the Simultaneous Extraction of All Roots of Algebraic Polynomial, *International Conference on Computational Intelligence and Security Beijing, China Dec. 11, 2009 to Dec. 14, 2009* pp: 161-164.

Chuangxin Wang, Zhezhao Zeng: A Neural-Network Iteration Formula for the Simultaneous Inclusion of Polynomial Zeros, *International Conference on Computational Intelligence and Security Dec. 13, 2008 to Dec. 17, 2008*, pp: 162-165.

Rad:

Miodrag S. Petković, Dušan M. Milošević: Laguerre-like methods with corrections for the inclusion of polynomial zeros, *Novi Sad Journal of Mathematics*, Department of Mathematics and Informatics, Faculty of Sciences, University of Novi Sad, 34, pp. 135--156, 2004,

citiranje:

M.N.O. Ikhile: The Root and Bell's disk iteration methods are of the same error propagation characteristics in the simultaneous determination of the zeros of a polynomial, Part I: Correction methods, *Computers & Mathematics with Applications*, Volume 56, Issue 2, July 2008, Pages 411-430.

M.N.O. Ikhile: The root and Bell's disk iteration methods are of the same error propagation characteristics in the simultaneous determination of the zeros of a polynomial, Part II: Round-off error analysis by use of interval arithmetic, *Computers & Mathematics with Applications*, Volume 61, Issue 11, June 2011, Pages 3191-3217.

Rad:

Miodrag S. Petković, Mimica R. Milošević, Dušan M. Milošević: New higher-order methods for the simultaneous inclusion of polynomial zeros, *Numerical Algorithms*, Springer-Verlag Dordrecht, 58, Issue 2, pp. 179--201, October 2011.

citiranje:

Zhang Ying, Zeng Zhe-zhao: Neural Network Algorithm for the Simultaneous Extraction of All Roots of Algebraic Polynomial, *International Conference on Computational Intelligence and Security Beijing, China Dec. 11, 2009 to Dec. 14, 2009* pp: 161-164.

Rad:

Miodrag S. Petković, Dušan M. Milošević, Ivan M. Petković: On the improved Newton-like methods for the inclusion of polynomial zeros, *International Journal of Computer Mathematics*, Taylor & Francis Ltd, Vol. 87, No. 8, July 2010, pp. 1726--1735.

citiranje:

Ramandeep Behl, Kapil K. Sharma: Optimal equi-scaled families of Jarratt's method, *International Journal of Computer Mathematics*, Volume 90, Issue 2, 2013 pages 408-422.

Michael R Farmer: Computing the Zeros of Polynomials using the Divide and Conquer Approach, Department of Computer Science and Information Systems Birkbeck University of London PhD Thesis 24th September 2013 (Revised 1st July 2014).

Rad:

Miodrag S. Petković, Dušan M. Milošević: Ostrowski-like method with corrections for the inclusion of polynomial zeros, *Reliable Computing*, Springer-Verlag Dordrecht, 10, issue 6, pp. 437--467, December 2004.

citiranje:

M.N.O. Ikhile: The Root and Bell's disk iteration methods are of the same error propagation characteristics in the simultaneous determination of the zeros of a polynomial, Part I: Correction methods, *Computers & Mathematics with Applications*, Volume 56, Issue 2, July 2008, Pages 411-430.



M.N.O. Ikhile: The root and Bell's disk iteration methods are of the same error propagation characteristics in the simultaneous determination of the zeros of a polynomial, Part II: Round-off error analysis by use of interval arithmetic, Computers & Mathematics with Applications, Volume 61, Issue 11, June 2011, Pages 3191-3217.

Rad:

Dušan M. Milošević, Ljiljana D. Petković: On the improved family of simultaneous methods for the inclusion of multiple zeros of polynomial, Novi Sad Journal of Mathematics, Department of Mathematics and Informatics, Faculty of Sciences, University of Novi Sad, 35, pp. 49--57, 2005,

citiranje:

M.N.O. Ikhile: The Root and Bell's disk iteration methods are of the same error propagation characteristics in the simultaneous determination of the zeros of a polynomial, Part I: Correction methods, Computers & Mathematics with Applications, Volume 56, Issue 2, July 2008, Pages 411-430.

M.N.O. Ikhile: The root and Bell's disk iteration methods are of the same error propagation characteristics in the simultaneous determination of the zeros of a polynomial, Part II: Round-off error analysis by use of interval arithmetic, Computers & Mathematics with Applications, Volume 61, Issue 11, June 2011, Pages 3191-3217.

Rad:

Ljiljana D. Petković, Miodrag S. Petković, Dušan M. Milošević: Inclusion Weierstrass-like root-finders with corrections, Filomat, Prirodno-matematički fakultet - Departmant za matematiku i informatiku, 17, pp. 143--154, 2003.

citiranje:

M.N.O. Ikhile: The Root and Bell's disk iteration methods are of the same error propagation characteristics in the simultaneous determination of the zeros of a polynomial, Part I: Correction methods, Computers & Mathematics with Applications, Volume 56, Issue 2, July 2008, Pages 411-430.

M.N.O. Ikhile: The root and Bell's disk iteration methods are of the same error propagation characteristics in the simultaneous determination of the zeros of a polynomial, Part II: Round-off error analysis by use of interval arithmetic, Computers & Mathematics with Applications, Volume 61, Issue 11, June 2011, Pages 3191-3217.

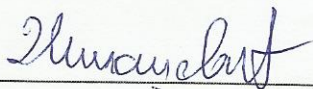
Rad:

Dušan M. Milošević, Miodrag S. Petković, Mimica R. Milošević: On an interval method for the inclusion of one polynomial zero, Facta Universitatis Series: Mathematics and Informatics, University of Niš, Vol. 28, No 4 (2013), 403--416.

citiranje:

Md. Abu Talhamainuddin Ansary and Geetanjali Panda: Higher Order Root Finding Algorithm using Interval Analysis, Reliable Computing, 21, pp. 11-24, September, 2015.

Potpis kandidata: \_\_\_\_\_



**Napomena:** Kandidat je dužan da popunjen, odštampan i potpisan obrazac o ispunjavanju uslova za izbor u zvanje nastavnika dostavi fakultetu koji je objavio konkurs zajedno sa ostalom dokumentacijom kojom dokazuje da ispunjava uslove konkursa.