Name of teacher:	Ivan Dražić

Employed at: Since:	University of Rijeka, Faculty of Engineering 30.09.2022.

Academic rank: Since: In:	Associate Professor Applied Mathematics and Mathematical Modelling, Natural sciences

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Knowledge of foreign languages	English, german (active); italian (passive)

Qualifications	**- date of birth, nationality: 13.05.1980., Croatian** **- First degree obtained at:** University of Rijeka, Faculty of Humanities and Social Sciences in Rijeka, title: Professor of Mathematics and Informatics (2004), Master's thesis: *Distributions and Differential Equations in the Space of Distributions*, mentor: N. Mujaković, Ph.D. **- Ph.D. degree obtained at:** University of Zagreb, Faculty of Science – Department of Mathematics, postgraduate scientific study of mathematics, title: PhD (2014), dissertation: *Spherical symmetrical three-dimensional non-stationary motion of micropolar compressible viscous fluid*, mentors: Prof. N. Mujaković, Ph.D. and Prof. Z. Tutek, Ph.D. **- additional education: -** **- previous employments:** 1. 2017 – 2022, University of Rijeka, Faculty of Engineering, Department of Mathematics, Physics, Foreign Languages and Kinesiology, Department of Applied Mathematics, Assistant Professor 2. 2016 – 2017, University of Rijeka, Faculty of Engineering, Department of Mathematics, Physics, Foreign Languages and Kinesiology, Department of Applied Mathematics, senior lecturer 3. 2010 – 2016, University of Rijeka, Faculty of Engineering, Department of Mathematics, Physics, Foreign Languages and Kinesiology, Department of Applied Mathematics, lecturer 4. 2005 – 2010, University of Rijeka, Faculty of Engineering, Department of Mathematics, Physics, Foreign Languages and Kinesiology, Department of Applied Mathematics, Assistant Professor **5.** 2001 – 2005, Vladimir Nazor Elementary School Crikvenica, Computer Science Associate – Mathematics and Computer Science Teacher

List of papers published in scientific journals	1. Čotić Poturić, V., Čandrlić, S., Dražić, I.: A Scoring Algorithm for the Early Prediction of Academic Risk in STEM Courses, Algorithms (2025), 18(4), 177, JCR 2023: Q1 (Computer Science, Theory & Methods), IF: 1.8, doi: 10.3390/a18040177 2. Žužić, L., Dražić, I., Simčić, L., Hržić, F., Lerga, J.: A Bayesian and Markov chain approach to short-term and long-term personal watercraft trajectory forecasting, Journal of the Franklin Institute, 362 (3), 107509, JCR 2023: Q1 (Mathematics, Interdisciplinary applications), IF: 3.9 3. Črnjarić, N., Dražić, I.: *A Comprehensive Model and Numerical Study of Shear Flow in Compressible Viscous Micropolar Real Gases,* Axioms (2024), 13 (12), 845, JCR 2023: Q1 (Applied mathematics), IF: 1.9

4. Bašić-Šiško, A., Dražić, I., Simčić, L.: *Three-dimensional model of a spherically symmetric compressible micropolar fluid flow with real gas equation of state*, Symmetry (2024), 16 (10), 1330, JCR 2023: Q2 (Multidisciplinary Sciences), IF: 2.2
5. Bašić-Šiško, A., Dražić, I.: *Global existence theorem of a generalized solution for a one-dimensional thermal explosion model of a compressible micropolar real gas,* Mathematical Methods in the Applied Sciences (2024), 47 (12), 10024-10039, JCR 2023: Q1 (Applied mathematics), IF: 2.1
6. Bašić-Šiško, A., Dražić, I.: *Uniqueness of a generalized solution for a one-dimensional thermal explosion model of a compressible micropolar real gas,* Mathematics (2024), 12 (5), 717, JCR 2023: Q1 (Mathematics), IF: 2.3
7. Bašić-Šiško, A., Dražić, I.: *Local existence theorem for micropolar viscous real gas flow with homogeneous boundary conditions,* Mathematical Methods in the Applied Sciences (2023), 46 (5), 5395-5421 (2023), JCR 2022: Q1 (Applied mathematics), IF: 3.007
8. Bašić-Šiško, A., Dražić, I.: *One-dimensional model and numerical solution to the viscous and heat-conducting reactive micropolar real gas flow and thermal explosion,* Iranian Journal of Science and Technology – Transactions of Mechanical Engineering 47, 19-39 (2023), JCR 2020: Q3 (Mechanical Engineering), IF: 1.596
9. Bašić-Šiško, A., Dražić, I., Simčić, L.: *One-dimensional model and numerical solution to the viscous and heat-conducting micropolar real gas flow with homogeneous boundary conditions,* Mathematics and Computers in Simulation, 195, 71-81 (2022), JCR 2020: Q1 (Applied mathematics), IF: 2.463
10. Bašić-Šiško, A., Dražić, I.: *Local existence for viscous reactive micropolar real gas flow and thermal explosion with homogeneous boundary conditions,* Journal of Mathematical Analysis and Applications, 509 (2), 125988 (2022) JCR 2020: Q1 (Mathematics), Q2 (Applied mathematics), IF: 1.583
11. Bašić-Šiško, A., Dražić, I., *Uniqueness of generalized solution to micropolar viscous real gas flow with homogeneous boundary conditions*, Mathematical Methods in the Applied Sciences, 44 (6), 4330-4341 (2021), DOI: 10.1002/mma.7032, JCR 2020: Q1 (Applied mathematics), IF: 2.057
12. Bašić-Šiško, A., Dražić, I., *Global solution to a one-dimensional model of viscous and heat-conducting micropolar real gas flow*, Journal of Mathematical Analysis and Applications, 495 (1), 124690 (2021), DOI: 10.1016/j.jmaa.2020.124690 JCR 2020: Q1 (Mathematics), Q2 (Applied mathematics), IF: 1.583
13. Dražić, I., Črnjarić-Žic, N., Simčić, L.: *A shear flow problem for compressible viscous micropolar fluid: derivation of the model and numerical solution,* Mathematics and Computers in Simulation 162, pp 249-267 (2019), JCR 2017: Q1 (Applied mathematics), IF: 1.476
14. Huang, L., Dražić, I.: *Exponential stability for the compressible micropolar fluid with cylinder symmetry in R^3, Journal of Mathematical Physics 60,* 021507, pp 1-14 (2019), JCR 2017: Q3 (Mathematical physics), IF: 1.165
15. Dražić, I., Mujaković, N., *Local existence of the generalized solution for three-dimensional compressible viscous flow of micropolar fluid with cylindrical symmetry*, Boundary value problems 2019 (16), pp 1-25 (2019), JCR 2017: Q1 (Mathematics), Q2 (Applied mathematics), IF: 1.156
16. Dražić, I.: *Dimensionless formulation for the one-dimensional compressible flow of the viscous and heat-conducting micropolar fluid*, Physics & Astronomy International Journal 2 (5), pp 420-423 (2018)
17. Huang, L., Dražić, I.: *Large-time behavior of solutions to the 3-D flow of a compressible viscous micropolar fluid with cylindrical symmetry*, Mathematical Methods in the Applied Sciences 41 (17), 7888-7905 (2018), DOI: 10.1002/mma.5250, JCR 2017: Q2 (Applied mathematics), IF: 1.18
18. Dražić, I., Simčić, L.: *One-dimensional flow of a compressible viscous and heat-conducting micropolar fluid with homogeneous boundary conditions: a brief survey of the theory and recent progress*, Global and Stochastic Analysis 5 (1), pp. 45-55 (2018)
19. Dražić, I.: *3-D flow of a compressible viscous micropolar fluid model with spherical symmetry: a brief survey and recent progress*, Reviews in Mathematical Physics 30, 1830001 (17 stranica) (2018), JCR 2016: Q2 (Mathematical Physics), IF: 1.426

	20. Dražić, I.: *3-D flow of a compressible viscous micropolar fluid with cylindrical symmetry: a global existence theorem*, Mathematical Methods in the Applied Sciences 40 (13), pp. 4785-4801 (2017), JCR 2016: Q2 (Applied mathematics), IF: 1.017 21. Dražić, I., Črnjarić-Žic, N., Mujaković, N.: *Three-dimensional compressible viscous micropolar fluid with cylindrical symmetry: derivation of the model and a numerical solution*, Mathematics and Computers in Simulation 140, pp. 107–124 (2017), JCR 2016: Q2 (Applied mathematics), IF: 1.218 22. Mujaković, N., Simčić, L., Dražić, I.: *3-D flow of a compressible viscous micropolar fluid with cylindrical symmetry: uniqueness of a generalized solution*, Mathematical Methods in the Applied Sciences 40 (7), pp. 2686–2701 (2017), JCR 2016: Q2 (Applied mathematics), IF: 1.017 23. Dražić, I., Mujaković, N., Simčić, L.: *3-D flow of a compressible viscous micropolar fluid with spherical symmetry: regularity of the solution*, Journal of Mathematical Analysis and Applications 438 (1), pp. 162-183 (2016), JCR 2014: Q1 (Mathematics), Q2 (Applied mathematics), IF: 1.120 24. Dražić, I., Mujaković, N., *3-D flow of a compressible viscous micropolar fluid with spherical symmetry: large time behavior of the solution*, Journal of Mathematical Analysis and Applications 431 (1), pp. 545-568 (2015), JCR 2014: Q1 (Mathematics), Q2 (Applied mathematics), IF: 1.120 25. Dražić, I., Mujaković, N., *3-D flow of a compressible viscous micropolar fluid with spherical symmetry: a global existence theorem*, Boundary value problems 98, pp. 1-21 (2015), JCR 2014: Q1 (Mathematics), Q2 (Applied mathematics), IF: 1.014 26. Mujaković, N., Dražić, I., *3-D flow of a compressible viscous micropolar fluid with spherical symmetry: uniqueness of a generalized solution*, Boundary value problems 226, pp. 1-17 (2014), JCR 2013: Q1 (Mathematics), Q2 (Applied mathematics), IF: 0.836 27. Dražić, I., Mujaković, N., *3-D flow of a compressible viscous micropolar fluid with spherical symmetry: a local existence theorem,* Boundary value problems 69, pp. 1-28 (2012), JCR 2011: Q1 (Mathematics), Q2 (Applied mathematics), IF: 0.911 28. Mujaković, N., Dražić, I., *The Cauchy problem for one-dimensional flow of a compressible viscous fluid: stabilization of the solution*, Glasnik matematički 46 (1), pp. 215-231 (2011), JCR 2010: Q3 (Mathematics), Q4 (Applied mathematics), IF: 0.475 29. Dražić, I., Barišić, B., Mujaković, N. *Implementation of Shishkin mesh in the modelling of spring-mass system*, Transaction of the VŠB – Technical University of Ostrava LVI (1), pp. 49-52 (2010), 30. Dražić, I., Barišić, B., Jurasić, K. *Modeling of orthoptic curve associated to couple of circles*, Technological engineering 6 (2), pp. 13-16 (2009) 31. Dražić, I., Mujaković, N., *Approximate solution for 1-D compressible viscous micropolar fluid model in dependance of initial conditions,* International Journal of Pure and Applied Mathematics 42, pp. 535-540 (2008) 32. Dražić, I., Barišić, B., Mujaković, N., *The implementation of iterative outer approximation method for elasto-plastic torsion problem*, Technological engineering 5 (1), pp. 37-39 (2008) 33. Mujaković, N., Dražić, I., *Numerical approximations of the solution for one-dimensional compressible viscous micropolar fluid model,* International Journal of Pure and Applied Mathematics 38, pp. 285-296 (2007)

List of publications which serve as a proof of teaching qualifications	All works from the previous list

Leader of the following research projects	• Project of Initial Support to Research of the University of Rijeka No. 17.10.2.2.01, *Initial-Edge Problems in the Research of Micropolar Continuum Models*, principal investigator (2017) • Project of Initial Support to Research of the University of Rijeka no. 16.09.2.2.01, *Initial-edge problems in the research of compressible micropolar thermally conductive fluid*, principal investigator (2016)

Participant in the following research projects	1. HRZZ project Multiscale Problems in Fluid Mechanics (HRZZ-IP-2019-04-1140) 2. UNIRI Projects of Experienced Scientists 2023: Mathematical Modeling of Micropolar Fluid and Numerical Spectral Analysis Using Data-Driven Algorithms (uniri-experienced-nature-23-184) 3. UNIRI Projects of Experienced Scientists 2023: Development of an Information System for Early Detection of Failure in Students in STEM Subjects (uniri-experienced-society-23-236) 4. Support to the research of the University of Rijeka: Analysis of mathematical models of fluid mechanics and technical systems using data-driven algorithms for the Koopman operator (uniri-prirod-18-118-1257) 5. The research support project of the University of Rijeka no. 13.14.1.3.03, Mathematical and Numerical Modeling kompresibilnog mikropolarnog fluida

Supervision of PhD theses	1 completed, 2 in progress

Examination of PhD theses	0