

Stefan Ivić

Curriculum vitae

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Education

- 2014 **dr. sc.**, *University of Rijeka, Faculty of engineering*, Rijeka.
- 2008 **mag. ing. mech.**, *University of Rijeka, Faculty of engineering*, Rijeka.

Experience

- since 2016 **Assistant professor**, *University of Rijeka, Faculty of Engineering*, Rijeka.
Department of fluid mechanics and computational engineering
- 2014–2016 **Postdoc**, *University of Rijeka, Faculty of Engineering*, Rijeka.
Department of fluid mechanics and computational engineering
- 2009–2014 **Junior researcher**, *University of Rijeka, Faculty of Engineering*, Rijeka.
Fluid Flow Numerical Modeling and Optimization
- 2008–2009 **Expert associate**, *University of Rijeka, Faculty of Engineering*, Rijeka.
Optimization of pipelaying laybarge and stinger configuration

Research and other projects

Scientific research projects

- 2008–2014 **Fluid Flow Numerical Modeling and Optimization**, *MZOS*, Rijeka.
chief researcher prof. dr. sc. L. Sopta

Industry projects

- 2015–2016 **Weather Stand-by Software Development**, *SAIPEM S.p.A. Croatian Branch*, Rijeka.
Engineering software development
chief researcher prof. dr. sc. L. Sopta
- 2009 **Numerical modelling of flue gas dispersal from TE Plomin substitute stack**, *HEP, TE Plomin*, Rijeka.
CFD simulations
chief researcher prof. dr. sc. L. Sopta
- 2007–2009 **Modelling of efficiency factor" efficiency coefficient" TEP C-500**, *HEP, TE Plomin*, Rijeka.
Engineering software development
chief researcher prof. dr. sc. L. Sopta
- 2007–2009 **Optimization of pipelaying laybarge and stinger configuration**, *Saipem Mediterranean Services LLC.*, Rijeka.
Engineering software development
chief researcher prof. dr. sc. L. Sopta

2006–2007 **Freespan Analysis Software, Saipem Mediterranean Services Llc., Rijeka.**
Engineering software development
chief researcher prof. dr. sc. L. Sopta

Visits to foreign research and education institutions

July 2011 - **University of California, Santa Barbara, Department of Mechanical Engineering.**
September 2011 Prof. Igor Mezić research group

Conferences

- May 29 - 30, 2014 **6th International Congress of Croatian Society of Mechanics, Rijeka, Stefan Ivić (speaker), Karlo Ćiković and Siniša Družeta.**
Non-pneumatic tire design optimization using genetic algorithm
- May 29 - 30, 2014 **6th International Congress of Croatian Society of Mechanics, Rijeka, Stefan Ivić (speaker), Ivan Staver and Kranjčević Lado.**
PSO pipe network optimisation regarding installation cost and exploitation
- July 6 - 7, 2013 **5th International Congress of Croatian Society of Mechanics, Terme Jezerčica, Donja Stubica, Stefan Ivić, Arsen Sušanj and Siniša Družeta (speaker).**
Pipeline route optimization with regard to installation and exploitation cost effectiveness
- September 14 - 18, 2009 **Sixth Conference on Applied Mathematics and Scientific Computing, Zadar, Stefan Ivić (speaker), Luka Sopta and Siniša Družeta.**
Optimization of submarine pipeline laying

Teaching

- since 2008 **Computer applications in engineering, Undergraduate.**
- since 2008 **Computational methods, Undergraduate.**
- since 2008 **Modelling in engineering, Graduate.**
- since 2008 **Optimization in engineering, Graduate.**
- since 2014 **Computational engineering, Graduate.**
- since 2015 **Script languages, Graduate.**
- 2013 - 2014 **Programming, Undergraduate.**

Languages

Native **Croatian**
Fluent **English**
Basic **Italian**

Computer skills

Programming C++, Qt, .NET, Python, Mathematical tools MATLAB, MathCAD
PHP/MySQL

CAE OpenFOAM, CATIA, PTC Creo, OS Windows, Linux
Abaqus

Publications

- [1] Ivić, S., Družeta, S., and Hreljac, I. S-lay pipe laying optimization using specialized pso method. *Structural and Multidisciplinary Optimization*, pages 1–17, 2017.

- [2] Ivić, S., Grbčić, L., and Družeta, S. Cooperative random walk for pipe network layout optimization. *International Journal of Applied Engineering Research*, 11(Number 4):2839–2847, 2016.
- [3] Ivić, S., Crnković, B., and Mezić, I. Ergodicity-based cooperative multiagent area coverage via a potential field. *IEEE Transactions on Cybernetics*, 2016.
- [4] Družeta, S. and Ivić, S. Examination of benefits of personal fitness improvement dependent inertia for particle swarm optimization. *Soft Computing*, pages 1–14, 2016.
- [5] Ivić, S. Sensitivity analysis of s-lay pipe-laying configuration. *International Journal of Applied Engineering Research*, 10(Number 4):43250–43255, 2015.
- [6] Loire, S., Arbabi, H., Clary, P., Ivić, S., Črnjarić Žic, N., Maćešić, S., Crnković, B., and Mezić, I. Search strategy in a complex and dynamic environment (the indian ocean case). *Bulletin of the American Physical Society*, 59, 2014.
- [7] Ivić, S., Staver, I., and Kranjčević, L. Pso pipe network optimisation regarding installation cost and exploitation. *Proceedings of 6th International Congress of Croatian Society of Mechanics*, 2014.
- [8] Ivić, S., Ćiković, K., and Družeta, S. Non-pneumatic tire design optimization using genetic algorithm. *Proceedings of 6th International Congress of Croatian Society of Mechanics*, 2014.
- [9] Ivić, S., Čanađija, M., and Družeta, S. Static structural analysis of s-lay pipe laying with a tensioner model based on the frictional contact. *Engineering Review*, 34(3):223–234, 2014.
- [10] Ivić, S., Sušan, A., and Družeta, S. Pipeline route optimization with regard to installation and exploitation cost effectiveness. *Proceedings of 5th International Congress of Croatian Society of Mechanics*, 2013.
- [11] Valentine, D., Mezić, I., Maćešić, S., Črnjarić Žic, N., Ivić, S., Hogan, P., Fonoberov, V., and Loire, S. Dynamic autoinoculation and the microbial ecology of a deep water hydrocarbon irruption. *Proceedings of the National Academy of Sciences*, 2012.