2020 InterPore elections

Maša Prodanović, Ph.D.

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Education and Professional Career

1995-1999	B.Sc. in Applied Mathematics, The University of Zagreb, Croatia
2000-2001	MSc in Applied Mathematics, Stony Brook University, NY, USA
2001-2005	Ph.D. in Applied Mathematics and Statistics, Stony Brook University, NY, USA
2005-2007	Postdoctoral Fellow, Institute for Computational Engineering and Sciences
2007-2010	Research Associate, Center for Petroleum and Geosystems Engineering, UT Austin
2010-2016	Assistant Professor, UT PGE
Since 2016	Associate Professor, UT PGE

Commitment, Appointments and Scientific Volunteer Jobs

2017-2020	Interpore Kimberly-Clarck Lecture Award Committee
2010-2020	Interpore member since inception
2010-2019	over the years involved in as: Main facilitator of the Focus Group on Pore Scale Modeling and Visualization, International Scientific Committee for Interpore Conference, Elections Committee, and Awards committee member
2019-2021	American Chemical Society Petroleum Research Fund board member
2019-2021	NSF EarthCube Leadership Council, Member-at-large (elected) and DEI working group member
2018-2020	Energy Advisory Committee member, Texas Education Agency
2020	SPE working group on Current Issues in Reservoir Characterization
2019	Organizing Committee Member, 20th Annual Conference of the International Association for Mathematical Geosciences
2015-2017	SPE Innovative Teaching Award Committee member
2018	Guest editor, Special Issue in Journal of Contaminant Hydrology “Advances in experimental techniques, validation of modelling tools and uncertainty in predictions from pore to field scale”
2017-	Associate editor, Journal of Petroleum Science and Engineering
2016	Organizing committee member, The 4th Arab-American Frontiers Symposium
2015	Guest editor, Special Issue in Advances in Water Resources on *Pore Scale Modeling and Experiments*
2015-	Digital Rocks Portal (https://www.digitalrocksportal.org/) PI and curator
2020	Co-organizer, Co-instructor and judge, Porous Media Visualization mini-course and visualization challenge
2014	Instructor, Short course on porous media, University of Wyoming, Laramie, WY
2013	Co-Instructor, Short course on porous media, Czech Technical University, Prague, Czech Republic, May 25-28, 2013 (w. D. Wildenschild and A. Sheppard)
2011	Co-Instructor/co-organizer, Short course and research workshop on porous media, UT Austin, (w. D. Wildenschild and A. Sheppard)
2007-2020	Co-organizer of 25+ conference mini-symposia
2003-2010	Association for Women in Mathematics member
2003-	Society of Industrial and Applied Mathematics (SIAM) member

2007- Society of Petroleum Engineers (SPE) member
2010- American Geophysical Union member
2019- European Association of Geoscientist and Engineers (EAGE) member

Professional Awards, Offers and Recognitions

2019 SPE Regional Formation Evaluation Award (Southwestern North America)
2017 "The Texas Ten", top faculty by UT Austin Alumni Association
2017 "Stony Brook 40 Under Forty", Stony Brook University Alumni award
2015 Chevron Centennial Teaching Fellowship in Petroleum Engineering, UT Austin
2014 Faculty Innovative Teaching Award
2014 InterPore Procter & Gamble Award for Porous Media Research
2013 NSF CAREER Award (NSF Directorate of Earth Sciences)
2011 Summer Research Assignment 2011 Award for tenure-track faculty, UT Austin
2009 SPE Annual Technical Conference and Exhibition Outstanding Young Professional Paper
2007, 2009 SIAM Early Career Travel Awards
2005-2007 J.T. Oden Postdoctoral Fellowship, UT Austin

Most important Publications (maximum 10)
(Peer reviewed journal articles / books / patents)

[10] J.E. Santos, D. Xu, H. Jo, C.J. Landry, M. Prodanović, M.J. Pyrcz, PoreFlow-Net: A 3D convolutional neural network to predict fluid flow through porous media, Advances in Water Resources. 138 (2020) 103539. https://doi.org/10.1016/j.advwatres.2020.103539.

[9] A. Mehmani, R. Verma, M. Prodanović, Pore-scale modeling of carbonates, Marine and Petroleum Geology. 114 (2020) 104141. https://doi.org/10.1016/j.marpetgeo.2019.104141.

[8] M. Zhang, M. Prodanović, M. Mirabolghasemi, J. Zhao, 3D Microscale Flow Simulation of Shear-Thinning Fluids in a Rough Fracture, Transport in Porous Media. (2019). https://doi.org/10.1007/s11242-019-01243-9.

[7] R. Xu, M. Prodanović, Effect of pore geometry on nitrogen sorption isotherms interpretation: A pore network modeling study, Fuel. 225 (2018) 243–255. https://doi.org/10.1016/j.fuel.2018.03.143.

[6] C.J. Landry, P. Eichhubl, M. Prodanović, S. Wilkins, Nanoscale grain boundary channels in fracture cement enhance flow in mudrocks, J. Geophys. Res. Solid Earth. 121 (2016) 2016JB012810. https://doi.org/10.1002/2016JB012810.

[5] S. Ghanbarzadeh, M.A. Hesse, M. Prodanovic, J.E. Gardner, Deformation-assisted fluid percolation in rock salt, Science. 350 (2015) 1069–1072. https://doi.org/10.1126/science.aac8747.

[4] M. Mirabolghasemi, M. Prodanović, D. DiCarlo, H. Ji, Prediction of empirical properties using direct pore-scale simulation of straining through 3D microtomography images of porous media, Journal of Hydrology. 529, Part 3 (2015) 768–778. https://doi.org/10.1016/j.jhydrol.2015.08.016.

[3] A. R. Rahmani, M. Prodanović, S.L. Bryant, C. Huh, Quasi-static analysis of a ferrofluid blob in a capillary tube, Journal of Applied Physics. 111 (2012) 074901. https://doi.org/10.1063/1.3697894.

[2] M. Prodanović, W.B. Lindquist, R.S. Seright, 3D image-based characterization of fluid displacement in a Berea core, Advances in Water Resources. 30 (2007) 214–226. https://doi.org/10.1016/j.advwatres.2005.05.015.

[1] M. Prodanović, S.L. Bryant, A level set method for determining critical curvatures for drainage and imbibition, Journal of Colloid and Interface Science. 304 (2006) 442–458. https://doi.org/10.1016/j.jcis.2006.08.048.