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EDUCATION

- Ph.D. in Civil Engineering, University of Minnesota, Minnesota, Minnesota, thesis title: High-Order Analytic Elements in Modeling Groundwater Flow, advisor: Randal Barnes, 1997
- M.S. in Civil Engineering, University of Minnesota, Minneapolis, Minnesota, thesis title: Numerical Simulation of Groundwater Recharge: Spatial and Temporal Analysis, 1993
- B.S. in Civil Engineering, University of Split, Split, Croatia, 1990

EMPLOYMENT HISTORY

- 2006-present: Associate Professor, Department of Civil, Structural and Environmental Engineering, University at Buffalo, State University of New York
- 2000-2006: Assistant Professor, Department of Civil, Structural and Environmental Engineering, University at Buffalo, State University of New York
- 1997-2000: Post-doc. Associate, Department of Civil Engineering, University of Minnesota
- 1993-1997: Research Assistant, Department of Civil Engineering, University of Minnesota
- 1992-1993: Research Associate, Desert Research Inst., Las Vegas, Nevada
- 1991-1992: Research Assistant, Saint Anthony Falls Hydraulic Lab, University of Minnesota

PUBLICATIONS

Journal Publications (* UB student)

- 1. A. Zarlenga, I. Janković, A. Fiori and G. Dagan, Effective Conductivity of Three-Dimensional Heterogeneous Formations of Lognormal Permeability Distribution: The Impact of Connectivity, a technical note published in *Water Resources Research*, 54, 2480–2486, 2018
- A. Fiori, A. Zarlenga, I. Janković and G. Dagan, Solute Transport in Aquifers: the Comeback of the Advection Dispersion Equation and the First Order Approximation, Advances in Water Resources, 110, 349-359, 2017
- 3. I. Janković, M. Maghrebi*, A. Fiori, G. Dagan, When Good Statistical Models of Aquifer Heterogeneity go Right: The Impact of Aquifer Permeability Structures on 3D Flow and Transport, Advances in Water Resources, 100, 199-211, 2016
- 4. A. Fiori, A. Zarlenga, H. Gotovac, I. Janković, V. Cvetković and G. Dagan, Transport in Heterogeneous Aquifers: Are Proxy Models Predictive?, Water Resources Research, 51, 9577–9594, 2015

- 5. M. Maghrebi*, I. Janković, G. Weissmann, L. Matott, R. Allen-King and A. Rabideau, Contaminant Tailing in Highly Heterogeneous Porous Formations: Sensitivity on Model Selection and Material Properties, Journal of Hydrology 531, 149-160, 2015
- 6. G. Weissmann, A. Pickel, K. McNamara, J. Frechette, I. Kalinovich, R. Allen-King and I. Janković, Characterization and Quantification of Aquifer Heterogeneity Using Outcrop Analogs at the Canadian Forces Base Borden, Ontario, Canada, GSA Bulletin, B31193.1, 2015
- 7. M. Maghrebi*, I. Janković, R. Allen-King, A. Rabideau, I. Kalinovich and G. Weissmann, Impacts of Transport Mechanisms and Plume History on Tailing of Sorbing Plumes in Heterogeneous Porous Formations, *Advances in Water Resources*, 73, 123–133, 2014
- 8. A. Fiori, G. Dagan, I. Janković and V. Cvetković, Mass Arrival in Transport through Highly Heterogeneous Porous Formations by the MIM (Multi Indicator Model) and the Self Consistent Approximation, supplementary material to paper "Solute Transport in Aquifers of Arbitrary Variability: A Time-Domain Random Walk Formulation with Application to MADE", Water Resources Research, 2014
- 9. M. Maghrebi*, I. Janković, A. Fiori and G. Dagan, Effective Retardation Factor for Transport of Reactive Solutes in Highly Heterogeneous Porous Formations, Water Resources Research, 49(12), 8600–8604, 10.1002/2013WR014429, 2013
- A. Zarlenga, A. Fiori, I. Janković and G. Dagan, The Plume Spreading in the MADE Transport Experiment: Could it be Predicted by Stochastic Models?, Water Resources Research, 49(5), 2497–2507, 10.1002/wrcr.20128, 2013
- 11. I. Janković, A. Fiori and G. Dagan, Effective Conductivity of Isotropic Highly Heterogeneous Formations of Lognormal Conductivity Distribution: Numerical and Theoretical Issues, Water Resources Research, 49, 1178–1183, 2013
- 12. A. Fiori, G. Dagan and I. Janković, Upscaling of Flow in Heterogeneous Porous Formations: Critical Examination and Issues of Principle, Advances in Water Resources, 51, 67–85, 2013
- 13. A. Zarlenga, I. Janković, A. Fiori and G. Dagan, Advective Transport in Heterogeneous Formations: The Impact of Spatial Anisotropy on the Breakthrough Curve, *Transport in Porous Media*, 96(2), 295–304, 2013
- 14. A. Fiori, G. Dagan and I. Janković, Comment on "Comparison of Fickian and Temporally Nonlocal Transport Theories over Many Scales in an Exhaustively Sampled Sandstone Slab", Water Resources Research, 48, doi:10.1029/2011WR011706, 2012
- 15. A. Zarlenga, A. Fiori, C. Soffia and I. Janković, Flow Velocity Statistics for Uniform Flow through 3D Anisotropic Formations, *Advances in Water Resources*, 40, 37–45, 2012
- A. Fiori and I. Janković, On Preferential Flow, Channeling and Connectivity in Heterogeneous Porous Formations, Mathematical Geosciences, 44, 133–145, DOI 10.1007/s11004-011-9365-2, 2012
- 17. A. Fiori, I. Janković and G. Dagan, The Impact of Local Diffusion upon Mass Arrival of a Passive Solute in Transport through Three-Dimensional Highly Heterogeneous Aquifers Advances in Water Resources, 34, 1563–1573, 2011

- 18. A. Fiori, G. Dagan and I. Janković, Upscaling of Steady Flow in Three-Dimensional Highly Heterogeneous Formations, *Multiscale Modeling*, *Analysis*, and *Simulation (MMAS)* SIAM Journal, 9(3), 1162–1180, 2011
- 19. R. Suribhatla*, I. Janković, A. Fiori, A. Zarlenga and G. Dagan, Effective Conductivity of Anisotropic Random Media, *Multiscale Modeling, Analysis*, and *Simulation (MMAS)* SIAM Journal, 9(3), 933–954, 2011
- 20. I. Janković and A. Fiori, Analysis of the Impact of Injection Mode in Transport through Strongly Heterogeneous Aquifers, Advances in Water Resources, 33, 1199–1205, 2010
- 21. I. Janković, D. Steward, R. Barnes and G. Dagan, Is Transverse Macrodispersivity in Threedimensional Groundwater Transport Equal to Zero? A Counterexample, Water Resources Research, 45, W08415, doi:10.1029/2009WR007741, 2009
- 22. G. Firmani, A. Fiori, I. Janković and G. Dagan, Effective Conductivity of Random 2D Media with Asymmetric Logconductivity Structures, *Multiscale Modeling*, *Analysis*, and *Simulation* (MMAS) SIAM Journal, 7(4), 1979–2001, 2009
- 23. I. Janković, A. Fiori and G. Dagan, The Impact of Local Diffusion on Longitudinal Macrodispersivity and its Major Effect upon Anomalous Transport in Highly Heterogeneous Aquifers, Advances in Water Resources, 32, 659–669, 2009
- 24. K. Bandilla*, A. Rabideau and I. Janković, A Parallel Mesh-free Contaminant Transport Model Based on the Analytic Element and Streamline Methods, *Advances in Water Resources*, doi: 10.1016/j.advwatres.2008.08.009, 2009
- 25. A. Fiori, G. Dagan and I. Janković, Comment on "Asymptotic Dispersion in 2D Heterogeneous Porous Media Determined by Parallel Numerical Simulations" by J.R. de Dreuzy, A. Beaudoin, J. Erhel, Water Resources Research, 44, W06603, doi:10.1029/2007WR006699, 2008
- D. Steward, P. Le Grand, I. Janković and O. Strack, Cauchy Integrals for Boundary Segments with Curvilinear Geometry, Proceedings of the Royal Society of London, A, 464, 223–248, 2008
- A. Fiori, I. Janković, G. Dagan, and V. Cvetković, Ergodic Transport through Aquifers of Non-Gaussian Log-Conductivity Distribution and Occurrence of Anomalous Behavior, Water Resources Research, 43, W09407, doi:10.1029/2007WR005976, 2007
- 28. K. Bandilla*, I. Janković and A. Rabideau, A New Algorithm for Analytic-Based Modeling of Large-Scale Groundwater Flow Using Parallel Processing, *Advances in Water Resources*, 30, 446-454, 2007
- 29. A. Rabideau, J. Craig*, W. Silavisesrith*, K. Fredrick*, D. Flewelling, I. Janković, M. Becker, K. Bandilla* and S. Matott*, Analytic Modeling of Super-regional Groundwater Flow: Concepts and Tools for Automated Model Configuration, *Journal of Hydrologic Engineering*, doi:10.1061/(ASCE)1084-069912:1(83), 2007
- I. Janković, A. Fiori and G. Dagan, Modeling Flow and Transport in Highly Heterogeneous Three-Dimensional Aquifers: Ergodicity, Gaussianity and Anomalous Behavior. Part
 1: Conceptual Issues and Numerical Simulations, Water Resources Research, 42, W06D12, doi:10.1029/2005WR004734, 2006

- 31. A. Fiori, I. Janković and G. Dagan, Modeling Flow and Transport in Highly Heterogeneous Three-Dimensional Aquifers: Ergodicity, Gaussianity and Anomalous Behavior. Part 2: Approximate Semi-Analytical Solution, Water Resources Research, 42, W06D12, doi:10.1029/2005WR004752, 2006
- 32. H. J. Haitjema, R. J. Hunt, I. Janković and W. J. de Lange, Foreword: Groundwater Flow Modeling with the Analytic Element Method, *Ground Water*, 44(1), 2006
- 33. J. Craig*, I. Janković and R. Barnes, The Nested Superblock Approach for Regional Scale Analytic Element Models, *Ground Water*, 44(1), 76-80, 2006
- 34. I. Janković, A. Fiori, R. Suribhatla* and G. Dagan, Identification of Heterogeneous Aquifer Transmissivity Using an AE-Based Method, *Ground Water*, 44(1), 62-71, 2006
- 35. A. Rabideau, S. Matott*, I. Janković, J. Craig* and M. Becker, Influence of Numerical Precision on the Calibration of AEM-based Groundwater Flow Models, *Environmental Geology*, 48, 57-67, 2005
- 36. R. Suribhatla*, M. Bakker, K. Bandilla* and I. Janković, Reply to Comment by O.D.L. Strack on "Steady two-dimensional groundwater flow through many elliptical inhomogeneities", Water Resources Research, 41, W11602, 10.1029/2005WR004063, 2005
- 37. A. Fiori, I. Janković and G. Dagan, The Effective Conductivity of Heterogeneous Multiphase Media with Circular Inclusions, *Physical Review Letters*, 94, 224502, 2005
- 38. A. Fiori and I. Janković, Can we Determine the Transverse Macrodispersivity by Using the Method of Moments?, Advances in Water Resources, 28, 589-599, 2005
- 39. G. Dagan, A. Fiori and I. Janković, Transmissivity and Head Covariances for Flow in Highly Heterogeneous Aquifers, *Journal of Hydrology*, 294(1-3), 39-56, 2004
- 40. R. Suribhatla*, M. Bakker, K. Bandilla* and I. Janković, Steady Two-Dimensional Groundwater Flow Through Many Elliptical Inhomogeneities, Water Resources Research, 40(4), W04202, 10.1029/2003WR002718, 2004
- 41. G. Dagan, A. Fiori and I. Janković, Flow and Transport in Highly Heterogeneous Formations, Part 1. Conceptual Framework and Validity of First-Order Approximations, Water Resources Research, 39(9), 1268, 10.1029/2002WR001717, 2003
- 42. A. Fiori, I. Janković and G. Dagan, Flow and Transport in Highly Heterogeneous Formations, Part 2. Semi-Analytical Results for Isotropic Media, Water Resources Research, 39(9), 1269, 10.1029/2002WR001719, 2003
- 43. I. Janković, A. Fiori and G. Dagan, Flow and Transport in Highly Heterogeneous Formations, Part 3. Numerical Simulations and Comparison with Theoretical Results, Water Resources Research, 39(9), 1270, 10.1029/2002WR001721, 2003
- 44. A. Fiori, I. Janković and G. Dagan, Flow and Transport Through Two-Dimensional Isotropic Media of Binary Conductivity Distribution. Part 1: Numerical Methodology and Semi-Analytical Solutions, Stochastic Environmental Research and Risk Assessment (SERRA), 17(6), 370-383, 2003

- 45. I. Janković, A. Fiori and G. Dagan, Flow and Transport Through Two-Dimensional Isotropic Media of Binary Conductivity Distribution. Part 2: Numerical Simulations and Comparison with Theoretical Results, Stochastic Environmental Research and Risk Assessment (SERRA), 17(6), 384-393, 2003
- 46. I. Janković, A. Fiori and G. Dagan, Effective Conductivity of an Isotropic Heterogeneous Medium of Lognormal Conductivity Distribution, *Multiscale Modeling, Analysis*, and *Simulation (MMAS)* SIAM Journal, 1(1), 40-56, 2003
- 47. D. Steward and I. Janković, Permanent Deformation of Stream Surfaces in Axisymmetric Flow, Water Resources Research, 37(2), 307-316, 2001
- 48. I. Janković and R. Barnes, Three-Dimensional Flow Through Large Numbers of Spheroidal Inhomogeneities, *Journal of Hydrology*, 226(3-4), 225-234, 1999
- 49. I. Janković and R. Barnes, High-Order Line Elements in Modeling Two-Dimensional Groundwater Flow, Journal of Hydrology, 226(3-4), 211-224, 1999
- 50. R. Barnes and I. Janković, Two-Dimensional Flow Through Large Numbers of Circular Inhomogeneities, Journal of Hydrology, 226(3-4), 204-210, 1999
- 51. O. Strack and I. Janković, A Multi-Quadric Area-Sink for Analytic Element Modeling of Groundwater Flow, Journal of Hydrology, 226(3-4), 188-196, 1999
- 52. O. Strack, I. Janković and R. Barnes, The Superblock Approach for the Analytic Element Method, Journal of Hydrology, 226(3-4), 179-187, 1999
- 53. I. Janković and R. Andričević, Spatial and Temporal Analysis of Groundwater Recharge with Application to Sampling Design, Stochastic Hydrology and Hydraulics, 10, 39-63, 1996

Book Contributions

• G. Dagan, A. Fiori, I. Janković, Ecological Processes: Transport in Porous Media, *Encyclopedia of Ecology*, 2008

Peer-Reviewed Conference Papers

- G. Dagan, A. Fiori, I. Janković and V. Cvetković, Tailing of the Breakthrough Curve in Aquifer Contaminant Transport: The Impact of Permeability Spatial Variability, proceedings from Groundwater Quality 2007, IAHS publication 324, Fremantle, Australia, December 2007
- A. Fiori, G. Dagan, V. Cvetković and I. Janković, Tailing of the Breakthrough Curve in Aquifer Contaminant Transport: Equivalent Longitudinal Macrodispersivity and Occurrence of Anomalous Transport, proceedings from *Groundwater Quality 2007*, IAHS publication 324, Fremantle, Australia, December 2007
- I. Janković, A. Fiori and G. Dagan, On the Departure from Gaussianity and Fickianity of Transport in Highly Heterogeneous Aquifers, proceedings from *ModelCARE 2005* conference on Calibration and Reliability in Groundwater Modeling, IAHS publication 304, The Hague, The Netherlands, 2005
- I. Janković, Flow and Transport in Highly Heterogeneous Formations: High-Resolution Large-Scale Numerical Simulations, proceedings from ModelCARE 2002 conference on Calibration and Reliability in Groundwater Modeling, IAHS publication 277, Prague, Czech Republic, 2002

- I. Janković and R. Barnes, Three-Dimensional Flow Through Large Numbers of Spheroidal Inhomogeneities, proceedings from 2nd International Conference on the Analytic Based Modeling of the Groundwater Flow, Nunspeet, The Netherlands, 1997
- R. Barnes and I. Janković, Two-Dimensional Flow Through Large Numbers of Circular Inhomogeneities, proceedings from 2nd International Conference on the Analytic Based Modeling of the Groundwater Flow, Nunspeet, The Netherlands, 1997
- I. Janković and R. Barnes, High-Order Line Elements in Modeling Two-Dimensional Ground-water Flow, proceedings from 2nd International Conference on the Analytic Based Modeling of the Groundwater Flow, Nunspeet, The Netherlands, 1997

Peer-Reviewed Technical Reports

- R. J. Barnes and I. Janković, Three-dimensional Unconfined Groundwater Flow for Well-head Protection: Capture Zone Analysis with a Transient Well and Transient Infiltration, prepared for Minnesota Department of Health, 2001
- R. J. Barnes and I. Janković, Statistical Analysis of the Sources of Pavement Variability, prepared for Minnesota Department of Transportation, 1998
- R. J. Barnes, I. Janković and D. Colom, Statewide Statistical Subgrade Characterization ("Minnesota Subgrade Atlas"), prepared for Minnesota Department of Transportation, 1995

Other Publications (* UB student at the time paper was submitted)

- I. Janković and A. Fiori, Application of the Analytic Element Method to Stochastic Modeling of Flow and Transport in Highly Heterogeneous Porous Formations, *Developments in Water Science*, 47(1) (this volume contains non-reviewed proceedings from conference Computational Methods in Water Resources (CMWR)), Delft, The Netherlands, 2002
- I. Janković, Analytic Element Codes for Two- and Three-Dimensional Groundwater Flow, non-reviewed article for a newsletter published by the *International Groundwater Modeling Center*, 19(1), 2001
- I. Janković, Split: Computer program for analytic-based modeling of single-layer groundwater flow in heterogeneous aquifers with particle tracking, capture-zone delineation, and parameter estimation, Version 2.2, www.groundwater.buffalo.edu, May 2001 (newer version currently available at the same web page)
- I. Janković and R. Barnes, PhreFlow: Computer program for modeling local three-dimensional transient groundwater flow and transport under unconfined conditions, Version 1.1, www.groundwater.buffalo.edu, May 2001
- I. Janković, A large set of movies showing contaminant spreading in groundwater, recorded in AVI format; available from www.groundwater.buffalo.edu, May 2000

PRESENTATIONS

Invited Presentations (* UB student)

1. I. Janković, Flow and Transport Simulations Based on Multi-Indicator Conductivity Model: Numerical Issues and Challenges, *Thirty years of stochastic subsurface hydrology: Where do we stand and what are the emerging challenges?*, Monte Verita, Switzerland, June 2010

- 2. I. Janković, Physics-Based Stochastic Modeling of Groundwater Flow and Contaminant Transport, seminar at *University of Split*, Split, Croatia, October 2008
- 3. I. Janković, Analytical and Numerical Modeling of Flow and Transport in Highly Heterogeneous Three-dimensional Aquifers: Ergodicity, Gaussianity and Anomalous Behavior, keynote lecture at International Ground Water Symposium on Ground Water Hydraulics in Complex Environments (Heterogeneous Media, Coupled Processes and Upscaling), Toulouse, France, June 2006
- I. Janković, Modeling of Contaminant Transport in Highly Heterogeneous Porous Formations Using Advection-Dispersion Equation: Scale and Conceptual Issues, seminar at *University of Waterloo*, Waterloo, Canada, January 2006
- 5. A. Fiori, I. Janković and G. Dagan, Flow and Transport in Highly Heterogeneous Aquifers: Fickianity, Gaussianity and Anomalous Transport, Fall Meeting, American Geophysical Union, presentation by the first author, San Francisco, CA, December 2005
- 6. I. Janković, A. Rabideau and K. Bandilla*, Analytic Modeling of Super-Regional Groundwater Flow and Transport, seminar at *Pennsylvania State University*, presentation by the first author, State College, PA, October 2005
- 7. I. Janković and K. Bandilla*, Modeling Groundwater Flow and Transport Using Analytic Element Method and Parallel Processing, Center for Computational Research seminar, presentation by the first author, Buffalo, NY, October 2005
- 8. I. Janković, Overview of Principles and Applications of Analytic Element Method in Modeling Groundwater Flow, seminar at *Universita Di Roma Tre*, Rome, Italy, July 2002
- 9. I. Janković, Application of the Analytic Element Method to Stochastic Modeling of Flow and Transport in Highly Heterogeneous Porous Formations, Computational Methods in Water Resources (CMWR) conference, Delft, The Netherlands, June 2002
- I. Janković, R. Barnes and D. Steward, Transverse Dispersion by Advective Mixing, Fall Meeting, American Geophysical Union, presentation by the first author, San Francisco, CA, December 2000
- 11. A. J. Rabideau and I. Janković, A High-Performance Analytic Element Model: GIS Interface, Calibration Tools and Application to Niagara Falls Region, presentation by both authors at the Cross-Discipline Ecosystem Modeling and Analysis Workshop, sponsored by the United States Environmental Protection Agency, Research Triangle Park, NC, August 2000
- 12. I. Janković, Transverse Dispersion by Advective Mixing of Groundwater Flow, seminar at Institute of Hydromechanics and Water Resources Management, Swiss Federal Institute of Technology, Zuerich, Switzerland, November 1999
- 13. I. Janković, Transverse Dispersion by Advective Mixing of Groundwater Flow, colloquium presentation at *Department of Civil Engineering and Geosciences*, Delft University, Delft, The Netherlands, November, 1999

Contributed Presentations (* UB student)

1. A. Fiori, A. Zarlenga, I. Janković and G. Dagan, Breakthrough Curve Prediction in Heterogeneous Aquifers: ADE is Alive and Kicking European Geosciences Union, General Assembly, poster, Vienna, Austria, April 2018

- 2. A. Fiori, I. Janković, A. Zarlenga and G. Dagan, Solute Transport by Groundwater: the "Universal" Behavior of the Breakthrough Curve, Computational Methods in Water Resources (CMWR) conference, presentation by the first author, Saint-Malo, France, June 2018
- 3. I. Janković, M. Maghrebi*, A. Fiori, A. Zarlenga and G. Dagan, The "Universal" Behavior of the Breakthrough Curve in 3D Aquifer Transport and the Validity of the First-Order Solution, European Geosciences Union, General Assembly, presentation by the 3rd author, Vienna, Austria, April 2017
- 4. A. Fiori, A. Zarlenga, H. Gotovac, I. Janković, V. Cvetković and G. Dagan, An Evaluation of the Predictive Capabilities of CTRW and MRMT, European Geosciences Union, General Assembly, poster, Vienna, Austria, April 2016
- 5. M. Maghrebi*, I. Janković, A. Rabideau, R. Allen-King and G. Weissmann, Contaminant Transport in the Highly Heterogeneous Sedimentary Formation at Canadian Forces Base Borden, Ontario, Canada, Fall Meeting, American Geophysical Union, poster, San Francisco, CA, December 2013
- 6. G. Weissmann, J. Frechette, A. Pickel, J. Carritt, R. Allen-King, I. Janković, M.Maghrebi* and L. Scuderi, Modeling Sedimentology and Aquifer Heterogeneity using LIDAR and Digital Photographs of Outcrop Analogs, GSA Annual Meeting, poster, Denver, CO, October 2013
- M. Maghrebi*, I. Janković, A. Rabideau, R. Allen-King and G. Weissmann, Novel Geostatistical Characterization of the Borden Aquifer, Canada, Fall Meeting, American Geophysical Union, poster, San Francisco, CA, December 2012
- 8. A. Fiori, G. Dagan and I. Janković, Stochastic Modeling of the MADE plume, Fall Meeting, American Geophysical Union, presentation by the first author, San Francisco, CA, December 2012
- 9. G. Weissmann, A. Pickel, J. Frechette, R. Allen-King, I. Janković, M.Maghrebi*, I. Kalinovich and K. McNamara, Modeling Physical and Chemical Heterogeneity of the Borden Aquifer Using an Outcrop Analog, *GSA Annual Meeting*, poster, Charlotte, NC, November 2012
- M. Maghrebi*, I. Janković, A. Rabideau, R. Allen-King and G. Weissmann, Relative Effects of Advection, Sorption and Diffusion on Transport and Tailing of Chlorinated Solvents, Fall Meeting, American Geophysical Union, poster, San Francisco, CA, December 2011
- 11. A. Fiori, I. Janković and G. Dagan, On Preferential Flow in Heterogeneous Porous Formations, *IAHR International Groundwater Symposium*, presentation, Valencia, Spain, September 2010
- 12. A. Fiori and I. Janković, A Procedure for the Upscaling of Longitudinal Dispersivity in Strongly Heterogeneous Formations, European Geosciences Union, General Assembly, poster, Vienna, Austria, April 2009
- 13. G. Dagan, I. Janković and A. Fiori, Formulation of the Problem of Upscaling of Solute Transport in Highly Heterogeneous Formations, Scaling Up and Modeling for Transport and Flow in Porous Media, presentation by the third author, Dubrovnik, Croatia, October 2008
- 14. K. Bandilla*, I. Janković and A. Rabideau, Contaminant Transport Modeling Using the Analytic Element Method and the Deterministic Streamline Method, Fall Meeting, American Geophysical Union, poster, San Francisco, CA, December 2007

- 15. I. Janković and R. Suribhatla*, Analytic Element Solution for Inhomogeneities in Hydraulic Conductivity Placed In Anisotropic Porous Background, Fall Meeting, American Geophysical Union, poster, San Francisco, CA, December 2007
- 16. R. Suribhatla* and I. Janković, Effective Conductivity of Highly Heterogeneous Formations: Does the Self-Consistent Solution Work?, Fall Meeting, American Geophysical Union, presentation by the first author, San Francisco, CA, December 2007
- 17. G. Dagan, A. Fiori, I. Janković and V. Cvetković, Tailing of the Breakthrough Curve in Aquifer Contaminant Transport: The Impact of Permeability Spatial Variability, *Groundwater Quality* 2007, presentation by the second author, Fremantle, Australia, December 2007
- 18. A. Fiori, G. Dagan, V. Cvetković and I. Janković, Tailing of the Breakthrough Curve in Aquifer Contaminant Transport: Equivalent Longitudinal Macrodispersivity and Occurrence of Anomalous Transport, *Groundwater Quality 2007*, presentation by the first author, Fremantle, Australia, December 2007
- I. Janković, On Gaussianity and Fickianity of Contaminant Transport in Highly Heterogeneous Aquifers, 5th International Conference on the Analytic Element Method, presentation, Manhattan, KS, May 2006
- 20. K. Bandilla* and I. Janković, Performance of a New Algorithm for Analytic-Based Modeling of Groundwater Flow on Super-Regional Scales, Fall Meeting, American Geophysical Union, poster, San Francisco, CA, December 2005
- 21. I. Janković, A. Fiori and G. Dagan, Impacts of Low-Conductive Zones on Transport in Highly Heterogeneous Porous Formations, *Fall Meeting, American Geophysical Union*, presentation by the first author, San Francisco, CA, December 2005
- 22. I. Janković, A. Fiori and G. Dagan, On the Departure from Gaussianity and Fickianity of Transport in Highly Heterogeneous Aquifers, *Modelcare* conference, presentation by the first author, Hague, The Netherlands, June 2005
- 23. I. Janković and A. Fiori, Effective Conductivity of 2D Isotropic Formations: Performance of the Effective Medium Approximation, *Fall Meeting*, *American Geophysical Union*, presentation by the first author, San Francisco, CA, December 2004
- 24. K. Bandilla*, R. Suribhatla* and I. Janković, Numerical Advances in the Modeling of Highly Heterogeneous Domains Using the Analytic Element Method, Fall Meeting, American Geophysical Union, poster, San Francisco, CA, December 2004
- 25. I. Janković and A. Fiori, Simulations of Flow and Transport in Highly Heterogeneous Porous Formations: Numerical Issues, *Computational Methods in Water Resources (CMWR)* conference, presentation by the first author, Chapel Hill, NC, June 2004
- 26. A. Fiori, I. Janković, R. Suribhatla* and G. Dagan, Statistical Analysis of Head and Transmissivity in Natural Aquifers: Application to Structure Identification and Transport Prediction, Computational Methods in Water Resources (CMWR) conference, presentation by the first author, Chapel Hill, NC, June 2004
- 27. I. Janković, K. Bandilla*, J. Craig* and A. Rabideau, Role of the Analytic Element Method in Regional-Scale GIS-Based Modeling of Groundwater Flow and Transport, Fall Meeting, American Geophysical Union, presentation by the first author, San Francisco, CA, December 2003

- 28. I. Janković, R. Suribhatla*, M. Bakker and K. Bandilla*, A New Analytic Element Solution for Steady Two-Dimensional Groundwater Flow with Many Elliptical Inclusions, International Conference on the Analytical Element Method for the Modeling of Groundwater Flow and Applications in Environmental Sciences, presentation by the first author, Saint Etienne, France, November 2003
- 29. K. Bandilla*, J. Craig* and I. Janković, Iterative Solutions for the Analytic Element Method: Recent Computational Advances, International Conference on the Analytical Element Method for the Modeling of Groundwater Flow and Applications in Environmental Sciences, presentation by the first author, Saint Etienne, France, November 2003
- 30. A. Fiori, I. Janković and G. Dagan, Flow in Natural Aquifers at the Regional Scale: Analysis of a Second Moments of Flow Variables, International Conference on the Analytical Element Method for the Modeling of Groundwater Flow and Applications in Environmental Sciences, presentation by the first author, Saint Etienne, France, November 2003
- 31. G. Dagan, A. Fiori and I. Janković, Flow and Transport Through Two-Dimensional Media of Binary Conductivity Distribution, *International Conference on the Analytical Element Method for the Modeling of Groundwater Flow and Applications in Environmental Sciences*, presentation by the first author, Saint Etienne, France, November 2003
- 32. J. R. Craig*, A. J. Rabideau and I. Janković, Visual Bluebird: Software for Teaching Ground-water Modeling and Potential Flow to Undergraduate Students, poster at Frontiers in Assessment Methods for the Environment (FAME), Minneapolis, MN, August 2003
- 33. I. Janković, Flow and Transport in Highly Heterogeneous Formations: High-Resolution Large-Scale Numerical Simulations, *Modelcare* conference, presentation, Prague, Czech Republic, June 2002
- 34. J. R. Craig* and I. Janković, An Overview of the Object-Oriented Iterative Model for the Analytic Element Method, *Spring Meeting*, *American Geophysical Union*, presentation by the first author, Washington, DC, May 2002
- 35. I. Janković, Flow and Transport in Highly Heterogeneous Porous Formations: Numerical Experiments Performed Using the Analytic Element Method, Spring Meeting, American Geophysical Union, presentation, Washington, DC, May 2002
- 36. I. Janković, Analytic-Based Numerical Laboratory for Investigating Dispersion in Groundwater, American Mathematical Society conference: Fluid Flow and Transport in Porous Media: Mathematical and Numerical Treatment, presentation, South Hadley, MA, June 2001
- 37. I. Janković and R. Barnes, Analytic-based Solution for Three-dimensional Transient Groundwater Flow Near Partially Penetrating Wells Under Unconfined Conditions, Fall Meeting, American Geophysical Union, poster, San Francisco, CA, December 2000
- 38. A. H. de Zwart, Ainhoa G. Gorriti, J. Bruining and I. Janković, An Analytic Element Method Developed for Groundwater Flow to Compute Dielectric Permittivity of Water Saturated Soil, Gordon Research Conference: *Modeling of Flow in Permeable Media*, poster, Andover, NH, August 2000
- 39. I. Janković, Advective Transport Through a Highly-Conductive Prolate Inhomogeneity using Modflow/Modpath and Analytic Solutions, 3rd International Conference on the Analytic Element Method in Modeling Groundwater Flow, presentation, Brainerd, MN, April 2000

- 40. I. Janković, R. Barnes and D. Steward, Transverse Dispersion by Advective Mixing of Groundwater Flow, 3rd International Conference on the Analytic Element Method in Modeling Groundwater Flow, presentation by the first author, Brainerd, MN, April 2000
- 41. I. Janković and R. Barnes, Three-Dimensional Flow Through Large Numbers of Spheroidal Inhomogeneities, 2nd International Conference on the Analytic Based Modeling of the Groundwater Flow, presentation by the first author, Nunspeet, The Netherlands, April 1997
- 42. R. Barnes and I. Janković, Two-Dimensional Flow Through Large Numbers of Circular Inhomogeneities, 2nd International Conference on the Analytic Based Modeling of the Groundwater Flow, presentation by the first author, Nunspeet, The Netherlands, April 1997
- 43. I. Janković and R. Barnes, High-Order Line Elements in Modeling Two-Dimensional Ground-water Flow, 2nd International Conference on the Analytic Based Modeling of the Groundwater Flow, presentation by the first author, Nunspeet, The Netherlands, April 1997
- 44. I. Janković and R. Andričević, Numerical Simulation of the Groundwater Recharge, Spatial Distribution and Kernel Identification, Fall Meeting, American Geophysical Union, poster, San Francisco, CA, December 1992

Other Presentations

- I. Janković, workshop Introduction to Parallel Computing, University at Split, Split, Croatia, October 2008
- I. Janković, two lectures delivered during a short course Modeling Regional Groundwater Flow with Analytic Element Method, University at Buffalo, Buffalo, NY, June 2004

COURSES TAUGHT (typical enrollment in parenthesis)

- CIE308 Engineering Statistics (170)
- CIE343 Hydraulics and Hydrology (160)
- CIE354 Fluid Mechanics (170)
- CIE444 Hydrologic Engineering (40)
- CIE445/541 Groundwater Engineering (60)
- CIE546 Environmental Fluid Mechanics (10)
- CIE554 Numerical Methods in Water Resources and Environmental Engineering (8)
- CIE641 Advanced Topics in Groundwater Engineering (8)