# Publications

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## Books


## Book Chapters


## Papers in Refereed Journals

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Proceedings of Refereed Conferences


53. Hexian Wang, Han Yang, Sumeet Kumar Sinha, Yuan Feng, Chao Luo, David B McCallen and Boris Jeremić. 3D Non-Linear Earthquake Soil-Structure Interaction Modeling of Embedded Small Modular Reactor (SMR). In proceedings of Structural Mechanics in Reactor Technology (SMiRT) 24 conference, Busan, South Korea, August 20-25, 2017.

52. Sumeet Kumar Sinha, Yuan Feng, Han Yang, Hexiang Wang, Nebojša Orbović, David B McCallen and Boris Jeremić. 3D Non-Linear Modeling and Its Effects in Earthquake Soil-Structure Interaction In proceedings of Structural Mechanics in Reactor Technology (SMiRT) 24 conference, Busan, South Korea, August 20-25, 2017.


10. Key Rosebrook, Dan W. Wilson Boris Jeremić and Bruce Kutter. Centrifuge Characterization and Numerical Modeling of the dynamic properties of Tire Shreds for Use as Bridge Abutment Backfill Fourth International Conference On Recent Advances In Geotechnical Earthquake Engineering And Soil Dynamics, March 26-31, 2001 San Diego, CA USA


Reports and Other Major Publications


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**Technical Presentations**

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186. Boris Jeremić, Chanseok Jeong. Collaborative Research: Development of Realistic Seismic Input Motions for Improving the Resilience of Infrastructures to Earthquakes. NIST/NSF 2022 Disaster Resilience Symposium, NIST, Washington DC, online meeting, 14-15 September 2022. (PDF)


179. Boris Jeremić and Jerzy Salamon. Verification for Numerical Analysis of Concrete Dams. USSR Annual Conference and Exhibition, San Diego, CA, USA, 11-14 April, 2022. (PDF)


176. Boris Jeremić. Forward and Backward Uncertainty Propagation in Computational Earthquake Engineering. Tianjin University, Tianjin, China, 24 November 2021. (PDF)


171. Boris Jeremić. A Road Map for Seismic Analyses of Concrete Dam-Rock-Reservoir Systems. USSD 2021 Annual Conference, April 2021. (PDF)


169. Boris Jeremić, and Jerzy Salamon. Road Map for Advanced Structural Analysis of Concrete Dams. ICOLD Symposium on Sustainable Development of Dams and River Basins, New Delhi, India, 24-27 February 2021. (PDF)


163. Boris Jeremić. The Real-ESSI Simulator System. Winter School, "From research to practise in geotechnical engineering", Centro Stefano Franscini, Monte Verità, Ascona, Ticino, CH, 12 - 17 January 2020. (PDF)


161. Boris Jeremić. Modeling and Simulation of Dam Foundation Reservoir System. Hydro-Québec, Montréal, Québec, Canada, 04 December 2019. (PDF)


146. Boris Jeremić. Realistic Modeling and Simulation of Earthquakes, Soils, Structures and their Interaction. Eighth Kwang-Hua Forum on Innovations and Implementations in Earthquake Engineering Research Area, State Key Laboratory of Disaster Prevention in Civil Engineering, International Laboratory for Earthquake Engineering (ILEE), Tongji University, Shanghai, China, 14-16 December, 2018. (PDF)


133. Boris Jeremić. Real ESSI Simulator, Inelastic Modeling and Simulations for Soils, Contacts and Structures. Real ESSI Short Course, San Francisco, CA, USA, 12-14 December 2017. (Available to participants only)

132. Boris Jeremić. Real ESSI Simulator, Seismic Ground Motions. Real ESSI Short Course, San Francisco, CA, USA, 12-14 December 2017. (Available to participants only)

131. Boris Jeremić. Real ESSI Simulator, Intro, Setup and Staged Nonlinear Modeling. Real ESSI Short Course, San Francisco, CA, USA, 12-14 December 2017. (Available to participants only)


121. Boris Jeremić. Site Specific Dynamics of Structures: From Seismic Source to the Safety of Occupants and Content (Plenary Lecture). 6th International Conference on Computational Methods in Structural Dynamics and Earthquake Engineering (CompDyn2017), Rhodes Island, Greece, 14-17 June 2017. (PDF)


119. Boris Jeremić. Динамика тла и конструкције при земљотресима, непоуздане модели, непоуздане параметри и теорија вероватноћа. (Dynamics of Soils and Structures During Earthquakes, Uncertain Models, Uncertain Parameters and Theory of Probability). Институт за Испитивање Материјала Србије и Грађевински Факултет Универзитета у Београду, Београд, Србија, 16-ти децембар, 2016, Institute for Testing of Materials, and Civil Engineering Faculty of the University of Belgrade, Belgrade, Serbia, 16th December 2016. (PDF)

118. Boris Jeremić. On Modeling Uncertainty in Earthquake Soil Structure Interaction Analysis. Seventh Kwang-Hua Forum on Innovations and Implementations in Earthquake Engineering Research Area, State Key Laboratory of Disaster Prevention in Civil Engineering, International Laboratory for Earthquake Engineering (ILEE), Tongji University, Shanghai, China, 9 December, 2016. (PDF)


112. Boris Jeremić. Uncertainties in Modelling and Simulation of Earthquake Soils Structures Interaction. Earthquake Engineering Institute, University of Tokyo, Tokyo, Japan, 25 January, 2016. (PDF)


98. Boris Jeremić. PRENOLIN Meeting Presentation. PRENOLIN 3rd Workshop, Nice, France, April 7th-8th, 2014. (PDF)


95. Boris Jeremić. PRENOLIN Meeting Presentation. PRENOLIN 2nd Workshop, Nice, France, November 4th-5th 2013. 2013. (PDF)


84. Boris Jeremić, Nima Tafazzoli, Nebojša Orbović and Andrei Blahoianu. Amplification of Seismic Input due to 1D, 2D and 3D effects, and their Importance for NPP Structures. 21st Structural Mechanics in Reactor Technology (SMiRT) Conference, New Delhi, India, November 6-11, 2011. (PDF)

83. Boris Jeremić, Nima Tafazzoli, Nebojša Orbović and Andrei Blahoianu. 3D Analysis of the Influence of Varying Rock/Soil Profiles on Seismic NPP Response. 21st Structural Mechanics in Reactor Technology (SMiRT) Conference, New Delhi, India, November 6-11, 2011. (PDF)


81. Boris Jeremić, Annie Kammerer, Nima Tafazzoli and Babak Kamrani. The NRC ESSI Simulator. 21st Structural Mechanics in Reactor Technology (SMiRT) Conference, New Delhi, India, November 6-11, 2011. (PDF)


74. Boris Jeremić. Factors of Safety for 3D vs 2D for Curved Section of the Wolf Creek Dam. Wolf Creek Dam Foundation Remediation Project. Wolf Creek Dam site, Kentucky, 19 – 21 April 2010. (not for public distribution)


69. Boris Jeremić, Kallol Sett, Lev Kavvas and Suzana Koprivica. Решение еласто-пластичног проблема у простору вероватности и примена на практичесне проблеме (Solution for the probabilistic elastic–plastic problem and its application to practical problems) UNION University, Belgrade, Serbia, 29th June, 2009.(PDF)


65. Boris Jeremić. Verification and Validation in Computational Geomechanics, GheoMat: Deformation and Failure of Geomaterials, a Multidisciplinary Scientific Workshop, Masseria Salamina, Brindisi, Italy, 14-19 June 2009.(PDF)

64. Boris Jeremić. High Fidelity, Large Scale Modeling and Simulation, GheoMat: Deformation and Failure of Geomaterials, a Multidisciplinary Scientific Workshop, Masseria Salamina, Brindisi, Italy, 14-19 June 2009.(PDF)


59. Boris Jeremić. Soil Uncertainty and Seismic Ground Motion Fourth Geotechnical Earthquake Engineering and Soil Dynamics Conference, Sacramento, California, May 19-22st, 2008.(PDF)


56. Boris Jeremić. On Computational Simulations and Predictions, UC Davis Geotechnical Seminar Series, November 1st, 2007.(PDF)


53. Boris Jeremić. Parallel Computational Method for Simulations of Earthquake, Soil and Structures, University of Belgrade, Faculty of Civil Engineering Seminar Series, Belgrade, Serbia, June 5th 2007. (PDF)


34. Boris Jeremić. Interakcija konstrukcije i tla u toku zemljotresa: numerička analiza. (Structure-soil interaction during earthquakes: numerical analysis) Грађевински Факултет Универзитета у Београду, Децембар, 2003 (Civil Engineering Faculty of the University of Belgrade, December 2003). (PDF)


