Dissertations and Theses Completed under Prof. Bažant's Advisorship, and Collaborators

February 22, 2019

1 Ph.D. Dissertations

- 1. Martin K. Christensen, Field Solutions for Large Regular Frameworks under Initial Stress, June 1973.
- 2. Leonard J. Najjar, Environmental Factors and Prediction of Structural Effects in Creep of Concrete, June 1973.
- 3. Spencer T. Wu, Rate-Type Creep Law of Aging Concrete in Variable Environment, August 1973.
- 4. Vicente Cuellar, Rearrangement Measure Theory Applied to Dynamic Behavior of Sand, August 1974 (co-advised with R.J. Krizek).
- 5. Mahjoub M. El Nimeiri, Stability and Large Deflections of Curved Thin-Walled Girders, June 1974.
- 6. Ibrahim Kutay Ozaydin, *A Micro-Mechanistic Analysis of Creep Response of Kaolin Clay*, June 1974 (co-advised with R.J. Krizek).
- 7. Ali A. Asghari, Experimental and Numerical Investigation of the Effects of Variable Humidity, Aging and Stress Nonlinearity on Creep of Concrete, August 1975.
- 8. Parameshwara D. Bhat, Endochronic Theory of Inelasticity and Failure of Concrete with Application to Seismic-Type Cyclic Loading, June 1976.
- 9. Elmamoun Abdalla Osman, Prediction of Creep and Shrinkage of Concrete and Its Modeling as a Stochastic Process, June 1976.
- 10. Atilla M. Ansal, An Endochronic Constitutive Law for Normally Consolidated Cohesive Soils, June 1977 (co-advised with R.J. Krizek).
- 11. John Louis Glazik, Numerical Analysis of Elastodynamic Near-Tip Stress Fields for Stationary and Propagating Cracks, June 1977 (co-advised with J.D. Achenbach).

- 12. Werapol Thonguthai, Creep and High Temperature Effects on Pore Pressure and Drying of Concrete, August 1977.
- 13. Rafael Blázquez, Endochronic Model for Liquefaction of Sand Deposits as Inelastic Two-Phase Media, June 1978 (co-advised with R.J. Krizek).
- 14. Ali A. El Zaroughi, Application of Endochronic Constitutive Law to One-Dimensional Liquefaction of Sand, June 1978 (co-advised with R.J. Krizek).
- 15. Sang-Sik Kim, Theoretical and Experimental Investigation of Nonlinear Behavior and Creep of Concrete, August 1978.
- 16. Liisa Panula, Practical Prediction of Time-Dependent Deformations and Failure of Concrete, August 1978.
- 17. Luis F. Estenssoro, *The Surface Singularity of Cracks*, August 1979.
- 18. Celal Sener, An Endochronic Nonlinear Inelastic Constitutive Law for Cohesionless Soils Subjected to Dynamic Loads, August 1979 (co-advised with R.J. Krizek).
- 19. Tatsuya Tsubaki, Nonlinear Response of Plain Concrete and Cracked Reinforced Concrete, August 1979.
- 20. Byung-Hwan Oh, Mathematical Models for Inelastic Behavior and Cracking of Concrete Structures, July 1982.
- 21. Jenn-Chuan Chern, Creep Law of Concrete, Its Uncertainty and Effects of Drying and Cracking, 1984.
- 22. Ta-Peng Chang, Finite Element Modeling of Strain-Softening and Failure in Concrete, 1985.
- 23. Jin-Keun Kim, Fracture and Inelastic Constitutive Relations for Concrete and Geomaterials,

1985.

- 24. Phillip A. Pfeiffer, Size Effect in Blunt Fracture, 1986.
- 25. Feng-Bao Lin, Plasticity with Nonlocal Strain-Softening and Material Instabilities, 1987.
- 26. Gilles Pijaudier Cabot, Nonlocal Strain Softening Material Instabilities, 1987.
- 27. Pere C. Prat, Micromechanics Modeling and Fracture of Concrete and Geometerials, 1987.
- 28. Santosh Prasannan, Nonlinear and Thermal Effects in Concrete Creep Experiment and Theory, 1989.
- 29. Mazen R. Tabbara, Fracture and Stability of Strain-Softening Materials and Structures, 1990.
- 30. Joong-Koo Kim, Prediction of Time-Dependent Deformations of Concrete and Bridge Deflection Probability, 1990.
- 31. Mohammed T. Kazemi, Fracture Characteristics of Quasi-brittle Materials from the Size Effect Method and Implications in Design, 1990.
- 32. Yunping Xi, Analysis of Concrete Creep, Shrinkage and Fracture by Deterministic and Probabilistic Methods, 1991.
- 33. Ravindra Gettu, Concrete and Rock Fracture and the Influence of Loading Rate, 1992.
- 34. Milan Jirásek, Modeling of Fracture and Damage in Quasibrittle Materials, 1993.
- 36. Zhengzhi Li, Fracture Size Effect and Damage Properties of Quasibrittle Materials, 1995.
- 37. Yuyin Xiang, Modeling of Fracture and Scaling in Quasi-Brittle Materials, 1996.
- 38. Sandeep Baweja, Long-Term Deformations of Concrete, Practical Prediction, Effect of Composition and Mechanisms, 1996.
- 39. Sanjeev Tandon, Fracture Behavior of Quasi-Brittle Material, 1997 (co-advised with K.T. Faber).
- 40. Jang-Jay Ho Kim, Failure Mechanisms and Size Effect of Quasi-Brittle Materials: Ice, Steel Reinforced Concrete and Fiber Composite, 1998.
- 41. Michele Brocca, Material Modeling and Structural Analysis with the Microplane Constitutive Model, 1999.
 - 42. Ferhun C. Caner, Computational Modeling of

Damage and Fracture in Concrete, 2000.

- 43. Emilie Becq-Giraudon, Size Effect on Fracture and Ductility of Concrete and Fiber Composites, 2000.
- 44. Goangseup Zi, Size Effect of Quasibrittle Materials and Simulation of Concrete Decontamination Using Microwave Heating, 2002.
- 45. Zaoyang Guo, Size Effect Analysis of Materials and Structures from Micro Scale to Macro Scale, 2004.
- 46. Yong Zhou, Size Effect on Strength of Fiber Composites and Rigid Foams, 2005.
- 47. Alessandro Beghini, Stability and Quasibrittle Failure of Fibrous and Particulate Composites, 2005.
- 48. Sze-Dai Pang, Probabilistic Size Effect in Fracture of Quasibrittle Materials, 2005.
- 49. Martin G. Andrews, The Static and Dynamic Interaction of Multiple Delaminations in Plates Subject to Cylindrical Bending (co-advised, principal advisor: Prof. Roberta Massabó, Univ. of Genova), 2005.
- 50. Qiang Yu, Size Effect and Design Safety in Concrete Structures under Shear, 2007.
- 51. Jia-Liang Le, Probabilistic and Energetic Scaling of Fracture of Quasibrittle Materials, 2010.
- 52. Mahendra Gattu, Structural Strength at Large Strains under Softening Compression Damage, Aug. 2012.
- 53. Christian G. Hoover, Fracture and size effect in quasibrittle composites: Experiment and theory, Aug. 2012.
- 54. Kyung-Tae Kim, Scaling of Failure and Time Dependent Behavior of Brittle Heterogeneous Materials: Composite, Concrete and Bone, Sept. 2012.
- 55. Mija Helena Hubler, Improved Prediction Models of Creep, Shrinkage, and Relaxation of Modern Concretes, Aug. 2013.
- 56. Mohammed Gallal Alnaggar, Multiscale modeling of aging and deterioration of reinforced concrete structures (as co-advisor with principal advisor Prof. Gianluca Cusatis), Apr. 2014.
- 57. Kedar S. Kirane, Fatigue, fracture and size effect in particulate and fabric composites: Constitutive modeling, theory and experiments, Dec. 2014.

58. Viet Tuan Chau, Fracture Mechanics in Anisotropic Quasi-brittle Material: Hydraulic Fractures in Shale, Damaging Composites, June 2017.

M.S. Theses 2

- 1. Leonard J. Najjar, The Drying of Concrete as a Nonlinear Diffusion Problem, June 1971.
- 2. Werner Astl, Torsion of Stiffening Systems of Thin-Walled Beams in High-rise Structures, June 1976.
- 3. Michael C. Burrow, Nonlinear Threedimensional Finite Element Analysis of Reinforced Concrete Beams in Flexure, August 1977.
- 4. Chuan Lin, Frictional Limit Design of Reinforcement in Plates, August 1981.
- 5. Steven Zebich, Statistical Analysis of Creep and Shrinkage Data, December 1981.
- 6. James S. Ong, Creep in Continuous Beam Built Span by Span, February 1982.
- 7. Warren J. Raftshol, Finite Element Model for Creep and Shrinkage in Concrete Cylinders, August 1982.
- 8. Kwang-Liang Liu, Uncertainty Analysis and Shrinkage in Concrete Structures, 1984.
- 9. Manuel Aguinaga-Zapata, Effect of Creep on Overloads of Slab Buildings During Construction, 1985.
- 10. Sohail Aslam, Bayesian Probabilistic Prediction of Creep Deflections of Bridges, 1985.
- 11. Hsu-Huei Sun, Size Effect in Diagonal Shear Failure and Pullout Strength of Concrete, 1986.
- 12. Hung-Wen Chen, The Effect of Drying Creep in Concrete Box Girder Beams, 1986.
- 13. Stephen Beissel, Numerical Analysis of Nonlinear and Time-Dependent Fracture by Means of the Smeared-Tip Superposition Method, 1990.
- 14. William F. Schell, Fatique Fracture of High Strength Concrete Under High Frequency Loading, 1991.
- 15. Gustavo Gioia, Is No-Tension Dam Design Always Safe?—A Comparison with Fracture Mechanics Analysis, 1994.

Simulation of a Concrete Slab Impacted by a Projectile Using Microplane Theory and Finite Elements, 1995.

- 17. Michele Cyr, Fracturing Truss Model: Size Effect of Reinforced Concrete Beams in Torsion, 1998.
- 18. Guang-Hua Li, Unbiased Statistical Evaluation of Creep and Shrinkage Models from a Comprehensive Database, 2009.

Appendix I: Doctoral Theses Prepared Fully or Partly under Bažants Advisorship or Co-Advisorship at Northwestern, but Defended at Other Universities

- 1. Abu-Bakr Wahab Stability of parallel crack system (visiting, from U. of Khartoum).
- Anping Hong, Theory of Crack Initiation from Smooth Surfaces and Its Applications, (co-advised with H. Binienda), 1994—Ph.D. awarded by University of Akron with Bažant as examining committee member.
- 3. Rodrigue Desmorat, Size effect in fiber of bar pullout with interface softening slip, Ph.D. Thesis, L.M.T., E.N.S. (Ecole National Supérieur) de Cachan, Paris-Cachan, France, 1992-93 (princ. advisor Jean Lemaitre); Visiting Research Assistant at Northwestern University.
- 4. Laurent Granger, Effect of Composition on Basic Creep of Concrete and Cement Paste, Ph.D. Thesis, E.C.P.C. (Ecole Nationale des Ponts et Chausée), Paris, France, 1993 (princ. advisor Paul Acker); Visiting Research Assistant at Northwestern University.
- 5. Anders Boe Hauggaard, Microprestress-Solidification Theory for Concrete Creep, Ph.D. Thesis 1996, Technical University of Denmark, Lyngby, 1995 (prepared mainly at NU, supported by 6 month Danish Fellowship).
- 6. Jiří Nemeček, Microplane modeling of concrete, part of Ph.D. dissertation at CTU Prague (principal advisor Z. Bittnar).
- Alexander Steffens, Mathematical Model for Aggregate-Silica Reaction in Concrete. Part of Ph.D. Thesis, T.U. Braunschweig, Germany 1999 (6 months at NU during 1998).
- Gianluca Cusatis, Microstructure Based Lattice Model for Concrete, PhD. Thesis 2002, Politecnico di Milano, Italy (1 year at NU, 1999–2000, supported by Italian fellowship).
- 9. Giovani de Luzio, Nonlocal Microplane Model for Concrete PhD. Thesis 2003, Politecnico di Milano, Italy (1 year at NU, 2000-2001, supported by Italian Fellowship).
- 10. Martin Wierer, Computational Modeling of Composites Predoctoral Fellow (doctoral student at CTU Prague, principal advisor J. Šejnoha), 4 months in 2003.
- 11. Miroslav Vořechovský, Stochastic fracture mechan-16. Louis Paul Goncalves Da Costa, Numerical ics and size effect (doctoral student at VUT Brno), Ful-

bright Fellow, 8 months in 2003-04 (with supplement from Bažant's NSF grant).

- 12. Jan Eliáš, Dissertation on Stochastic Modeling od Damage and fracturing in Concrete, one year 2013-2014 at NU, defended at TU Brno, Czech Rep.
- 13. Cunbao Li, Spherocylindrical microplane model for shale (Nov. 2015 Sept. 2017). Doctoral student; dissertation submitted to Sichuan University, Chengdu, China.
- 14. Abdullah Dönmez, prepared dissertation defended at Istanbul Technical University, on Size effect in punching shear and Interaction of drying and autogenous shrinkage, Supported from Turkey, at NU Apr. 2014–May 2015.
- 15. Cunbao Li, Sichuan University, Chengdu, supported from China (at NU Nov. 2015 Sept. 2017). PhD in China in November 2017.

Appendix II: Other Theses Prepared Fully or to a Major Extent under Bažant's Advisorship at Northwestern but Defended at Other Universities

- 1. Abu Bakr Wahab (PhD student from University of Khartoum, Sudan, Stability of parallel crack system in concrete, 1979.
- 2. M. Elisabeth (Betsy) Karr (M.S. Student on NU Summer Institute Fellowhip), Size effect in high strength concrete, 1989.
- 3. Jerôme Pelan, Inelastic buckling study of concrete columns, Graduation Thesis at Ecole polytéchnique, Paris-Palaiseau, France, Visiting Fellow at Northwestern University, spring 1992.
- 4. Marc Heitz, A study of quasibrittle fracture, Graduation Thesis at Ecole polytéchnique, Paris–Palaiseau, France, Visiting Fellow at Northwestern university, spring 1992.
- 5. Phillipe Hein, Finite element whose distribution function has an excess number of parameters determined by optimum fitting. Graduation Thesis at Ecole polytéchnique, Paris-Palaiseau, France, Visiting Fellow at Northwestern University, spring 1993.
- 6. Michael Thoma, Size effect in pullout failure of fibers or reinforcing bars, Diploma Thesis (Diplomarbeit, Lehrstuhl A für Mechanik), Technische Universität München, Germany; Visiting Research Assistant at Northwestern University, Dec. 1992–June 1993.
- 7. Olivier Barrère, Fatigue fracture and size effect in fibre-reinforced concrete, Thesis, E.N.S. de Cachan, France, 1996.
- 8. Louis da Costa, Numerical simulation of impact on concrete walls. Visiting Fellow (3 months at NU), from Ecole centrale, France, 1996.
- 9. Fredéric Beltoise. *Modeling of rapid heating of concrete wall*, princ. advisor for Ph.D. G. Pijaudier-Cabot, E.N.S. de Cachan, France, Visiting Fellow at NU, summer

1997.

- 10. Gianluca Cusatis (particle model for concrete with interface damage and fracturing, and extension of microprestress-solidification theory to variable temperature), princ. advisor Luigi Cedolin, dissertation defended at Politecnico di Milano, 1-year 1999-2000 under grant from Italy.
- 11. Andreas Kalkbrenner, Predoctoral Fellow, graduate student on leave from Stuttgart University (Prof. H. Reinhardt), Visiting Fellow, Oct. 2001 Jan. 2002.
- 12. Olivier Gouirand, Graduation Thesis at Ecole polytéchnique, Paris-Palaiseau, France, Visiting Fellow, April-July 2004, Study of microplane model for fiberreinforced concrete (support from France, plus supplement from Bažant's project).
- 13. Olivier Abellan, Graduation Thesis at Ecole polytéchnique, Paris–Palaiseau, Frace, Visiting Fellow, Approximations of aging coefficient for concrete creep, April–July 2005.
- 14. Pierre Madelpech, Graduation Thesis at Ecole polytéchnique, Paris–Palaiseau, Frace, Visiting Fellow, Computer modeling of skin wrinkling in sandwich plates, April–July 2005.
- 15. Mathieu Verdure, Graduation Thesis at Ecole polytéchnique, Paris-Palaiseau, France, Visiting Fellow, One-dimensional model for progressive collapse of tall buildings, April–July 2006.
- 16. Marc de Maréschal, Graduation Thesis at Ecole polytéchnique, Paris-Palaiseau, France, Visiting Fellow, Size effect in punching shear of reinforced concrete slabs, April-July 2007.

Appendix III: Theses at Other Universities Advised or Co-Advised by Bažant During His Visiting Appointments at These Universities

- 1. M. A. Mukaddam, Creep analysis of concrete structures at elevated temperatures, Ph.D. Dissertation, University of California, Berkeley, Ph.D., 1968 (princ. advisor Boris Bresler).
- 2. B.M. Jensen, The effect of temperature on the thermal dilatation of concrete conditioned to a given humidity, M.S. Thesis, 1968, University of California, Berkeley, 1968 (princ. advisor Boris Bresler).
- 3. Jan Byfors, *Concrete creep at early ages*, CBI, Royal Institute of Technology, Stockholm, Sweden, 1977 (coadvisor).
- 4. L. Resende, *Progressive damage continuum model for rock*, Ph.D. Dissertation, University of Cape Town, South Africa, 1984 (princ. advisor John B. Martin).
- 5. Jan Erik Jonasson, *Concrete Durability*, Ph.D., Lulea University, Sweden 1994 (also, principal examiner).

Appendix IV. Postdoctoral Associates and Visiting Scholars Supported Fully of Partly from Bažant's Projects

- 1. Geir Horrigmoe, Trondheim U.
- 2. Hideomi Ohtsubo (co-advisor: S. Nemat-Nasser)
- 3. Abu Bakr Wahab, Univ. of Khartoum, Sudan
- 4. R.P. Khetan (with Prof. Achenbach), India
- 5. Atilla Ansal, Bosphorus University, Instanbul
- 6. Luigi Cedolin, Politecnico di Milano
- 7. Pietro Gambarova, Politecnico di Milano
- 8. Zekai Celep, TU Istanbul
- 9. Henrik O. Madsen, Danish Eng. Acad., Lyngby
- 10. Tong-Sheng Wang, Anhui, China
- 11. David Darwin, U. of Kansas
- 12. Andrej Pitoňák, ÚSTARCH, Slov .Ac. Sci. Bratislava
- 13. Alexander Zubelewicz, IPPT, Warsaw
- 14. Michael P. Wnuk, South Dakota State U.
- 15. Soo-Gon Lee, Korea
- 16. Patrick Droz, EFFL, Lausanne
- 17. Jacky Mazars, ENS de Cachan, Paris
- 18. Yves Berthaud, ENS de Cachan, Paris
- 19. Joško Ožbolt, Stuttgart U. and Zagreb U.
- 20. Jianying Pan, China Acad. of Railway Sci., Beijing
- 21. Jose More Ramos, Lab. Nat. Engeh. Civil, Lisbon
- 22. Mehmet Basar Çivelek, on leave from IIT Chicago
- 23. Sıddık Sener, Gazi U., Ankara
- 24. Kang-Ming Xu, Wuhan Inst. Hydr. Elec. Engrg.
- 25. Zhiping Cao, Yellow River Cons.Com., Zheng-Zhou
- 26. Y.W. Kwon, Korea
- 27. Toshiaki Hasegawa, Shimizu Co., Tokyo
- 28. M. Elisabeth (Betsy) Karr
- 29. Ignacio Carol, UPC, Barcelona
- 30. Jaime Planas, UP Madrid
- 31. Vladimír Křístek, CTU Prague
- 32. Rodrigue Desmorat, ENS de Cachan, Paris
- 33. Anders Boe Hauggaard, U. of Denmark, Lyngby
- 34. Jaroslav Navrátil, TU Brno, Czech Rep.
- 35. Richard Kohoutek, Univ. of Wollongong, Australia
- 36. Jiří Nemeček, CTU Prague
- 37. Borek Patzák, CTU Prague
- 38. Jerôme Pelan, EP, Paris-Palaiseau
- 39. Marc Heitz, EP, Paris-Palaiseau
- 40. Jan L. Vítek, CTU Prague
- 41. Stuart G. Reid, U. of Sydney
- 42. Larissa Molina, CBI, Stockholm
- 43. B. Pohl, EP, Paris-Palaiseau
- 44. Phillipe Hein, EP, Paris-Palaiseau
- 45. Michael Thoma, TU Munich, Germany
- 46. Olivier Barrère, EP, Paris-Palaiseau
- 47. Louis da Costa, EP, Paris-Palaiseau
- 48. Fredéric Beltoise, EP, Paris-Palaiseau
- 49. M. Verdure, EP, Paris-Palaiseau
- 50. Shang-Ping Bai, Inst. of Sci. & Technol., Shanxi
- 51. Min Chen, Water Conservancy Hydroel. Power Res.
- 52. Imre Bojtár, TU Budapest
- 53. Zhishen Wu, Kyoto University (later Nanjing)
- 54. Laurent P. Granger, EDF, France

- 55. Xiao-Xin Cui, Beijing Polytechnic Inst.
- 56. PeteOr J. Simeovov, Bulgarian Acad. Sci., Sophia
- 57. E. A. El Traify, Univ. of Khartoum, Sudan
- 58. Wei Yi Gan, Northw. Invest./Design Inst., Xi'an
- Christian Huet, Ecole des Ponts et Chaussees, Paris
 Milan Holický, Klokner Inst., CTU (ÇVUT), Prague
- 61. Yuan-Neng Li, China
- 62. An-Ping Hong, China
- 63. Wei-Hwa Gu (co-advisor K. Faber)
- 64. Bořek Patzák, CTU, Prague
- 65. Franz-Josef Ulm, LCPC, Paris
- 66. Alexander Steffens, Stuttgart University
- 67. Gianluca Cusatis, Politecnico di Milano
- 68. Giovani de Luzio, Politecnico di Milano
- 69. Jan Červenka, Červenka Co., Prague
- 70. Petr Kabele, CTU, Prague
- 71. Drahomír Novák, TU Brno, Czech Rep.
- 72. Daniele Ferretti, U. of Parma, Italy
- 73. Jan Sládek, Slovak Academy of Sciences, Bratislava
- 74. Reza Vaziri, UBC, Vancouver
- 75. Libor Jendele, Červenka Co., Prague
- 76. Martin Wierer, CTU Prague
- 77. Miroslav Vořechovský, TÜ Brno, Czech Rep.
- 78. Arash Yavari, Caltech (as external collaborator)
- 79. Petr Pařík, Czech Acad. Sci. Prague
- 80. Ferhun Caner, UPC, Barcelona
- 81. Peter Grassl, Chalmers U., Göteborg, Sweden
- 82. Vít Šmilauer, CTU Prague
- 83. Goangseup Zi, Korea University, Seoul
- 84. Yun Lee, KAIST, Korea
- 85. Jian-Ying Wu, Zhejiang Univ., Hangzhou, China
- 86. Jan Eliáš, TU Brno, Czech Rep.
- 87. Jörg Unger, BAM, Berlin
- 88. Vanja Travaś, U. of Zagreb, Croatia
- 89. Roman Wendner, BOKU, Vienna
- 90. Jan Vorel, CTU, Prague
- 91. Weihui Duan, Monash University, Melbourne
- 92. Xin Chen, Univ. of Mining & Technology, Beijing
- 93. An Duan, Zhejiang University, Hangzhou, China
- 94. Petr Havlásek, Czech Technical University in Prague 95. K Darunkumar Singh, IIT Guwahati, Assam, India
- 96. Matthieu Vandamme, Université Paris Est
- 97. Abdullah Dönmez, Istanbul Techn. University, Turkey (Vis. Felow, 2014-15)
- 98. Yewang Su, Tsinghua U. and National Academy of Sciences, Beijing
- 99. Enrico Masoero, Univ. of Newcastle, U.K.
- 100. Kedar Kirane, Exxon Corp., Houston, TX
- 101. Zaoyang Guo, Prof., Beihang University, Beijing
- 102. Miguel Bessa, in collab. with W-K Liu
- Mohammad Javad Abdolhosseini Qomi, Univ. of California, Irvine
- Marco Salviato (Univ. di Padova, Jan. 2013 Aug. 2015, became Assist. Prof. U. of Washington, Seattle, Aero Dept.)
- 105. Hoang Nguyen, Saigon (Ho Chi Min City), Vietnam-US Foundation (Vis. Fellow, later Bažant's PhD student)
- Cunbao Li, Sichuan University, Chengdu, China (Nov. 2015 - Sept. 2017)

- 107. Huyjin Lee, Grad. Res. Assistant (2016-2018, from Korea Uniersity)
- 108. Weixin Li, postdoc, after a PhD at NU under Prof. Cusatis' advisorship
- 109. Abdullah Dönmez, Istanbul Techn. University, Turkey (Vis. Scholar, 2019-2020)

Appendix V. Visiting Professors (supported partly or fully on ZPB grants)

- Jaime Planas, Professor on leave from Universidad Politecnica de Madrid, 1994 to write a joint book)
- Milan Jirásek (Eschbach Prof.), Professor on leave from CTU Prague, 2011 (to write a joint book)
- Ferhun Caner, Professor on leave from UPC Barcelona, summers 2011, 2012, 2013, 2014 (to work on quasibrittle constitutive models)
- Goangseup Zi, Professor on leave from Korea University, summer 2013 (to work on microplane constitutive model)

Technicians (paid from grants, since 1969):

John Schmidt, Samuel Meiri, Marvin Hagen, Steve Albertson, John Chirayil, John Bayldon (previously at CTU Prague: M. Kounovská, 1963-67, at U. of Toronto: E. Ezra, 1967)