

**Prof. Dr. M. Farshad****List of Published Papers**

- (1) M. Farshad, "Mathematical Models for the Electro-Mechanical Properties of Intact Bones", Proc. of Bone Measurement Conference, Chicago, 1970.
- (2) M. Farshad, "Mechanical Properties of Intact Bone", Proc. 9th International Conference on Medical and Biological Engineering, Chicago, 1971.
- (3) M. Farshad, & G. Ahmadi, "Perturbation Solution to the Problems of General Orthotropic Rectangular Plates", Iranian J. Sci. & Tech., Vol. 1, No. 2, Sept. 1971.
- (4) M. Farshad & M. Shahinpoor, "Beams on Bilinear Elastic Foundations", Int. J. of Mech. Sciences, Vol. 14, pp. 441-445, 1972.
- (5) M. Farshad, "Moving Shear Loads on the Surfaces of an Inhomogeneous Elastic Half Space with Transition Layers", Indian J. of Tech., Vol. 11, March 1973.
- (6) G. Ahmadi & M. Farshad, "On the Continuum Theory of Solid-Fluid Mixture-A Superimposed Model of Equipresent Constituents", Indian J. of Tech., Vol. 12, May 1974.
- (7) M. Farshad & I. Tadjbakhsh, "Optimum Shape of Columns with General Conservative End-Loading", J. of Optimization Theory and Applications, Vol. 11, No. 4, April, 1973.
- (8) M. Farshad and G. Ahmadi, "The Effect of Boundaries on Wave Propagation in Media with Microstructure-Reflection of Plane Waves at a Free Plane Boundary", Bulletin of the Seismological Society of America, Vol. 63, No. 5, October 1973.
- (9) M. Farshad, "On General Conservative End-Loading of Pretwisted Rods", Int. J. Solids and Structures, Vol. 9, pp. 1361-1371, 1973.
- (10) M. Farshad, "Stresses in Rotating Disks of Materials with Different Compressive and Tensile Moduli", Int. J. Mech. Sci, Vol. 16, pp. 559-564, 1974.
- (11) M. Farshad, "Optimum Shape of Continuous Columns", Int. J. Mech. Sci, Vol. 16, 1974.
- (12) G. Ahmadi, & M. Farshad, "On the Dynamic Response of A Generally Orthotropic Plate to Random Load", Iranian J. Sci. & Tech. Vol. 2, No. 4, July 1973.
- (13) M. Farshad, "Some Considerations on Timoshenko Bar Problem Subjected to Nonconservative Loading", J. of Applied Mech., pp. 535-536, June 1974.
- (14) M. Farshad, & G. Ahmadi, "On Vibrations of Bounded Anisotropic Inhomogeneous Elastic Media", Iranian, J. Sci. & Tech., Vol. 3, No. 2, pp. 74-85 1974.
- (15) M. Farshad, & G. Ahmadi, "Effect of Boundaries on Wave Propagation in Media with Microstructure: II, Surface Waves in a Half-Space", Bulletin of the Seismological Society of America, Vol. 64, No. 2, pp. 387-392, 1974.
- (16) M. Farshad, "Variations of Eigenvalues and Eigenfunctions in Continuum Mechanics", AIAA Journal, Vol. 12, No. 4, April 1974.
- (17) G. Ahmadi, & M. Farshad, "On Dynamics of Disordered Chains", Industrial Mathematics, Vol. 26, Part 1, pp. 1-10, 1976.
- (18) M. Farshad, "On General Conservative Loading of Naturally Curved and Twisted Funicular Rods", Int. J. Solids and Structures, 1974.
- (19) G. Ahmadi, & M. Farshad, "Theory of Nonlocal Plates", Letters in Applied and Engineering Sciences, Vol. 1, pp. 529-541, 1974.
- (20) I. Tadjbakhsh, & M. Farshad, "On Conservatively Loaded Funicular Arches and their Optimal Design", Optimization in Structural Design, IUTAM Symposium, Poland, 1973, Springer Verlag Publication, pp. 215-228, 1975.
- (21) M. Farshad, "A Self-Adjointness Study of a Class of Elastomechanic Problems in Bars", Iranian. J. of Sci. & Tech. Vol. 4, pp. 71-75, 1975.
- (22) M. Farshad, "Stresses in Sheets with Backing", J. of the Franklin Inst. January, Vol. 229, No. 1, pp. 1-7, 1975.

- (23) M. Farshad, "Stability of Systems with Multiple Motion-Dependent Loading", *AIAA Journal*, Vol.13, No. 4, pp. 517-518 1975.
- (24) K. Firoozbakhsh & M. Farshad, "On Minimum Weight Funicular Arches", *Mechanics Research Communications*, Vol. 3, pp. 269-275, 1975.
- (25) A. Vafai, & M. Farshad, "Investigation of Pointed Domes- Part I: Theory", *Building and Environment*, Vol. 11, No. 2, pp. 81-85, 1976.
- (26) A. Vafai, & M. Farshad, "Investigation of Pointed Domes- part II: Experiment, *Building and Environment*, Vol. 11, No. 2, pp. 87-90, 1976.
- (27) M. Farshad, & D. Isfahanian, "A Research on a Seal Discovered from the Excavation in Susa" (In Persian), *Barrasihaye Tarikhi*, No. 6, Tenth year, 1976.
- (28) A. Vafai, M. Farshad, and A. Ahmadi, "Determination of Modulus of Elasticity of Wood from Vibrating Reed Measurements", *Fiber Science and Tech.* (9), pp. 1-9, 1976.
- (29) M. Farshad, "On Optimal Form of Arches", *J. of the Franklin Inst.*, Vol. 302, No. 2, pp. 187-194, 1976.
- (30) M. Farshad, and B. Tabarrok, "Dualities in the Analysis of Cosserat Plate", *Mechanics Research Communications*, Vol. 3, pp. 399-406, 1976.
- (31) B. Tabarrok, and M. Farshad, "On Dualities in the Oscillations of Naturally Curved and Pretwisted Rods", *Int. J. of Solids and Structures*, Vol. 12, No. 8, pp. 601-609, 1976.
- (32) M. Farshad, and B. Tabarrok, "On Generalized Conjugate Analogy for Spatial Rods", *Int. J. of Mechanical Sciences*, Vol. 18, pp. 525-528, 1976.
- (33) M. Farshad, and D. Isfahanian, "Iranian Plateau-the Homeland of Original Truss Structures", *Iran, British Inst. for Persian Studies*, pp. 164-166, 1977.
- (34) M. Farshad, "On the Shape of Momentless Tensionless Masonry Domes", *Building and Environment*, Vol. 12, No. 2, pp. 81-85, March, 1977.
- (35) M. Farshad, "Engineering Investigation of Ancient Iranian Bows", (in Persian) *Barresihaye Tarikhi*, No. 3, Eleventh year, 1977.
- (36) K. Habibagahi, and M. Farshad, "Stability of Slopes- Stability of two Layer System", *Proc. of The 2nd Iranian Congress of Civil Engineering*, Shiraz, 1976.
- (37) M. Farshad, "On Lateral-Torsional Instability of Arches Subjected to Motion-Dependent Loading", *Journal of Sound and Vibration*, Vol. 53, No. 2, pp. 165-171, 1977.
- (38) M. Farshad, "Membrane Model of Surface Effects", *Journal of the Engineering Mechanics Division, Proceedings of ASCE*, Vol. 103, No. EM5, pp. 939-948, 1977.
- (39) M. Farshad, "A Short Chronology of the History of Engineering in Iran", (in Persian) *Barrasihaye Tarikhi*, No.3, Twelfth year, 1978.
- (40) M. Farshad, "On Incremental Deformations of Initially Stressed Media with Couple Stresses", *Journal of the Franklin Institute*, Vol. 305, No. 3, pp. 125-135, 1978.
- (41) M. Farshad, and I. Tadjbakhsh, "Travelling-Wave-Induced Instability of Structures", *Journal of the Franklin Institute*, Vol. 305, No. 6, pp. 343-350, 1978.
- (42) G. Ahmadi, I. Tadjbakhsh, and M. Farshad, "On the Response of Nonlinear Plates to Random Loads", *Acoustica*, Vol. 40, No. 5, pp. 316-322, 1978.
- (43) M. Farshad, "Stability of Cantilever Plates Subjected to Biaxial Subtangential loading", *Journal of Sound and Vibration*, Vol. 58, No. 4, pp. 558-561, 1978.
- (44) M. Farshad, and D. Isfahanian, "Iranian Plateau-the Home-land of Original Truss Structures", *J. American Oriental Society*, Vol. 98.3, pp. 248-250, 250, 1978.
- (45) M. Farshad, "Aspects of the History of Engineering in Iran", (in Persian), *Barrasihaye Tarikhi*, No.1, Thirteenth year, 1979.
- (46) M. Farshad, and G. Ahmadi, "Influence of Loading Behavior on the Stability of Cylindrical Shells", *J. of Sound and Vibration* 62(4), pp. 533-540, 1979.
- (47) G. Ahmadi, and M. Farshad, "On the Stability of Cylindrical Shells Subjected to Random Loading", *Acoustica*, 1979.
- (48) A. Vafai, and M. Farshad, "Experimental Study of Lattice Domes", *Architectural Science Review*, 1979.

- (49) A.A. Akbarzadeh, and M. Farshad, "On Sculpturic Design of Structures", Computer Aided Design, Vol. 11, No. 1, pp. 33-35, 1979.
- (50) M. Farshad, "On Deformation-Dependent Loading in the Theory of Elastic Stability", Proc. of Eight U.S. National Congress of Applied Mechanics, Los Angeles, 1978.
- (51) A. Vafai, and M. Farshad, "Theoretical and Experimental Study of Prefabricated Funicular Shell Units", Int. J. of Building and Environment, Vol. 14, No. 3, pp. 209-216, 1979.
- (52) A. Vafai, and M. Farshad, "Modulus of Elasticity of Wood in Standing Trees", Wood Science, Vol. 12, No. 2, pp. 93-97, 1979.
- (53) M. Farshad, "Studies on the Structural Aspects of Nuclear Power Plants-Static Analysis of Containment Shell", CE report, University of Shiraz.
- (54) M. Farshad, "Configurations of momentless Extensible Rods", International Journal of Mech. Sciences, Vol. 19, pp. 113-119, 1979.
- (55) M. Farshad, "Wave Propagation in Prestressed Curved Rods", Journal of the Engineering Mechanics Division, ASCE, Vol. 106, No. EM 2, 1980.
- (56) A. Vafai, and M. Farshad, "A study of H-P shell Structures", Architectural Science Review, 1980.
- (57) A. Vafai, and M. Farshad, "A Study of Prefabricated Cylindrical Shells", Journal of the Engineering Mechanics Division, ASCE, Vol. 106, No. EM 2, 1980.
- (58) M. Farshad, "A Research on the Philosophy of Iranian History", Farvaha, Tehran, No. 6-7, pp. 648-689, 1984.
- (59) M. Farshad, "Response of Structures to Ground Surface Rotational Motion", Presented in the 19th Midwestern Mechanics Conference, Ohio, U.S.A, 1985.
- (60) B. Tabarrok, M. Farshad, and H. Yi, "Finite element formulation of Spatially Curved and Twisted Rods", Presented in the First World Congress on Computational Mechanics, Texas, 1986.
- (61) M. Farshad, and B. Tabarrok, "On Stability Equation of Spatial Rods-A Technical Theory", Transactions of CSME, Vol. 11, No. 4, pp. 229-235, 1987.
- (62) M. Farshad, and B. Tabarrok, "A Simplified Stability Theory of General Shells", Int. J. of Solids and Structures, Vol. 25, No. 3, pp. 235-245, 1988.
- (63) M. Farshad, and B. Tabarrok, "Systems Perspectives in Applied Mechanics", Int. Journal of General Systems, Vol. 14, pp. 45-47, 1988.
- (64) B. Tabarrok, M. Farshad, and H. Yi, "Finite Element Formulation of Spatially Curved and Twisted Rods", Comp. Meth. in Appl. Mech. and Eng. Vol. 70, No. 3, pp. 275-299, 1988.
- (65) M. Farshad, and A. Vafai, "Research-Developmental Study of Prefabricated Shells", Symposium on Concrete and Concrete Structures in the Middle East 1987, Saudi Arabia, Riyadh, April 25-29, Vol. II, pp. 582-607, 1987.
- (66) A. N. Sinclair, and M. Farshad, "A Comparison of three Methods for Determining Elastic Constants of Wood", Journal of Testing and Evaluation, JTEVA, Vol. 15, No. 2, pp. 77-86, March 1988.
- (67) M. Farshad, "Precast Concrete Shells", (in Persian), Symposium on Concrete and its uses, Conference Proceeding by Building and housing Research Center, Tehran, 1987.
- (68) M. Farshad, and N. Talebbeydokhti, "A Study of Dams on Kur River", First Symposium on Large Dams, Tehran, 1987.
- (69) B. Tabarrok, A.N. Sinclair, M. Farshad, and H. Yi, "On the Dynamics of Spatially Curved and Twisted Rods-A Finite Element Formulation", Journal of Sound and Vibration, Vol. 123(2), pp 315-326, 1988.
- (70) M. Farshad, "Aspects of Concrete Shells-Analysis and Design", paper presented in the International conference- concrete 67 held by Iranian Plan Organization, Tehran, 1988.
- (71) M. Farshad, "The knowledge of the Ancients about Materials", paper presented at the seminar on Materials of Construction, held by the Iranian Plan Organization in collaboration with the Building and Housing Research Center, Tehran, 1989.

- (72) M. Farshad, "A survey of analysis and design of concrete Silos", paper presented at the seminar on concrete Silos, Tehran, 1989.
- (73) M. Farshad, G. Karami, and M.R. Banan, "A Theoretical and Numerical Finite Element Analysis of Spatial Rod Systems", *Comp. Methods in Appl. Mech. and Eng.* Vol. 13, pp. 111-132, 1989.
- (74) M. R. Banan, G. Karami, and M. Farshad, "Finite Element Analysis of Curved Beams on Elastic Foundations", *Computers and Structures*, Vol. 32, pp. 45-53, 1989.
- (75) M. Farshad, "Engineering Traditions in Iran", *Name'-ye Farhang-e Iran*, Bonyad Nieshabour (in Persian) No. 22, Tehran, pp. 5-29, 1989.
- (76) M. R. Banan, G. Karami, and M. Farshad, "Non-Linear Theory for Elastic Spatial Rods", *International J. of Solids and Structures*, Vol. 27, pp. 713-724, 1991.
- (77) M. Farshad, "Precast Concrete Shells", (in Persian) in: *Proc. of Seminar on Concrete and its Uses*, Building Research Institute, Tehran, pp. 349-359, 1988.
- (78) G. Karami, and M. Farshad, "Finite Element Stability Analysis of Curved Elements", *Paper Presented at the Twenty-First Midwestern Mechanics Conference*, Houghton, Michigan, Aug. 13-16, 1989. *Developments in Mechanics* Vol. 12, Edited by: J. B. Ligon, H. W. Lord, M. Vable, V.W. Snyder, G. Trevino, pp. 491-492, 1989.
- (79) G. Karami, M. Farshad, and M. Yazdchi, "Free Vibrations of Spatial Rods-A Finite Element Analysis", *Communications in Applied Numerical, Analysis*, Vol. 6, pp. 417-428, 1990.
- (80) G. Karami, M. Farshad, M.R. Banan, "Spatial Buckling of Arches-A Finite Element Analysis", *J. of Computers and Structures*, Vol. 34, No. 4, pp. 565-576, 1990.
- (81) M. Farshad, "A Survey of Analysis and Design of Harbor and Offshore Structures", *Proc. First Int. Conference on Port and Marine Structures*, Tehran, May 28-30, 1990.
- (82) M. Farshad, "A General Dynamic and Stability Analysis of Spatial Rod Systems", *Proc. Second World Congress on Computational Mechanics*, Stuttgart, F.R.G. Aug. 27-31, 1990.
- (83) M. Farshad, "A Systemic Outlook to Urban Rehabilitation", *Proc. of Second Conference on Urban Rehabilitation*, Tehran, 1990.
- (84) M. Farshad, "Criteria for the Design, Analysis, and Construction of Concrete Shells", paper presented at Concrete 69 Seminar, Tehran, May 1990.
- (85) M. Farshad, "Systems Approach to Architectural Rehabilitation", *Proc. of Conference on Rehabilitation of Old Buildings*, University of Science and Technology, Narmak, Tehran, 1990.
- (86) M. Farshad, "Research and Developments in Shell Structures", paper presented at the Third International Iranian Congress of Civil Engineering, Shiraz, May 1990.
- (87) P. Flüeler and M. Farshad, "Slow Burst Failure Investigation of HDPE Pipes", *Swiss Federal Laboratories for Materials Testing and Research (EMPA) Report No.132 939*, May 1991.
- (88) M. R. Banan, G. Karami, and M. Farshad, "Non-linear Theory for Elastic Spatial Rods", *Int. J. Solids and Structures*, Vol. 27, No. 6, pp. 713-724, 1991.
- (89) G. Karami, M. Farshad, and M. R. Banan, "Pretwisted rods- An efficient Finite Element modeling", *Finite Elements in Analysis and Design* 9, pp.77-85, 1991.
- (90) M. Farshad and P. Flüeler, "Crack Propagation in Cylindrical Shells and Pipes", *Swiss Federal Laboratories for Materials Testing and Research, EMPA Report 140 723*, 1992.
- (91) P. Flüeler and M. Farshad, "Schnelle Rissausbreitung- Ein Besonderheit im Bruchverhalten von Kunststoff-Rohren", *gwa, (Gas, Wasser, Abwasser, Schweizerische Verein des Gas-und Wasserfaches)*, 72 Jahrgang, 5/92, Seiten 350-352, 1992.
- (92) M. Farshad and P. Flüeler, "Behavior of Pressurized Polymer Pipes- Experiments, Theoretical Modeling and Design Recommendations", *Swiss Federal Laboratories for Materials Testing and Research, EMPA Report No. 138 815*, July 1992.
- (93) P. Flüeler and M. Farshad, "End Effects on Long-Time Pressure Testing of PVC Pipes", *Proc. VIII International conference on Plastics Pipes*, The Netherlands, pp. II-1 to II11, 1992.
- (94) M. Farshad and P. Flüeler, "Shock Behavior of HDPE Pipes", *Proc. VIII International conference on Plastics Pipes*, The Netherlands, pp. I-1 to I-11, 1992.

- (95) M. Farshad, and P. Flüeler, "Buckling of Polymer Pipes under External Pressure", Swiss Federal Laboratories for Materials Testing and Research, EMPA Report No. 138'816, December 1992.
- (96) M. Motavalli, M. Farshad, and P. Flüeler, "Buckling of Polymer Pipes Under Internal Pressure", J. of Materials and Structures, Vol. 26, pp. 348-354, 1993.
- (97) M. Farshad, and P. Flüeler, "Crack propagation in cylindrical shells", Int. J. Engineering Fracture Mechanics, Vol. 44, No. 6, pp. 937-947, 1993.
- (98) M. Farshad, A. Necola, and P. Flüeler, "Soil - Box Investigation of Recycled Polymer Pipes", Swiss Federal Laboratories for Materials Testing and Research, EMPA Report No. 137 657 (F/1), January 1993.
- (99) M. Farshad and M. Motavalli, "Stiffness of Polymer Pipe Sections", Proc. ASCE/ASME/SES Meeting 93, Charlottesville, Virginia, Vol2, p 678, June 1993.
- (100) M. Farshad, "Mathematical Modeling in Engineering- A Systems Approach", Proc. International Congress on Computational Methods in Engineering, Shiraz, Iran, Vol. 4, pp. 355-362, 1993.
- (101) S. Sohrabpour, R. Naghrabadi, and M. Farshad, "An Improved Finite Element Approach to Large Deformation Analysis of Solids", Iranian Journal of Science and Technology, Vol. 17, No. 1, pp. 37-49, 1993.
- (102) M. Farshad, "Adaptive Control of Active Rods", Fifth International Symposium on Robotics and Manufacturing, Hawaii, USA, August 1994.
- (103) M. Farshad and P. Flüeler, "Intelligent materials and Structures", EMPA Report No. 147'472, Feb. 1994.
- (104) M. Farshad, and P. Flüeler, "Dynamic Fracture Toughness of PE-HD Pipes, Rapid Crack Propagation in PE-HD Pipes", EMPA Report No. 151'317/1, May 1994.
- (105) M. Farshad and P. Flüeler, "Crack Propagation in Prestressed Plates", Int. J. Engineering Fracture Mechanics, Vol. 50, No.1, pp. 41-50, 1995.
- (106) P. Flüeler, M. Farshad, and A. Roller, "Punching Resistance of Mats Made of Recycled PVC and Rubber in Underground Construction", Proc. RILEM Workshop on "Disposal and Recycling of Organic (Polymeric) Construction Materials", (Japan), Y. Ohama (ed), E&FN Spon, London, pp. 199-206, 1995.
- (107) M. Motavalli, M. Farshad, and P. Flüeler, "Noise Abatement by Panels of Recycled Vehicle Tires", Proc. RILEM Workshop on "Disposal and Recycling of Organic (Polymeric) Construction Materials", (Japan), Y. Ohama (ed), E&FN Spon, London, pp 181-188, 1995.
- (108) P. Flüeler and M. Farshad, "Arrest of Crack Propagation in Polymer Pipes", Journal of Materials and Structures, Vol. 28, pp. 108-110, 1995.
- (109) M. Farshad and P. Flüeler, "Crack propagation in prestressed plates", Proc. 15th Canadian Congress of Applied Mechanics, CANCAM'95, University of Victoria, Canada, May 28- June 2, 1995, Vol. 1, pp. 218-219, 1995.
- (110) Farshad and P. Flüeler, "Rapid Crack Propagation in PE-HD Pipes", Proc. 15th Canadian Congress of Applied Mechanics, CANCAM'95, University of Victoria, Canada, May 28- June 2, 1995, Vol. 1, pp. 222-223, 1995.
- (111) P. Flüeler and M. Farshad, "Arrest of rapid crack propagation in polymer pipes", Proc. 15th Canadian Congress of Applied Mechanics, CANCAM'95, University of Victoria, Canada, May 28- June 2, 1995, Vol. 1, pp. 220-221, 1995.
- (112) M. Farshad, "Intelligent Materials and Structures", Scientia Iranica, Vol.2, No. 1, pp. 65-87, 1995.
- (113) P. Flüeler and M. Farshad, "Arrest of rapid crack propagation in polymer pipes", XI Plastics Pipes Conference, Edinburgh, UK, 1995.
- (114) M. Farshad and P. Flüeler, "Buckling of polymer pipes", XI Plastics Pipes Conference, Edinburgh, UK, 1995.
- (115) R. Brönnimann, M. Farshad, P.N. Nellen, and U. Sennhauser, "Measurement of Crack Propagation in Polymer Pipes with Embedded Optical Fibers", Proc. Smart Structures: Optical

- Instrumentation and Sensing Systems, Munich 19 June 1995, Editor: D.G. Uttamchandani, EURopst Series, SPIE Vol. 2509, pp. 12-19, 1995.
- (116) M. Farshad and P. Flüeler, „Buckling resistance of Polymer pipes under hydrostatic pressure“, *Plastics, Rubber and Composites Processing and Applications*, Vol. 25, No. 8, pp. 373-379, 1996.
- (117) M. Farshad and P. Flüeler, “On Internal stability problems in structured materials“, *Proc. Workshop on Modeling of Industrial Materials: Connecting Atomistic and Continuum Scales*, Jan. 7-11, University of California, Santa Barbara, USA, p54, 1996.
- (118) U. Meier and M. Farshad, „Connecting high performance fiber reinforced polymer cables of suspension and cable stayed bridges through the use of gradient materials, *Proc. Workshop on Modeling of Industrial Materials: Connecting Atomistic and Continuum Scales*, Jan. 7-11, University of California, Santa Barbara, USA, p56, 1996.
- (119) M. Farshad and P. Flüeler, "Buckling resistance of polymer pipes under hydrostatic pressure", *Plastics Rubber and Composites Processing and Applications*, Vol. 25, No. 8, pp. 373-379, 1996.
- (120) P. Flüeler and M. Farshad, "Arrest of rapid crack propagation in polymer pipes", *Plastics Rubber and Composites, Processing and Applications-An international Journal*, Vol. 25, No. 6, pp. 291-293, 1996.
- (121) Farshad, M., Flüeler, P., “On internal stability problems in structured materials”, In: *Workshop on modeling of industrial materials: connecting atomistic and continuum scales*, University of California at Santa Barbara, 7-11 January 1996. Pub. In: *Journal of computer-aided materials design* Vol. 3, No.1-3, S. 303-310, 1996.
- (122) M. Farshad and P. Flüeler, „Arrest of rapid crack propagation in polymer pipes“, *Plastics, Rubber and Composites Processing and Applications*, Vol. 25, No. 6, pp. 291-293, 1996.
- (123) M. Farshad, W.M. Wildenberg, and P. Flüeler, “Determination of shear modulus and Poisson’s ratio by anticlastic plate bending method“, *Materials and Structures*, Vol. 30, pp. 377-382, July 1997.
- (124) Schmidlin F.R., Rohner S., Hadaya K., Isellin C.E., Vermeulen B., Khan H., Farshad M., Niederer P., Graber P., "Le traitement conservateur du traumatisme rénal majeur", *Ann. Urol.*, 31, no 5, pp. 246-252, 1997.
- (125) M. Farshad, “Investigation of adhesives Properties and Mode II crack growth with anticlastic plate bending method”, *Proc. European Conference on Macromolecular Physics*, Lausanne, Switzerland, June 1-6, pp. 145-146, 1997.
- (126) M. Farshad und R. Paradies, R.H., „Qualitätssicherung bei FE-Simulation und-Analysen“, *Schweizer Ingenieur und Architekt*, Vol. 116, No.14, pp 214-217, 1998.
- (127) M. Farshad, "Investigation of Mode III Fracture Toughness with Anticlastic Plate Bending Method“, *Engineering Fracture Mechanics*, Vol. 60, No. 5-6, pp. 597-603, 1998.
- (128) M. Farshad and H.-R. Meyer Piening, „An Imperfection method for non linear buckling analysis of composite cylindrical shells“, *Proc. Fourth Int. Cof. on Computational Structures Technology*, Edinburg, 18-20 th July 1998.
- (129) M. Farshad, P. Flüeler, and R. Paradies, "Wrinkling of Sandwich Elements with Very Thin Facings", *Proc. 8th European Conference on Composite Materials ECCM-8*, Naples, Italy, 3-6 June 1998.
- (130) Farshad, "Investigation of Mode III Fracture Toughness with Anticlastic Plate Bending Method", *Proc. Fifth Int. Cof. on Composite Engineering (ICCE/5)*, USA, July 5-11, pp. 279-280, 1998.
- (131) Schmidlin F., Farshad M., Bidaut, L., Barbezat M., Becker C., Niederer P., Graber P., "Biomechanical Analysis and Clinical Treatment of Blunt Renal Trauma", *Swiss Surgery*, Vol. 4, pp. 237-243, 1998.
- (132) Schmidlin F., Farshad M., Bidaut, L., Barbezat M., Niederer P., Flüeler P., Graber P., *Simulation tridimensionnelle d'un traumatisme renal au moyen d'un modele à éléments finis*

- du rein, Conference Abstract 6e Congres de l'union des Sociétés chirurgicales suisses, Lausanne, 24-27. 6.1998
- (133) Farshad M., Barbezat M., Schmidlin F., Niederer P., Bidaut, L., Flüeler P., Graber P., "Ermittlung der Materialeigenschaften von Schweinsnieren im Rahmen einer Biomechanischen Analyse des Nierentraumas", Conference Abstract für 6e Congres de l'union des Sociétés chirurgicales suisses, Lausanne, 24-27, 1999.
- (134) Farshad M., Barbezat M., Flüeler P., Schmidlin F., Graber P., Niederer P., "Material Characterization of pig kidney in relation with the analysis of renal Trauma", Journal of Biomechanics, Vol. 32, pp. 417-425, 1999.
- (135) M. Farshad und P. Flüeler, "Schubmodul von Kunststoffen bestimmen", MP Materialprüfung, jahrg.41, No.3, seite 64-69, 1999.
- (136) M. Farshad und P. Flüeler, "Bestimmen der Mode-III-Brucheigenschaften von Kunststoffen", MP Materialprüfung, jahrg.41, No.4, Seite 128-131, 1999.
- (137) M. Farshad and P. Flüeler, "Large Prefabricated Thin-Faced Sandwich Elements for Antennae Coverage", Structural Engineering International, Vol. 9. No.4, pp. 292-297, 1999.
- (138) M. Farshad, Short Glass Fiber Reinforced Epoxy Foams, Conf. Proc. "Advancing with Composites 2000, May 9-11, Milan, Italy, pp. 201-208, 2000.
- (139) Farshad, M., "Investigation of adhesives properties and mode III crack growth with anticlastic plate bending method", In: European conference on macromolecular physics: Surfaces and interfaces in polymers and composites, EPFL, Lausanne, 1.-6. Juni 1997. Europhysics conference abstracts Vol. 21 B, pp145-146, 1997
- (140) Farshad, M., Flüeler, P., "Behavior of sandwich elements with very thin facings", In: 4th Int. conference on composites engineering (ICCE/4), Big Island of Hawaii, HI, 6. -12., suppl. Vol. 2 S. Juli 1997.
- (141) Farshad, M., Flüeler, P., Paradies, R.H., "Wrinkling of sandwich elements with very thin facings", In: ECCM-8, 8th European conference on composite materials: Science, technologies and applications, Neapel, 3.-6., Vol. 1, pp 551-558, Juni 1998.
- (142) Schmidlin, F.R., Farshad, M., Bidaut, L., Barbezat, M, et al, "Biochemical analysis and clinical treatment of blunt renal trauma", Swiss surgery Vol. 4, No. 5, pp 237-243, 1998.
- (143) Farshad, M., Flüeler, P., "Investigation of mode III fracture toughness using an anti-clastic plate bending method", Engineering fracture mechanics Vol. 60, No. 5-6, pp 597-603, 1998.
- (144) Farshad, M., "Investigation of mode III fracture toughness with anticlastic plate bending method", In: 5th Int. conference on composite engineering (ICCE/5), Las Vegas, 5. -11., PP279-280, Juli 1998.
- (145) Schmidlin, F.R., Iselin, C.E., Naimi, A., Rohner, S., Borst, F., Farshad, M., Niederer, P., Graber, P., "The Higher Injury Risk of Abnormal Kidneys in Blunt Renal Trauma", Scandinavian Journal of Urol Nephrol, Vol. 32, pp 388-392, 1998.
- (146) Farshad, M., Barbezat, M., Flüeler, P., et al, "Material characterization of the pig kidney in relation with the biomechanical analysis of renal trauma", Journal of Biomechanics Vol. 32, No. 5, pp 417-425, 1999.
- (147) Farshad, M., Flüeler, P., „Schubmodul von Kunststoffen bestimmen. Die Methode der antiklastischen Plattenbiegung“, Materialprüfung Vol. 41 No.3, pp 64-69, 1999.
- (148) Farshad, M., Flüeler, P., „Bestimmen der Mode-III-Brucheigenschaften von Kunststoffen“, Die antiklastische Plattenbiegung als Prüfverfahren. Materialprüfung Vol. 41, No. 4, pp 128-131,1999.
- (149) Farshad, M., Flüeler, P., "Large prefabricated thin faced sandwich elements for antenna coverage-II", In: Fifth int. conference on sandwich construction (Sandwich Construction 5), ETH Zürich, Vol.1, pp 157-168, 5.-7. September 2000.
- (150) Farshad, M., Fernandez, J., Short glass fiber reinforced epoxy foam-II. In: Fifth int. Conference on Sandwich Construction (Sandwich Construction 5), ETH Zürich, 5.-7. September, Vol.1, pp 241-249, 2000.

- (151) Farshad, M., Flüeler, P., “Antenna protection with prefabricated sandwich elements”, In: 22nd Int. SAMPE Europe conference on making the difference with innovative materials and processes, pp15-25, Paris, 27-29. March 2001.
- (152) Meyer-Piening, H.-R., Farshad, M., Geier, B., Zimmermann, R., “Buckling loads of CFRP composite cylinders under combined axial and torsion loading - experiments and computations”, *Composite structures* Vol. 53, No. 4, pp 427-435, 2001.
- (153) Farshad, M., “Stability control of active compressed rods with shape memory polymers”, *Journal of Thermoplastic Composite Materials* Vol.14, No.4, pp306-315, 2001.
- (154) Farshad, M., „ADAP Neues Rechenprogramm für die Dimensionierung und statische Analyse von Rohrleitungen“, *Gas-Wasser-Abwasser (gwa)* Vol. 82, No. 4, pp. 241-249, 2002.
- (155) Farshad, M., Rossini, P., Flüeler, P., CFK Zuelemente verankern. *Materialprüfung* vol. 44, no. 5, pp. 179-185, 2002.
- (156) Flüeler, P., Löwe, Ch., Farshad, M., Zwicky, P., Böhni, H., “The Sealing of Deep-Seated Swiss Alpine Railway Tunnels- New Evaluation Procedure for Waterproofing Systems”, 9<sup>th</sup> International Conference on Durability of Building Materials and Components, Brisbane, Australia, March 2002.
- (157) Farshad, M., “ADAP: A New Software for Automated Design and Analysis of Plastic Pipelines”, *Journal of Thermoplastics Composite Materials*, Vol. 16, pp171-181, 2003.
- (158) Farshad, M., Benine, A.N., Magnetoactive Elastomer Composites, *Proc. Euromat 03*, Lausanne, 2003.
- (159) Farshad, M., „Diagnose von Rohrleitungen – ein Expertensystem für Ausfallanalysen“, *gwa*, No. 10, pp 715-724, 2003.
- (160) Farshad, M. and Flüeler, P., Drainage behavior of two-layered water-sealing polymeric systems, *Polymer Testing*, Vol. 23, pp 43-49, 2004.
- (161) Farshad, M. and Necola, A., “Effect of aqueous environment on the long-term behavior of glass fiber-reinforced plastic pipes”, *Polymer Testing*, Vol 23, No. 2, pp163-167, 2004.
- (162) Snedeker, J.G., Niederer, P., Schmidlin, F.R., Farshad, M., Demetropoulos, C.K., Lee, J.B., Yang, K., “Strain-rate dependent material properties of the porcine and human kidney capsule”, to appear in *Journal of Biomechanics*, 2004.
- (163) Farshad, M., Benine, A.N., “Magnetoactive Elastomer Composites”, *Polymer Testing*, Vol . 23, pp347-353, 2004.
- (164) Farshad, M., Le Roux, M., “New magnetoactive noise abatement system”, *Polymer Testing*, Vol. 23, pp 855-860, 2004.
- (165) Farshad, M., “Two new criteria for the service life prediction of plastics pipes”, *Polymer Testing*, Vol. 23, pp 967-972, 2004.
- (166) Farshad, M., “ADAP – A new software for automated design and structural analysis of plastics pipelines”, *Proc. XII Plastics Pipes Conference*, 19th-22<sup>nd</sup>, Milan, Italy April 2004.
- (167) Farshad, M., “EFAP – An Expert system for failure analysis of plastics pipes”, *Proc. XII Plastics Pipes Conference*, 19th-22<sup>nd</sup>, Milan, Italy April 2004.
- (168) Farshad, M., Le Roux, M., and F. Clemens, “Magnetoactive fibers and fabrics”, Submitted for publication
- (169) Farshad, M., “Magnetoactive polymer composites”, *Proceedings of 3<sup>rd</sup> International Congress on Mechatronics*, 7-9 July, Prague 2004.
- (170) Farshad, M., and Guran, A., “Systems thinking in mechatronics design”, *Proceedings of 3<sup>rd</sup> International Congress on Mechatronics*, 7-9 July Prague, 2004.
- (171) Farshad, M., “Design and Analysis of pipelines”, Farshad, M., “Magnetoactive polymer composites”, *Proceedings of 3<sup>rd</sup> International Congress on Mechatronics*, 7-9 July Prague, 2004.
- (172) Farshad, M., Le Roux, M., and F. Clemens, “Magnetoactive fibers and fabrics”, *Proceedings of 11 International Conference on Composite Engineering, ICCE-11*, 7-14 August, South Carolina, USA, 2004.



- (173) Farshad, M., Rohrberechnungsprogramm – Neue Version von ADAP, gwa 12 (Switzerland), 899-911, Dez. 2004.
- (174) Farshad, M., Necola, A., and Flüeler, P., “Service life prediction of GFRP pipes in aggressive environments”, Proc, The Second International Conference on FRP Composites in Civil Engineering, 8-10 December 2004 - Adelaide, Australia, 2004.
- (175) Farshad, M. and Le Roux, M., Compression properties of magnetostrictive polymer composite gels, *Polymer Testing*, Vol. 24, pp163-168, 2005.
- (176) Farshad, M., Bianchi, S., Löwe, Ch., Long-term extrapolation of properties of polymeric waterproofing membranes, *Materials and Structures*, Vo. 38, pp557-560. June 2005.
- (177) Snedeker, J., Niederer, P., Farshad, M., and Farshad, M., Biomechanics of renal Trauma: understanding injury through numerical simulation, Book Chapter in: *Recent Research Developments in Biomechanics*, Transworld Research Network, India, pp 15-42, 2005.
- (178) Farshad, M., Lübben, J.F., Halbeisen, M., Hufenus, R., Le Roux, M., and Clemens, F., Magnetostrictive polymer composite fibers, Proc. of *Intelligent Processing and Manufacturing of Materials 2005*, IPMM05, (Eds. J.A. Meech, J.F. Maguire, and Y. Kawazoe), Monterey Bay Monterey, Calif., USA, July 19-23, 2005.
- (179) M. Farshad, Determination of the long-term hydrostatic strength of multilayer pipes, *Polymer Testing*, Vol. 24, Issue 8, pp1041-1048, 2005.
- (180) Magneto-active elastomer composites, Proc. International Conference on High Performance and Speciality Elastomers, 20th-21st April, Geneva, Switzerland, p16
- (181) S.M. Neuhold, E.Murtola, E.Fröhlich, M. Farshad, A. Stutz, P. Anliker, Hyperelastic high voltage composite conductor, *Proc. of European Congress on Advanced Materials and Processes*, EUROMAT 05, Prag 5.-8. Sept 2005
- (182) M. Farshad, Sicherheit von Rohrleitungen, zu erscheinen in gwa, 06. Jan. 2006.
- (183) J. Snedeker, M. Farshad, P. Niederer, and F.R. Schmidlin, A Comprehensive, Modeling based, Renal Injury Concept, to appear in the Proc. of World Congress on Biomechanics, Munich, Germany, 2006.
- (184) Snedeker, J., Farshad, M., Niederer, P., and Schmidlin, F., A comprehensive renal injury concept based on a validated finite element model of the human abdomen, to appear in *The Journal of Trauma*, 2006.
- (185) M. Farshad, New Automated Long-Term Extrapolation Method for Plastic Pipes Under Hydrostatic Pressure, *Journal of Thermoplastic Composite Material*, Vol19, No.5, pp569-574, 2006..
- (186) Farshad, M., Le Roux, M., and F. Clemens, “Magnetoactive fibers and fabrics”, to be published in *Journal of Thermoplastic Composite Materials*
- (187) Farshad, M., Computational Technology of Pipelines, invited contribution for the 8<sup>th</sup> International Conference on Computational Structures Technology, Gran Canaria, Spain, CST/ECT 2006.