Szekeres' short resume and list of publication
1993-2011 (May)

- April-June 2002 Engineering Mechanics Laboratory, University of Oulu, Finland, visiting researcher, application of thermo-hygro-mechanics to composites.

- May-June 2000 Engineering Mechanics Laboratory, University of Oulu, Finland, visiting researcher, thermo-hygro-mechanics with Onsager's relation, numerical methods and application.

- December 1999 Institute of Cybernetics, Tallinn, Estonia, visiting researcher, reciprocal relations in thermo-hygro-mechanics.

- June 1999 Dept. Engineering Science and Mechanics, Virginia Tech, visiting researcher, cross-coupled heat and moisture diffusion with second sound, application to tailoring of composites.

- December 1997 Institute of Cybernetics, Tallinn, Estonia, visiting researcher, analogy between heat and moisture transfer.

- May-June 1997 Dept. Engineering Science and Mechanics, Virginia Tech, visiting researcher, basic equations of thermo-hygro-elasticity and application to composites.

- October-November 1996 Dept. Engineering Science and Mechanics, Virginia Tech, visiting researcher, heat and moisture absorption effect in composites.

- July-December 1995 Engineering Mechanics Laboratory, University of Oulu, Finland, visiting researcher, thermo-hygro-mechanical tailoring of composites.

- May 1995 Dept. Engineering Science and Mechanics, Virginia Tech, visiting researcher, special problems of thermo-hygro-elastic coupling.

- August-December 1994 Dept. ESM, Virginia Tech, visiting professor, lecture course on Thermomechanics, research on thermo-hygro-elastic materials and application to composites.

- April-May 1994 Institute of Cybernetics, Tallinn, Estonia, visiting researcher, coupled thermal and moisture fields in composites.

- September-December 1993 Engineering Mechanics Laboratory, University of Oulu, Finland, visiting professor, lecture course on Continuum-mechanics, research on thermo-mechanical tailoring of composites.

- April-May 1993 Institute of Cybernetics, Tallinn, Estonia, visiting researcher, thermodynamics of complex systems.

PUBLICATIONS (oral and written)

- Journal paper (all in English) 15
- Conference lecture with abstract in proceedings
  - in English 77
  - in Hungarian 6
- Seminar
  - in English 56
  - in Hungarian 6

Summarized 160

1. On solvent diffusion in a solid with large dilatation (co-authors S. Roy, Y. Wang, A. Nair). COMPOSITES SCIENCE AND TECHNOLOGY, 68 (13): 2697-2704 (2008) IF: 2.533
2. New approach to the non-classical heat conduction (co-author N. Petrov). JOURNAL OF THEORETICAL AND APPLIED MECHANICS, 38(3), pp. 61-70, (2008)
3. Non-classical thermoelasticity (co-author N, Petrov). JOURNAL OF THEORETICAL AND APPLIED MECHANICS, 39(4), pp. 3-10, (2009)
4. Thermal stresses, thermomechanics, thermo-hygro-mechanics (co-authors P. Elesztos, E. Enikov). Thermal stresses 2009 congress, June 1-4, 2009, Urbana Champaign
5. Waves in Thermoelastic and Plastic Solids, Revising Old Problems by New Solutions. International Conference on Complexity of Nonlinear Waves, October 5-7, 2009, Tallinn
6. Nonlinearity in Composite Mechanics. FUDoM 09, 23-29 August, 2009, Rackeve, Hungary
7. Selected Chapters of Thermo-Hygro-Mechanics (THM) 4. Seminar in the Dept. Engineering Science and Mechanics, May 25, 2009, Virginia Tech, Blacksburg, VA
8. Selected Chapters of Thermo-Hygro-Mechanics (THM) 3. Seminar in the Dept. Aerospace and Mechanical Engineering, May 14, 2009, University of Alabama, Tuscaloosa, AL
9. Selected Chapters of Thermo-Hygro-Mechanics (THM). Seminar in the Dept. Aerospace and Mechanical Engineering, May 7, 2009, University of Arizona, Tucson, Arizona
10. Thermo-Hygro-Mechanics (THM) with Second Sound (SS). Seminar at the Technion, 27 Oct, 2008, Haifa, Israel.
11. Interdisciplinarity by Thermo-Hygro-Mechanics (co-author N. Petrov). Pres. on the 36th Solid Mechanics Conference, 9-12 Sept, 2008, Gdansk, Poland.
12. Second Sound (SS), Thermoelasticity (TE) and Asymmetry (co-author N. Petrov). Seminar in the Institute of Mechanics, BAS, 18 Aug, 2008, Sofia, Bulgaria.

13. Thermo-Hygro-Mechanics as the Frame of the Cooperation. Seminar in the Laboratory of Engineering Mechanics, University of Oulu, 12 June, 2008, Oulu, Finland.
14. Interdisciplinaritree, Levels of Interdisciplinarity by Thermo-Hygro-Mechanics. Seminar in the Institute of Cybernetics, 16 June, 2008, Tallinn, Estonia.
15. Thermo-Hygro-Mechanical (THM) Aspects of Moisture Semi-Conductor (MS-C) (co-author N. Petrov). Pres. on the Int. Conf. Mechanics of Composite Materials (MCM 2008), 26-30 May, 2008, Riga, Latvia.
16. Bio-Thermo-Hygro-Mechanics: Theory and Applications, Part 2 : Applications (co-author N.N. Kizilova). Int. School-Conference "Tarapov's Readings", Dept. Theoretical Mechanics, V.N. Karazin Kharkov National University, 21-26 April, 2008, Kharkov, Ukraine.
17. Humor in Science (in Hungarian). Seminar in the Dept. Applied Mechanics, TU Budapest, 7 April, 2008, Budapest, Hungary.
18. Theory and Practice – University and Industry. Pres. at the 2nd Int. Forum of Mechanical Engineering (IFME 2007), 29 Nov- 1 Dec, 2007, Dornbirn, Austria.
19. Thermo-Hygro-Mechanical Constructions. Seminar in the Institute of Cybernetics, 1 Oct, 2007, Tallinn, Estonia.
20. Mechanics of Radivane (Applied Thermo-Hygro-Mechanics). Pres. on the Int. Conf. SMDS'04, 11-13 Sept, 2007, Palanga, Litvania.
21. Fourier and Fick in Thermo-Hygro-Mechanics (in Hungarian). Pres. on the Hungarian Conf. of Mechanics (MaMeK 10), 27-29 Aug, 2007, Miskolc, Hungary.
22. Thermo-Hygro-Mechanics – Theory and Application. Pres. on the Int. Conf. on Continuum Physics and Engineering Application (CPEA), 2-11 June, 2007, Rackeve, Hungary.
23. Thermoelasticity with and without Second Sound. Seminar at the Institute of Theoretical Physics, TU Berlin, 14 December, 2006, Berlin, Germany.
24. Mechanical Engineering Application of Thermo-Hygro-Mechanics. Pres. on the West-Pannon Workshop on Physics and Engineering, 25-27 October, 2006, Gothard Astrophysical Observatory, Szombathely, Hungary.
25. Thermo-Hygro-Mechanics in Mechanical Engineering (co-author P. Elesztos). Pres. on the 6th ESMC (European Solid Mechanics Conference) 28 August-1 Sept, 2006, Budapest, Hungary.
26. Special Problems of Thermo-Hygro-Mechanics. Seminar in the Dept. of Mechanics of Solids, University of Technology, June 21, 2006, Kaunas, Lithaunia.
27. Solitary Waves and Transmission Lines – Analytical and Experimental Possibility by Electrical Analogy. Pres. on EUROMECH 478, June 13-16, 2006, Institute of Cybernetics, Tallinn, Estonia.
28. Partial Differential Equations and Thermo-Hygro-Mechanics. Seminar at the Tartu University, June 5, 2006, Tartu, Estonia.
29. On the Physics of Moisture Sorption of Composites. Pres. on the MCM 2006 (Mechanics of Composites Materials), May 29 – June 2, 2006, Riga, Latvia.
30. Damage and Durability of Composites from the Viewpoint of Thermo-Hygro-Mechanics. Pres. on the Symposium on the 60th birthday of Ramesh Talreja, 18-21 May, 2006, Venice, Italy.
31. Advanced Thermo-Hygro-Mechanics (THM) and Its Application. Seminar in the Frame of Advanced School on New Perspectives in Thermodynamics Quantifying Non-Equilibrium Processes, International Centre for Mechanical Sciences (CISM), October 27-31, 2005, Udine, Italy.

32. Dynamic Heat and Moisture Process in Composites. Seminar in the institute of Polymer Mechanics, September 26, 2005, Riga, Latvia.
33. Coupled Thermoelastic Waves and Solitons Bridged by the Telegraph Equations. Seminar at the Helsinki Uni. of Technology, September 19, 2005, Helsinki, Finland.
34. Is There Any Possibility of Solitary Waves in the Heat Sensitive and Hygroscopic Materials?. Seminar in the Institute of Cybernetics, September 15, 2005, Tallinn, Estonia.
35. Humor in Science, in Thermo-Hygro-Mechanics. Seminar at the Horvath Architekt Buro, August 16, 2005, Hamburg, Germany.
36. PARKUS at the TU Budapest a Quarter of Century Ago. Pres. on the Thermal Stresses 05, May 26-29, 2005, Vienna Uni. of Technology, Vienna, Austria.
37. Cross-Coupled Heat and Moisture Transport. What About the Radiation?. Pres. on the Thermal Stresses 05, May 26-29, 2005, Vienna Uni. of Technology Vienna, Austria.
38. Advanced Problems of Thermo-Hygro-Mechanics (THM) and the Available Softwares. Pres. on the FUDoM 05, 29 May-4 June, 2005, Rackeve (Budapest), Hungary.
39. Thermo-Hygro-Mechanics and Partial Differential Equations. An Interdisciplinary Field of Engineering, Mechanics, Thermodynamics and Mathematics. Plenary Lecture in the Section Engineering Mathematics, APLIMAT 2005 – 4th International Conference, February 1-4, 2005, Bratislava, Slovak Republic.
40. Basic Equations and Different Applications (BEDA) of Continuum Mechanics. Periodica Polytechnica Ser. Mech. Eng. Vol. 48, No. 2. pp. 185-188, 2004.
41. The Second Sound Phenomenon: Pro and Contra. Periodica Polytechnica Ser. Mech. Eng. Vol. 48, No.1. pp. 83-87, 2004.
42. Analysis of Fire Propagation in Composite Structures by the Thermo-Hygro-Mechanics. Theoretical Approach and Practical Conclusions. Pres. on the ICSCS'04, Seoul, Korea, Sept 2-4, 2004.
43. Huber and Reuss in Plasticity and Thermo-Hygro-Mechanics. Pres. on the Huber Symposium, Cracow, Poland, Aug 12-14, 2004.
44. Fire Behaviour of Composites and Fire Propagation in Structures. Pres. on MCM 2004, Riga, Latvia, May 16-20, 2004.
45. Thermo-Hygro-Mechanics and Other Fields of Human Culture: History of Science, Art, Literature. Seminar in the Institute of Cybernetics, Tallinn, Estonia, May 10, 2004.
46. Thermo-Hygro-Mechanical (THM) Tailoring of Fiber Reinforced Composite (FRC) Materials and Structures. Theory and Application in Engineering, Part 4. Seminar in the Engineering Mechanics Laboratory, University of Oulu, Finland, May 7, 2004.
47. Art and Thermo-Hygro-Mechanics. Seminar at the Univ. of Massachusetts, Amherst, MA, Febr 8, 2004.
48. Theoretical, Experimental and Application Problems of Thermo-Mechanics of Porous (Hygroscopic) Materials. Seminar in the Theoretical Department of The Ioffe Institute of the RAS, StPetersburg, Nov 27, 2003.
49. The "Second Sound" Phenomenon: Pro and Contra (in Hungarian). Proc. of the 9th. MaMeK, Miskolc, Hungary, Aug 27-29, 2003.
50. Diffusion of Inhomogeneous and Anisotropic Material. Theory and Engineering Application. Proc. of the 2003 Annual Summer Meeting of Applied Mechanics&Materials Division, Scottsdale, Arizona, June 17-20, 2003.
51. Non-Fourier Heat Conduction and Thermoelasticity. Proc. of Thermal Stresses 2003, Virginia Tech, Virginia June 8-11, 2003.
52. Analogies in Thermo-Hygro-Mechanics. Proc. of the Annual Meeting of Society of Experimental Mechanics, Charlotte, North Carolina, June 2-4, 2003.

53. Asymmetry in Thermoelasticity: How to Heal It?. Introduction to the workshop in the Institute of Cybernetics, Tallinn, Estonia, May 12, 2003.
54. Thermo-Hygro-Mechanical (THM) Tailoring of Fiber Reinforced Composite (FRC) Materials and Structures. Theory and Application in Engineering. Part 3. Seminar in the Engineering Mechanics Laboratory, University of Oulu, Finland, April 23, 2003.
55. Thermo-Hygro-Mechanics and Engineering Application (In Hungarian). Seminar in the Department of Applied Mechanics, TU Budapest, Hungary, April 10, 2003.
56. Reciprocal Relations in Thermo-Hygro-Mechanics. Proc. of the GAMM Annual Meeting, Abano Terme-Padua, Italy, March 24-28, 2003, p. 104.
57. On the Flammability of Composites. Theoretical Approach and Practical Conclusions. Pres. on the ICCST/4, University of Natal, Durban, South-Africa, Jan 21-23, 2003.
58. Coupled Thermodiffusion. Theory and Engineering Application. Pres. on the ICAMM, University of Natal, Durban, South-Africa, Jan 21-23, 2003.
59. Thermo-Hygro-Mechanical Tailoring of Fiber Reinforced Composite Materials and Structures. Theory and Application in Mechanical Engineering (Coauthor A. Pramila). Seminar in the Institute of Mechanics, HUT, Otaniemi, Nov 22, 2002.
60. Applied Thermo-Hygro-Mechanics from the Viewpoint of Non-Destructive Testing and Diagnostics. Seminar, Brasov, Nov 15, 2002.
61. Heat and Moisture in Solids (in Composites): On the Cross-Coupled Heat/Moisture Convection (Coauthor A. Pramila). 5th International Workshop on Similarity Methods. University Stuttgart, Nov 4-5, 2002.
62. Heat and Moisture in Solids (in Composites) Application of the Similarity Method (Coauthor A. Pramila). 34th Solid Mechanics Conference, Zakopane, Poland, Sept 2-7, 2002.
63. On the Moisture Sorption of Composites (Coauthor A. Pramila). USNCTAM 14, Mroz Symposium, VPI, Blacksburg, Virginia, June 23-28, 2002.
64. Solar Energy by Fiber Reinforced Composite Material. USNCTAM 14, Boley Symposium, VPI, Blacksburg, Virginia, June 23-28, 2002.
65. Heat and Moisture in Solids (in Composites): Dynamical Sorption with Microcracks (Coauthor A. Pramila). EUROMECH 436 Nonlinear Waves in Microstructured Solids, Tallinn, Estonia, May 29 – June 1, 2002.
66. Thermo-Hygro-Mechanical (THM) Tailoring of Fiber Reinforced Composite (FRC) Materials and Structures. Theory and Application in Engineering Part 2 (Coauthor A. Pramila). Seminar, Engineering Mechanics Laboratory, Univ. of Oulu, May 23, 2002.
67. Thermo-Hygro-Mechanics of Solids. Seminar in SICOMP, Pitea, Sweden, May 17, 2002.
68. Heat and Moisture in Solids (in Composites): Coupled Diffusion&Convection of Crosscoupled Heat&Moisture (in Hungarian). Pres. in the TU Budapest, Jan 30, 2002.
69. Analysis of Cross-Coupled Heat and Moisture Diffusion with Second Sound Phenomenon Application of Onsager's Reciprocal Relation and of Electrical Analogy. Seminar in the Lehrstuhl Technische Mechanik. Universitat Duisburg, Nov. 8, 2001.
70. Cross-Coupled Heat and Moisture with Second Sound Phenomenon – Application of Onsager's Reciprocal Relation and of Electrical Analogy. Seminar in the Lehrstuhl Technische Mechanik, Universitat Karlsruhe, Nov. 7, 2001.
71. Symmetry of Cross-Coupled Heat and Moisture Diffusion with Second Sound Phenomenon- Application of Onsager's Reciprocal Relation and of Electrical Analogy. Proc. of 4th Int. Workshop on Similarity Methods. University of Stuttgart, Nov. 5/6. 2001. pp. 79-89.

72. Thermo-Hygro-Mechanical (THM) Tailoring of Fiber Reinforced Composites (FRC) (Coauthor A. Pramila). Seminar in the Dept. Applied Mechanics, TU Budapest, Oct. 25, 2001.
73. Selected Topics of Thermo-Hygro-Mechanics (THM). Seminar in the Institute of Cybernetics, Tallinn, Estonia, Aug. 31. 2001.
74. Heat and Moisture in Solids (in Composites): What about the Micro-Cracks?. Seminar in the Institute of Polymer Mechanics, Riga, Latvia, Sept. 4, 2001.
75. Analogy and Cross-Coupling Between Heat and Moisture. Pres. at the Workshop on Recent Developments in Thermodynamics, Budapest, July 22-24, 2001.
76. Basic Equations and Different Applications (BEDA) of Continuum Mechanics. Pres. held at Finno-Ugric International Conference of Mechanics (FUDoM'01), Rackeve (Budapest) Hungary, 27 May – 2 June, 2001.
77. On the Moisture Sorption of Composites (Coauthor A. Pramila). Pres. held at Finno-Ugric International Conference of Mechanics (FUDoM'01), Rackeve (Budapest) Hungary, 27 May – 2 June, 2001.
78. Thermodynamics and Engineering – Bridged by the Mechanics (In Hungarian). Seminar held in the Group of Thermodynamics, March 6, 2001, Budapest.
79. Thermo-Hygro-Mechanical Composites in Engineering, Application in Automotive Industry. Pres. held at the International Mechanical Engineering 2000 Congress & Exposition, Nov 5-10, 2000, Orlando, Florida.
80. Heat and Moisture in Solids (in Composites): How to Separate the Different Diffusivities, Transfer and Expansion Coefficients and Relaxation Times. Seminar held in the Dept. Civil and Environmental Engineering, Louisiana State Univ., Nov. 1, 2000, Baton Rouge, Louisiana.
81. Thermo-Hygro Coupling and Composites. 37th Annual Technical Meeting Society of Engineering Science, Univ. of South Carolina, Oct 23-25, 2000, Columbia, South Carolina.
82. Analogy in Thermo Hygro-Mechanics (THM). Seminar held in the Dept. Mathematical Methods and Models for Scientific Applications, Univ. of Padova, Sept 28, 2000, Padova, Italy.
83. Heat and Moisture in Solids (in Composites): Environmental or Internal Effects? (Coauthor A. Pramila). Pres. held at the 33rd Solid Mechanics Conference, Sept 5-9, 2000, Zakopane, Poland.
84. Cross-Coupled Heat and Moisture Diffusion – Application of Onsager's Relation. (Coauthors A. Pramila, R. Hannila). Pres. held at the 11th International Conference on Mechanics of Composite Materials, June 11-15, 2000, Riga, Latvia.
85. Effect of Heat and Moisture on Composites. Proc. of 7th Annual International Conference on Composites Engineering, July 2-8, 2000, Denver, Colarado, pp. B53-B56.
86. Thermo-Hygro-Mechanical (THM) Tailoring of Fiber Reinforced Composite (FRC) Material and Structures Theory and Application in Engineering. (Co-authors A. Pramila, R. Hannila). Seminar held in the Engineering Mechanics Laboratory, University of Oulu, June 5, 2000, Oulu, Finland.
87. Cross-Coupled Heat and Moisture Problems in Composite Materials. Pres. held at the 20th Southeastern Conference on Theoretical and Applied Mechanics, April 16-18, 2000, Callaway Gardens, Georgia.
88. Description of Cross-Coupled Heat and Moisture Diffusion with Second Sound Phenomenon and Anisotropic Material – The Application of Onsager's Reciprocal Relation.). Pres. held at the 41st ASME Structures, Structural Dynamics and Materials Conference, April 3-6, 2000, Atlanta, Georgia.

89. Feather and Down Reinforced Composites and Structural Thermomechanics. (Co-author I. Adam). Pres. held at the 3rd International Conference on Composite Science and Technology, Jan 11-13, 2000, Durban, South Africa.
90. Possible Generalization of Thermo-Hygro-Mechanics: Application in Agriculture. (Co-author I. Adam). Pres. held at the South African International Conference on Applied Mechanics, Jan 11-13, 2000, Durban South Africa.
91. Coupling of Generalized Heat and Moisture Transfer. (Co-author J. Engelbrecht). Periodica Polytechnica Ser. Mech. Eng. Vol. 44. No. 1, pp. 161-170 (2000).
92. Analogy Between Heat and Moisture. Thermo-Hygro-Mechanical Tailoring of Composites by Taking into Account the Second Sound Phenomenon. Journal of Computers & Structures 76 (2000) 145-152.
93. Application of Reciprocal Relations in Thermo-Hygro-Mechanics. Seminar held in the Institute of Cybernetics, Dec 2, 1999, Tallinn, Estonia.
94. Cross-Coupled Heat and Moisture Problems in Composite Materials. Seminar held in the Dept. Mechanical Engineering, Florida Atlantic University, Nov 2, 1999, Boca Raton, Florida.
95. Unsymmetry in Thermo-Hygro-Mechanics and Possible Reasons. Pres. held at the Annual Technical Meeting of Society of Engineering Science, University of Texas at Austin, Oct 25-27, 1999.
96. Heat and Moisture in Composite Materials (Theory and Application). Seminar held in the Dept. Mechanical Engineering, Auburn University, Oct 21, 1999, Auburn, Alabama.
97. Special Problems of Thermo-Hygro-Mechanics in Mechanical Engineering. Seminar held in the Dept. Strength and Elasticity, Slovak Technical University, Sept 22, 1999, Bratislava, Slovakia.
98. Surfing on the Boundary of Thermo-Hygro-Mechanics. (In Hungarian). Pres. held at the 8th Hungarian Conference on Mechanics, Aug 30 – Sept 1, 1999, Miskolc, Hungary.
99. Special Possibilities for Tailoring of Composites on the Basis of Coupled Fields. Proc. of sixth International Conference on Composite Engineering, ICCE 6, June 27 – July 3, 1999, Orlando, Florida.
100. BB Reinforced Composites and Couplied Fields. Proc. of ASME'99 Mechanics and Materials Conference, June 27-30, 1999, Virginia Tech, Blacksburg, Virginia.
101. Coupling of Generalized Heat and Moisture Transfer. (Co-author J. Engelbrecht). Proc. of ASME'99 Mechanics and Materials Conference, June 27-30, 1999, Virginia Tech, Blacksburg, Virginia.
102. Advanced Thermomechanical Modeling of Dynamically Loaded Materials and Structures. Proc. of ASME'99 Mechanics and Materials Conference, June 27-30, 1999, Virginia Tech, Blacksburg, Virginia.
103. Second Sound and Thermoelasticity, Analogy Between Heat and Moisture. Pres. held in the ANSYS, Canonsburg, PA, June 7, 1999.
104. Coupled Fields and Composites. Seminar in the Dept. Mechanical and Industrial Engineering, Univ. of Massachusetts, Amherst, June 4, 1999.
105. Special Problems of Bio-Thermo-Hygro-Mechanics. Proc. of CANCAM'99, May 30 – June 3, 1999, McMaster University, Hamilton, Ontario.
106. Special Aspects of Thermo-Hygro-Mechanics with Second Sound for Application in the Electronics Industry. Pres. in the frame of consultation with the R&D engineers of Precision Measurements and Instruments Corp. (Oregon, USA) and LG Electronics Corp. (Korea). Philomath, Oregon, March 4-6, 1999.
107. Analogy Between Heat and Moisture - Extension of Theory of Similarity for Moisture. Proc. of International Workshop on Similarity Methods, Institut für Statik und Dynamik

der Luftund Raumfahrtkonstruktionen, Universität Stuttgart, Germany, Nov. 26-27, 1998. pp. 265-279.

108. Heat Conduction with Second Sound. Thermoelasticity and Other Coupled Fields. Seminar in the Institute of Cybernetics, Tallinn, Estonia, Nov. 19, 1998.
109. Mechanics and Applications of Composite and Hygroscopic Material. Seminar in the Center for Advanced Materials Research, Mechanical Engineering Department, Oregon State University, Corvallis, Oregon, October 2, 1998.
110. Modeling of Composites by Electrical Analogies. Proc. of Annual Technical Meeting of Society of Engineering Science, Washington State University, Pullman, WA, Sept. 27-30, 1998.
111. Possible Method for Obtaining the Material Properties of Thermo-Hygro-Elastic Materials (In Slovakian, with P. Elesztos). Proc. of Conference on Mechanical Engineering, Faculty of Mechanical Engineering, Slovak Technical University, Bratislava, Sept 17, 1998.
112. Possible Extension of Theory of Similitude for Moisture Convection. Proc. of 32nd Polish Solid Mechanics Conference, Zakopane, Poland, Sept. 1-5, 1998.
113. Thermo-Hygro-Mechanical (THM) Tailoring of Composites by Taking into Account the Second Sound Phenomenon. Proc. of NATO Advanced Study Institute on Mechanics of Composite Materials and Structures, Troia, Portugal, 12-24 July, 1998.
114. BOB Reinforced Composite Research. Pres. held at Finno-Ugric Days of Mechanics (FUDoM'98), Rackeve (Budapest) Hungary, June 7-13, 1998.
115. Thermo-Hygro-Mechanical (THM) Tailoring of Fiber Reinforced Composites (FRC) for Mechanical Engineering Application. (Co-authors J. Engelbrecht, R. Heller, P. Kiss, A. Pramila). Proc. of 1st Conference on Mechanical Engineering, TU of Budapest, May 28-29, 1998.
116. Moisture Transfer and Composites. Pres. held at XIXth Southeastern Conference on Theoretical and Applied Mechanics. Deerfield Beach, FL, May 3-5, 1998.
117. Theoretical, Experimental and Numerical Problems of Hygroscopic Composites. Seminar in the School of Engineering, University of Missouri-Rolla, MO, April 30, 1998.
118. Ideas on Hygro-Thermal Composites for Automotive Industry. Pres. held at 6th Technical Conference and Reviews of Center for Composite Materials and Structures, Virginia Tech, VA, April 19-21, 1998.
119. Thermodynamics of Complex Systems: Special Problems of Coupled Thermal and Moisture Fields and Application to Tailoring of Composites (Co-author R.Heller). Periodica Polytechnica, Ser. Chem Eng., 42/1 (1998) 55-64.
120. Wonderful Hooke's Law, Theory, History and Story. Proc. of Estonian Academy of Sciences Phys. Math. 1999, 48, 3/4, 296-305.
121. Coupled Fields and Composites. (In Hungarian, co-authors Gy. Beda and R. Heller). Proc. of the 6th Scientific Days of Research Community, 27-28 January, 1998, TU Budapest, Hungary.
122. Coupled Stress Distribution in a Vibrating Rod Subjected to Variable Temperature and Moisture. (Co-authors R.Heller and S.Thangjitham). Proc. of the 5th Int. Cong. on Sound and Vibration, 15-18 Dec., 1997, Univ. of Adelaide, Australia.
123. Second Sound - Heat Conduction - Moisture Diffusion - Thermal Stresses. Seminar held in the Center of Mechanics, Warsaw, Poland, December 16, 1997.
124. Heat Conduction and Moisture Diffusion. Seminar held in the Chair of Environmental Mechanics, Bydgoszcz Pedagogical University, Poland, December 17, 1997.

125. Theoretical and Practical Problems of Hygro-Thermally Loaded Fibre Reinforced Composites. (Co-author A. Pramila). Proceeding of Estonian Academy of Science Phys. Math., 1997, 46, 1/2, 128-138.
126. Theoretical and Experimental Investigation on the Diffusivities of Composites. (Co-author H. Koivurova). Periodica Polytechnica, Ser. Mech. Eng. 41/2 (1997) 143-150.
127. Coupled Thermal and Moisture Fields With Application to Composites. (Co-author J.Engelbrecht). Periodica Polytechnica, Ser. Mech. Eng. 41/2 (1997) 151-161.
128. Possible Analytical Solution of Crosscoupled Heat and Moisture Transfer by Electrical Analogy. Seminar held in the Dept. of Mechanical Engg. Saginaw Valley State University, October 3, 1997.
129. Application of Thermo-Hygro-Elastic (THE) Fiber Reinforced Composites (FRCs) in Engineering Constructions. Seminar held in the Aerospace Engg. Dept. University of Michigan, Ann Arbor, October 2, 1997.
130. Heat Conduction and Thermal Stresses with and without Second Sound Phenomenon. Seminar held in the Structural Integrity Branch NASA Lewis Research Center Cleveland, September 29, 1997.
131. Coupled Fields and Electrical Analogies of Mechanics. Pres. held at 25th Midwestern Mechanics Conf. Sept. 21-24, 1997, South Dakota School of Mining and Technology, Rapid City, SD.
132. Fiber Reinforced Composite Structures with Hygroscopic Element in Civil Engineering (Co-author A. Pramila). Proc. of The Mouchel Centenary Conference on Innovation in Civil and Structural Engineering 19-21 August, 1997, Cambridge, England.
133. Theory and Practice of Thermo-Hygro-Mechanical Tailoring of Fiber Reinforced Composites, Some Results on Diffusivities. (Co-authors A. Pramila and R. Heller). Proc. of Fourth International Conference on Composite Engineering, ICCE 4, 6-12 July, 1997, Big Island of Hawaii.
134. Feasibility of Electrical Analogy in Compled Fields of Mechanics. Pres. held at McNU'97 29 June-2 July, 1997, Northwestern University, Evanstone, IL.
135. Similarities and Differences Between Heat Conduction and Moisture Diffusion. (Co-authors R. Heller and S. Thangjitham). Proc. of Thermal Stresses'97, 8-11 June, 1997, RIT, Rochester, NY.
136. The Effects of Temperature Extremes on Moisture Trapped in Voids Inside a Material. (Co-author R. Heller). Proc. of CANCAM'97, 1-5 June, 1997, Laval University, Quebec.
137. Possible Extension of Tailoring of Composites through Inhomogeneity (Co-author R.Heller). Pres.held at Fifth Pan American Congress of Applied Mechanics, San Juan, Puerto Rico, January 2-4, 1997.
138. Heat and Moisture Absorption Effects in Composites; Theory and Experiments (Co-author R. Heller). Pres. held at ASCE Materials Engineering Conference, Washington DC. November 10-14, 1996.
139. Thermo-Hygro-Viscoelastic (THVE) Tailoring of Fiber Reinforced Composites (FRCs): Theoretical, Numerical, Experimental and Practical Problems. Seminar held in the Dept. of Engg. Science and Mechanics, Virginia Tech, November 6, 1996.
140. Investigations on the Material Properties of Thermo-Hygro-Elastic (THE) Composites. Pres. held at 33rd Annual Technical Meeting of Society of Engineering Science, October 20-23, 1996, Tempe, Arizona.
141. Composite Structures with Hygroscopic Elements. Pres. held at CASS/CCMS Fifth Technical Conference, Dept. of Engg. Science and Mechanics, Virginia Tech, October 14-15, 1996.

142. Thermodynamics of Complex Systems: Special Problems of Coupled Thermal and Moisture Fields (Co-author R. Heller). Pres. held at Minisymposium on Non-Linear Thermodynamics and Reciprocal Relations, Balatonvilagos, Hungary, Sept. 22-25, 1996.
143. Theoretical and Experimentel Investigations on the Diffusiveness of Composites (Co-author H. Koivurova). Pres. held at 31st Polish Solid Mechanics Conference, Mierki, Poland, Sept. 9-14, 1996.
144. Fiber Reinforced Composites - Engineering Constructions for Sports. Seminar held in the Dept. of Mechanics, Helsinki University of Technology, 3 June, 1996.
145. On the Theoretical and Practical Problems of Dynamically Loaded Fiber Reinforced Composites (Co-outhor A. Pramila). Pres. held at EUROMECH Colloquium 348, Tallinn, Estonia, 22-26 May, 1996.
146. Theoretical and Practical Problems of Tailoring of Composites and Related Topics. Seminar held in the Lab. Engg. Mechanics, Univ. of Oulu, 29 Nov 1995.
147. Extrema of Coefficients of Thermal/Moisture Expansion for Thermo-Hygro-Elastic Composites (Co-authors M.Laitinen, A.Pramila). Pres. held at 32nd Annual Technical Meeting of the Society of Engineering Science, 29 Oct - 1 Nov, 1995, New Orleans.
148. Mechanical Engineering Constructions Based on Losing Stability (In Hungarian). Pres. held at 7th Hungarian Conference of Mechanics, 29-31 Aug, 1995, Miskolc.
149. Comparison of Strength Calculation Taught at Dept. Technical Mechanics, TU Budapest and Engg. Science and Mechanics Dept., Virginia Tech. (In Hungarian, with Prof. R. Heller). Pres. held at 7th Hungarian Conference of Mechanics 29-31 Aug, 1995, Miskolc.
150. Coupled Fields in Composites (Co-authors M.Autio, J.Engelbrecht, R. Heller, A. Pramila). Pres. held at Finno-Ugric Days of Mechanics, 18-24 June, 1995, Rackeve (Hungary)
151. Special Problems of Thermo-Hygro-Elastic Coupling (Co-author R. Heller). Pres. held at CANCAM 95, 28 May - 2 June, 1995, Victoria, B.C.
152. Hygrotermomechanics, Theory and Application (In Hungarian). Pres. held at Scientific Days of Research Group for Technical Mechanics, HAS, 19-20 Nov, 1994, Budapest.
153. Basic Equations of Hygro-Thermo-Mechanical Materials and Application to Composites (Co-author R.Heller). Pres. held at 2nd Thermal Structures Conference, 18-20 Oct, 1994, U. of Virginia, Charlottesville.
154. Coupled Thermal and Moisture Fields with Application to Composites (Co-author J.Engelbrecht). Res. Report Mech. 108/94, Inst. of Cybernetics, Estonian Academy of Sciences, Tallinn, 1994.
155. Tailoring of Composites, Theoretical Questions, Thermomechanical Applications and Example in Heat Conduction (Co-authors M. Autio, A. Pramila). Seminar held in the Lab. Engg. Mechanics, U. of Oulu, 3 Dec 1993.
156. On Thermodynamics of Complex Systems (Co-authors A. Berezovsky, J. Engelbrecht). Proc. Estonian Academy of Sci. Phys. Math. 1993, 42, 4, 350-352.
157. Modified Thermoelasticity: Internal Variables and Heat Conduction (Co-author J. Engelbrecht). Res. Report Mech. 88/93, Institute of Cybernetics, Tallinn 1993.
158. Heat Conduction Problems in Thermoelasticity. Seminar held in the Institute of Cybernetics, Tallinn, Estonia, 3 May, 1993.
159. Practical Applications of Thermo-Mechanics. Seminar at the TU Helsinki, May 1993.
160. Modeling of Heat Conduction in Solids. Remarks on the Equations of Thermoelasticity. Seminar in the Ioffe Physical-Technical Institute, Russian Academy of Sciences, Sankt Petersburg, May 1993.

SCIENTIFIC ORGANIZATIONAL WORKS

1. International Journal of Aerospace Engineering, associate editor since 2007.
2. Conference of Continuum Physics and Engineering Application (CPEA), co-founder and executive chairman, 209, 2007.
3. 6th ICCST 2007, member of International Advisory Board.
4. ESMC 2006, member of the Local Organizing Committee.
5. ICCM-15, Durban, 2005, member of International Scientific Committee.
6. APLIMAT 2005, Bratislava, member of Scientific Committee and Editorial Board, plenary lecturer.
7. Foreign PhD opponent, 2002 Lulea, Sweden, 2005 Tallinn, Estonia.
8. International Journal of Mechanics and Solids, member of Editorial Board, since 2004.
9. ICCE-11, 12, 14 (2004, 2005, 2006) member of the Scientific Committee and Review Board.
10. Applied Mechanics 2004, Bratislava (Kocovce), member of the Scientific Committee.
11. Executive editor of Periodica Polytechnica, Series Mechanical Engineering, since 1990.
12. Thermal Stresses Congresse, 2011 principal organizer, 2009, 2003 member of the Program Committee.
13. FUDoM 2009, 2005, 2001, 1998, 1995 International Conference on Mechanics, Budapest (Rackeve), co-founder of the series, executive chairman of Local Organizing Committee, member of International Organizing Committee.
14. SES 2000, Annual Technical Meeting of Society of Engineering Science, member of International Scientific Committee.
15. MaMeK 1999 and 2003, Hungarian Conference on Mechanics, executive chairman of Scientific Organizing Committee.
16. Member of International Advisory Board, Centre for Nonlinear Studies (CENS), Tallinn, Estonia, 1999 – 2005.
17. Scientific Days of Research Groups on Mechanics, HAS 1998, executive chairman of Organizing Committee.

CONSULTING WORKS

1. ANSYS (PA, USA) 1999, problems of second sound phenomenon in coupled heat and moisture diffusion.
2. LG Electronics (Korea) 1999, special problems of thermo-hygro-mechanics in electronics industry.
3. PMIC (OR, USA) 2006, 1999, 1998, theoretical problems on measurement of cross-coupled thermo-hygro diffusivities.
4. ZOLTEK (MO, USA; Hungary) 1998, 1997 special problems on application of carbon fibers in fiber reinforced composites.