

Thursday,  
25<sup>th</sup> September, 2003.

- 7.30 - 8.50 Breakfast, Registration at Hotel Révész  
8.50 - 9.00 Guided walk to the place of Opening Ceremony (and Oral Section 1.), at University Széchenyi  
9.00 - 9.20 **Opening Ceremony**
- 9.20 - 10.40 **Oral Session 1.**  
General problems, dynamics, vibration, non metallic materials
1. **LAERMANN, K. H.**  
Experimental/Numerical parameter identification for visco-elastic problems
  2. **INSBEGER, T., STÉPÁN, G., MANN, B.P., BAYLY, P. V.**  
Experimental identification of chatter in milling
  3. **BRAUT, S., ŽIGULIĆ, R., SKOBLAR, A., BUTKOVIĆ, M.**  
Experimental and numerical estimation of annular seal influence on pump vibrations
  4. **STOCKMANN, M., NAUMANN, J.**  
The transverse sensitivity of strain gages – determination and compensation
- 10.40 - 10.50 Guided walk back to the Hotel Révész  
10.50 - 11.10 Coffee break
- 11.10 - 13.00 **Poster Session 1.**  
General problems, dynamics, vibration, problem of non metallic materials
- 11.10 - 11.55 **Introduction to presentations of Poster Session 1.**
5. **GÓDOR I., MAJOR Z., RESCH, K.**  
Characterisation of the tribological behaviour of PTFE-compounds
  6. **SZALAI, J., NIEMZ, P., ANDOR, K., HOWALD, M., BARISKA, M.**  
The influence of moisture content on the tensile strength behaviour of Norway spruce in the grain direction
  7. **FLEISCHMANN, M., EBERHARDSTEINER, J., ONDRIS, L.**  
Experimental investigation of spruce wood in different material-directions and constitutive modelling including knot effects
  8. **CONSTANTIN, N., SCHEERER, M., CONSTANTINESCU, D., GĂVAN, M., SOROHAN, Ș., PETRE, C.**  
Residual strength and stiffness of damaged composite panels
  9. **PÖLÖSKEI, K., CZIGÁNY, T.**  
Investigation of surface adhesion in basalt fiber reinforced polypropylene composites
  10. **MAJOR Z., FEICHTER, Ch., LANG, R**  
Fatigue tests method development for elastomers
  11. **MEZEY, Z., DANAYADI, L., CZIGÁNY, T., PUKÁNSZKY, B.**  
Investigation of mechanical properties of sisal fiber reinforced polypropylene composites
  12. **ZUCHELLI, A., DAL RE, V.**  
Acoustic emission monitoring of composite laminate progressive failure
  13. **KÁNNÁR, A.**

- Investigation of micro-damage processes of wood using acoustic emission and electron-microscopy
14. **RAK, M., KROLO, J., HAIMAN, M., HERCEG Lj., ČALOGOVIĆ, V.**  
Timber – concrete composite floors
  15. **CSIZMADIA, B., OLDAL, I., KEPPLER, I.**  
Quasitriaxial apparatus for the determination of mechanical properties of granular materials
  16. **JARUCKA, J.**  
FEM modelling of composite structures and experimental comparison
  17. **DOGOSSY, G., CZIGÁNY, T., KOVÁCS, J.**  
Investigation of polymer composites filled with corn hull
  18. **KAPUSŇÁK, P., PALČEK, P., CHALUPOVÁ, M.**  
Adhesion testing on steelcord – rubber framework at high frequency loading
  19. **RONKAY, F., CZIGÁNY, T.**  
Investigation of one and multiple way PET bottles and the possibility of their recycling
  20. **KÓNYA, L., VÁRADI, K., FRIEDRICH, K.**  
Experimental testing and modelling of the wear and creep behaviour of polymers
  21. **PADEVĚT, P.**  
Testing of higher temperature loaded concrete in compression and observing its structure
  22. **BOUSKA, P., HANYKYR, V., PUME, D.**  
Investigation on interaction of clay units and concrete in the floors
  23. **KALETA, J., LEWANDOWSKI, D. I., ZAJĄC, P.**  
Cyclic properties of magnetorheological composite
  24. **BEER, R., KODVANJ, J., JECIC, S.**  
*Residual stresses caused by shrinking in multi-body polymer models*
  25. **STĚPÁN, G., GÁSPÁR, T.**  
Application of Integrated Acceleration Transducers
  26. **GÁL, P.**  
Development of variable-parameter valve timing and tribologic test
  27. **REITERER, M., HOCHRAINER, M.**  
Parametric resonance in tuned liquid column dampers: an experimental investigation
  28. **NIEDERWANGER, G., LEHAR, H.**  
Restoration of a ceiling excited to vibrations by lift truckers on the basis of measurements and finite element calculations
  29. **JEBACEK, I.**  
Experimental determination of lift curve slope
  30. **VINCZE-PAP, S.**  
Frontal impact tests on bus and bus bumper
  31. **AUGUSTIN, P.**  
Flight by flight fatigue test of Aircraft Structure
  32. **NOVOTNÝ, R.**  
Empirical modelling for optimisation purposes
  33. **GELENCŠÉR, E.**  
Rheological and optical properties and the Poynting Thomson model
  34. **BRADIC, J.**  
Evaluation of uncertainties
  35. **PÓSFALVI, Ö.**  
Historical review of Hooke's Law and its application on engineering practice
  36. **PAVLÍČEK, P.**  
Height profile measurement by means of white-light interferometry

37. **ŠPANIEL, M., DIVIŠ, M., TICHÁNEK, R.**  
Steady state heat analysis of engine head
38. **SITEK, L., FOLDYNA, J.**  
Measurement of selected parameters of modulated high-speed water jet

13.00	14.15	Lunch in HR
14.30	14.45	Bus transfer to the <b>RÁBA Museum</b> , from the HR
14.45	17.00	Technical visit of the “ <b>RÁBA</b> ” <b>Museum</b>
17.15	17.30	Bus transfer from RÁBA Museum back to the HR
18.30	18.50	Transfer to the concert, from HR
19.00	20.00	Concert in the “ <b>Old Church</b> ” of Győr Program: <b>Liszt: Le's Preludes</b> <b>Berlioz: Rákóczi march</b>
20.30	21.30	Dinner, in the HR

Friday,  
26<sup>th</sup> September, 2003.

7.30 - 9.00 Breakfast

9.00 - 10.40 **Oral Session 2.**

Stress, strain investigations, photostress analysis, strain gauge technique

39. **HOFFMANN, K., DECKER, K.**  
Influence of the measuring grid of a foil sensor on the accuracy of pressure measurements
40. **MACIEJEWSKI, Ł., MYSZKA, W.**  
Virtual platform for real mechanical experiments on-line
41. **CONSTANTINESCU, D. M., CONSTANTIN, N., GOSS, T.**  
Experimental evaluation of Mode I and Mode II interlaminar fracture toughness of textile composites
42. **GUAGLIANO, M., SANGIRARDI, M., VERGANI, L.**  
Photoelastic analysis of internal cracks under contact loads
43. **ERRAPART, A.**  
Photoelastic tomography

10.40 - 11.00 Coffee break

11.00 - 13.00 **Poster Session 2.**

Biomechanics, material testing and fatigue of metals

11.00 - 11.55 **Introduction to presentations of Poster Session 2.**

44. **HOLL, H.J., ZEHETNER, C.**  
Design of a manipulator supporting the planning process in maxillo-facial surgery
45. **KNOLL, Zs., KOCSIS, L., GYÖRE, I.,  
MAGYAR, M. O., KISS Rita M.**  
Complex test of professional cyclist
46. **KUBEIN-MEESENBURG ABICHT, Ch., THOMSEN, M., DATHE  
H. ADAM, P., FANGHÄNEL, J., NÄGERL, H.**  
A functional knee-endoprosthesis with rolling articular surfaces during the stance phase
47. **ZSIDAI, A., KOCSIS, L.**  
Ultrasound based measuring system for spinal analysis
48. **SZÁVA, I., ŞAMOTĂ, I., HOLLANDA, D., DANI, P., NECULA, R.**  
Electrotensometrical investigation of the fractured long bones large displacements
49. **COSMI F, DREOSSI D., SCALICI M.**  
Bone sintering for strength assessment: First results in bossa project
50. **KNOLL, Zs., KOCSIS, L., KISS, Rita M.**  
Gait analysis of professional fencers
51. **ZIĘBOWICZ, A., MARCINIAK, J.**  
Biomechanical analysis of miniplate osteosynthesis of mandible fracture
52. **GOLDMANN, T., HIMMLOVÁ, L.,**  
Usage of motion analysis for describing the trajectory of the human mandible in 3d
53. **WALKE, W., KAJZER, W., MARCINIAK, J.**  
Biomechanical characteristic of coronary stent in percutaneous

- transluminal coronary angioplasty
54. **OSTROWSKA, A., BEDZINSKI, R., SASIADEK, M.**  
Relation of mechanical and structural properties of cancellous bone
55. **VRÁNA, J., MICHALEC, J., SEDLÁČEK, R., HORÁK, Z.,  
KOUKALOVÁ, J.**  
Measurements of mechanical properties of human articular cartilage in  
the hip joint
56. **GMYR, M., KOBIELARZ, M., FILIPIAK, J.**  
Investigation of the mechanical and clinical properties of the abdominal  
aorta
57. **FILIPIAK, J., PEZOWICZ, C., GONET, M.**  
Influence of pedicle screws design on pull-out strength
58. **MAŁGORZATA, G.-D., DĄBROWSKI, J. R.**  
The forming of tribological properties of materials for endoprostheses
59. **PILARSKI, W., BĘDZIŃSKI, R.**  
Application of experimental methods for displacement and strain analysis  
of cadaver human pelvis
60. **ROSENKRANCOVÁ, J., RŮŽIČKA, P., SEDLÁČEK, R., ŽÁK, J.**  
The calcitonin treatment versus bone bending strength
61. **DONAT, A., ZIVNY, M.**  
Perineometer
62. **RUZICKA, P., JANEK, M., SEDLACEK, R.**  
Mechanical properties of the cornea tissue
63. **Volf, J., Bezuska, V., HOLÝ, S., VÍTEK, K., VLČEK, J.**  
New sensor for in bone stress measuring
64. **HORNY, L., ADAMEK, T., KITTNAR, O.**  
Residual strains role in human aorta
65. **GYÖKÖS, F., BORBÁS, L., THAMM, F.**  
Photoelastic coating investigation during the fatigue test carried out on an  
Autobus frame structure
66. **GÓDOR, I., LEITNER, H., EICHLSEDER, W.**  
Test procedures to study the size effect on fatigue strength
67. **NICOLETTO, G., FERSINI, D.**  
Near-threshold fatigue crack growth in coarse-grained magnesium
68. **KUFFOVÁ, M., BOKŮVKA, O., NOVÝ, F., CHALUPOVÁ, M.**  
Fatigue crack propagation and life of Mg-alloy az 63hp
69. **KOPAS, P., NOVÝ, F., CHALUPOVÁ, M., BOKŮVKA, Otakar**  
Fatigue life of nodular cast irons in the very high cycle regime
70. **ČINČALA, M., NICOLETTO, G., BOKUVKA, O., BERTANI, F.,  
CHALUPOVÁ, M.**  
Long-life fatigue behavior of a martensitic bearing steel
71. **DOUBRAVA, R.**  
The influence of stress state on the fatigue crack growth prediction in the  
3D body
72. **VÍTEK, K., DOUBRAVA K., HOLÝ, S., KOLMAN, R. , MAREŠ,  
T., ŠPANIEL, M.**  
Residual stress identification by means of „signal differentiation method“
73. **GOLDMANN T., HIMMLOVÁ L.,**  
Usage of motion analysis for describing the trajectory of the human  
mandible in 3d
74. **RŮŽIČKA, M..**  
Local stress parameters for multiaxial fatigue of spot welded joints
75. **PETRUŠKA, J., ŘÍDKÝ, R., HORSKÝ, J., KOTRBÁČEK P.**  
Identification of semisolid steel behaviour
76. **DYNYBYL, V.**  
Experimental analysis of force and rotation effects used for prediction of  
gearbox's wear

77. **GAJDOŠ, I.**  
A model for fracture behaviour of a thin-walled pipe damaged by the net of stress corrosion cracks
78. **HECKER, F. W., HECKER, M.**  
Digital photoelasticity of a specimen with rotating principal directions

13.00 - 14.15 Lunch

14.30 - 16.10 **Oral Session 3.**  
Biomechanics, residual stress measurement

79. **NÄGERL, H., MANSOUR, M., LEE, Ch., KUBEIN-MEESBURG, D., FANGHÄNEL, J.**  
Mechanical properties of lumbar and thoracic motion segments
80. **BEDZINSKI, R.**  
**Experimental and numerical investigations in the biomechanics**
81. **KOCSIS, L., KISS, Rita M.**  
New possibilities for motion analysis in Hungary
82. **RADEK, S., JANA, R.**  
Experimental evaluation of biomaterials - polyetheretherketone
83. **HOLÝ S., DOUBRAVA K., VÁCLAVÍK J., VÍTEK K., WEINBERG, O.**  
Residual stress determination – one of tools for evaluating technology, quality and economy of the product

16.10 - 16.20 Coffee break

16.20 - 18.30 **Poster Session 3.**  
Special investigations: Barkhausen noise, corrosion; stress,- and strain analysis, miscellaneous applications

16.20 - 17.20 **Introduction to presentations of Poster Session 3.**

84. **NOVAK, G., FUCHS, K., KROUZECKY, N.**  
Hydraulic model tests on a tunnel variation of collective duct and by-pass channel of the river Wien
85. **TAKÁCS, N., ANGYAL, R.**  
Stress analysis on suspension ribbons of a counter ceiling
86. **KALETA, J., WIEWIÓRSKI, P., WIŚNIEWSKI, W.**  
Ferromagnetic metal sheets texture testing with the use of villari effect
87. **PUSKÁS, P.**  
Examination of residual stress in head checked rails
88. **BOMBA, J., KALETA, J., SAWA, P.**  
The influence of prestress on magnetomechanical damping in giant magnetostrictive materials
89. **HOFFMANN, K., LIEHL, R.**  
Measurement of cross-oscillation effects at a detachable bicable ropeway
90. **HOLL, H.J., BERGHAMMER, A., ~~GRAHNERT, R.~~**  
Experimental and numerical analysis of vibration absorbers for turbine blades
91. **CONSTANTINESCU, D. M., CONSTANTIN, N., STOICA, M. O., GAVAN, M.**  
Three-dimensional variations of stress intensity factors along the front of the through cracks
92. **POPESCU, D.**

- Measuring the horizontality of hexapod type work platforms
93. **ILIESCU, N., NĂSTĂSESCU, V., ATANASIU, C.,**  
On results of a comparative stress state analysis in perforated plate of an industrial equipment
94. **ANTON, J., ABEN, H.**  
A discrete algorithm of integrated Photoelasticity for axisymmetrical problems
95. **PYRZANOWSKI, P., STUPNICKI, J.**  
Interaction between the crack faces of subsurface fatigue cracks due to normal and tangential loads
96. **ŠIMIĆ, D.**  
Determination of the level of torsional restraint by trapezoidal sheeting
97. **LAKUSIC, S., RAK, M.**  
Experimental analysis of the rail behavior in the case with irregularity on running surface and without it
98. **RUZICKA, M., POUL, R., BLAHOUS, K., UHER, O.**  
Experimental verification of bending stiffness analysis of the windmill shaft
99. **BALLON, I., PÉNTEK, L.**  
Foile-type strain gauge production at the KALIBER plant
100. **LEITNER, H.- GÓDOR I., FORSTNER Ch.**  
Characterization of the mechanical properties of sliding bearing materials based on aluminium
101. **MINAK, G., FRAGASSA, C.**  
Experimental studies on free diving fins
102. **GOTA, E., PASTRAV, I.**  
Stresses in a steam turbine rotor
103. **ŠPANIEL, M. , DIVIŠ, M., TICHÁNEK, R.**  
Steady state heat analysis of engine head
104. **SITEK, L., FOLDYNA, J.**  
Measurement of selected parameters of modulated high-speed water jet
105. **ISTRATE, M., HARDAU, M.**  
The comparative study of the state of stresses  
In the body of a horizontal centrifuge
106. **ŽLÁBEK, P., PLÁNIČKA, F., BARTÁK, J., MENTL, V.,**  
An experimental study of fatigue crack behaviour in weldments
107. **BOUSKA, P., HANYKYR, V., PUME, D.**  
Investigation on interaction of clay units and concrete in the floors
108. **MACURA, P., FIALA, A.**  
Residual stresses at flats and rolled sections
109. **HOLKUP, T., ŘEZNÍČEK, J.**  
Experimental determination of the coefficient of thermal expansion using strain gauges

20.00 - 22.00 Conference Dinner

Saturday,  
27<sup>th</sup> September, 2003.

7.30 - 9.00 Breakfast

9.00 - 10.20 **Oral Session 4.**  
Material testing and fatigue of metals

110. **RIEDLER, M., EICHLSEDER, W.**  
New method of measuring temperature and strain in high temperature low cycle fatigue and thermo-mechanical fatigue testing
111. **IKEGAMI, K.**  
Cyclic Plastic Deformation of Steel at Liquid Nitrogen Temperature
112. **LENKEY, Gy. B., SZÁVAI, Sz., TÓTH, L.**  
Application of up-to-date material testing and numerical methods for design optimisation of large sphere valves
113. **NICOLETTO, G., KONEČNÁ, R., COLLINI, L., BUJNOVA, P.**  
Damage mechanisms in ferritic-pearlitic nodular cast iron

10.20 - 10.30 Coffee break

10.30 - 11.50 **Oral Session 5.**  
Non metallic materials, composites. Material testing and fatigue of metals.

114. **CZOPOR, J., RYBACZUK, M.**  
Movable Cellular Automata method as a tool to simulate cracks propagation in ceramic materials
115. **SZATA, M., DABROWSKA-SZATA, M.**  
Fatigue fracture, crack initiation and description of propagation
116. **KUNZ, L., LUKÁŠ, P.**  
An experimental study of fatigue behaviour of rubber Segments for low-noise RaiLway wheels
117. **BENČAT, J.**  
Experimental analysis of steel water tank tower

11.50 - 12.00 **Closing the Symposium**

12.10 - 13.10 Lunch