

*A workshop is organised in relation to the publications of the Granular Matter Section JETC 2017,
at the Hungarian Academy of Sciences HAS, Main Building, June 12, „Felolvasó terem” 1051
Budapest, Széchenyi István tér 9*

by the HAS-BME Morphodynamics Research Group, the Óbuda University, (Alternative Energy Technologies Knowledge Center and Environmental Protection Engineering) and The School of Engineering and The Built Environment Edinburgh Napier University, with the support of the VI. Section of Engineering Sciences of HAS, Eötvös Loránd Physics Society Thermodynamics Group, Scientific Soc. of Silicate Industry, the Institute for Soil Sciences and Agricultural Chemistry (HAS), ISSMGE Hungarian Nat. Committee, Eng. G. and Geotechnical Dep. BME.

8:00	Registration
8:20	
8:40	CHAIR RAJKAI, K. RISSAC AND CO-CHAIR TELEKES, G. SZIU, VÁN, P. BME, Opening: Kálmán Rajkai, Gábor Domokos, Péter Kádár
9:00	Barreto, D. Imre, E.Goudarzy, M.: Preliminary study on the relationship between the small and intermediate strain properties of granular materials in terms of grading entropy parameters
9:20	Pande, G. N.: Soil Water Retention Curve for a Soil Mass Consisting Uniform Sized Spherical Particles
9:40	Pande, G. N.: Particle/pore size distribution & microstructure of Saturation – key elements for rational description of Mechanical behaviour of unsaturated soils
10:00	Break
10:20	Écsi, L. Ván, P.: A nonlinear continuum theory of finite deformations of elastoplastic media
10:40	M. Arroyo: Effect of crushing on critical states of soils: a DEM-based study
11:00	Monforte, L. Arroyo, M. Carbonell, JM. Gens, A.: Large strain plasticity for soils using the Particle Finite Element Method
11:20	Arroyo, M.: Linking true sphericity and particle rotation to calibrate DEM contact
11:40	Lunch
12:00	
12:20	
12:40	CHAIR: TOROK. J. BME AND CO-CHAIR VÁN, P. BME
13:00	Lévay, S. Fischer. D. Stannarius, R. Szabó, B. Börzsönyi, T. and Török, J. : Uniform sphere packing or frustrated packing in a granular system under geometrical confinement
13:20	Sipos, A.: Tracking critical points on evolving curves and surfaces
13:40	Barreto, D. McDougall, J. Imre, E.: Volumetric consequences of mass loss in soils - A micro-mechanical perspective
14:00	Lévay, S. and Török, J. : Multiple shear bands in granular materials
14:20	Talata, I. Barreto, D. Lőrincz, J. Imre, E. Singh, VP Nagy L.: The internal stability, filter and segregation rules of grading entropy. Some comment on the internal stability rule and poofs for strong force chains.
14:40	Imre, E. Barreto, D. Goudarzy, M. Rahemi, N. Baille, W.: New aspects of the grading curve characterization. Mean or fractal gradings, naturally (internally stable) soils.
15:00	Szendefy, J. Lőrincz, J. Imre, E. Trang, PQ. Fityus, S. Casini, F. Guida, GD. Barreto, D. Gálos, M. Kárpáti L.: Mixture composition change and grading entropy – A rock classification alternative? A surface erosion criterion alternative? Lime moodification, a qualification alternative?

- 15:20 Break
CHAIR: MESZAROS, CS. SZIU CO-CHAIR. TELEKES, G. SZIU
- 15:40 Safranyik, F.: Calibration algorithm for discrete element models.
16:00 Gálos, M. **Orosz, Á.**: Breakage properties and DEM modelling of Ballast material
- 16:20 Varga, A.: Analysis of particle movement conditions of open mixing screws
16:40 Lőrincz, J. **Imre, E.** Goblyos, I. Fityus, S.: Triaxial test critical state ϕ parameter and the grading entropy parameters.
- 17:00 Verhás, J.: Morse lemma and entropy principle (Mohr Coulomb law and the properties of the friction)
- 17:20 **Martinás, K.**, Tremmel, B.: Basic Energy Concepts of Thermodynamics in Non-equilibrium Approach
- 17:40 **Imre, E.** Singh, VP. Baille, W. Barreto, D.: Preliminary study on the relationship between dry density and the grading entropy parameters. Approximate interpolation in terms of grading curves (density and SWCC parameter functions)
- 18:20 Discussion
18:40 Closing TELEKES, G. SZIU