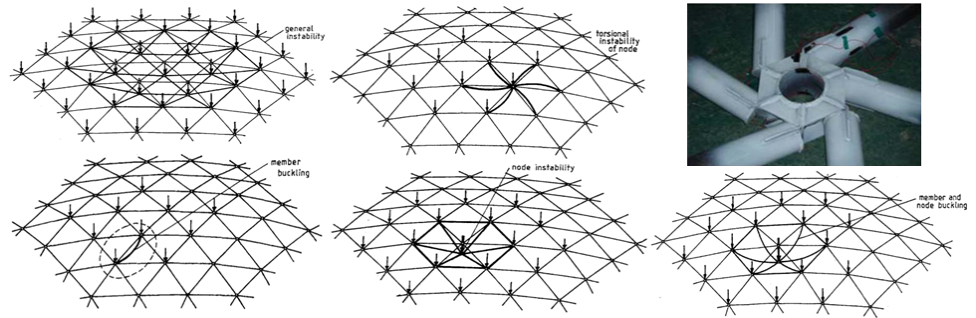




**Professor Kitti Gidofalvy**



See:

[http://doktori.bme.hu/bme\\_palyazat/2015/Honlap/Gidofalvy\\_Kitti\\_eng.htm](http://doktori.bme.hu/bme_palyazat/2015/Honlap/Gidofalvy_Kitti_eng.htm)

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**On reticulated shell structures (by Professor Gidofalvy):**

“Single-layer reticulated shells sometimes referred to as grid shells became widespread in the last 15 years. Mainly the so-called free-form roof structures – with seemingly irregular shape and doubly curved mid-surface – became popular, thanks to software developed specifically for architectural design purposes. Because of the geometrical complexity, new questions arise in the areas of structural design and economic construction. The main goal of my research is to reveal the connection between the geometry of the shell and its structural behaviour. On the other hand, I focus on the joints that connect the members in the shell structure. I developed a numerical method suitable for comparing the structural behaviour of structures with different geometrical parameters and different joints.”

**Selected Publications:**

- [G1] Gidófalvy, K., Katula, L., and Ma, H., A semi-rigid steel joint system for free-form shell structures with T sections, *Periodica Politechnica*, 2015 (in preparation)
- [G2] Gidófalvy, K., Katula, L., and Ma, H., Semi-rigid joints in free-form grid shell structures, *Journal of the International Association of Shell and Spatial Structures*, 2015 (submitted)
- [G3] Gidófalvy, K., Katula, L., Ma, H., and Fan, F., Semi-rigid free-form grid shells on rectangular plan, 7. European Conference on Steel and Composite Structures (Eurosteel 2014), Ed. Landolfo, Mazzolani, 2014
- [G4] Gidófalvy, K., and Katula, L., Imperfection for the Buckling Analysis of Grid Shells, *Proceedings of the Second Conference of Junior Researchers in Civil Engineering*, 2013
- [G5] Gidófalvy, K., Katula, L., and Mészáros, L., Behaviour study of single-layer steel grid shells based on numerical analysis, *Proceedings of the Ninth FIB International PhD Symposium in Civil Engineering*, Ed. Müller, Haist, Acosta, KIT Scientific Publishing, 2012, pp. 563–567.

- [G6] Gidófalvy, K., and Katula, L., Effect of connection rigidity on the behaviour of single-layer steel grid shells, Proceedings of the Conference of Junior Researchers in Civil Engineering, 2012
- [G7] Gidófalvy, K., Szabad formájú szerkezetek tervezése, MAGÉSZ Acélszerkezetek, Vol. 7, No. 2, 2010, pp. 41–45. (in Hungarian)
- [G8] Gidófalvy, K., Szabad formájú szerkezetek tervezése, 14. Fémszerkezeti Konferencia, Göd, 2010, pp. 1–5. (in Hungarian)