

dr. KARL KUZMAN
professor



1. General:

1941	born in Vitanje, Slovenia
1973-1978	UNIOR – forging industry Zreče: director of hot and cold forging plant
1996	professor, Faculty of Mechanical Engineering, University of Ljubljana,
1993-2005	founder and director, TECOS- Slovene Tool and Die Development Centre, Celje, (www.tecos.si)
2005 - 2007	Dean, Faculty of Mechanical Engineering, University of Ljubljana, Slovenia

2. Research experiences:

1 month EUMUCO Forging Equipment, Germany
6 months researcher, TU Stuttgart, Germany
1 month researcher MEL Tsukuba, Japan

3. International organisations:

ICFG – International Cold Forging Group (Chairman 2003 - 2007)
IDDRG – International Deep Drawing Research Group (National Secretary)
ICEM – International Committee for Ecology and Economy (Chairman 2003 - 2009)
CIRP – International Academy for Production Engineering, Paris (associate member since 2004)
WAMME -World Academy of Materials and Manufacturing Engineering, Gliwice, PL (fellow since 2006)

4. Postgraduate education:

supervisor/ mentor: 6 Dr. Sc. in Slovenia,
Dr. Sc. exams: in Germany (1), Portugal (1), Macedonia (1), and Denmark (1)

5. Invited lectures on universities: Glasgow, Erlangen, Kopenhagen, Miskolc, Zagreb, Skopje, Padua, Eindhoven, Tsukuba, Shanghai, Maribor, Rijeka, Sarajevo, Cranfield, Novi Sad, Ankara

6. Research interests: metal forming processes, tools and machines; CAE; FEM; economy in manufacturing, ecology and energy savings in manufacturing

7. Ten selected publication:

1. KUZMAN, Karl. Energy evaluation of cold-forming processes. *CIRP ann.*, 1990, vol. 39, no. 1, pp 253-256

2. KUZMAN, Karl, PEPELNJAK, Tomaž, HOFFMANN, P. Flexible Herstellung von Lamellenwerkzeugen mittels Laserstrahlschneiden. *Blech, Rohre, Profile*, 1994, vol. 41, No. 4, pp. 241-245.

3. KUZMAN, Karl, PFEIFER, E., BAY, N., HUNDING, J. Control of material flow in a combined backward can - forward rod extrusion. *J. mater. process. technol.*. 1996, Vol. 60, pp 141-147.

4. KUZMAN, Karl, NASTRAN, Miha, DODD, Bradley. Determination of cold plastic flow properties of aluminum 2124 alloy metal matrix composite at high strains and hydrostatic pressures. *J. mater. sci. lett.*, 1999, vol. 18, no. 17, pp. 1425-1426.

5. VOLLERTSEN, Frank, BIERMANN, Dirk, HANSEN, H.N., JAWAHIR, I.S., KUZMAN, Karl. Size effects in manufacturing of metallic components. *CIRP ann.*, 2009, vol 58, no. 2, pp. 566-587.

6. GANTAR, Gašper, KUZMAN, Karl, FILIPIČ, Bogdan. Increasing the stability of the deep drawing process by simulation-based optimization. *J. mater. process. technol.*. 2005, vol. 164/165, pp. 1343-1350.

7. KUZMAN, Karl. Closed loop control of the 3D bending process. *CIRP ann.*, 2003, vol. 52, no. 1, pp. 205-208.

8. PETEK, Aleš, KUZMAN, Karl, SUHAČ, Blaž. Autonomous on-line system for fracture identification at incremental sheet forming. *CIRP ann.*, 2009, vol. 58, No 1, pp. 283-286,

9. KUZMAN, Karl. Comments on the cold metal forming processes stability control. *J. mater. process. technol.*. 2007, vol. 185, No. 1/3, pp. 132-138.

10. KUZMAN, Karl. Metal working: cold extrusion. V: ILSCHNER, Bernhard, KRAMER, Edward J., MAHAJAN, *Encyclopedia of materials : science and technology*. Amsterdam [etc.]: Pergamon, 2001, pp. 5495-5500.

8. Bibliography

<http://izum.izum.si/bibliografije/Y20070108072009-00807.html>

9. Editor

1. KUZMAN, Karl, BALIČ, Jože: International Conference on Industrial Tools ICIT '97, Maribor, Slovenia, April 21st - 22nd, 1997. *Conference proceedings*. Celje: TECOS - Slovenian Tool and Die Development Centre, 1997,
2. KUZMAN, Karl, BALIČ, Jože: 2nd International Conference on Industrial Tools ICIT '99, Rogaška Slatina & Maribor, Slovenia, April 18-22, 1999. *Conference proceedings*. Celje: TECOS, Slovenian Tool and Die Development Centre, 1999.
3. KUZMAN, Karl: 3rd International Conference on Industrial Tools ICIT 2001, Rogaška Slatina, Celje, Slovenia, April 22-26, 2001. *Conference proceedings*. Celje: TECOS, 2001
4. SANO, Toshio, KAWAI, Kenichi, KUZMAN, Karl. *ICEM - 2000: proceedings of International Workshop on Ecology and Economy in Manufacturing, Bled, Slovenia, September 17 - 20, 2000*. Celje: TECOS, Slovenian Tool and Die Development Centre, 2001.
5. KUZMAN, Karl : 4th International Conference on Industrial Tools ICIT 2003, Bled, Celje, Slovenia, April 8-12, 2003. *Conference proceedings*. Celje: Tecos, Slovenian Tool and Die Development Centre, 2003.
6. KUZMAN, Karl; Janssen, Evert; COL, Alain; KERGEN, Richard; KESSLER, Lutz; LENZE, Franz-Josef.: *IDDRG 2003 Conference*. Bled, *Conference proceedings*. Celje: Tecos, Slovenian Tool and Die Development Centre, 2003.
7. KUZMAN, Karl (ur.). 5th International Conference on Industrial Tools, ICIT 2005, Velenje, April 12th - 15th 2005. *Conference proceedings*. Celje: TECOS, Slovenian Tool and Die Development Centre, 2005.
8. KUZMAN, Karl . 6th International Conference on Industrial Tools ICIT 2007, Bled, Sept. 11 th – 14 th *Conference proceedings*. Celje: TECOS, Slovenian Tool and Die Development Centre, 2007.