

## *Short Curriculum Vitae* (May 2015)

### **Personal data**

**Georgios K. Triantafyllidis**

Mining – Metallurgical Engineer

Aristotle University of Thessaloniki, Faculty of Engineering, Chemical Engineering Department, **Assistant Professor**

Adress: 4 K. Georgaki, 546 43, Thessaloniki, Greece, tel. +30 2310 845909, 996235, mob. +30 6978552467, e-mail: [gkrian@auth.gr](mailto:gkrian@auth.gr) [giorgos30f@yahoo.gr](mailto:giorgos30f@yahoo.gr)

### **Education**

Ms Engineering Degree: National Technical University of Athens, Department of Chemical Engineering, branch of Mining and Metallurgy (1975).

Ph. D. Thesis: Aristotle University of Thessaloniki, Chemical Engineering Department, 1993. In collaboration with the «Laboratoire de Cristallographie, CNRS Grenoble France».

### **Professional Education**

1. Level II Non-Destructive Testing Courses Certified for attending by Lavender International (MPI, PT, RT, UT), 1997.
2. Certification for attending the Intensive Short Course on «Industrial Corrosion» given by the Center for Professional Advancement, 1997.

### **Foreign languages**

1. Italian (Certification of the Aristotle University of Thessaloniki, 1970).
2. English (Cambridge Lower Certificate, 1981).
3. German (Zertifikat Deutsch als Fremdsprache, Goethe Institut, 1985).

### **Association memberships**

American Society of Metals (ASM International), Individual Member ID 2016024, since 2002.

### **Teaching Experience**

Lessons of the Education Program of the Chemical Engineering Department

Obliged:

Materials Science and Technology I, 5<sup>th</sup> Semester, 2004-2005 and 2006-2007

Materials Science and Technology II, 6<sup>th</sup> Semester, 2004-2005

Technical Drawing, 1<sup>st</sup> Semester, since 2012-2013

Elective:

Metallic Materials, 8<sup>th</sup> Semester, since 2000-2001.

### **Published Papers (15)**

1. **George Triantafyllidis**, Liliane Pontonnier, Daniel Fruchart, Jean-Louis Soubeyrou, Robert Fruchart, Alain Rouault, «Structural Investigation in (Zr-Ti) – (Mn-Fe) alloys having large hydrogen storage performances», Zeitschrift fuer Physikalische Chemie, Neue Folge, Bd. 163, S. 255-260 (1989).
2. **G. Triantafyllidis**, L. Pontonnier, D. Fruchart, P. Wolfers, J.L. Soubeyrou, «Effect of hydrogen absorption on the structural properties of hyperstoichiometric alloys  $Zr(Mn_{0.72}Fe_{0.28})_{2+x}$ », Journal of the Less-Common Metals, 172-174 (1991) p. 183-190.

3. L. Pontonnier, D. Fruchart, J.-L. Soubeyroux, **G. Triantafyllidis**, Y. Berthier, «Structural and magnetic behaviour of  $\text{LuFe}_2\text{H}_x$ , *Journal of the Less-Common Metals*, 172-174 (1991) p. 191-197.
4. D. N. Tsipas, **G. K. Triantafyllidis**, J. Kipkemoi Kiplagat, P. Psillaki, “Degradation behaviour of boronized carbon and high alloy steels in molten aluminium and zinc”, *Materials Letters* 37 (1998) 128-131.
5. D. N. Tsipas, **G. K. Triantafyllidis**, J. Kipkemoi, Y. Flitris, “Thermochemical Treatments for Protection of Steels in Chemically Aggressive Atmospheres at High Temperatures”, *Materials and Manufacturing Processes*, Vol. 14 (1999), Ref. No. 99-919.
6. **G. K. Triantafyllidis**, A. V. Kazantzis, K. N. Karageorgiou, “Premature Fracture of a Stainless Steel 316L Orthopaedic Implant by alternative Episodes of Fatigue and Cleavage Decoherence”, *Engineering Failure Analysis* 14 (2007) 1346-1350.
7. A. V. Kazantzis, M. Aidow, I. P. Jones, **G. K. Triantafyllidis**, J. Th. M. De Hosson, “The mechanical properties and the deformation microstructures of the C15 Laves phase  $\text{Cr}_2\text{Nb}$  at high temperatures”, *Acta Materialia* 55 (2007) 1873-1884.
8. A. V. Kazantzis, M. Aidow, **G. K. Triantafyllidis**, J. Th. M. De Hosson, “On the self-pinning character of synchro-Shockley dislocations in a Laves phase during strain rate cyclical compressions”, *Scripta Materialia*, 59 (2008) 788-791.
9. **G.K.Triantafyllidis**, A.V.Kazantzis, E.K.Drambi, El-Aour Sami, A.I.Kalantzis, “Fracture characteristics of torsion–bending fatigue and impact fatigue failure of two steel pins in a crawler excavator”, *Journal of Failure Analysis and Prevention*, (2009) 9:23-27.
10. **G. K. Triantafyllidis**, A. Antonopoulos, A. Spiliotis, S. Fedonos, D. Repanis, «Fracture characteristics of fatigue failure of a vehicle’s ductile iron steering knuckle», *Journal of Failure Analysis and Prevention*, (2009) 9:323-328.
11. **G. K. Triantafyllidis**, N. Stefanidis, «Fracture characteristics of tensional-torsional fatigue failure of the Archimedes helix», *Journal of Failure Analysis and Prevention*, (2011) 11:222-226.
12. **G. K. Triantafyllidis**, A. Antoniou, «Investigation of the failure mechanism by bending of a rack steering gear», *Journal of Failure Analysis and Prevention*, 18-05-2011.
13. **Triantafyllidis G. K.**, Kiligaridis I., Zagkliveris D. I., Orfanou I., Spyridopoulou S., Mitoudi-Vagourdi E., Semertzidou S., «Characterization of the A6060 Al alloy mainly by using the micro-hardness Vickers test in order to optimize the industrial solutionizing conditions of the as-cast billets», *Journal of Materials Sciences and Applications*, 2015, 6, 86-94.
14. **Triantafyllidis G. K.**, Pukhalska N. V., Zagkliveris D. I. «Natural aging effects on the solutionizing heat treatment process of the A6060 Al alloy as-cast billets for profile production», *Journal of Materials Sciences and Applications*, 2015, 6, 111-116.
15. **Georgios Triantafyllidis**, Dimitrios Zagkliveris, Panagiotis Koliotsas «Metallurgical Analysis Explains the Failure Mechanism of a Farm Tractor’s PTO + PTO’s Drive Shaft,

Assisting in the Evaluation of Economical Consequences of Similar Events», **Journal of Failure Analysis and Prevention**, (2015) 15:179–183.

**Coordinator of Professional Seminars – Meetings:**

1. Technical Chamber of Greece, Regional Department of Thrace, «Exploitation of cold deposits in Thrace». 14-15 of October 2000, Komotini, Greece.
2. Macedonian Castings SA and QIT-Fer et Titane Inc.Sorel.Canada/RBM.South Africa Subsidiary of RIO TINTO IRON & TITANIUM INC, seminar on Ductile Iron presented by Pierre – Marie CABANNE, Aristotle University of Thessaloniki, March 2006.

**Conference Presentations**

1. National Conference Association of Chemical Engineers 2009 (one presentation)
2. National Conference Association of Chemical Engineers 2009 (first presentation)
3. National Conference Association of Chemical Engineers 2009 (second presentation)

**Author**

1. Book in the greek language titled «**General Metallurgy For the non – Metallurgical Engineer and the Materials Scientist**», Tziolas Editions, Thessaloniki 2014.
2. Translator in greek of the Burry Dupen’s book, «**Applied strength of Materials for Engineering Technology**», v.7, November 2014.

**Work in progress (scientific research)**

Welding and thermal treating of high Silicon Ductile Iron