

# **CURRICULUM VITAE**

IRAKLIS MAVROS

Dr. MATERIALS ENGINEERING

## **PERSONAL DETAILS**

First Name	IRAKLIS
Last Name	MAVROS
Date of Birth	5 <sup>th</sup> of July 1982
Address	Chr. Smirnis, 1 B', 65403
ZIP Code / City	65403 / KAVALA
Personal Phone Number	+30 6944 381 268
E-mail Address	iraklismavros@gmail.com
Nationality	Hellenic

## **EDUCATION**

- 2007-2013      Doctoral Thesis  
*"Development of Aluminum Matrix Composites and Evaluation of their Corrosion and Wear Behavior"*
  - Grade      Excellent  
  
Department of Materials Science and Engineering,  
University of Ioannina
- 2006-2007      Diploma Thesis  
*"Heat Treatment of Highly Alloyed White Cast Irons"*
- 2000-2007      Diploma of Materials Engineering
  - Grade      6.62 (Very Good))  
  
Department of Materials Science and Engineering,  
University of Ioannina

## **PERSONAL SKILLS**

Metallurgy  
Metallographic Preparations  
Microstructural Analyses  
Heat Treatments  
Phase Transformations  
Casting  
Metal Matrix Composites  
Aluminum Alloys  
Mechanical Properties - Testing  
Corrosion and Protection of Metal  
Materials  
Tribology  
Optical Microscopy  
Scanning Electron Microscopy  
Coordination and administration of  
people and projects  
Living, cooperation and excellent  
communication in the work  
environment

## **WORKING EXPERIENCE**

05/2012 – 09/2012

Cooperation with Swerea Swecast  
AB, Jönköping, Sweden,  
participating the Erasmus  
Exchanging program

12/2005 – 03/2006

Cooperation with Greek Modern  
Castings, Kambakas Group,  
Diomidia, Xanthi

## **TEACHING EXPERIENCE**

2007-2012

Supervision and technical guidance of undergraduate theses in the "Applied Metallurgy" Laboratory, Dept. Materials Science and Engineering, University of Ioannina

2009-2012

Teaching assistant in the "Applied Metallurgy" Laboratory, Dept. Materials Science and Engineering, University of Ioannina

2008-2010

Teaching assistant in the "Mechanics, Smart Sensors & Nondestructive Evaluation (MSS-NDE)" Laboratory, Dept. Materials Science and Engineering, University of Ioannina

## **INTERNATIONAL JOURNAL PUBLICATIONS**

2013

H.Mavros, A.E.Karantzalis, A.Lekatou, «Solidification observations and sliding wear behaviour of cast TiC particulate reinforced AlMgSi matrix composites», Journal of Composite Materials, Vol 47, No 17, August 2013, p 2149-2162

2012

A.E. Karantzalis, A. Lekatou, A. Kapoglou, H. Mavros, V. Dracopoulos, «Phase transformation and microstructural observations during subcritical heat treatments of a high-chromium cast iron», Journal of Materials Engineering and Performance, Vol. 21, No. 6, July 2012, p 1030-1039

- 2011 A.E.Karantzalis, A.Lekatou, E.Georgatis, V.Poulas, H.Mavros, «Casting-based production of Al-TiC-AlB<sub>2</sub> composite material through the use of KBF<sub>4</sub> salt», Journal of Materials Engineering and Performance, Vol 20, No 2, March 2011, p 198-202
- 2010 A.E.Karantzalis, A.Lekatou, E.Georgatis, V.Poulas, H.Mavros, «Microstructural observations in a cast Al-Si-Cu/TiC composite», Journal of Materials Engineering and Performance, Vol 19, No 4, June 2010, p 585-590
- A.E.Karantzalis, A.Lekatou, E.Georgatis, H.Mavros, «Solidification behaviour of ceramic particle reinforced Al-alloy matrices», Journal of Materials Science, Vol 45, No 8, April 2010, p 2165-2173
- A.E.Karantzalis, A.Lekatou, E.Georgatis, T.Tsiligiannis, H.Mavros, «Solidification observations of dendritic cast Al-alloys reinforced with TiC particles», Journal of Materials Engineering and Performance, Vol 19, February 2010, p. 1268-1275
- 2009 A.E.Karantzalis, A.Lekatou, H.Mavros, «Microstructure and properties of high chromium cast irons: effect of heat treatments and alloying additions»,

International Journal of Cast  
Research, Vol 22, No 6, December  
2009, p 448-456

A.E.Karantzalis, A.Lekatou and  
H.Mavros, «Microstructural  
modifications of as-cast high-  
chromium white iron by heat  
treatment», Journal of Materials  
Engineering and Performance, Vol  
18, No 2, March 2009, p 174-181

**PRESENTATION IN  
CONFERENCES**

20-22/11/2013  
Volos

5<sup>th</sup> Panhellenic Conference on Metal  
Materials, "Al/TiC composite  
materials: Comparative study of  
electrochemical corrosion and  
sliding wear" (in Greek) I. Mavros,  
A. Lekatou, A.E. Karantzalis,  
"Applied Metallurgy" Laboratory,  
Dept. Materials Science and  
Engineering, University of Ioannina

4-5/11/2010  
Thessaloniki

4<sup>th</sup> Panhellenic Conference on Metal  
Materials, "Production of cast Al-  
TiC-AlB<sub>2</sub> composite through the use  
of KBF<sub>4</sub> salts" (in Greek). I.  
Mavros, A. Lekatou, A.E.  
Karatzalis. V. Poulas, E.  
Georgatis, "Applied Metallurgy"  
Laboratory, Dept. Materials Science  
and Engineering, University of  
Ioannina

3/4/2009  
Ioannina

Workshop Hellenic Metallurgical  
Society (HMS) and Hellenic  
Ceramic Society (HCS),  
"Combination of Metal-Ceramic  
Materials in Technological

6-7/12/2007  
Patra

Applications", A.E. Karantzalis, A. Lekatou, I. Mavros, "Applied Metallurgy" Laboratory, Dept. Materials Science and Engineering, University of Ioannina

3<sup>rd</sup> Panhellenic Conference on Metal Materials, "Study of the effect of heat treatment and alloying additions on the microstructure and mechanical properties of high chromium white cast irons" (in Greek). A.E.Karantzalis, A. Lekatou, I. Mavros, G. Karamanis, "Applied Metallurgy" Laboratory, Dept. Materials Science and Engineering, University of Ioannina and GMC

**LANGUAGES**

English

**COMPUTER SKILLS**

Windows, MS Office

**MILITARY  
OBLIGATIONS**

Fulfilled

## REFERENCES

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and Engineering, University of  
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