



Report on Trainings for the WBC partners held in Slovenia

Acronym: WBC-VMnet

Project title: WBC Virtual Manufacturing Network – Fostering an Integration of the Knowledge Triangle,

Project number: 144684-TEMPUS-2008-RS-JPHES

Date: June 2010,

Location: Ljubljana, Slovenija



In accordance with the approved training plan by all partners in the Project, in the period from 7th until 11th June 2010., specialized trainings realized in Ljubljana. Trainings were attended by WBC Partners, that is CTC staff from Serbia, Bosnia and Herzegovina, Croatia and Montenegro. Organizers of trainings were University of Ljubljana and C3M as partners involved in Project Consortium. Trainings schedule and topics are listed in table below:

7th June, C3M, Ljubljana

Trainers	Title of training: Introduction to FEM	Trainees
Prof. Dr. Tomaz Rodic	"Introduction and training overview"	1. Dr Vesna Mandic, 2. Dr Zoran Jurkovic, 3. Dr Zivko Babic, 4. Dr Mileta Janjic, 5. Vladan Lukovic, 6. Marko Pantic, 7. Sasa Randjelovic, 8. Sven Maricic, 9. Hrvoje Radelja.
Janez Languz	"Introduction FEM"	
	"FEM Worked example – 2D Heat Flow"	

8th June, C3M, Ljubljana

Trainers	Title of training: Symbolic approach to FEM	Trainees
Dr. Tomaz Sustar	"Symbolic approach to FEM"	1. Dr Vesna Mandic, 2. Dr Zoran Jurkovic, 3. Dr Zivko Babic, 4. Dr Mileta Janjic, 5. Vladan Lukovic, 6. Marko Pantic, 7. Sasa Randjelovic.
Trainers	Title of training: Introduction to FEM	
Dr. Martin Lamut	"FEM Worked example – 2D Heat Flow"	

9th June, Faculty of Natural Sciences and Engineering, Ljubljana

Trainers	Title of training: Microstructural changes	Trainees
Prof. Dr. Goran Kugler	"Methods for recrystallization and grain growth simulation on mesoscopic spatial scale"	1. Dr Vesna Mandic, 2. Dr Zivko Babic, 3. Dr Mileta Janjic, 4. Vladan Lukovic, 5. Marko Pantic, 6. Sasa Randjelovic.
David Bompac	"Atomistic Simulations in Materials Science: Kinetic Method Monte Carlo "	

10th June, Impol d. d., Slovenska Bistrica; TIC-LENS d. o. o., Celje

Trainers	Title of training: Industrial tour - IMPOL	Trainees
Dir. Edvard Slacek	"Production of aluminium and aluminium-alloy products by casting, rolling, extruding, and drawing"	1. Dr Vesna Mandic, 2. Dr Zoran Jurkovic, 3. Dr Zivko Babic, 4. Dr Mileta Janjic, 5. Vladan Lukovic, 6. Marko Pantic, 7. Sasa Randjelovic, 8. Sven Maricic, 9. Hrvoje Radelja, 10. Dusko Pavletic.
Trainers	Title of training: Industrial tour - TIC-LENS	
Dir. Matjaz Milfelner	"Laser Beam Hardening; Laser Engineered Net Shaping (LENS); Rapid Prototyping, Tooling & Manufacturing"	

11th June, Institute of Metals and Technology, Ljubljana

Trainers	Title of training: Microscopy (SEM, optical)	Trainees
Ales Nagode	“Electronic Microscopy - Scanning Electron Microscope – JSM5610”	1. Dr Vesna Mandic, 2. Dr Zivko Babic, 3. Dr Mileta Janjic, 4. Vladan Lukovic, 5. Marko Pantic, 6. Sasa Randjelovic.
Trainers	Title of training: Superplastic Al alloys	
Prof. Dr. Anton Smole	“Superplastic Aluminium alloys”	

Besides the trainings that took place at UI & C3M premises, two industrial tours were organized to companies:

1. IMPOL d. d. from Slovenska Bistrica, which produces aluminium and aluminium-alloy products by casting, rolling, extruding, and drawing,
2. TIC-LENS d. o. o. from Celje, that provides services and perform research and development of modern laser technology in all areas of industry.

Both companies are very good examples of cooperation industry with scientific and research institutions.

Apart from presentations and visits to shopfloors, trainees had opportunity to follow practical demonstrations of using specialized equipment, such as:

1. Thermo-mechanical simulator GLEEBLE 1500D (Institute of Metals and Technology)
2. Computerized materials testing machine ZWICK Z250 (Institute of Metals and Technology)
3. Optomec LENS 850R (TIC-LENS d. o. o.)
4. Robot laser hardening (TIC-LENS d. o. o.)



