



Tempus

**TEMPUS CD\_JEP-25047-2004**  
**Curricular Reform of MSc&PhD**  
**Metallurgy Programmes**  
**“Internet”**

*Current project attainments and further tasks overview*

*Prof. V. Shatokha*

Coordination Meeting INSA Lyon  
02-03 October, 2006

# JEPs for curriculum development

- to create new or update existing courses and enhance the skills of teaching staff
- to develop updated modern teaching and learning materials
- to provide material aid in purchasing computers and other teaching material

# Our Project - in a brief

- **Objective** - Reform of Metallurgy engineering education in Ukraine in the scope of Bologna process and the Sustainable Development Strategy

# Main milestones

(specific objectives)

1. Long term **strategy** for modern metallurgy education developed by **September 2006**
2. **Human resources** able to transfer the EU experience in metallurgy education to UA teaching practice by **September 2007**
3. **Master and PhD Metallurgy programmes** updated in line with EU experience by **September 2008**
4. Updated **English teaching for engineering students** based on modern communicative techniques launched by **September 2006**

# Outputs and Outcomes

1. Updated engineering English training methodology, programmes and techniques
2. UA Metallurgy students and academics acquainted to EU training practice
3. Updated Master and PhD Metallurgy study programmes
4. Dissemination
5. Sustainability
6. Quality Control and Monitoring
7. Management of the Project

## Activities

- 1.1. Intensive retraining courses of 8 UA English teaching staff at UK
- 1.2. Development of new English courses for engineering students and academics
- 1.3. Creation of Language Centres

Methodology, Teaching aids and techniques, Mobility

**1<sup>st</sup> Output - Updated English training  
September 2006**

# 1<sup>st</sup> Output – Fulfillment In Details

- 1.1. Intensive retraining courses of 8 UA English teachers at UK** - 11 Ukrainian teachers of English were retrained at Eastbourne School of English during the Project (2 weeks intensive course)
- 1.2 Development of new English courses for engineering students and academics** – by June 2006
- 1.3 Creation of two Language Centres in Ukraine** - by August 2006

# 1<sup>st</sup> Output – Extra Activity

Investigation of experience at computer-based language-learning centres in the UK

- ***Attended institutions***

1. University of Sussex (Sussex Language Institute, Language Learning Centre)
2. University of Brighton (The School of Languages, Language Teacher Development Programme)
3. Sussex Downs College (Computer Assisted Language Learning Centre)
4. Brighton Language Centre

- ***Collected data on software, web-resources***

- ***Exchange with experience***



Coordination Meeting INSA Lyon  
02-03 October, 2006

# 1<sup>st</sup> Output – Extra Activity

Questionnaire to investigate the approach for learning of foreign languages at the Universities all over the world was prepared and distributed through the mailing list of the EAIE (European Association of International Education)

- 45 responses
- 21 country
- Article submitted to the *Forum* (EAIE journal)

## Activities

- 2.1. Academic retraining at EU universities
- 2.2. Intensive English courses at home Universities for selected teams
- 2.3. Intensive Metallurgy Master courses delivered in UA by EU professors
- 2.4. Workshop at PSACEA

Methodology, Teaching aids, Mobility

2<sup>nd</sup> Output - Ukrainian Metallurgy students and academics acquainted to EU training practice  
September 2007

# 2<sup>nd</sup> Output – Fulfillment In Details

**2.1 Academic retraining at EU universities** (4 Ukrainian academics for 1 month to each EU University)

- *INSA – done in June 2006*
- KTH - 01/04/2007 – 28/04/2007
- TUBAF - 30/09/2007 – 27/10/2007

**2.2 Intensive English courses at home Universities for selected teams**

- *First courses term 06 Mar 06 – 18 Jun 06 (15 weeks) - done*
- Second courses term 04 Sep 06 – 29 Dec 06 (17 weeks)
- Third courses term 12 Feb 07 – 17 Jun 07 (18 weeks)
- Fourth courses term 03 Sep 07 – 28 Dec 07 (17 weeks)

**2.3 Intensive Metallurgy Master courses delivered in Ukraine by EU professors** (1 Prof. from each EU University for 1 week to Ukraine to participate in coordination meeting and to deliver 22 hours of lectures)

- *I course: 19 May 2006 – 02 June 2006 - done by Prof J.COURBON*
- II course: 13 May 2007 – 19 May 2007
- III course: 18 May 2008 – 24 May 2008
- **2.4 Workshop at PSACEA** - “Modern European Methods and Techniques in Education: personality and learning environment ” 18 Jun 07 – 22 Jun 07 - 4 representatives from EU partners

Coordination Meeting INSA Lyon  
02-03 October, 2006

**shift to May to  
coincide with coordination  
meeting and courses ?**

## Activities

- 3.1. Comprehensive testing of students' skills and knowledge
- 3.2. Comparative assessment of existing EU and UA Metallurgy curricula
- 3.3. Developing of new curricula units
- 3.4. Integration of curricula
- 3.5. Development of teaching aids
- 3.6 PhD training cycle UA-EU-UA
- 3.7. Master training cycle UA-EU-UA
- 3.8. Comprehensive testing of pilot groups
- 3.9. Finalization and accreditation of renovated curricula

Methodology,  
Teaching aids, Materials for accreditation, Research,  
Mobility

**3<sup>rd</sup> Output - Updated Master and PhD Metallurgy study programmes**

# 3<sup>rd</sup> Output – In Details

## 3.1. Comprehensive testing of students' skills and knowledge

*(September 2005)- done*

## 3.2. Comparative assessment of existing EU and UA Metallurgy curricula

- Assessment results will be discussed on the Meeting to be held 13 Feb 2006 – 25 Feb 2006 at NMAU
- Approach to update curricula will be discussed on the meeting at INSA (Lyon) 24 Apr 2006 – 30 Apr 2006
- May 06 - Strategy to update curricula developed

## 3.3. Development of new curricula units

- Jun – Oct 06 NMAU and PSACEA academics develop new units for updated Master and PhD Metallurgy Programmes
- Oct 06 examination of the developed units by KTH, INSA and TUBAF academics, development of recommendations
- Nov 06 modification of newly developed units by NMAU and PSACEA academics according to recommendations of the EU academics

## 3.4. Integration of curricula (till Feb 07)

## 3.5. Development of teaching aids (till Feb 07)



Coordination Meeting INSA Lyon  
02-03 October, 2006



Coordination Meeting INSA Lyon  
02-03 October, 2006

# 3<sup>rd</sup> Output – In Details

## **3.6 PhD training cycle UA-EU-UA** (2 Ukr PhD students to each EU University)

- I study term (UA): 05 Sep 2005 – 29 Jan 2006
- II study term (UA): 06 Feb 2006 – Jul 2006
- III study term (EU): 04 Sep 2006 – 28 Jan 2007
- IV study term (UA): 05 Feb 2007 – 01 Jul 2007
- V study term (EU): 03 Sep 2007 – 27 Jan 2008
- VI study term (UA): 04 Feb 2008 – 29 Jun 2008

## **3.7. Master training cycle UA-EU-UA** (2 Ukr Master students to each EU University)

- I study term (UA): 12 Feb 2007 – 10 Jun 2007
- II study term (EU): 03 Sep 2007 – 27 Jan 2008
- II study term (UA): 11 Feb 2008 – 15 Jun 2008

## **3.8. Comprehensive testing of pilot groups** (after each study term)

## **3.9. Finalization and accreditation of renovated curricula**

- Mar 08 updating curricula
- May 08 preparation of documentation for accreditation
- June 08 accreditation of updated Metallurgy Master Programme by the State Accreditation Commission

# Dissemination

## I. Web-conferences

1. “European training experience” Apr 2006
  - Target groups: UA academics
2. “Credential structure of study programs” Apr 2007
  - Target groups: UA academics
3. “Educational aspects by students’ eyes” Dec 2007
  - Target groups: UA metallurgy Master and PhD

## II. Conference at the NMAU

“Curricular reform of Metallurgy education in Ukraine”  
04 - 07 Aug 2008 **shift to May ?**

# SUSTAINABILITY

## **Creation of the Interuniversity Centre of Excellence**

- dissemination of advanced EU experience attained within a project to other UA universities
- fundraising with involvement of industry stakeholders interested in perfection of engineering education
- intensification of interuniversity cooperation
- intensification of international cooperation
- academic counselling

# QUALITY CONTROL AND MONITORING

- Organisation of Expert Teams for quality control and monitoring
- Academic quality control
- External evaluation of the project results

# MANAGEMENT OF THE PROJECT

## 1. Day-to-day project coordination

Management Board Committee represented with:

- Project Contractor at KTH
- Project Coordinator at NMAU
- Project co-Coordinator at PSACEA
- Project administrators at KTH, TUBAF, INSA, ESE, NMAU and PSACEA
- Project secretaries at KTH and NMAU

## 2. Holding 6 semi-annual coordination meetings

I – took place November 2005 (Stockholm)

II – took place May 2006 (NMAU, Dnipropetrovsk)

III - Oct 2006 (Lyon)

IV - May 2007 (PSACEA, Dnipropetrovsk, UA)

V - September 2007 (TUBAF, Freiberg, Germany)

VI - May 2008 (NMAU, Dnipropetrovsk, UA)