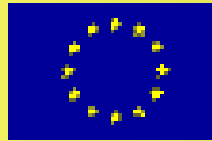


ANNEXE 6



Faculty of Sciences and
Technologies Marrakech



TEMPUS III



Cadi Ayyad University

TEMPUS PROGRAMME (FORGEMAT)

UNIVERSITY – ENTERPRISE COOPERATION

Presented by I. SAADOUNE

Marrakech, 22-23th January, 2007

“Classical universities”

Universities and enterprises each operate in their own field

Enterprises want short-term success on the market, while universities are much more long-term oriented and are interested in innovative teaching and research in general

Universities are often considered to have a little contact with the out-side world

New orientations of the high education ministry (2002)

Promoting and focusing all new formation on the professional sector



MATERIALS ENGINEERING AND THE MASTER OF CONDENSED MATTER

The case of our Faculty...

Technical Faculties are usually eager to cooperate with enterprises as a results of their traditional links in applied research

Technical Faculties consider that SMEs as the most relevant and interested partners for cooperation which is due to the fact that industry in Morocco is mainly made up of SMEs

Some examples in our Faculty

**Engineering formation in the food security (from 2004)
(Oil industry, aliments conservation cooperation,.....)**

**Master course : Telecom (from 2002)
(Maroc Telecom, Internet enterprises,)**

**Master courses : Moroccan mineral resources
Strong partnership with ONA group**

What about the chemical sciences department ?

Master courses : polymers (2001)

20 students per year, 4 months in enterprises (Casablanca, Marrakech)

Only two students are working now in the industry !!!!

Master courses : paints and varnishes (2003)

10 students per year, 6 months in enterprises (Casablanca)

All students are now working in the industry

Recommendation of the TEMPUS CONFERENCE

Amman (JORDAN ; April 2006)

1. Support structures and platforms

- Participation in governing boards of enterprises and universities
- Participation in recruitment committees in enterprises
- **Establishment of career service offices at universities**
- Establishment of technology transfer centers
- **Establishment of continuing training / lifelong learning centers (3th year of the project) CEDGEMA (P1 activity in the Tempus project)**
- **Locating business incubators at universities (two industrial projects have been developed : internet network ; medicals from cactus**

Recommendation of the TEMPUS CONFERENCE

Amman (JORDAN ; April 2006)

2. Curriculum development

- **Joint analysis of training needs**
- **Joint development of teaching and learning modules**
- **Joint education and training projects**

**(Activities A1 and
A2 in FORGEMAT)**

3. Mobility

- **Exchange of staff between universities and enterprises**
- **Joint research**

Some industrial partners

- **MANAGEM-ONA (Mineral Resources : Co, Ni, Au,)**
- **LAFARGE (cements)**
- **FACERAM (ceramis)**
- **ARCOL (paints)**
- **SICPA (paints)**
- **PRODEC (polymers)**
- **SACEM (mineral resources : Mn mines)**
- **ALCATEL (electronics)**
- **CERPHOS-OCP (phosphates, clays)**
- **CDER (solar energy)**

Research (Master Course : Condensed Matter)

Materials and Environmental Research Team



**Laboratory of Processes and Materials for Energy
and Environment**



**Moroccan Materials Network
(12 Moroccan Laboratories)**