



Open Archive Toulouse Archive Ouverte (OATAO)

OATAO is an open access repository that collects the work of Toulouse researchers and makes it freely available over the web where possible.

This is an author-deposited version published in: <http://oatao.univ-toulouse.fr/>
Eprints ID : 3024

To link to this article :

URL : <http://www.gpe-epic2009.org/>

To cite this version : Billet, Anne-Marie and Camy, Séverine and Coufort-Saudejaud, Carole and Gagneur, Sébastien and Le Lann, Jean Marc and Meyer, Michel (2009) *CHEMEPASS – Innovative Tools to promote Chemical Engineering Mobility*. In: 2nd International Congress on Green Process Engineering, 2nd European Process Intensification Conference, 14-17 June 2009, Venise, Italie.

Any correspondence concerning this service should be sent to the repository administrator: staff-oatao@inp-toulouse.fr

CHEMEMPASS – Innovative Tools to promote Chemical Engineering Mobility

Anne-Marie BILLET^a, Séverine CAMY^a, Carole COUFORT-SAUDEJAUD^a, Sébastien GAGNEUR^b, Jean-Marc LE LANN^a, Xuan MEYER^a

^a *Institut National Polytechnique de Toulouse- ENSIACET- 118 route de Narbonne,
31077 Toulouse Cedex 4, France*

^b *Coordinator - Department of Chemistry and Chemical Engineering, CPE Lyon , 43 Bd du 11 Novembre 1918,
69616 Villeurbanne, France*

All along their course, students involved in Chemical Engineering Higher Education get more and more claimant for an international mobility experience within European or even non-European Chemical Engineering Institution. In the present context of world-wide competition, most Institutions have understood that this individual mobility is an excellent way of human and academic training and clearly encourage it. Moreover, it is an opportunity for Institutions to welcome students from other countries and open up to the diversity of Chemical Engineering Higher Education.

This diversity in educational offer requires proper tools for a student to clearly analyse and compare educational programmes. A possible way to approach these requirements is for instance to provide common frameworks to describe educational programs; another way is to develop general tests of knowledge to evaluate basics of students as well as institutions specificities. A thorough study of existing assessment methods of educational programmes' outcomes and individuals' abilities, and of current European and national projects showed that no such tools dedicated to **Chemical Engineering** are available so far in Europe (and furthermore around the world) for public-use. The **CHEMEMPASS** project is born from this latter observation.

The 3 years long **CHEMEMPASS** project (standing for 'Chemical Engineering Passport') has been financed by the European Commission since the end of 2006 (Project website: <http://www.cpe.fr/chemepass/CPELyon-CHEMEMPASS.htm>). This project is carried out by a consortium of 13 higher education institutions (from 9 European countries and South Africa) and aims at developing innovative tools to promote international mobility and attractiveness in the European Chemical Engineering Higher Education through the development of specific tools. The project's target entities are more particularly:

- **Students, young graduates and professionals.**
- **Higher Education Institutions involved in Chemical Engineering.**
- **Industries hiring chemical engineers around the world.**

The ChemEPass tools are expected to:

- **Describe specific competences of Chemical Engineering Institutions:** Frameworks are worked out to describe academic programmes of universities; the resulting data base of university curricula will improve the transparency of programmes and facilitate the evaluation of specific competences.
- **Improve knowledge pedagogy:**
 - A general test of knowledge in Chemical Engineering has been developed for training and evaluating basic knowledge. This tool is presently under testing by partner institutions.
 - A booklet gathering examples of the various teaching practices held by the different partners of the CHEMEMPASS project is being drawn up and will be available for higher educational institutions involved in Chemical Engineering.