EMerald
Erasmus Mundus Master in Georesources Engineering.
Strategic Advisory Board.

Introduction

Facing the crucial need for high level education in Georesources Engineering, four top level mining schools in Europe, Freiberg (DE) – Liège (BE) – Lulea (SE) and Nancy (FR), have decided to join their efforts and organize an Erasmus Mundus Master program. The proposed EMerald course program combines a good balance between mining geology, resource modeling and mineral processing while promoting student mobility, plant visits and field trips. The four Partner Universities have decided to associate a network of International Universities and a network of Industrial Members to further enhance the EMerald project.

Strategic Advisory Board (SAB)

It is a consultative organization composed of the Industrial Members having shown their strong interest in the EMerald project. The four Partner Universities have decided not to include the network of Associated Universities into the SAB.

The role of the SAB is to:

- Promote EMerald within the larger mining community
- Recommend students for the course program
- Finance fellowship for students from less favoured countries
- Advise on the structure, the modules and the content of the courses of the master program
- Suggest, organize and lead professional seminars (as part of the management module of the course program)
- Organize guided technical visits to some facilities in Europe
- Offer and sponsor internships and master thesis topics (within the frame of the program)
- Host and sponsor the annual “get together” at the time of the graduation ceremony

Other functions may be added in the future upon recommendation of the Partner Universities.

The structure of the SAB:

The SAB shall start up with three Members, expecting to grow over time up to seven Members, until representing the larger mining community in Europe.

These three Members are:
Jacques Tack, ex-Corporate Development Manager at Aurubis.
Jean-Louis Cardini, Mineral Processing Director at Imerys.
Kari Niiranen, specialist in process mineralogy at LKAB.
The Chairman shall be nominated by the Members for a period of one year.
An invitation letter to the Industrial Members shall be prepared in the coming months, with a view to appreciate their likely interest to become a Member of the SAB.
Invitation to potential Industrial Members shall be extended to include representatives of the European Aggregate Industry

Schedule of meetings for the SAB:

The Members of the SAB shall meet in person at least twice a year.
Additional meetings, upon request of any of its Members and by means of conference calls, shall be arranged by the Chairman.

The Chairman outlines and communicates beforehand the agenda.
The Members of the SAB shall, on a rotating basis, be responsible for the minutes of the meetings.
A copy of the minutes shall be distributed to the four Partner Universities.

The SAB, by means of its Chairman, shall have the freedom to contact the four Partner Universities at any time.
Communication shall be done in writing or by electronic mail.
In which case, a memo shall be distributed to the Members of the SAB.

Priority action items for the SAB:

The Members shall by the end of the January 2014 review and comment in writing on the content of the courses of the complete curriculum.
Credit hours specific for each semester, have been reserved for teaching-seminars, of which the topics shall be proposed by the SAB.

Engineering Companies, such as SNC-Lavallin, Golder Associates, SRK, Outotec ... and Suppliers/Fabricating Companies, such as Metso, Atlas-Copco, Caterpillar, ICI ... shall be allowed to present specific research or application topics at these seminars as long as their commercial impact is limited.

These teaching-seminars can be coupled with specific mine visits to reinforce the teaching subject.
All students will have to be actively present at these seminars whose evaluation will account for 5 credits. The evaluation process might vary from one year to another.

The SAB likes to see the following general topics covered, without being limited to:
Sampling procedures, methodology, QA/QC
Introduction to mining/industrial safety
Key performance indicators at the mine and at the beneficiating plants
Human resources issues: selection and training
Power issues at industrial installation
Introduction to mining legislation; the specific case of the European mining legislation
Construction and management of a tailings pond
Management of mine waste versus industrial waste
Process control issues in beneficiating plants
Introduction to pyro- and hydromet technologies
Management of large mining/industrial projects
Ways to finance large mining/industrial projects

Jean-Louis Cardini, Jacques Tack.