



## **Bantrel Forum on Design in Chemical Engineering**

Held in Conjunction with the 56<sup>th</sup> Canadian Chemical Engineering Conference  
Sherbrooke Delta Hotel and Convention Centre  
18 October 2006

### **Design-Directed Research**

The first Bantrel Forum on Design in Chemical Engineering was held during the 55th Canadian Chemical Engineering Conference in Toronto last October. The goal of the first Forum was to share experiences and synthesize best practices on two themes: Design Throughout the Chemical Engineering Curriculum, and the Chemical Engineering Capstone Design Sequence. This year we would like to focus on design-directed research (see note below for a general definition), and some success stories from its application. The goal of the second *Bantrel Forum on Design in Chemical Engineering* will be to share experiences and synthesize best practices on successful design-directed research projects, and spin-off companies evolving through design-directed research activities. This will be followed by break-out sessions where the characteristics of design-directed research are discussed.

*Note: Design-directed research includes projects which meet the following 3 criteria:*

- 1. An industry-based problem or opportunity is addressed,*
- 2. The potential for innovation leading to the creation of a new or enhanced product and/or systematic design practice is enhanced, and*
- 3. An articulated design practice guides the research.*

### **Design-Forum-At-A-Glance**

#### **Wednesday Morning 18 October (10h00-12h00, Sherbrooke B)**

- Session Keynote Speaker: Janet Walden, Vice President - Research Partnerships, NSERC
- John McVey, Bantrel
- Alberto Alva-Argaez, Natural Resources Canada
- Esteban Chornet, Université de Sherbrooke

#### **Wednesday Afternoon 18 October (13h40-15h20, Sherbrooke B)**

- Tom Marlin, McMaster University
- Yonghoa Ni, University of New Brunswick
- Jean-Sebastien Simard, Wyeth

#### **Wednesday Afternoon 18 October (15h40-17h15, Sherbrooke B)**

- Break-out sessions to address key issues related to design-directed research
- Summary presentations from the facilitator of each break-out group
- Open discussion and workshop summary



## **Bantrel Forum on Design in Chemical Engineering**

### **Wednesday Morning Program**

Session Chairs:

Paul Stuart (Ecole Polytechnique) and Viviane Yargeau (McGill University)

18 October, 10h00-12h00

Sherbrooke B

### **Opening Keynote Speaker**

### **“Designing Innovation in an Environment of Change”**

Janet Walden

Vice President - Research Partnerships

NSERC

### **Bantrel Design Forum Objectives**

Paul Stuart, Ecole Polytechnique

### **Opening presentations**

John McVey, Bantrel

Alberto Alva-Argaez, Natural Resources Canada

Esteban Chornet, Université de Sherbrooke

### **Roundtable discussion**

**Lunch:** 12h00 – 13h40

## **Bantrel Forum on Design in Chemical Engineering**

### **Wednesday Afternoon Program**

Session Chairs:

Viviane Yargeau (McGill University) and Nicolas Abatzoglou (Université Sherbrooke)

18 October, 13h40-17h15

Sherbrooke B

### **Successful Case Studies**

Tom Marlin, McMaster University

Yonghoa Ni, University of New Brunswick

Jean-Sebastien Simard, Wyeth

### **Break-Out Session Protocols**

Nicolas Abatzoglou, Université de Sherbrooke

**Coffee Break:** 15h00 – 15h20

### **Break-Out Sessions**

30 minutes of discussion on targeted themes, facilitated by session participants

### **Break-Out Group Summary Presentations**

Summary presentations by the Group Leader of each of the break-out groups

Facilitator: Nicolas Abatzoglou, Université de Sherbrooke

### **Wrap-up Comments**

Viviane Yargeau, McGill University

17h05 – 17h15