

## Workshop: Measurement of the morphological structure of fibers and particles

The use of raw material fibers and particles is ubiquitous and can be found in different sectors like chemistry, pharmacy, textile industry, timber industry and many more. The characterization of the shape and size of fibers and particles is important for development of composite material products, process optimization and quality control. This workshop invites users of the Fibreshape and Powdershape system as well as other people interested in the measurement and characterization of fibers and particles to discuss their experience, methods and solutions.

**When:** 12-13 April 2012

**Where:** NRC Biotechnology Research Institute, 6100 Royalmount, H4P-2R2 Montréal, Québec, Canada

### Agenda

#### 12 April 2012, *Thursday*:

12.00      Lunch

13.10 - 14.10    Welcoming – Official start of Conference

[Dr. Denis Rho](#), NRC Biotechnology Research Institute, Canada

[Dr. Hubert Schmid](#), Innovative Sintering Technologies Ltd., Switzerland

*Short presentations: Theory, Methodology and Measurement Methods*

14.10 - 14.30    **Geometrical evaluation of the structure of plant products by Fibreshape**

[Dr. Hubert Schmid](#), Innovative Sintering Technologies Ltd., Switzerland

14.40 - 15.00    **Fibreshape utilization for size distribution of flax diameters**

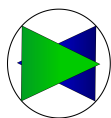
[Dr. Denis Rho and Jérémy Goimard](#), NRC Biotechnology Research Institute, Canada

15.10 - 15.30    **Length reduction of fibers in twin-screw extrusion of long fiber reinforced thermoplastics**

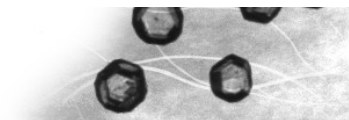
[Dr. Salim Derdouri](#), Industrial Materials Institute

15.30 - 16.00    Panel discussion / Open discussion

16.00      Coffee break



## Workshop 2012 in Montréal



*Short presentations: Image analysis and ....*

- 16.30 - 16.50 **Image analysis in the brain**  
[Georg Schmid](#), Vilters, Switzerland
- 17.00 - 17.20 **Image analysis of fibres and particles and the human eye**  
[Dr. Hubert Schmid](#), Innovative Sintering Technologies Ltd., Switzerland
- 17.30 - 18.00 **ASTM standard for cotton fineness measurements by image analysis ?**  
A video conference with [A. Ulrich](#), Biolin Saskatoon
- 19.00 **Dinner** in a restaurant in Old Montréal (dinner is not included in the inscription fee). **Please let us know if you want to join us by e-mail to:**  
[info@istag.ch](mailto:info@istag.ch)

### 13 April 2012, Friday

- 09.00 - 10.00 **Visit of the labs of the Biotechnology Research Institute**  
[Dr. Denis Rho](#), NRC Biotechnology Research Institute, Canada
- 10.00 **Coffee break**
- Characterization of fibers and particles*
- 10.30 - 10.50 **Curvature calculations on abrasive particles**  
[Prof. Christopher A. Brown, PhD](#), [Matthew A. Gleason](#), WPI - Center for Surface Metrology, USA
- 11.00 - 11.50 **Basics of powder and fiber characterization and challenges of image data processing with Powdershape and Fibreshape**  
[Dr. Hubert Schmid](#), Innovative Sintering Technologies Ltd., Switzerland
- 12.00 **Lunch**
- 13.30 - 15.00 **Fibreshape and Powdershape demonstration (on demand)**