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Q-Interline Sampling Award 2013

As has happened at previous international NIR spectroscopy conferences, Q-Interline handed out the Q-Interline sampling award in Montpellier, France, during the NIR-2013 conference. The scientific committee behind the award, headed by Professor Kim Esbensen, did a careful review of all posters and orals. Nominees were all poster and orals where sampling issues had been dealt with in a proper and professional manner, acknowledging that what comes before analysis may have a huge impact on the results.

This year's winner is Industrial Pharmacist Dr Lizbeth Martinez and her team, with poster #091, "Mixing of particulate material studied by near infrared spectroscopy". Dr Martinez and the team has made an important contribution to the understanding of how chemical and physical attributes affects the optical sampling situation, and that sampling can have a huge impact on the analytical performance.

Winners of the Q-Interline Sampling Award 2013. From left to right: Dr Lorenz Liesum, Dr Lizbeth Martinez and Dr Antonio Peinado.

Every other year, Q-Interline selects a person or a group to receive the Sampling Award. The achievement should focus on either fast analytical methods with critical consideration to the Theory of Sampling (TOS), or focus on critical, correct sampling in the area of Process Analytical Technologies (PAT). The sampling award can be given for fundamental studies, R&D or industrial implementation.

PANalytical NIR partners with ALS's CoreViewer

PANalytical NIR (formerly ASD Inc.) and ALS Mineral Services have announced that ALS's geochemical data management system CoreViewer will incorporate near infrared (NIR) mineralogy data collected from PANalytical's TerraSpec 4 to provide customers with greater comprehensive visual representation of their data.

Spectral mineralogy has long provided great benefits to mine operators for both mining exploration and production projects as thousands of spectra are often collected for each project. In addition to the spectral mineralogy, a plethora of additional data that is collected by geologists for projects can complicate the correlation, management and presentation of that data. The goal of this partnership is to provide seamless information flow from the collection and interpretation of the spectra, through integration with other geologic data and presenting it on the web for collaborative decision making.

Geologists can now submit TerraSpec data along with drill core photos into ALS' CoreViewer so spectral data can be plotted directly alongside the photograph, along with other relevant geological or geochemical data. This data is then viewable online.

More information from www.asdi.com

Martian sampling challenge

TOS forum has located a news item that will interest all readers. It concerns the world's decidedly largest and most refined effort to eliminate all possible IPE (Incorrect Preparation Errors, which in this case include "storage errors" and "cross-contamination errors"). The European Space Agency (ESA) have built a container to hold samples collected on Mars and return them to Earth (read the full story at http://bit.ly/16oLeH6).

This spherical container has been engineered to house samples to be brought back from Mars. Weighing less than 5 kg, this 23 cm-diameter sphere has been designed to keep Martian samples in pristine condition at a temperature of under –10°C throughout their journey back to Earth. The container hosts 11 sealable receptacles, including one set aside for a sample of martian air. Copyright ESA-Anneke Le Floc'h

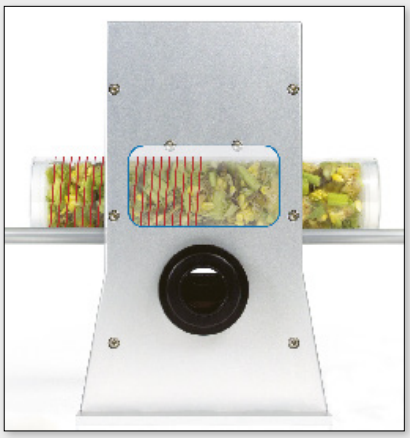
All readers of *TOS forum* will be able to locate a possible "weak spot" in the ESA article—but there may very well be a solution somewhere in the mission descriptions, regarding the all-important question:

- HOW will these 11 samples be taken? In a gravity field that is less than 1/3 of that on Earth? At temperatures which are generally below zero, and with an atmospheric pressure of 7.5 millibars only (less than 1/100 of that on Earth)?
- HOW does this influence our standard application of TOS?

Something to think about and ponder for all TOS afficionados ...

FT-NIR with Spiral Sampler

Q-Interline have launched a combination of their FT-NIR platform, the Quant, and a new patented accessory, the Spiral Sampler; together called the AgriQuant B8.



Q-Interline's Spiral Sampler acquires representative data from very hetergeneous samples.

The AgriQuant B8 makes it easy to acquire representative spectral data from very heterogenic samples with a high degree of reproducibility. Drying and grinding is no longer needed for many products and parameters, vastly reducing the total time spent from reception of the samples to the final result. Examples of target materials are wet forage, fresh energy crops and wood pellets, compost, cotton, flaky materials, big pellet materials and generally anything that does not fit well in a petri dish.

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Bon in Cherbourg, France, in 1994.

Leeds, which ran for many years at Leeds and at the Mackey School of Mines in Reno, Nevada. In 1977 he established the MSc in Geostatistics at Leeds, which was offered continuously until 2003 and was the first such programme offered anywhere in English.

Bon was instrumental in the dissemination of Geostatistics in the English-speaking world and in translating it into a practical and meaningful language that contributed significantly to its understanding and implementation both in academe and in industry. His approach to the theory and practice of sampling followed the same path. Among his many achievements in this field Bon translated into English the entire French manuscript of Gy's book, *Sampling for Analytical Purposes* (1996). This was the deciding achievement in the selection of Bon as the first recipient of the Pierre Gy Sampling Gold Medal at the first World Conference on Sampling and Blending in 2003. The award is made for "distinguished service in disseminating the Theory of Sampling" and, on this first occasion, it was made on the insistence of the theory's founding father, in recognition of what Gy considered to be vital help at a crucial time in the development of the sampling theory.

Following retirement in 1989, Bon remained active in teaching and research as an Honorary Lecturer at the University of Leeds. He also completed a PhD on the *Sampling and evaluation of gold deposits*, awarded in 1995, and which stands as a major contribution to the field. He was still publishing papers and writing his own software for sampling up until a few months before he died.

Bon is survived by two sons, Graham and Nicholas, and their families. His wife, Margaret, died in 2006.

(No-one knows the origin of the nickname "Bon" and, if Bon knew, he never told anyone, including his family. He was, however, universally known as Bon.)

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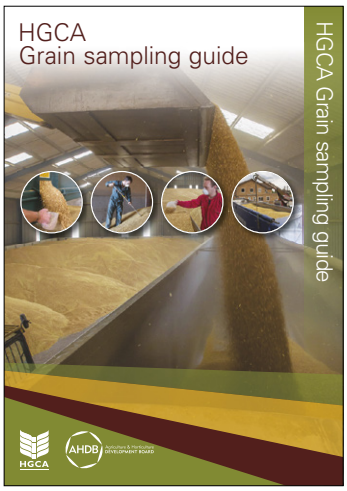
The AgriQuant B8 uses Agritubes as the sampling container. The 60 mm diameter glass tube is filled with sample and inserted into the AgriQuant B8. The AgriTube is spun and moved forward during the analysis, providing a 375 cm^2 scanning area of the sample in less than 90 s. Agritubes are inexpensive, easy to fill, empty, clean and re-use, keeping the cost per analysis very low. The AgriQuant solution allows reference labs to rethink their work-flow. Previous technologies often worked with a single golden cuvette, however, the AgriQuant B8 concept allows many tubes to be filled prior to scanning in batches.

The AgriQuant B8 can be seen in action on the Q-Interline YouTube channel: www.youtube.com/user/qinterline

Grain sampling

HGCA have published their *Grain Sampling Guide 2013*. Understanding the quality and condition of grain is crucial. Accurate sampling at each stage of the grain chain is required to develop that understanding. It should help to reduce waste and minimise charges, claims and rejections. This guide brings together the key requirements for effective grain sampling for everyone involved, from growing to purchasing. It seeks to minimise duplication of effort, maximising efficiency. In this guide, sampling refers to the collection of physical grain and also sampling for moisture, temperature, pests and moulds. A PDF version can be downloaded from http://bit.ly/1f3MJNl. The HGCA guide will be evaluated from the perspective of TOS in the next issue of *TOS forum*.



DIARY

2014

11 February, Johannesburg, South Africa. **Domain Analysis in Isatis.** www.geovariances.com/en/mining-domain-analysis-in-isatis-co945

29–30 July, Perth, Western Australia. **Sampling 2014.** www.ausimm.com.au/sampling2014/, esanneman@ausimm.com.au

CONFERENCE ORGANISERS

Remember to let us know of any conferences or other events that you would like listed in the *TOS forum* Diary. Just e-mail the details to ian@impublications.com.