

Preliminary IDRC 2016 Program

Sunday Evening, July 31

Welcome: David Funk, Chair, IDRC-2016

Phil Williams, "How It All Began"

Organizer: Donald Dahm—A Universe of Diffuse Reflectance

Craig Bohren, Theory of light scattering from small particles

Bruce Hapke, "A half-century of reflecting on reflectance"

Monday Morning, August 1

Frontiers of NIR Diffuse Reflectance, Organizer: Steven Delwiche

Byoung-Kwan Cho, Food adulteration topic

Tony Qin, Raman hyperspectral imaging topic

Moon Kim, Reflectance and fluorescence hyperspectral imaging topic

Charles Hurburgh, NIRT instrument model alignment topic

Monday Afternoon, August 2

CNIRS Governing Board meeting, 2 p.m.

Monday Evening, August 1

Tomas Hirschfeld Award Session, Organizer: Tom Fearn, Chair: Pierre Dardenne

Awardee: Jean-Michel Roger, "How to use the projections in the row and in the column spaces"

Ana Maria de Juan Capdevila, Topic TBA

Pierre Dardenne, "How to build a robust model against perturbation factors with only a few reference values"

Søren Balling Engelsen, "2017 INIRS Conference"

Tuesday morning, August 2

Instrumentation Advances for Diffuse Reflectance, Organizer: Jerome Workman

Art Springsteen, "The World of DR Standards"

Donald Dahm, "The Ideal Instrument for DR Measurements"

Jerome Workman, "The theory and practice of building instruments for DR measurements"

Arnold Eilert, "Practical experiences with a variety of instrumentation for DR Measurements"

Tuesday Afternoon, August 2

Poster Session, Organizer: David Semmes

All poster submissions will be welcomed by David Semmes at idrc.posters@cnirs.org!

Tuesday Evening, August 2

Vendor Showcase, Organizer: Howard Mark

IDRC Exhibitors of spectroscopic hardware and software will share novel aspects of their products.

Wednesday Morning, August 3

Hyperspectral Imaging and Remote Sensing, Organizer: Kurt Lawrence

Bosoon Park, "Hyperspectral Microscopy for Agriculture and Food Applications"

Seung Chul Yoon, "High-Speed Hyperspectral Imaging"

David Wetzel, "Quantitative Chemical Imaging via Near IR: Progress, Technology, and Application to Complex Mixtures of Solids that Result from Processing Plant Material"

Wednesday Afternoon, August 3

Software Shootout, Organizer: Benoît Igne

On-site Shootout open to all IDRC participants.

Traditional (pre-conference work) Shootout presentations. See IDRC website to download data set and instructions to participate!

Wednesday Evening, August 3

Gerald Birth Award Session, "Light Paths," Organizer: David Hopkins

Eric B. Brauns, Awardee, "Mid-Infrared Diffuse Reflection on Ultrafast Time Scales"

Arnold Kim, "Multiscale modeling of backscattered light"

Andrea Farina, "Recent advancements in time-domain diffuse optics for extreme sensitivity and depth penetration"

Thursday Morning, August 4

Advanced Chemometrics, Organizer: David Honigs

Pierre Dardenne, "A new Local PLS-based regression approach for near infrared spectroscopy (NIRS) data sets"

Dave Hopkins, "A fresh look at the Derivative Quotient Method in regression"

Mark Westerhaus, "Detecting structure in calibration datasets"

Martin Lagerholm, "A practical approach to ANN"

David Honigs, "Scatter correction for various optical geometries with one function"

Thursday Afternoon, August 4

Predict Your Own Time (PYOT) test run, 2:00 p.m. Organizer: David Ryan

Open CNIRS Meeting, 3:30 p.m.

Thursday Evening, August 4

Reception

Banquet

Awards and recognitions (Student Travel, Poster, Shootout, PYOT, Honorary Lifetime CNIRS Membership)

Featured speaker: Peter Griffiths, "Diffuse Reflections on Near- and Mid-IR Spectroscopy"
Announcement of Chair for IDRC-2018 and passing of the IDRC Whip

Friday Morning, August 5

Diffuse Reflectance Meets the Internet of Things, Organizer: Franklin W. Barton, II

Fred McClure Tribute

Nada O'Brien, "Integrating small instruments"

Ali Gahkani, "Managing large networks of diverse NIR instruments"

Ellen Miseo, "Detectors for sensors"