

Third IDRC Conference – 1986

Chairman: Franklin E. “Woody” Barton III



IDRC 1986 The Third Chambersburg Conference

The 1986 conference was the third one in Chambersburg and the third one for the Russell Research Center personnel to convene. The first was convened by Gerry Birth and the “zero’th” by Gerry as well. The one thing that stood out about this IDRC was size. The conference drew 150 delegates and we were quite pleased with the attendance and the quality of the meeting. The other item that marked this meeting was the passing of Tomas Hirschfeld. Tomas had agreed to use the IDRC this time to present a series of lectures on instrument design, spectroscopy and chemometrics. Needless to say we scrambled to attempt to fill the void. The 1986 conference was also the one at which we met to discuss the two-dimensional correlation spectroscopy and planned how the task should be done. At the previous conference Dave Himmelsbach and I had discussed our ideas with Tomas Hirschfeld and were certain it could be done and would be helpful with NIR interpretation.

The afternoons were filled with lengthy discussions in the common area, the dining room or on walks around the campus. There were the usual volleyball matches with Peter Griffith, golf and the “predict your own time run”. There was an afternoon trip to Gettysburg where two old artillerymen, Dave Himmelsbach and me, got to view the battlefield from a different perspective.

I remember the third conference as the last of the simple ones, because after that one the numbers grew even more and the need for formality and legality in the conduct of the meeting became real issues. After this meeting we had to have insurance and formal contracts and although we tried very hard the meetings became less personal. However this was first meeting at which we had a number of students and it is a tradition we have fostered over the years. Early on we realized that there was no place to learn the technology so the IDRC had a large educational role to play.

In the years that have passed Wilson College has changed and so has the IDRC. Those changes have been to move with the technology and keep the IDRC as the pre-eminent NIR reflectance conference in the world.

THIRD INTERNATIONAL DIFFUSE REFLECTANCE CONFERENCE



**WILSON COLLEGE
CHAMBERSBURG, PA**

AUGUST 17-22, 1986

ACKNOWLEDGEMENT

THE ORGANIZING COMMITTEE OF THE THIRD INTERNATIONAL DIFFUSE REFLECTANCE CONFERENCE GRATEFULLY ACKNOWLEDGES THE GENEROUS CONTRIBUTIONS OF PACIFIC SCIENTIFIC CORPORATION, TECHNICON INSTRUMENTS CORPORATION AND TREBOR INDUSTRIES, INC.

F. E. BARTON, II

W. R. HRUSCHKA

Final Program

Third International Diffuse Reflectance Conference
Technical Sessions
Meeting Times and Partial List of Speakers

MONDAY, AUGUST 18, 1986 8:30 a.m. - 12:00 p.m.

Instrumentation - Chairman - Ed Stark, Instrumentation Consultant

Don Webster, Pacific Scientific
Mark Westerhaus, Infracsoft International
Lois Weyer, Hercules, Inc.
Keith Snail, Naval Research Lab.

7:00 p.m. - 10:00 p.m.

Lab Automation - Chairman - P. C. Williams, Canadian Grain Commission

R. Wehling, University of Nebraska
C. Shoemaker, University of California
A. King, Perkin Elmer
L. Carreria, University of Georgia
P. Calvi, Tecatur Inc.
J. Antoniszyn, Canadian Grain Commission

TUESDAY, AUGUST 19, 1986

8:30 a.m. - 12:00 p.m.

Physics, Chemistry & Surface Effects of Moisture - Chairman - K. Norris,
USDA/ARS

Ed Stark, Instrumentation Consultant
John Shenk, Pennsylvania State University
William Windham, USDA/ARS
Ian Murray, University of Aberdeen, Scotland
Károly Kaffka, Central Food Research Institute, Hungary

7:00 p.m. - 10:00 p.m.

Data Processing - Chairman - W. F. McClure, North Carolina State Univ.
Steven M. Buco, Louisiana State University
M. C. Davies, Food Research Institute, Norwich, England
Ian A. Cowe, Scottish Crop Research Institute, Scotland
William Hruschka, USDA/ARS

WEDNESDAY, AUGUST 20, 1986

8:30 a.m. - 12:00 p.m.

Industrial Applications - Chairman - Don Webster, Pacific Scientific

Peter Griffiths, University of California
Lois Weyer, Hercules, Inc.
Roy Weedon, Technicon
Pat Cooper, Pacific Scientific
Robert Taylor, Clemson University
Francis Dennis, Masonite Corporation
Richard Whitefield, Upjohn

7:00 p.m. - 10:00 p.m.

Automated Spectral Interpretation - Chairman - L. A. Carreria, Univ. of GA

Jim DeHaseth, University of Georgia
Mark Westerhaus, Penn State University Franklin
E. Barton, II, USDA/ARS

THURSDAY, AUGUST 21, 1986

8:30 a.m. - 12:00 p.m.

Agricultural and Food Applications - Chairman - Don Burns, Technicon

Jerome Workman, Technicon
John Diffeo, R. J. Reynolds Tobacco
George Anderson, Pillsbury Co.
Patrick Cooper, Pacific Scientific

7:00 p.m. - 10:00 p.m.

Spectroscopy - Chairman - D. S. Himmelsbach, USDA/ARS

Fred McClure, North Carolina State University
Paul Yang, NRC Canada
John Ferraro, Loyola University

FRIDAY, AUGUST 22, 1986

8:30 a.m. - 12:00 p.m.

Experimental Hardware - Chairman - D. L. Wetzell, Kansas State University

Peter Griffiths, University of California
Gabor Kemeny, Kansas State University
James Callis, Washington State University
Jonathan Perkins, Washington State University

POSTER SESSIONS WILL BE MANNED AFTER LUNCH AND BEFORE DINNER MONDAY THROUGH THURSDAY
AFTERNOONS

THIRD INTERNATIONAL DIFFUSE REFLECTANCE CONFERENCE Poster Session

Program

Authors/Title	Date/Time
1. Stephen Delwiche (USDA/ARS) NIR Spectra of Sugars.	Aug 19/1:30-2:00 3:30-4:00
2. William Hruschka (USDA/ARS) Rare Earth Wavelength Standards for the NIR.	Aug 19/1:30-2:00 3:30-4:00
3. Karl Norris (USDA/ARS) A Method for Obtaining NIR Spectra Without Water Absorbtion Bands.	Aug 19/1:30-2:00 3:30-4:00
4. John Madasci (USDA/ARS) Frederick Parrish Peter Schott Henry Marshall Near Infrared Analysis of Constituents in Barley Grain	Aug 19/1:30-2:00 3:30-4:00
5. Ian Cowe (Scottish Crop Res. Inst.) The Use of Principal Components for Measuring Noise in Spectrophotometers.	Aug 20/1:30-2:00 3:30-4:00
6. Karoly Kaffka Determining Amino Acids in Lupine by Near Infrared Reflectance Spectroscopy.	Aug 20/1:30-2:00 3:30-4:00
7. Sherman Faught (USDA/ARS) Understanding a Sample Property to NIRA Relationship, Cellulose to Cotton Fiber Maturity.	Aug 20/1:30-2:00 3:30-4:00
8. Nicholas Hill (U. Ga.) Detection of the Endophyte in Tall Fescue Seed Using NIRS.	Aug 20/1:30-2:00 3:30-4:00
9. N. J. Harrick (Harrick Scientific) Diffuse Reflectance and other IR-VIS-UV Spectroscopy Accessories.	Aug 20/1:30-2:00 3:30-4:00