March 2008 GIMS Newsletter

Contents:

- March APS Meeting GIMS Special Events
- GIMS Student Travel Grants
- GIMS Focus Sessions and Sponsored Sessions
- Keithley Award Winner
- 2008 GIMS Fellows
- GIMS Officers Lists
- Secretary-Treasurer's Report

GIMS Special Events

Keithley Award Session

Bjorn Wannberg

Gammadata Scienta AB

The Award Session is Wednesday, March 12, 2008 2:30PM - 5:30PM

Session S4: Keithley Award Symposium Morial Convention Center - 206

"For advances in the development of angle-resolved electron analyzers for photoelectron spectroscopy."

The award winner will give a talk followed by 3 other presenters on related topics.

GIMS Business Meeting Tuesday, March 11 5:45 p.m. - 6:45 p.m. Convention Center Room 228

All GIMS members welcome!

Dinner to follow at the Marriott New Orleans in the Creole Queen Room

(Across the street from the convention center)

GIMS Student Travel Grants

Jason Randel, Stanford University

Utku Kemiktarak, Boston University

Focus Sessions at March Meeting

Special Thanks to the organizers of the GIMS focus sessions for 2008. Additional thanks to the focus session chairs for their time and effort.

Mar 10 2008 8:00AM, Monday

Session A36 Focus Session: X-ray and Electron Optics and Microscopy Sponsor: GIMS

Chair: Timothy Graber, University of Chicago Room: Morial Convention Center 228

Invited Speakers: Wenbing Yun

Mar 10 2008 11:15AM, Monday

Session B36 Focus Session: Advances in Scanned Probe Microscopy I: Low Temperatures

Sponsor: GIMS Chair: Joseph A. Stroscio, National Institute of Standards and Technology

Room: Morial Convention Center 228

Invited Speakers: Jens Wiebe

Mar 11 2008 8:00AM, Tuesday

Session H36 Focus Session: Advances in Scanned Probe Microscopy II: Force Methods

Sponsor: GIMS Chair: Andreas Heinrich, IBM Room: Morial Convention Center 228

Invited Speakers: Hans J. Hug

Mar 12 2008 8:00AM, Wednesday

Session P36 Focus Session: X-ray and Neutron Instrumentation and Science Sponsor: GIMS

Chair: George Srajer, Argonne National Laboratory Room: Morial Convention Center 228

Invited Speakers: *Douglas Abernathy*

Mar 12 2008 11:15AM, Wednesday

Session Q36 Focus Session: Advances in Scanned Probe Microscopy III: Force Methods

Sponsor: GIMS Chair: Eric Hudson, IBM Room: Morial Convention Center 228

Invited Speakers: U.D. Schwarz

GIMS March APS Meeting Session Schedule

View the complete GIMS sponsored March meeting schedule, speaker list, and abstracts at: http://flux.aps.org/meetings/YR08/MAR08/Unit_MAR08_GIMS.pdf

The general information for GIMS sponsored sessions:

Mar 11 2008 5:45PM, Tuesday

Session M36 GIMS Business Meeting Sponsor: GIMS Room: Morial Convention Center 228

Mar 12 2008 2:30PM, Wednesday

Session S4 Keithley Award Symposium Sponsor: GIMS Chair: James Matey, Sarnoff

Corporation Room: Morial Convention Center 206

Invited Speakers: Bjorn Wannberg, J.C. Campuzano, Dan Dessau, Zhi-Xun Shen

Mar 13 2008 8:00AM, Thursday

Session U36 Nanoinstrumentation for Biological and Other Applications Sponsor: GIMS

Chair: Robert Guertin, Tufts University Room: Morial Convention Center 228

Mar 13 2008 11:15AM, Thursday

Session V2 <u>Facilities for Meeting Grand Challenges</u> Sponsor: DCMP GIMS Chair: *Gwyn Williams, Thomas Jefferson Laboratory National Accelerator Facility* Room: *Morial Convention Center LaLouisiane C*

Invited Speakers: George Neil, Jerome Hastings, Wendy Flavell, J. Singleton

Session V36 Advances in Scanned Probe Microscopy IV: Optical and High Frequency Methods Sponsor: GIMS Chair: Phillip First, Georgia Institute of Technology Room: Morial Convention Center 228

Mar 14 2008 8:00AM, Friday

Session X36 Advances in Instrumentation and Measurements Sponsor: GIMS Chair: Charles Agosta, Clark University Room: Morial Convention Center 228

2008 Joseph F. Keithley Award For Advances in Measurement Science Recipient

Bjorn Wannberg Gammadata Scienta AB

Citation:

"For advances in the development of angle-resolved electron analyzers for photoelectron spectroscopy."

Background:

Bjorn Wannberg received his B.Sc. at Uppsala University in 1963 and his Ph.D. degree at the same university in 1972, with a thesis titled "Particle Optics with applications in Atomic Beam Spectroscopy". He was then recruited by later Nobel Laureate Kai Siegbahn to work on the electron optical aspects of photoelectron spectrometers. Besides the instrumentation work, he took an active part in the VUV spectroscopy of small molecules in gas phase, and in particular measurements of angular distributions.

Wannberg became engaged in the start of the Scienta company (now VG Scienta AB) in the mid-1980s, with the aim to commercialize the spectrometer development, especially for XPS (ESCA) applications. Between 1987 and 1996 he shared his time between the research at the university

and the development work for Scienta. During this time, he invented a novel way to operate a hemispherical electron energy analyzer in order to collect the energy distributions for a large number of emission directions in parallel. The successive improvement of this so called "angular mode" has been one of his main tasks ever since.

From 1996 to 2000 he worked full time for Scienta, in the role as the company's specialist in electron optics. Since 2000, he has been working as a consultant in particle optics, although with strong ties to VG Scienta. He is still active in the development of new instruments for angle-resolved photoelectron spectroscopy.

Selection Committee:

Art Hebard (Chair), K. Waldrip, V. Zapf, K.D. Irwin, J. Matey, A. Macrander

The Award Session is Wednesday, March 12, 2008 2:30PM - 5:30PM

Session S4: Keithley Award Symposium Morial Convention Center – 206

Keithley Award Session Speaker List

2:30PM - 3:06PM

S4.00001: Keithly Award Talk: Pushing the limits in ARPES

Invited Speaker: Bjorn Wannberg

3:06PM - 3:42PM

S4.00002:

Invited Speaker: J. C. Campuzano

3:42PM - 4:18PM

S4.00003: High Resolution Angle-Resolved Photoemission Studies of Correlated Electron

Systems

Invited Speaker: Dan Dessau

4:18PM - 4:54PM

S4.00004: Angle-Resolved Photoemission Study of High Temperature Superconductors

Invited Speaker: Zhi-xun Shen

2008 GIMS Fellows

- Albert Macrander
- Kent Irwin
- George Gillies

2007 GIMS Leadership

A special thank you to all who volunteered time and effort this year including our 2007 Officers

ChairSecretary-TreasurerCarolyn A MacDonaldChris ArmstrongUniversity at Albany, SUNYKeithley Instruments

Chair ElectVice-ChairCharles AgostaTim GraberClark UnivUniv of Chicago

Past & Nominating Comm. Chair Fellowship Committee Chair Karen E. Waldrip, Ph.D. Charles Agosta

Sandia National Labs

Clark University

Executive Committee

Joseph Stroscio Tim Graber

NIST University of Chicago

Adam DaireRachael HeronHoneywellJanis Corp.George SrajerEric Hudson

Argonne National Lab MIT

Albert T. Macrander (Ex Officio) Editor, Review of Scientific Instruments

Argonne National Laboratory

Keithley Award Committee

Art Hebard K. Waldrip

(Chair)

K.D. Irwin J. Matey

(2007 Award Winner)

Albert T. Macrander Vivien Zapf

Best wishes to our newly elected 2008 Officers

2008 GIMS Leadership

Chair Secretary-Treasurer Charles Agosta Albert Macrander

Clark Univ

Chair Elect Vice-Chair
Tim Graber Joseph Stroscio

Univ of Chicago NIST

Past & Nominating Comm. Chair Fellowship Committee Chair

Carolyn A MacDonald Tim Graber

University at Albany, SUNY University of Chicago

Executive Committee

Daniel Rugar Tim Graber

University of Chicago

Andreas Heinrich Keith Schwab

George Gillies Eric Hudson

MIT

Albert T. Macrander (Ex Officio) Editor, Review of Scientific Instruments Argonne National Laboratory

Secretary-Treasurer Report

GIMS finances

Available funds as of 12/31/07: \$73,691