

North Carolina Section Holds Workshop on Advanced Materials Processing, Awards Student Prizes, Elects 1987 Officers

The members of the North Carolina Section of the Materials Research Society met on November 24, 1986 to hold a Workshop on Advanced Materials Processing, award the James Homer Crawford, Jr. Memorial Student Prizes, and elect officers for the 1986-87 year.

Attended by about 30 persons, the Workshop on Advanced Materials Processing was the third in a series of one-day workshops held by the North Carolina Section. The previous two workshops were on semiconductor superlattices and ion implantation. The Workshop on Advanced Materials Processing included the following presentations:

- Si Processing, J. Wortman, NC State University, Chair

Integrated Circuit Manufacturing in 1995, Keynote Address by H. Philips, Semiconductor Research Cooperative

Atomic Structure of Ion Implantation Induced Dislocations and Dipoles in Silicon by A.S. Nandedkar and J. Narayan, NC State University

Redistribution of Arsenic During High Pressure Oxidation by S.S. Choi, M.Z. Numan, E.A. Irene, and W-K. Chu, University of NC at Chapel Hill

The Influence of Silicon Surface Cleaning Treatments on Silicon Oxidation by G. Gould, University of NC at Chapel Hill

Intrinsic Film Stress Measurements on Thermally Oxidized Si by E. Kobeda and E.A. Irene, University of NC at Chapel Hill

- Advanced Processing Techniques, R. Davis, NC State University, Chair

Laser Processing of Materials by J. Narayan, NC State University

Surface Chemistry Induced by Low Energy Electron Bombardment by R.R. Kunz and T.M. Mayer, University of NC at Chapel Hill

Effects of High Density Electric Current Pulses on Grain Growth in Copper by W-D. Cao, A.F. Sprecher, and H. Conrad, NC State University

Defect, Impurity Control and Gettering via Lattice Adjustments During Silicon Epitaxy by R.R. Kola, A.S.M. Salih, and G.A. Rozgonyi, NC State University

- Processing of Advanced Materials, K. Bachmann, NC State University, Chair

Processing of Non-Equilibrium Structures by C. Koch, NC State University

High Temperature Implantation of Single Crystal Beta Silicon Carbide Thin Films by J.A. Edmond, S.P. Withrow, W. Wadlin, and R.F. Davis, NC State University

Surface Characteristics of Monocrystalline B-SiC Dry Etched in Fluorinated Gases by J.W. Palmour and R.F. Davis, NC State University

Effectiveness of Thin Film Encapsulants for Reducing Evaporation During Rapid Thermal Processing of GaAs by T.E. Haynes, K. Chu, University of NC at Chapel Hill; S.T. Picraux, Sandia National Laboratories; and R.J. Markunas, Research Triangle Institute

Four cash prizes were awarded to students for the best new research presented at the November 24 meeting. First prize went to R.R. Kunz, second prize to J.A. Edmond, third prize to G. Gould, and fourth prize to E. Kobeda for the workshop presentations cited above. T.E. Haynes and W-D. Cao received certificates of honorable mention. Planned to be an annual event, the awards are in memory of Dr. James H. Crawford, Jr., formerly associated with Oak Ridge National Laboratory and then with the Physics Department of the University of North Carolina at Chapel Hill. Crawford was one of the original founders of the North Carolina Section, and he worked on building the materials science program at the University of North Carolina.

New officers elected for the 1986-87 year include:

President: Dr. Hans Conrad
Materials Science & Engineering Department

North Carolina State University
Box 7907
Raleigh, NC 27695-7907
(919) 737-7443

Vice President: Dr. Orlando Auciello
Nuclear Engineering Department
North Carolina State University
Box 7909

Raleigh, NC 27695-7909
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Secretary: Dr. Phillip Jones
Mechanical Engineering and Materials
Science Department

Duke University
Durham, NC 27706
(919) 684-2832

Treasurer: Dr. Thomas Mayer
Chemistry Department
Venable Hall

University of North Carolina
Chapel Hill NC 27514
(919) 966-1652

For more information about the North Carolina Section and its activities, contact any of the above officers.

Sixth Annual Symposium

Electronic Materials, Processing, and Characterization

June 1-2, 1987

Marriott Park Central Hotel

Dallas, Texas

*Sponsored by the North Texas Materials Characterization Society (MRS),
the Texas Chapter of the American Vacuum Society,
and the North Texas Section of the Electrochemical Society.*

Dr. Paul Chu will be the keynote speaker. Topics include: characterization, advanced lithography, metallization, dielectrics, epitaxy and deposition, compound semiconductors, advanced manufacture and processing technology, and failure analysis and process diagnostics.

For information, contact:

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