

Organization

Conference on Inelastic Electron Tunneling Spectroscopy and Symposium on Electron Tunneling.

Organizing and Program Committee

Chairman: T. Wolfram, Dept. of Physics, University of Missouri-Columbia
Members: R.V. Coleman, Dept. of Physics, University of Virginia
P.K. Hansma, Dept. of Physics, University of California, Santa Barbara
R.C. Jaklevic, Research Staff, Ford Motor Company
J. Lambe, Research Staff, Ford Motor Company
J. Rowell, Bell Laboratories
D.J. Scalapino, Dept. of Physics, University of California, Santa Barbara
W.H. Weinberg, Dept. of Chemical Engineering, California Institute of Technology
A. Yelon, Dept. génie Physique, Ecole Polytechnique, Montréal

Logistics and Arrangements

University of Missouri-Columbia, Extension Division
Mrs. Beverly Huckaba
Mrs. Bonnie Beckett

Conference on Inelastic Electron Tunneling Spectroscopy

PROGRAM

MAY 25, 1977

WELCOME: Dr. James C. Olson, President
University of Missouri

OPENING REMARKS: T. Wolfram, University of Missouri
Department of Physics

SESSION CA: REVIEW OF INELASTIC ELECTRON TUNNELING
W.J. Tomasch, Chairman
Department of Physics, University of Notre Dame

CA1: Inelastic Electron Tunneling Spectroscopy - History and Future
R.C. Jaklevic, Research Staff, Ford Motor Company

CA2: Survey of Applications of Tunneling Spectroscopy
P.K. Hansma, Department of Physics, University of California, Santa
Barbara

CA3: Theoretical Interpretation of IETS Data
J. Kirtley, Department of Physics and Laboratory of Matter, University
of Pennsylvania

SESSION CB: APPLICATIONS OF INELASTIC ELECTRON TUNNELING
J.G. Adler, Chairman
University of Alberta

CB1: Application of IETS to Surface Chemistry
W.H. Weinberg, Department of Chemical Engineering, California Institute
of Technology

CB2: Application of IETS to the Study of Biological Materials
R.V. Coleman, Department of Physics, University of Virginia

CB3: Application of IETS to Trace Substance Detection
A. Yelon, Department of génie Physique, Ecole Polytechnique, Montréal

CD3: Relation of IETS to Other Surface Studies
Opening comments by W. Plummer, Department of Physics, University of
Pennsylvania

CD4: Effects of Cooperative Behavior on Molecular Vibrational IETS Peak
Intensities
S.L. Cunningham, California Institute of Technology

CD5: Phonon Damping of Virtual Levels in Thick Superconducting Film
W.J. Tomasch, Department of Physics, University of Notre Dame

CD6: The Golden Rule Formalism in Tunneling - Can it be Justified?
T.E. Feuchtwang, Osmond Lab, Pennsylvania State University

MAY 26, 1977

SESSION CE: MOLECULAR ADSORPTION ON NON-METALLIC SURFACES

H. Jarrett, Chairman
E. I. DuPont Company

CE1: Photoemission Studies of Molecular Adsorption on Oxide Surfaces
V.E. Henrich, Lincoln Laboratory, Massachusetts Institute of Technology

CE2: Calculation of the Orientational Dependence of IETS Intensities for Ethylene
J. Rath, Department of Physics, University of Missouri-Columbia

CE3: Structure and Dynamics of Butane Adsorbed on Graphite by Inelastic Neutron Scattering
H. Taub, Department of Physics, University of Missouri-Columbia

CB4: Application of IETS to the Study of Adhesion
H. White, Department of Physics, University of Missouri-Columbia

MAY 26, 1977

SESSION CC: THEORY: INELASTIC ELECTRON TUNNELING-SCATTERING AT SURFACES

D.J. Scalapino, Chairman
University of California - Santa Barbara

INTRODUCTORY REMARKS: D.J. Scalapino

CC1: Calculations of Inelastic Tunneling Cross Sections Using Self-Consistent Multiple Scattering Techniques
J.R. Schrieffer, Department of Physics, University of Pennsylvania

CC2: Interaction of Low Energy Electron Beams with Surface Vibrations
D.L. Mills, Department of Physics, University of California - Irvine

CC3: Theory of Surface Plasmon Excitations by Electron Tunneling
L.C. Davis, Research Staff, Ford Motor Company

SESSION CD: PANEL DISCUSSIONS AND SELECTED PAPERS

CD1: Technology of IETS
Opening comments by J.G. Adler
Department of Physics, University of Alberta

CD2: Problems in the Biological Sciences
Opening comments by L. Sherman
Division of Biological Sciences, University of Missouri-Columbia

Symposium on Electron Tunneling

PROGRAM

MAY 27

SESSION SB: ELASTIC ELECTRON TUNNELING
J. Rowell, Chairman
Bell Telephone Laboratories

SB1: Zero Bias Anomalies
E. Wolf, Ames Laboratory, U.S. Energy and Research Development Administration

SB2: Superconducting Tunneling
R.C. Dynes, Bell Telephone Laboratories

SB3: Tunneling with Spin Polarized Electrons
R. Meservey, Francis Bitter National Magnet Laboratory, M.I.T.

SB4: Semiconductor Tunneling, Bound Levels and Band Structure
D.C. Tsui, Bell Telephone Laboratories

SESSION SA: INELASTIC ELECTRON TUNNELING
J. Lambe, Chairman
Ford Motor Company

SA1: Study of Supported Catalyst Particles by Tunneling Spectroscopy
P.K. Hansma, Department of Physics, University of California - Santa Barbara

SA2: External Doping of Tunnel Junctions
R.C. Jaklevic, Research Staff, Ford Motor Company

SA3: Observations of Molecular Electronic Transitions by IETS
S. de Chev igne, Solid State Physics Group, l'Ecole Normale Sup rieure, University of Paris

SA4: Light Emission from Inelastic Tunneling - LEIT
J. Lambe, Research Staff, Ford Motor Company