

The Science of Biological Specimen Preparation for Microscopy

Edited by: Marek Malecki and Godfried M. Roomans

Proceedings of the 14th Pfeifferkom Conference, Belleville, IL, August 1995. Hardbound book with 31 peer-reviewed papers; 476 + vi pages.

Some Comments from book reviews: (1) "... This book is well presented and bound and uses high quality paper to ensure good reproduction of illustrations. The Discussion with Reviewers, which is characteristic of all the books in this series and its associates, is most helpful, as is the inclusion of a subject index and the contents of the proceedings of earlier conferences in this series. This book will make a useful addition to any library committed to maintaining up-to-date reference works on the science of preparing biological tissues for microscopy. Robin Cross, South Africa. (2) "... The final paper is a mammoth review (80 pages) on cryoultramicrotomy by Hans Sitte. The book is worth its price for this paper alone. It is targeted at cryo-observation rather than labeling and covers the whole process from freezing to observation, with comprehensive diagrams of the hardware and some of the best cryosection micrographs ever published. ... Every EM lab should have a copy (and indeed the previous volumes in the series). Guy Cox, Australia. (3) "... This book provides good references and up-to-date information of the highest quality concerning the technical, experimental and theoretical aspects of microscopy and its application. This will satisfy the expanding use of microscopy by researchers around the world." Yutaka Shimada, Japan. (4) "... it is also very good value for money. In fact, it is almost worth it just for the 80 page review of Cryoultramicrotomy by Sitte; you could pay as much for a monograph on this subject. I would recommend this book to all microscopists as an extremely useful source book on specimen preparation for biological imaging and cytochemistry. Julian Heath, U.K. (5) "... The reviewed book represents a honourable continuation of a series of previous publications arisen from these conferences. It is a high quality informative manual, covering a large methodological and instrumental area of microscopy. Due to its focus on new, exacting approaches in the analysis of biological subjects at structural, ultrastructural and molecular levels, the book can serve a large community of researchers in the field of microscopy." Jan Korb, Czech Rep.

Contents: Preparation of Plasmid DNA in Transfection Complexes for Fluorescence and Electron Spectroscopic Imaging: M. Malecki (1-16); Simultaneous Identification of a Specific Gene Protein Product and Transcript using Combined Immunocytochemistry and In Situ Hybridization with Non-Radioactive Probes: G. V. Childs (17-26); In Situ Hybridization, In Situ Transcription, and In Situ Polymerase Chain Reaction: L.E. De Bault, J. Gu (27-47); Preparation of Samples for Polymerase Chain Reaction In Situ: G.J. Nuovo (49-55); Generation of High Efficiency ssDNA Hybridization Probes by Linear Polymerase Chain Reaction (LPCR): G.W. Konat (57-60); Nucleic Acid Detection by In Situ Molecular Immunogold Labeling Procedures: M. Thiry (61-71); Hydration-Scanning Tunneling Microscopy as a Reliable Method for Imaging Biological Specimens and Hydrophilic Insulators: M. Heirn, R. Eschrich, A. Hillebrand, H.F. Knapp, G. Cevc, R. Guckenberger (73-80); Imaging Molecular Structure of Channels and Receptors with an Atomic Force Microscope: R. Lal (81-96); Atomic Force Microscopy of DNA, Nucleoproteins and Cellular Complexes: The Use of Functionalized Substrates: Y.L. Lyubchenko, R.E. Blankenship, A.A. Gall, S.M. Lindsay et al. (97-109); Microscopic Analysis of DNA and DNA-Protein Assembly by Transmission Electron Microscopy, Scanning Tunneling Microscopy and Scanning Force

Crystal Clear.

The Meiji EM Series of Modular Stereo Microscopes.

If you are looking for precision, durability, quality and value in a stereo microscope, we invite you to take a closer look at Meiji's EM Series of Stereo Microscopes.

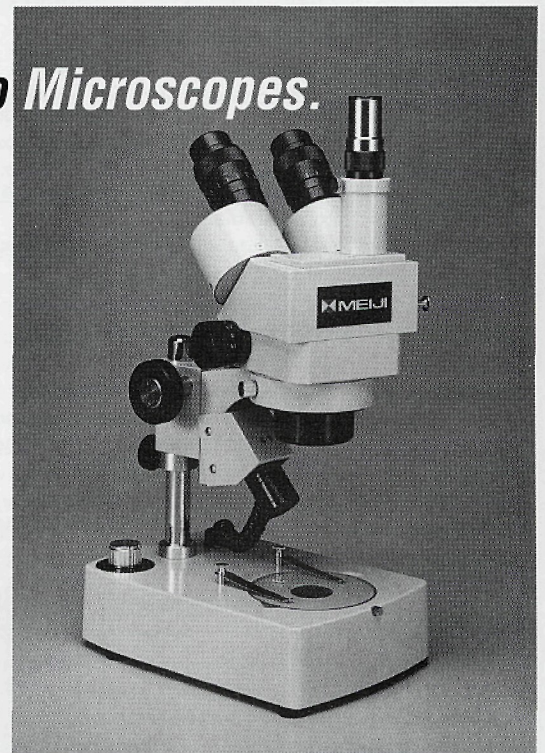
The modular design (A wide variety of bodies, single magnification or zoom— rotatable 360°, auxiliary lenses, eyepieces, stands, holders, etc.) gives you the freedom to create the ideal instrument for your specific needs or application, and Meiji stands behind every instrument with its limited **Lifetime Warranty**.

For more information on these economically priced stereo microscopes, please call, FAX or write us today.



MEIJI TECHNO AMERICA

2186 Bering Drive, San Jose, CA 95131, Toll Free Telephone: 800.832.0060
FAX: 408.428.0472, Tel: 408.428.9654



Microscopy: T. M. Iler-Reichert, H. Gross (111-121); Imaging Soft Materials with Scanning Tunneling Microscopy: J.T. Woodward IV, J.A. Zasadzinski (123-148); Accessing Nuclear Structure for Field Emission, In Lens, Scanning Electron Microscopy ... : T.D. Allen, G.R. Bennion, S.A. Rutherford et al. (149-164); Problems in Preparation of Chromosomes for Scanning Electron Microscopy to Reveal Morphology and to Permit Immunocytochemistry of Sensitive Antigens: A.T. Sumner (165-176); Electro-Optical Imaging of F-Actin and Endoplasmic Reticulum in Living and Fixed Plant Cells: N.S. Allen, M.N. Bennett (177-187); Neural Transplant Staining with Dil and Vital Imaging by 2-photon Laser-scanning Microscopy: S.M. Potter, J. Pine, S.E. Fraser (189-199); Video Rate Confocal Laser Scanning Reflection Microscopy in the Investigation of Normal and Neoplastic Living Cell Dynamics: P. Vesely, A. Boyde (201-211); Emerging Applications of Fluorescence Spectroscopy to Cellular Imaging: Lifetime Imaging, Metal-Ligand Probes, Multi-Photon Excitation and Light Quenching: J.R. Lakowicz (213-224); Comparative Scanning, Transmission and Atomic Force Microscopy of the Microtubular Cytoskeleton in Fenestrated Liver Endothelial Cells: F. Braet, R. De Zanger, W. Kalle, A. Raap, H. Tanke, E. Wisse (225-236); Correlated Confocal and Intermediate Voltage Electron Microscopy Imaging of the Same Cells Using Sequential Fluorescence Labeling, Fixation, and Critical Point Dehydration: L.D. Peachey, H. Ishikawa, T. Murakami (237-247); Pre-Embedding Staining of Single Muscle Fibers for Light and Electron Microscopy Studies of Subcellular Organization: E. Ralston, T. Ploug (249-260); Multiple Labeling in Electron Microscopy: Its Application in Cardiovascular Research: M.M.H. Marijnowski, P. Teeling, K.P. Dingemans, A.E. Becker (281-271); Covalent Labeling of Proteins with Fluorescent Compounds for Imaging Applications: D.R. Swartz (273-284); Cytoskeleton Architecture of C6 Rat Glioma Cell Subclones Whole Mount Electron Microscopy and Immunogold Labeling; W. Bohn, D. Etzrodt, R. Foisner, G. Wiche, P. Traub (285-294); Freeze-Dried Human Leukocytes Stabilized with Uranyl Acetate During Low Temperature Embedding or with OsO₄ Vapor after Embedding: L. Edelmann, A. Ruf (295-307); Labeling with Nanogold and Undecagold: Techniques and Results: J.F. Hainfeld (309-325); Immunocytochemistry by Electron Spectroscopic Imaging Using Well Defined Boronated Monovalent Antibody Fragments: M.M. Kessels, B. Qualmann, W. D. Sierralta (327-344); Specimen Preparation of the Human Cerebellar Cortex for SEM Using a t-Butyl Alcohol Freeze-Drying Device: T. Hojo (345-348); X-ray Microscopy: Preparations for Studies of Frozen Hydrated Specimens: A. Osanna, C. Jacobsen, A. Kalinovsky, J. Kirz et al. (349-358); In Vitro Systems and Cultured Cells as Specimens for X-ray Microanalysis: G.M. Roomans, J. Hongpaisan et al. (359-373); Aspects of Cryofixation and Cryosectioning for the Observation of Bulk Biological Samples in the Hydrated State by Cryoelectron Microscopy: K. Richter (375-386); Advanced Instrumentation and Methodology Related to Cryoultramicrotomy: A Review: H. Sitte (387-466); note: an 80 page review!; and several indexes etc.

Price: \$95 (U.S. delivery) and \$105 (elsewhere); by uninsured cheapest mail
Please inquire for other delivery methods as well as for Reprints or photo-copies of papers.

Published by: Scanning Microscopy Intl.,
PO Box 86507
Chicago, IL 60666-0507
USA

FAX: (847) 985-6981
Email: 73211.647@compuserve.com

Denton Vacuum Homepage - Netscape

File Edit View Go Window Help

Back Forward Reload Home Search Guide Print Security Stop Netscape

Bookmarks Go to: [HTTP://WWW.DENTONVACUUM.COM/](http://www.dentonvacuum.com/)

From Sunglasses to Satellites.

Corporate Info Denton News

Denton Products Key Contacts

Representatives Directions

**If it involves Thin Film Coatings,
it involves Denton.**

<http://www.dentonvacuum.com>

[Desk II Cold Sputtercoater](#) | [DV 502A Carbon Coater](#) | [DV 401 Desktop Carbon Coater](#)
[HI RES 100 High Resolution Chromium Coater](#) | [DCP-1 Critical Point Dryer](#)
[Desk II TSC Turbo Sputter Coater](#) | [BTT III Benchtop Carbon Coater](#)

DENTON VACUUM 1259 N. Church Street Moorestown, NJ 08057 Phone 609.439.9100 FAX 609.439.9111