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Department of Biochemistry
Trinity College
Dublin 2
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FURTHER INFORMATION

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A comprehensive calendar is published 4 times a year (January, April, July, and October); new listings appear in other months. The calendar lists open meetings of a biological topic: meetings, symposia, courses, and workshops. To have your event listed, please include the date and year of the meeting, its title and location, and a contact name and address and send it to Calendar Editor, The FASEB Journal, 9650 Rockville Pike, Bethesda, MD 20814, USA.


8-12 December 1991. The American Society for Cell Biology 31st Annual Meeting, Boston, Massachusetts, USA. (ASCB Natl Off., 9630 Rockville Pk., Bethesda, MD 20814, USA)


3-7 February 1992. Gordon Research Conference: Prolactin, Oxnard, California, USA. (N. Ben-Jonathan, Dept. of Physiology, Indiana U. Sch. of Med., 635 Barnhill Dr., Indianapolis, IN 46202, USA)


22-25 March 1992. Extended Clinical Consulting by Hospital Computer Networks, Boston, Massachusetts, USA. (The Conference Dept., NYAS, 2 East 63rd St., New York, NY 10021, USA)


30 March–1 April 1992. Spring Regional Meeting, Northeast Group on Medical Affairs: Integrating the Basic Sciences and Clinical Medicine: Breaking Down the Barriers, Baltimore, Maryland, USA. (Program Coordinator, Johns Hopkins Medical Institutions, Ofc. of Continuing Ed., Baltimore, MD 21205, USA)

5-9 April 1992. The FASEB Meeting, Anaheim, California, USA. (FASEB Off. of Scientific Mgs., 9630 Rockville Pk., Bethesda, MD 20814, USA)


13-16 May 1992. 25th Annual LFand Conference on Arterial Wall Metabolism, Boston, Massachusetts, USA. (Dept. of Continuing Medical Ed., Boston U., Sch. of Med., 80 East Concord St., Boston, MA 02118, USA)


6-9 June 1992. ASN Conference: Transcriptional Control and Differentiation, Phoenix, Arizona, USA. (ASN Conferences, 1101 Connecticut Ave., NW, Ste. 700, Washington, DC 20036, USA)


2-7 August 1992. 11th International Conference on the Biology and Pathogenicity of Free-Living Amoebae, Richmond, Virginia, USA. (F. Marconato Cabral, Conference Organizer. Medical Coll. of Virginia, Dept. of Microbiology and Immunology, Box 678, Richmond, VA 23298-0678, USA)


7-10 September 1992. European Lipoprotein Club, Tuizing, Germany. (M. Roseneu, Dept. of Clinical Biochemistry, A. Z. St.-Jan, Rudderhoff 10, B 8000 Brugge, Belgium)


22-26 September 1992. 4th International Congress of PAF and Related Lipid Mediators, Snowbird, Utah, USA. (S. Prescott, Conferences and Institutes, 217 Annex, U. of Utah, Salt Lake City, UT 84112, USA)

Courses and Workshops

13-22 November 1991. ATCC Workshop: Polymerase Chain Reaction (PCR) Methodology, Rockville, Maryland, USA. (ATCC/Workshop, 12301 Parklawn Dr, Rockville, MD 20852, USA)

3-5 December 1991. ATCC Workshop: Cytogetenics: Techniques and Applications, Rockville, Maryland, USA. (ATCC/Workshop, 12301 Parklawn Dr., Rockville, MD 20852, USA)

10-12 December 1991. ATCC Workshop: Cell Culture Fermentation, Rockville, Maryland, USA. (ATCC/Workshop, 12301 Parklawn Dr., Rockville, MD 20852, USA)


12-14 October 1992. Mechanisms in Nutrition and Cancer, Venice, Italy. (C. Ferrari, European School of Oncology, Via Venetia 18, 20133 Milan, Italy)

Erratum: The deadline date for submission of abstracts for the FASEB meeting in Anaheim April 5–9, 1992, was incorrect in October's Society calendar. The correct deadline is December 3, 1991. We regret any confusion this may have caused readers.
The FASEB Meeting is scheduled April 5-9, 1992 at the Anaheim Convention Center, Anaheim, California. The following scientific societies will participate:

**FASEB Societies**
- The American Physiological Society (APS)
- American Society for Pharmacology and Experimental Therapeutics (ASPET)
- American Association of Pathologists (AAP)
- American Institute of Nutrition (AIN)
- The American Association of Immunologists (AAI)

**Guest Societies**
- The Biomedical Engineering Society (BMES)
- Society for Experimental Biology and Medicine (SEBM)
- Clinical Immunology Society (CIS)
- Society for Mucosal Immunology (SMI)
- American Association of Veterinary Immunologists (AAVI)
- International Society for Bioelectricity (ISB)
- North American Society of Biorheology (NASB)

**THEME:** Growth Factors, Receptors, and Signal Transduction

Scientific sessions will be scheduled Monday, April 6 through 6:00 PM Thursday, April 9, 1992. The deadline for receipt of abstracts is Tuesday, December 3, 1991. Advance registration for the meeting will be accepted until February 3, 1992. For those who do not register in advance, on-site registration will open at 2:00 PM on Sunday, April 5.

Detailed announcements, with abstract, registration and housing forms will be mailed to members of all the participating Societies listed above. Members of the American Society for Biochemistry and Molecular Biology and the American Society for Cell Biology may submit abstracts for the meeting. ASBMB and ASCB members will not automatically be sent the announcement. Those members who wish to receive details and forms should complete and return the Request for Forms below. Non-members should also complete and return the Request for Forms.

The FASEB Meeting has been certified for Continuing Medical Education Category I credits on an hour-for-hour basis.

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The vocabulary of biology is made easier through knowing the meanings of elements that make up whole words. English continues to adopt words from foreign languages and to build its vocabulary by inventing new words from old elements. Most of the words entering English every year reside in technical vocabularies and knowing what the elements mean prepares medical students and physicians, the practitioner of any biological science, and anyone else to decipher these new words that might name a newly discovered microbe or mastodon, a disease, or a surgical procedure.

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Analysis of the catalytic specificity of cytochrome P450 enzymes through site-directed mutagenesis. E. F. Johnson, T. Kronbach, and M.-H. Hsu

Mechanism-based probes of the topology and function of fatty acid hydroxylases. P. R. Ortiz de Montellano, W. K. Chan, S. F. Tuck, R. M. Kaikaus, N. M. Bass, and J. A. Peterson

Dietary effects on cytochromes P450, xenobiotic metabolism, and toxicity. C. S. Yang, J. F. Brady, and J.-Y. Hong

Cytochrome P450:crystallography, oxygen activation, and electron transfer. T. L. Poulos and R. Raag

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For a description of operation at annual meeting, see January, February or March issue or contact the Placement Service.

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POSITIONS AVAILABLE

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RESEARCH ASSOCIATES (2) for projects involving cellular and molecular aspects of toxic cell injury with emphasis on gene expression and nonderegulation. Salary negotiable. Send CV to B. F. Trump, M.D., Department of Pathology, University of Maryland School of Medicine, 10 S Pine Street, Baltimore, MD 21201. EOE

FACULTY, BIOMEDICAL SCIENCES. Tenure-track positions in the developing Department of Biomedical Sciences, School of Medicine, Creighton University. Research includes the chemistry and biology of regulatory sequences and their receptors in the control of cardiovascular, pulmonary, gastrointestinal and renal functions, of bone growth and of cancer, comparative and developmental neuroscience, intracellular sig- nalling and the molecular biology of collagen synthesis, globin gene expression and gene therapy. State-of-the-art equipment is available for this research. Productive research links exist with the clinical departments. Areas of continued expansion include but are not limited to molecular biology and the role of proteinases in homeostasis. Applicants should welcome opportunities to collaborate with other faculty. Appointees will be expected to participate in courses to graduate and medical students in one or more of the following: biochemistry, molecular biology, cell biology, physiology, anatomy and neuroscience. Send CV and addresses of reference to J. R. Hiestand, M. Phillips, C. Gamba, Department of Bio- medical Sciences, School of Medicine, Creighton University, 2500 Califor- nia Street, Omaha, NE 68178. Creighton University is an equal opportu- nity-affirmative action employer and minority candidates are encouraged to apply.

HUMAN GENOME POSTDOCTORAL FELLOWSHIPS, U.S. Department of Energy. The Human Genome Postdoctoral Fellowships provide opportunities to conduct research related to the U.S. Department of Energy's Human Genome Program. This program is geared to develop the tools, technologies and resources required to efficiently decipher the molecular nature of the human genome. Research areas include molecular biology, computational biology and technology development. Stipend is $35,000. Fellowships are tenable at approved DOE and university labora- tories. A doctoral degree received after May 1, 1989, is required as is U.S. citizenship. Send CV and letter of intent to: Contact, Human Genome Postdoctoral Fellowships, Science/Engineering Educa- tion Division, Oak Ridge Associated Universities, P.O. Box 117, Oak Ridge, TN 37831-0117 (615) 576-4805.

POSTDOCTORAL/IMMUNOLOGY at Washington University School of Medicine, St. Louis, Missouri in the field of cellular and molecular immunology. Specific areas of study include the role of adhesion molecules in immunity, cytokine regulation and synthesis, immunoregulation, and ocular immunology. Applicants should have a Ph.D. or M.D. with experience in molecular biology, cellular immunology and/or molecular immunology. Competitive salary and signing bonus are offered. Individuals interested in pursuing an exciting career in immunology should forward CV and three letters of reference to Thomas A. Ferguson, Ph.D., Department of Ophthalmology and Visual Sciences, Washington University School of Medicine, 660 S Euclid, Box 8096, St. Louis, MO 63110. An equal opportunity/affirmative action employer, M/F/H/V.

RESEARCH INSTRUCTOR. Department of Pharmacology and Toxicology. Qualifications include Ph.D., M.D. or equivalent degree and post- doctoral research experience in pharmacological applications of tissue bath experiments, high pressure liquid chromatography, radioactively labeled ligand binding and, particularly, intracellular electrical recording. Applicants should provide a letter of application, a CV listing experience and pub- lications and the names of two persons who can provide recommenda- tions, to Dr. William W. Fleming. Department of Pharmacology and Toxicology, West Virginia University Health Sciences, North, Morgan- town, WV 26506. This position will be supported by grants awarded to Dr. Fleming and Dr. A. T. Taylor. The deadline for applications is December 15, 1991. West Virginia University is an equal opportuni- ty/affirmative action employer and applications from women and minorities are encouraged.

ASSISTANT PROFESSOR, BIOCHEMISTRY. Assume responsibility for the educational programs in biochemistry for medical students. This includes direction of a team-taught, lecture-based course for about 100 students and oversight of a problem-based unit for approximately 20 stu- dents. In addition, scholarly efforts in the field of education will be ex- pected. Candidates should hold a doctoral degree in biochemistry or a closely related discipline and be committed to excellence in education. Interested individuals should send CV, names of three referees together with a letter outlining their qualifications to Dr. Michael C. Phillips, Chairman, Physiology and Biochemistry Department, The Medical College of Pennsylvania, 3300 Henry Avenue, Philadelphia, PA 19129. The Medical College of Pennsylvania is an equal opportunity/affirmative action employer.

POSTDOCTORAL/RESEARCH ASSOCIATE. Participate in research on mechanisms of circulatory changes and volume homeostasis in preg- nancy. Requirements include a Ph.D. or M.D. and a strong background in cellular or organ physiology. Experience with functional and biochem- ical techniques or isolated vascular bed is desired. Send CV, references, statement of research interests and the names of three references to Dr. Kirk P. Conrad, Department of Physiology, BMSB, University of New Mexico School of Medicine, 915 Stanford, NE, Albuquerque, NM 87131. UNM School of Medicine is an equal opportunity/affirmative action employer. We encourage applications from women and minorities.

POSTDOCTORAL. Three years in developing and testing of immuno- analytic methods for drugs in body fluids. Prefer Ph.D. immunochromatist, molecular biologist, V.M.D. or M.D. Send letter of application, CV, names and addresses of three referees to Dr. Carl Ritter, Depart- ment of Animal Biology, School of Veterinary Medicine, University of Pennsylvania, Philadelphia, PA 19104-6046. The University of Pennsyl- vania is an equal opportunity/affirmative action employer.

POSTDOCTORAL RESEARCH ASSOCIATE. Molecular biologist with background in T cells to assist studies of autoimmune arthritis. Salary up to $35,000. Send CV and names of three references to Eugene Lance, M.D., Ph.D. Shriners Hospitals for Crippled Children, 1310 Punahou Street, Honolulu, HI 96826. An equal opportunity employer.

POSITIONS DESIRED

Ph.D., 1991 (expected); Molecular biology, microbiology; Protein chemis- try, protein purification, HPLC, raising polyclonal antibodies, immuno- screening of cDNA library, designing oligoprobes and oligoscreening of libraries, Western/Northern/Southern blots, DNA subcloning and DNA sequencing; Postdoc: in academia/industry; Ph. 2-1001

M.S., 1991 (expected); D.V.M., 1986, Immunology, pathology, veterinary anatomy, histology, hematology, immunology, histotechnology, bacterial research, histology, gross anatomy, gross pathology; Animal Science/Industry; Ph. 4-3550

CV: Degree, Ph.D., University of California; Specialty, Immunology; Affiliation, Harvard Medical School; Experience, Research Associate, Harvard Medical School; Location, Boston, MA; Position, Assistant Professor, Department of Immunology, Harvard Medical School; Academic Rank, Assistant Professor; Mail Address, 777 Commonwealth Avenue, Boston, MA 02215; Phone, (617) 432-1234; Fax, (617) 432-1235; Email, john@example.com; Website, http://www.immunology.org

EMPLOYMENT OPPORTUNITIES

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The ImmunoPure® IgM Purification Kit provides rapid, efficient IgM binding in a one-step chromatographic procedure. The kit uses Mannan-Binding Protein (MPB), which binds mannan and also selectively binds IgM (with miniscule IgG binding). The kit provides enough IgM purification buffers to perform 10 IgM purifications with the 5.0 ml immobilized MPB column. Pierce, PO. Box 117, Rockford, IL 61005, USA.

The Human Ab-STAT™ and the Mouse Ab-STAT™ kits—10-min membrane-based enzyme immunoassays—make testing of human and mouse antibody reactivity against antigens simple. Whole blood, plasma, serum, cell culture supernatant, ascites fluid, bioreactor product or purified antibody can be tested. The Ab-STAT™ allows testing of either multiple antibody specimens against a single antigen (monoclonal antibody screening, antibody quality control, bioreactor product monitoring) or a single antibody specimen against multiple antigens (cross-reactivity or antibody titer analysis) in a single test cartridge. SangStat Medical, 1505-B Adams Dr., Menlo Park, CA 94025, USA.

The Bubbler Subcell, an innovation in horizontal gel electrophoresis, provides efficient recirculation of the buffer system without the need for magnetic stir bars or peristaltic pumping systems by capturing the hydrogen bubbles that are naturally evolved during electrophoresis and using them for recirculation. Recirculation ensures that the pH and ionic strength of the buffer remains constant throughout the duration of your electrophoretic run, increasing the reproducibility of results. This autrecirculating subcell is ideal for applications such as glyoxal RNA gels, RFLP analysis, field inversion gel electrophoresis, or any other procedure requiring long running times. Schleicher & Schuell, 10 Optical Ave., PO. Box 2012, Keene, NH, USA.

A point-of-use dispenser gun connects directly to the compact Milli-Q® water system’s recirculation loop, providing high purity water at the actual point of use. The device allows water to be simultaneously dispensed up to 7 feet (2.1 meters) from the system by the gun and from the three-way valve on the system. All wetted surfaces are constructed of PTFE, PFA, and FEP, all Teflon® family members, the lowest extractable polymers available. The gun’s tubing connects directly to the automatic recirculation loop, which keeps the water in the tubing, the system pure between uses, and protects against bacterial growth. Millipore Corporation, Bedford, MA 01730, USA.

To meet the exacting demands of today’s hybridization techniques, Amersham has introduced Hybond-Nfp, the first and only membrane independently QC tested for DNA fingerprinting applications.

Independent testing removes the need for traditional in-house quality control checks that can be time-consuming and expensive.

Carefully manufactured from high-quality materials, each batch of membrane is tested for uniformity of wetting, sensitivity, efficiency of stripping, and reprobing. Optimal fixation conditions are also determined.

Hybond-Nfp can also be used for other hybridization applications where a good first result is important. Amersham International, Amersham Pl., Little Chalfont, Buckinghamshire, England HP7 9NA.

A pH profiling system specifically designed for isoelectric focusing-electrophoresis applications features a unique miniature flat combination pH probe in conjunction with an all-acrylic gel positioning table.

Ph measurements can be made on flatbed polyacrylamide gels, tube gels, disc gels, thin layer granular gels, and preparative gels. The system provides direct correlation between protein banding patterns and pH profile without tedious gel slicing or chemical pillar markers and is designed for use with all standard laboratory pH meters. Lazer Research Laboratories, Inc., 920 N. Formosa Ave., Los Angeles, CA 90046. USA.

The Chiu Light Guides line for microscopic, borescopic, and endoscopic applications is designed and manufactured for long system life and restriction-free movement. The light guides incorporate quality optical glass to supply brilliant specimen cross lighting from above or below and are ideal for stereomicroscopy, high/low contrast,
optical comparators, IC/semiconductor etching and printing, automatic test equipment, profile projectors, and measuring microscopes. Chiu Technical Corp., 252 Indian Head Rd., Kings Park, NY 11754, USA.

A system controller for liquid chromatography, the ISM100, provides turnkey, single keyboard control for a SpectraSYSTEM™ LC system. Standard features include a full QWERTY keyboard, dedicated LC keys, a built-in LCD display, and a near-letter-quality inkjet printer, which provides complete GLP system documentation.

Dedicated LC keys provide instant access to method programming and instrument status. Other features include a random access sample table, method linking, selectable report formats, and co-ordinated power-fail recovery. Spectra Physics Analytical, 3333 N. First St., San Jose, CA 95134, USA.

The GS Gene Linker™ UV chamber crosslinks DNA or RNA to either charged or neutral nylon membranes in less than 2 min, saving time over the conventional method of oven baking nucleic acids to membrane, which can take up to an hour. Crosslinking with the UV chamber enhances multiple probings of Southern, Northern, slot and dot blots, and colony or plaque screening. The chamber can also be used for nicking DNA in agarose gels prior to transfer, UV sensitivity testing of host strains, UV sterilization, and UV crosslinking of proteins to nucleic acids. Bio-Rad Laboratories, 3300 Regatta Blvd., Richmond, CA 94804, USA.

Perform high fidelity DNA synthesis, with an error rate 12-fold less than Taq DNA polymerase, is a multi-functional thermostable enzyme with both a 5' to 3' DNA polymerase activity and a 3' to 5' exonuclease proofreading activity. During DNA synthesis, the 3' to 5' exonuclease activity of the Pfu DNA polymerase will excise mismatched nucleotides from the 3' termini of the primer. The 3' to 5' exonuclease activity does not degrade single-stranded DNA. The activity vs. temperature profile of Pfu DNA polymerase is comparable to that of Taq DNA polymerase. Stratagene, 11099 N. Torrey Pines Rd., La Jolla, CA 92037, USA.

A new method for facile and effective removal of endotoxins, ACTICLEAN Etox also dissociates endotoxin-protein complexes. The ligand is nontoxic and very stable. Protein yield off the resin is nearly quantitative (>98%) despite the ligands' high affinity for endotoxin. Immobilized through a stable secondary amine linkage, leaching is <0.1 ppm. The resin can be cleaned with 1 M NaOH. Sterogene Bioseparations, 140 E. Santa Clara St., Arcadia, CA 91006, USA.

polymixin. ACTICLEAN Etox also dissociates endotoxin-protein complexes. The ligand is nontoxic and very stable. Protein yield off the resin is nearly quantitative (>98%) despite the ligands' high affinity for endotoxin. Immobilized through a stable secondary amine linkage, leaching is <0.1 ppm. The resin can be cleaned with 1 M NaOH. Sterogene Bioseparations, 140 E. Santa Clara St., Arcadia, CA 91006, USA.
EDP-Plus™ pipettes offer the accuracy and precision of a computer-controlled motorized instrument; an electronic memory that saves up to 12 different volume settings, then allows you to pipette them automatically, in sequence, without touching the keyboard; operating modes for pipetting, multiple dispensing, titrating, and diluting, and the ability to accurately and precisely pipette ultramicro volumes, down to 0.5 µl, and larger volumes up to 10 ml. Rainin Instrument Co., 568 Bergen Blvd., Ridgefield, N.J. 07657-2097, USA.

The OmniPac family of HPLC columns brings together in a single, solvent-compatible material the advantage of ion chromatography and reversed phase chromatography. These rugged state-of-the-art packings are constructed of highly crosslinked polystyrene divinylbenzene polymer and are stable in both acid and base. The chromatographer can independently control these retention mechanisms separately or simultaneously to achieve separations of ionizable and neutral analytes in a single run. Dionex Corporation, PO. Box 3603, Sunnyvale, CA 94086, USA.

Chromacol offers an extensive line of glass vials and caps for leading chromatography autosamplers. In addition to standard vials made from type I hydrolytic grade glass, Chromacol has a higher quality grade of glass, Chromacol Gold™, which is available in several vials in three Chromacol product ranges—STANDARD, SCI-VIT™, and UNI-VIT™. Chromacol, PO. Box 293, Trumball, CT 06611, USA.

Crossflow devices minimize product loss in the laboratory, and in pilot and production applications. Easyflow disposable crossflow devices, available in two sizes for processing of small and intermediate batches, are designed for processing 100 ml to 80-liter quantities. They are suitable for applications including concentration, diafiltration, fractionation, viral clearance, cell harvesting, and depyrogenation.

The devices are supplied with a choice of five membranes: a 5,000 MWCO membrane for concentration of peptides, a 20,000 MWCO membrane for the concentration, and diafiltration of proteins and macromolecules, depyrogenation of peptides and buffers; a 100,000 MWCO membrane for concentration and fractionation of proteins, virus capture and depyrogenation; a 300,000 MWCO membrane for fractionation of proteins and virus removal; and an 0.2 um membrane for clarification and cell harvesting. Sartorius Corp., 140 Wilbur Pl., Bohemia, Long Island, NY 11716.

In Hoefer's TE 2000 TwoStep™ direct blotter (sequencing technology), gels are run and blotted directly onto a nylon membrane that passes beneath the bottom edge of the gel. The tedious chores of handling and then blotting the thin sequencing gels are eliminated. DNA sequences that are bound to the immobilizing membrane can be probed numerous times and developed with chemiluminescent or colorimetric detection systems, increasing the amount of information obtained from a single gel. The TE 2000 also offers greater resolution of fragments that have been radiolabelled. Hoefer Scientific Instruments, 654 Minnesota St., San Francisco, CA 94107, USA.

A six-page full color brochure describes use of chrono-long whole-blood ionized calcium aggregation systems to improve platelet and leukocyte function studies. The bulletin from Chrono-log details the benefits of measuring shape-change, aggregation, dense granule release and cytoplastic ionized calcium flux with the Chrono-log whole-blood ionized calcium lumi-aggregometers.

Clinical applications in detection of hemostatic abnormalities are discussed, including von Willebrand disease, secretion defects, storage pool deficiency, and receptor site defects. Chrono-log Corp., 2 W. Park Rd., Havertown, PA 19083-4691, USA.

A hemostasis wall chart, Hemostasis Pathways, developed in cooperation with Temple University Hospital, Wadley Institutes, Colorado Coagulation Consultants, and Medical University of South Carolina, is comprehensive and accurately reflects current knowledge about the blood coagulation pathways. Details on each coagulation factor's biosynthesis, molecular weight, plasma concentration, in vivo half-life, and pathology are provided. The chart is an ideal educational tool for laboratories, medical schools, professional presentations, and continuing education projects. Helena Laboratories, 1530 Lindbergh Dr., P.O. Box 752, Beaumont, TX 77704, USA.

AESAR/Johnson Matthey has available its 10th anniversary product catalog of high purity research chemicals and materials. The 700 pages list more than 4000 high-quality research and development products, available through 24-hour delivery. There are new sections on labware, ceramics, and electronic materials. AESAR/Johnson Matthey, P.O. Box 8247, Ward Hill, MA 01835-0747, USA.
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