

RECRUTEMENT

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MICHIGAN STATE UNIVERSITY

POSTDOCTORAL POSITIONS EXPERIMENTAL/COMPUTATIONAL CONDENSED MATTER PHYSICS MICHIGAN STATE UNIVERSITY

Applications are invited for one or more post-doctoral research positions in condensed matter physics. The successful candidate will carry out x-ray and neutron scattering experiments and computer simulations to study the structure of nanostructured materials.

Applicants with a strong background in x-ray or neutron scattering, or computational physics are particularly encouraged to apply. Review of applicants will begin after April 1st 2004 and continue until the position is filled. Candidates must have a Ph.D in physics, materials science, chemistry or a related field.

Please send applications by paper mail, including a vita, statement of research, copy of one of your papers and at least two letters of recommendation, to **Prof. Simon J. L. Billinge, Department of Physics and Astronomy, Michigan State University, East Lansing, MI 48824.**

More information about the research can be found on the group web-page at <http://www.pa.msu.edu/cmp/billinge-group>.

*Michigan State University is an affirmative action/equal opportunity institution.
Women and minorities are especially encouraged to apply. Persons with disabilities have the right to request and receive reasonable accommodations.*

POSTDOCTORAL POSITIONS IN EXPERIMENTAL PARTICLE PHYSICS

The Fermi National Accelerator Laboratory (Fermilab) has openings for postdoctoral Research Associates in experimental particle physics. The Fermilab research program includes experiments with the 2 TeV proton - antiproton collider, neutrino oscillation experiments, fixed target experiments and astroparticle physics experiments. There are positions for recent Ph.D.s to join the Tevatron Collider program. There are also opportunities to join the neutrino oscillation experiments MiniBooNE and MINOS, and the Cryogenic Dark Matter Search. Opportunities also exist to participate in the future BTeV and LHC-CMS experiments. Positions associated with the experimental program are also available in the Computing Division for candidates interested in modern computing techniques applicable to HEP data acquisition and analysis.

Successful candidates are offered a choice among interested Fermilab experiments, and typically have the opportunity to participate in detector development and commissioning in addition to experiment operation and data analysis. Appointments are normally for three years with the possibility of extension.

Applications and requests for information should be directed to:
Dr. Michael Albrow, Head Experimental Physics Projects Department, Particle Physics Division (albrow@fnal.gov), Fermi National Accelerator Laboratory, MS 122, P.O. Box 500, Batavia, IL 60510-0500.
Applications should include a curriculum vita, publication list and the names of at least three references. EOE M/F/D/V.

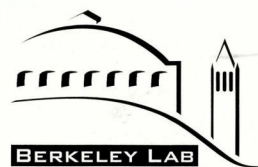


CAREER POSITION IN EXPERIMENTAL PARTICLE ASTROPHYSICS

The Lawrence Berkeley National Laboratory's Nuclear Science Division is seeking a scientist with outstanding promise and creative ability in experimental particle astrophysics. The appointment will be a career position as Staff Physicist. The successful candidate will have at least 5 years of experience beyond the PhD in major collaborative research in nuclear or particle physics and will be expected to assume a leadership role in the neutrino physics/astronomy program at LBNL.

The successful candidate initially will assume a major role in the group at LBNL that has a key role in IceCube, a neutrino detector to be installed at the South Pole. IceCube will survey the neutrino sky in the energy range 10^{12} - 10^{16} eV in search of galactic and cosmological neutrinos from a variety of potential sources. LBNL has major responsibility for the DAQ system, which will acquire data from 4800 optical modules located deep in the polar ice cap.

Applicants are requested to e-mail a curriculum vitae, list of publications, statement of research interests, and the names of at least 5 references, no later than June 1, 2004, to gensciemployment@lbl.gov and to jnmarx@lbl.gov. Please reference job number NS/016961/JCERN in your cover letter. Berkeley Lab is an EEO/AA employer.



The Faculty of Science of the University of Bern invites applications for a position of **Full Professor of Experimental High Energy Physics and Head of the Laboratory for High Energy Physics**

opening March 1, 2006 at the Laboratory of High Energy Physics of the Physics Institute, University of Bern, Switzerland. Current research activities of the Laboratory include work at CERN especially on the ATLAS experiment at LHC, as well as the physics of neutrino oscillations (OPERA) and dark matter (ORPHEUS).

Candidates should have a proven first rate research record in experimental high energy physics. This may include participation in large experiments and the development of novel experimental techniques.

She/he should also be prepared to participate actively in the teaching of physics at both the undergraduate and graduate level. As Head of the Laboratory, the successful candidate has overall responsibility for about 30 collaborators and will be a member of the Board of Directors of the Physics Institute.

The University of Bern especially encourages women to apply for this position.

Letters of application, including curriculum vitae, a list of publications, copies of the most important publications, and an outline of past and future research (all in English) should be sent before September 15, 2004 to

**Prof. G. Jaeger, Dean of the Faculty of Science,
Sidlerstrasse 5, CH-3012 Bern, Switzerland.**

Further information about the Laboratory can be found at <http://www.lhep.unibe.ch> and enquiries about this position can be made by contacting
**Prof. W. Benz, Physikalisches Institut,
Sidlerstrasse 5, CH-3012 Bern, Switzerland,
Tel: +41 31 631-4403, Fax: +41 31 631-4405,
e-mail: wbenz@phim.unibe.ch**



Senior Science Experts

(FIXED-TERM APPOINTMENTS)

SWINDON, WILTSHIRE

The Particle Physics and Astronomy Research Council (PPARC) is the UK's strategic science investment agency for particle physics and astronomy and it directs and funds research in national and international programmes across these areas. The PPARC delivers world-leading science, technologies and people for the UK.

In a new initiative to enhance its operations, the PPARC wishes to appoint a small number of high calibre science experts to work closely with the Chief Executive, Director Programmes and other senior members of the PPARC team in defining, developing, implementing and monitoring its future science priorities and programmes. These senior appointments, which will typically be for a fixed-term linked to specific projects or initiatives, will provide additional knowledge and expertise to complement that already available in-house and through the PPARC's existing peer-review and advisory structure.

The PPARC has four main science areas covering its remit; particle physics, particle astrophysics, astronomy and solar system science and it is envisaged that the experts will have a role in shaping the science strategies and priorities within these broad themes. Three projects requiring specific support and drive in science, policy and international negotiations are the Linear Collider, the ESA Aurora Programme, and Extremely Large Optical Telescopes coupled with the Square Kilometre Array. Expressions of interest in other areas of the PPARC's programme will also be welcome however.

The role and responsibilities taken by an expert will depend upon their skills and expertise and also, crucially, on the PPARC's science requirements in a specific area. Typically, however, the role is expected to encompass:

- Responsibility for development of a major project, including full delegated responsibility for the budget, liaison with other funding agencies, and interaction with the UK community.
- Advice and support to Director Programmes, Chief Executive and Science Committee on the development of PPARC's long term scientific strategy.
- Advice and support to the appropriate PPARC Programme Manager on matters relating to a particular subject theme area including liaison with the community.
- General support and advice to PPARC's Peer Review System.

To fill these exciting and challenging roles successfully individuals will need to be acknowledged experts in the PPARC theme area on which they wish to work. They must also be able to demonstrate experience in the development and management of major science projects / programmes at a national if not international level as well as a broad understanding of the definition and implementation of science policy and associated strategy within the UK research system. They must also be able to demonstrate that they can shape and set the agenda in the UK's strategic interests.

Effective communication (both written and oral) and political skills will be crucial to the role as will the ability to interact effectively with a wide range of senior people in the academic, industrial and government sectors both in the UK and abroad. High level negotiation and representation skills are a prerequisite. The role will require a substantial amount of travel to meetings around the UK and overseas and the need to work flexible and sometimes extended hours.

The nature and terms of appointment will be subject to negotiation depending upon the circumstances of the selected candidate and the role agreed. However, the PPARC envisages that the roles will typically be filled on a fixed-term basis linked to specific projects or initiatives with the individual subsequently returning to their former employment or similar. Applications involving a secondment or sabbatical arrangement are, therefore, particularly encouraged.

The salary offered will depend on qualifications and experience but will likely fall in the PPARC Band 2a range of £41.5k to £51k p.a. The PPARC also offers a final salary pension scheme and a generous non-pay benefits package. The role will require a commitment to work from the PPARC Swindon Office for a significant proportion of the allotted time. Assistance with relocation expenses of up to £5k may be payable in appropriate circumstances.

No agencies.

The PPARC is operating an equal opportunities policy, which ensures that all job applicants are treated fairly regardless of gender, ethnic origin or disability.

Suitably qualified individuals are invited to register their interest by submitting a copy of their CV with a covering letter indicating their area of interest to the Personnel Management Section, PPARC, Polaris House, North Star Avenue, Swindon SN2 1SZ or via e-mail to pms@pparc.ac.uk. Potential applicants are encouraged to contact Professor Ian Halliday, PPARC Chief Executive, e-mail Ian.Halliday@pparc.ac.uk or Professor Richard Wade, PPARC Director Programmes, e-mail Richard.Wade@pparc.ac.uk for an initial discussion about the work before registering their interest formally.

Expressions of interest should be sent by 14th May 2004 following which they will be considered by the PPARC with a view to arranging formal interviews with suitable applicants. It is hoped that successful candidates will take up appointment by October 2004.

PPARC

Particle Physics and Astronomy Research Council
www.pparc.ac.uk

the physics of the universe

*The Future
is our
Mission*

Forschungszentrum Jülich
in der Helmholtz-Gemeinschaft



We are the largest interdisciplinary research centre in Europe: 4 200 staff members are concerned with finding solutions to urgent problems in the fields of "Matter", "Energy", "Information", "Life" and the "Environment".

For our "Central Institute for Electronics" (ZEL) we are seeking a scientist as the

Director (C4)

ZEL is a scientific and technical joint facility of the Research Centre, which implements research and development projects in cooperation with the institutes of the Research Centre and with external partners. It has core competences in the fields of analog and digital electronics, measurement-, control- and detector-technology, process-oriented information technology as well as signal and image processing. The focus of current projects is on detector development and instrumentation for experiments in neutron scattering and hadron physics, on fast data acquisition systems as well as non-invasive imaging techniques and signal and image processing for the neuro- and environmental sciences. Beyond these activities, ZEL serves as a competence centre for prototype development, fast data networks and the conceptual design of IT systems.

This advertisement addresses scientists with broad-based experience in the fields of scientific instrumentation and electronic system engineering. The applicant is expected to be able and willing to keep track of and professionally support the activities of ZEL. Furthermore, experience in heading large projects is expected. Due to the size of ZEL and its project-oriented working practice, the future head must have proven organizational skills and adequate competence in business economics. In addition, willingness to cooperate with other institutes of the Research Centre, other research institutions and universities is indispensable.

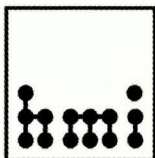
The director will be appointed jointly to a chair at one of the universities of North Rhine-Westphalia ("Jülich Model"). The salary will conform to the C4 scale of the German Civil Service. Candidates are required to have a "Habilitation" or equivalent scientific qualifications and the ability to head an institute as well as experience in teaching at the university level.

Equal opportunities is a cornerstone of our staff policy for which we have received the "TOTAL E-QUALITY" accolade. Applications from disabled persons are welcome.

Applications comprising a curriculum vitae, list of publications and a short summary of scientific achievements should be sent by 15 June 2004 to

Vorstand der Forschungszentrum Jülich GmbH
52425 Jülich
Germany

Internet Address:
<http://www.fz-juelich.de>



The Hahn-Meitner-Institut Berlin (HMI)

Member of the Hermann von Helmholtz-Gemeinschaft Deutscher Forschungszentren
invites applications for the appointment as

Head of the Ion Beam Laboratory ISL Berlin

(BAT I)

HMI is a research center with some 800 employees, research focussed on structure investigations utilizing neutrons, ions and synchrotron radiation and photovoltaics.

As a national large scale facility ISL provides particle accelerators and irradiation facilities to utilize fast ions in solid state physics, materials research and medicine. The accelerator complex combines a sector cyclotron with two injectors, a Van de Graaff and a RFQ structure, both equipped with modern ECR ion sources. Research at ISL ranges from a broad programme in basic research to applications of fast ions in medicine and technology (cf. also www.hmi.de). Candidates with a PhD in Physics or Engineering and an international reputation for expertise on

- particle accelerators
- modern high efficiency ion sources
- applying fast ions in materials research or medicine

are invited to apply.

The successful candidate is expected to be a motivating team leader and to inspire all efforts to support the high standard of reliability and precision of the beams provided to the users. She/he is expected to recruit new users and new applications, and to keep ISL matching the demands of both the external and internal research projects. Recruiting and supporting third-party funded projects is of ever rising importance.

HMI is seeking to increase the quota of women scientists. Therefore, women are especially encouraged to apply. Handicapped applicants will be given preference over others of equal qualification.

Applications including our reference no. **SF 2004/4** must be received no later than 4 weeks after posting, and should be addressed to Prof. Michael Steiner, Scientific Director, HMI, Glienicker Straße 100, D-14109 Berlin. Further information may be obtained via phone (049 / 030 / 8062 2762).

CERN COURIER RECRUITMENT BOOKING DEADLINE

July/August issue: 2 July
Publication date: 14 July

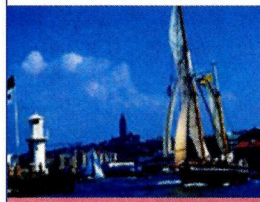
Contact Reena Gupta

Tel: +44 (0)117 930 1028

Fax: +44 (0)117 930 1178

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DESY is world-wide one of the leading accelerator centres exploring the structure of matter. The main research areas range from elementary particle physics over various applications of synchrotron radiation to the construction and use of X-ray lasers.

The DESY-Group "Zeus" is responsible for several central components of the ZEUS experiment. ZEUS is a large multi-purpose detector, operated by an international collaboration at the HERA storage ring. In addition the ZEUS-DESY Group performs detector development for future accelerators. To strengthen our group we are looking for an experienced

Physicist (PhD) m/f

MTV Ib

familiar with detector, electronics and software development. You will play a leading role in the operation, maintenance and further development of ZEUS. In addition, we expect active participation in the Group's development projects. Contributions to the analysis of ZEUS data are desirable. Further the job requires working with technicians and engineers as well as guidance of graduate students. If you fulfill these requirements and you are interested in this position please send your complete application to our personnel department. For further information please contact Mr. Zeuner under telephone +49 40/8998-3150.

Salary and benefits are commensurate with public service organisations. DESY operates flexible work schemes, such as flexitime or part-time work. DESY is an equal opportunity, affirmative action employer and encourages applications from women.

Deutsches Elektronen-Synchrotron DESY
member of the Helmholtz Association

code: 28/2004 • Notkestrasse 85 • D-22603 Hamburg • Germany
Phone: +49 40/8998-3392 • www.desy.de
email: personal.abteilung@desy.de

Deadline for applicants: 04.05.2004

The Institute of Particle Physics of the ETH Zürich invites applicants for the position of a Postdoctoral

PHYSICIST

position in experimental particle physics research to work on the H1 experiment at HERA.

Having constructed the central silicon-vertex detector and a special purpose fast tracking trigger, the ETHZ research group has a strong commitment in the H1 experiment at HERA. We are involved in many analysis projects with particular emphasis on heavy flavour physics and searches for phenomena beyond the standard model. The group is also in part involved in detector development for the CMS experiment at CERN, and expects to gradually increase its engagement in LHC physics.

Profile: The candidate is expected to have a PhD in particle physics and an excellent record of successful work in this field. Further requirements include: competence in detection techniques, good data analysis skills and a potential for making a significant contribution to the scientific program. As a member of the research group, the selected candidate will take a leading role in detector operation at H1 and performing physics analysis of data taken at HERA. Candidates are expected to actively participate in the teaching duties, which includes tutoring of students.

The initial term of this position is two years with the possibility of extension for further three years. Interested candidates are asked to submit an application by June 30, 2004, together with a letter of motivation, the names and addresses of three referees, a curriculum vitae and a list of their ten most important publications to

Prof. R. Eichler
Inst. of Particle Physics
5232 Villigen-PSI
Switzerland

For further information, please contact Prof. R. A. Eichler, (email: Ralph.Eichler@psi.ch).

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RESEARCH PHYSICISTS

PARTICLE PHYSICS DEPARTMENT, RUTHERFORD APPLETON LABORATORY

Applications are invited from experimental particle physicists with a strong research record for two Group Leader positions within the Particle Physics Department, Rutherford Appleton Laboratory. The first is to lead the Linear Collider Flavour Identification (LCFI) group, and requires an interest in advanced detector development, particularly vertex detectors. The second is to lead the BaBar experimental group, which requires experience in b physics.

The salary at appointment will depend upon relevant experience, and will be on a scale from £26,847 to £40,795 per annum, although an appointment could be made for suitably qualified candidates on a higher scale, up to £50,574.

Application forms can be obtained from: HR Operations Group, CCLRC, Rutherford Appleton Laboratory, Chilton, Didcot, Oxfordshire, OX11 0QX. Telephone (01235) 445435 (answerphone) or email recruit@rl.ac.uk quoting reference number VN2523/PW.

For more detailed information about the CCLRC please visit www.cclrc.ac.uk. If you require further information about this post please contact Prof. Ken Peach email Ken.Peach@rl.ac.uk

All applications must be returned by 7 May 2004.



CCLRC



INVESTOR IN PEOPLE

COUNCIL FOR THE CENTRAL LABORATORY
OF THE RESEARCH COUNCILS



University of Zurich

The Faculty of Science (Mathematisch-naturwissenschaftliche Fakultät) of the University of Zurich invites applications for a

Professorship in Theoretical Physics

at the Institute for Theoretical Physics, to commence on March 1, 2006. The new professor is expected to establish and lead a successful research group, contribute to the Masters program in Theoretical Physics and to undergraduate teaching. She or he will find a very stimulating environment in many areas of theoretical physics and major experimental activities at the University, the ETH and PSI. Current research interests at the institute include particle physics, quantum field theory, astrophysics and cosmology.

We are looking primarily for a theoretical cosmologist or particle-astrophysicist to complement our activities, however the main priority is to identify candidates with excellent scientific standing and applications from other fields will also be considered.

Applicants are invited to submit by July 31, 2004 a curriculum vitae, a publication list, and a summary of their research interests to Prof. Dr. P. Truöl, Dean of the Faculty of Science (MNF), University of Zurich, Winterthurerstrasse 190, CH-8057 Zurich, Switzerland. The application material should also be submitted in a single Word or PDF file to jobsnmf@zuv.unizh.ch.

For further information, contact Prof. D. Wyler, Institute of Theoretical Physics, phone +411 635 5817, email: wyler@physik.unizh.ch, or visit the homepage at www.theorie.physik.unizh.ch.

Deutsches Elektronen-Synchrotron Particle Physics



DESY is world-wide one of the leading accelerator centres exploring the structure of matter. The main research areas range from elementary particle physics over various applications of synchrotron radiation to the construction and use of X-ray lasers.

The DESY-Group -H1- is involved in the operation and upgrade of the H1 detector at the ep collider HERA as well as in physics analysis of the collected data. We have an opening for an

Experimental Particle Physicist (Ph.D)

You will develop the software environment of the H1 experiment towards optimal physics analysis and will actively participate in the H1 physics program.

You have a Ph.D. in physics and outstanding experience in software development for analysis of large data sets of particle physics experiments. You master the use of modern software tools and computing architectures and have a profound knowledge of all aspects of the analysis of particle physics data. If you fulfill these requirements and you are interested in this position, please send your complete application to our personnel department. For further information please contact Mr. Niebuhr on +49 40/8998-4594.

Salary and benefits are commensurate with public service organisations. DESY operates flexible work schemes, such as flexitime or part-time work. DESY is an equal opportunity, affirmative action employer and encourages applications from women.

Deutsches Elektronen-Synchrotron DESY
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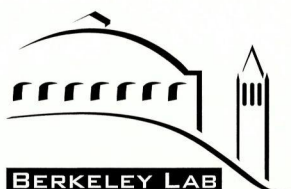
Deadline for applicants: 16th May 2004

POSTDOCTORAL FELLOW - ATLAS

The Physics Division of the Lawrence Berkeley National Laboratory (LBNL) is seeking a Postdoctoral Fellow to participate in the ATLAS Experiment at the Large Hadron Collider (LHC) at CERN. The ATLAS Group at LBNL has important roles in the silicon tracking detectors and in physics simulation and preparations for data analysis for ATLAS.

The successful applicant is expected to be involved in the production and commissioning of the ATLAS pixel detector and in analysis of the first data from the LHC. This is a 2-year term position with the possibility of renewal up to a total of 5 years. To qualify, you should have a PhD in Experimental High Energy Physics or equivalent experience and demonstrated strong potential for outstanding achievement as an independent researcher.

Interested applicants should submit via email (our preferred method) a curriculum vitae, publication list, and 3 letters of recommendation to gensciemployment@lbl.gov or mail to Lawrence Berkeley National Laboratory, Attn: Merrill Martin, 1 Cyclotron Road, MS 937-0600, Berkeley, CA 94720-8152. Applications should reference job number PH/016923/JCERN. Questions related to job content and responsibilities should be directed to M. Gilchriese at MGGilchriese@lbl.gov. Applications will be accepted until the position is filled. LBNL is an Affirmative Action/Equal Opportunity Employer committed to the development of a diverse workforce.



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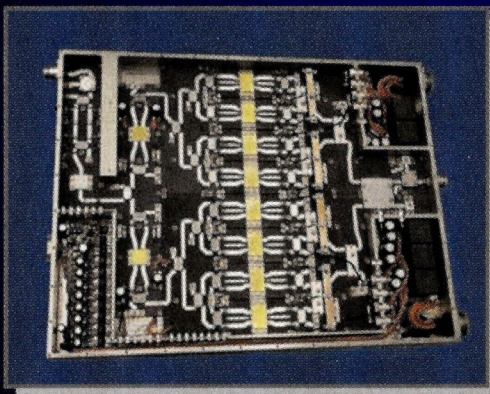
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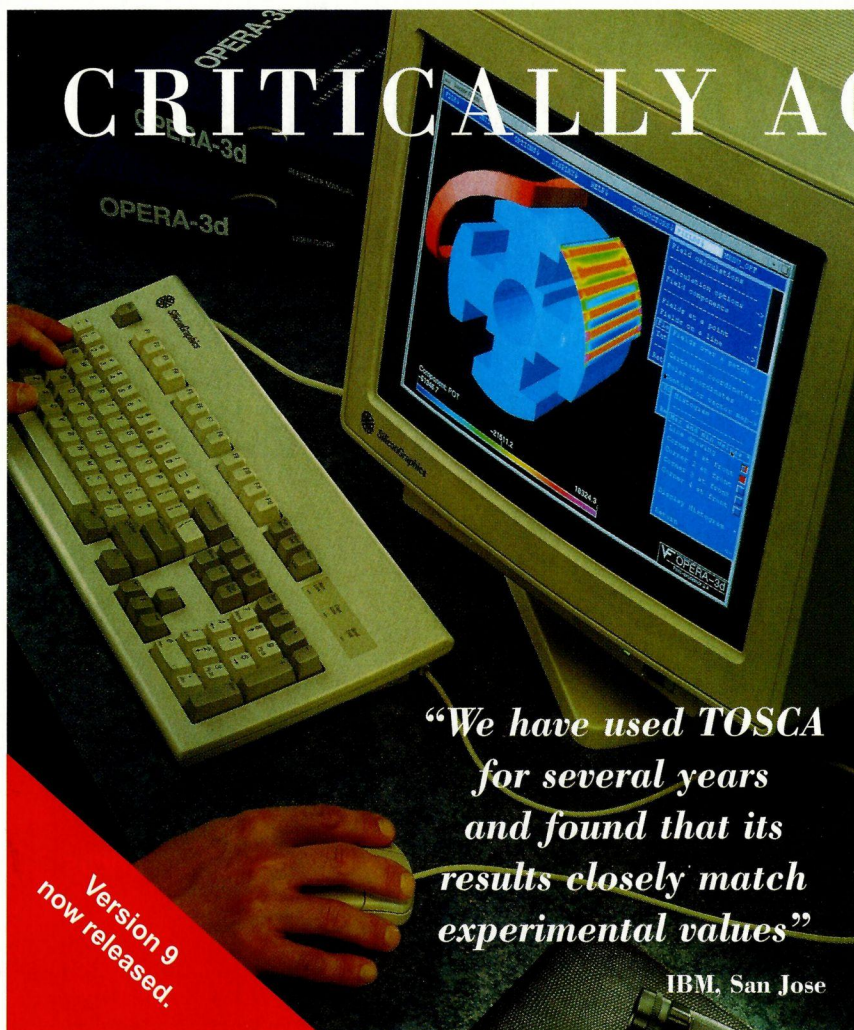
* Lanthanoids

** Actinoids

Lanthanum 57 La 138.91 6.146 920	Cerium 58 Ce 140.12 6.689 795	Praseodymium 59 Pr 140.91 6.64 935	Neodymium 60 Nd 144.24 6.80 1024	Promethium 61 Pm [145] 7.264 1100	Samarium 62 Sm 150.36 7.353 1072	Europium 63 Eu 151.96 5.244 826	Gadolinium 64 Gd 157.25 7.901 1312	Terbium 65 Tb 158.93 8.219 1356	Dysprosium 66 Dy 162.50 8.551 1407	Holmium 67 Ho 164.93 8.795 1461	Erbium 68 Er 167.26 9.066 1497	Thulium 69 Tm 168.93 9.20 1545	Ytterbium 70 Yb 173.04 6.57 824
Actinium 89 Ac [227] 1050	Thorium 90 Th 232.04 11.72 1642	Protactinium 91 Pa 231.04 15.37 1568	Uranium 92 U 238.03 19.05 1152	Neptunium 93 Np [237] 20.45 637	Plutonium 94 Pu [244] 19.816 639	Americium 95 Am [243] 17.7 1176	Curium 96 Cm [247] 13.51 1340	Berkelium 97 Bk [247] 14.78 986	Californium 98 Cf [251] 15.1 900	Einsteinium 99 Es [252] 15.1 860	Fermium 100 Fm [257] 1527	Mendelevium 101 Md [257] 827	Nobelium 102 No [259] 927

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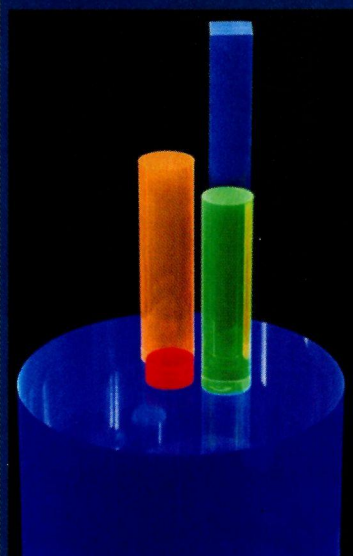
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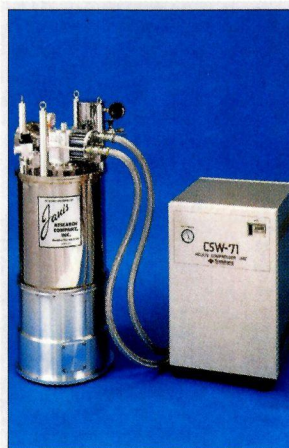
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