Members of the APS have chosen Helen Quinn of the Stanford Linear Accelerator Center to be the Society’s next vice president. Quinn is the fourth woman to be elected to the presidential line in the Society’s 102-year history, following Brinkman and Sarachik, who will be president in 2003. In other election results, Susan Seestrom of Los Alamos National Laboratory will become chair-elect of the APS nominating committee, which will be chaired by Susan Coppernith (University of Chicago) in 2002. The nominating committee selects the slate of candidates in the annual general elections, and its choices are then voted on by the membership. Elected as new general councillors were Frances Houle of IBM’s Almaden Research Center and Gerald Mahan of the University of Tennessee. T. Maurice Rice of the Swiss Federal Institute of Technology was elected to the new position of international councillor.

“I appreciate and accept the trust my colleagues have placed in me,” Quinn said of her election. “I look forward to the challenge of helping to provide good leadership to the APS over the next four years.” A native of Melbourne, Australia, Quinn completed her PhD in physics in 1967 at Stanford and has been a permanent staff member of the Stanford Linear Accelerator Center since 1979. She has made significant contributions to particle physics theory, for which she has received numerous honors. Quinn devotes significant professional time to education work. She was the founding President of the APS Education Director.

A Publication of The American Physical Society http://www.aps.org/apsnews

Volume 10, No. 10
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Aker Finalists Meet in Washington

Has the US State Department been giving Chinese citizens an especially difficult time obtaining student and exchange visitor visas to come to the United States in the past year or two? This question has elicited strong debate, with some members of the academic and research community, especially in physics, feeling under siege at what they perceive to be an unfair and arbitrary crackdown on students and scientists from China, and in some instances, from other countries. They say this crackdown has harmed scientific inquiry and damaged graduate programs, particularly those in physics, around the country.

But the State Department unequivocally denies charges of any crackdown or change in policy as “simply not true,” citing figures that show steady increases over the past several years in the number of people from China coming to the US under student and exchange visitor visa categories. These figures show steady increases in the number of “F1” student visas issued to people from China each year since fiscal 1998, including a nearly 10 percent jump from fiscal 2000 to fiscal 2001 (ending September 30). The State Department also says that the referral rate for Chinese student visa applicants was markedly lower in fiscal 2000 than in the prior two fiscal years. (Refusal rates for fiscal 2001 were not provided.)

Helping to set the dimensions of this problem are the results of a survey, conducted this September by the APS, of the heads of the 254 PhD- and Masters-granting physics graduate programs in the United States. Among the respondents, 54 percent said they have encountered sudden and unusual problems getting visas for Chinese citizens or other foreign nationals entering their programs, while 46 percent said they did not.

While the survey found that Chinese students seeking visas for the 2001-2002 academic year experienced difficulties at a rate almost four times that of other foreign nationals, this rate was the same as the State Department’s student visa applicant referral rate for all Chinese citizens in both fiscal 1998 and 1999. This indicates little had changed in the past three years except the perception of a problem.

Clouding the picture are the horrific events of September 11, 2001, which have abruptly and dramatically changed the political agenda and put any proposed changes in student visa categories on ice for some time to come. The issue has generated increasing controversy and confusion in the past year. News

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APS News Survey Tracks Chinese Student Visa Problems

By Richard M. Todaro

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This primitive organism forms a material with unique optical properties. Here, nature gives us a lesson in how to solve a very complex technological problem.”

— Joana Allenberg, Bell Laborat-
ories, on what inspired him to invent the e-book

“Almost 60 percent of these de-
vices are used for brain research, and they have tremendous potential for radioactive chemical in the patients body. The brain burns glucose, so the results show where the brain is working, and since the glucose produces radiation, the PET scan can image it. So it is a powerful way to look inside the brain.”

— John A. McIntyre, Texas A&M, on the PET scan, UPI, 9/25/01

“One of the earliest photographic plates from Roentgen’s experiments was found in a startlingly brief leap: within a

November 8, 1895. Roentgen noticed that when he shielded the tube with heavy black card-
board, the green fluorescent light seemed to move from the outer layer of the tube to the inner layer — too far away to be reacting to the cathode rays as he understood them. He deter-
mined that it was due to a stream of invisible rays emanating from the Crookes tube, he began to study
cathode rays (later recognized as electronic beams, which penetrate the opaque black paper folded around the tube. Further experi-
ments revealed that this new type of ray was capable of passing through a wide range of materials, including the sub-
stances of the body and bones visible. One of his earliest pho-
tographs published from his experiments was a film of his wife Bertha with her wedding ring clearly visible. To this day, his findings revolutionized the way scientists understand natural processes. Roentgen’s scientific career was not without challenges. As a student in Holland, he was expelled from the University of Leiden and later in his career, he was accepted to the University of Würzburg.

Roentgen’s discovery of X-rays has been settled. But that was in graduate school. I

off-brand that was 25 cents a box. It was. No one should eat lab chemi-

cals. Because I don’t know what the hell it

know what I mean? I did go through

a week, not always for breakfast, you

saw me!”

— David Nowak, Livermore Na-

tional Laboratory, on how metal films make

popular journals, and the metaphori-

cal use of X-rays were popularized.

Poems about X-rays appeared in

popular journals, and the metaphori-

cal use of the rays popped up in political
caricatures, short stories, and advertis-

ing. Detectives touted the use of Roentgen devices in following unfaith-
ful spouses, and lead underwear was

manufactured to foil attempts at peek-

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ing in. Roentgen’s discovery, developing a
cine camera offered to him by his own

employer, was the key to the invention

of an attended anatomic, who proposed the new discovery be named “Roentgen’s Rays.”

The news spread rapidly through-

out the world. Thomas Edison was among those eager to perfect Roentgen’s discovery. He developed a handheld fluoroscope, although he failed to make a commercial “X-ray lamp” for domestic use. The appli-
carried for producing X-rays was soon

widely available, and studios opened to take “bone portraits,” further fu-

eling public interest and imagination. Poems about X-rays appeared in popular journals, and the metaphorical

call use in the US in Dartmouth, MA, where Dr. Edward Brant first produced a plate of a patient’s collar bone for his own studies. Roentgen’s experi-

tal work was profoundly affected at the moment of discovery, and he never sought honors or financial profits for his work. He

thoughts were at the moment of

his discovery. When asked what his

thoughts were at the moment of

discovery, he replied, true to form, “I didn’t think, I just did.” That day

Roentgen was widely recognized as a brilliant experimentalist, who never sought honors or financial

profits for his work.

One of the earliest photographic plates from Roentgen’s experiments was a film of his wife, Bertha, with a ring on, produced on November 8, 1895.
Some day the 21st century will be long to the biologist. Thus, the physics profession potentially faces a new crisis: no longer being the primary science and the attendant reduction of its slice of the research funding pie. Although it is foolish to assume that physics will soon lose its lust for human problems, it would be foolish not to think that the profession will remain healthy without change. There is an opportunity to involve the physics community to embrace the value of industrial and applied physics, not only for the health of the profession, but also for the benefit of society.

What should the academic world know about industrial physics? Many physicists have not even heard of the organizations that fail to mention physics. How do they obtain such jobs? Many are hired through not-for-profit organizations that in general develop their own physicists or hire them on contract. The physicists in these companies are not engaged in basic research, but in applied and industrial research. Many are employed in companies that offer opportunities for physicists who want to work in areas that are important to society, but where the benefit to the community is not as clear as in pure research.

There is a new APS Industrial Faculty Fellowship program, which promises to be useful as well. Such experiences provide interesting new research projects and open up possibilities for future collaborations and for placing students and graduates. Obviously, industry benefits considerably from having students and faculty as visitors to companies, and by establishing graduate-level business groups. Industrial speaker programs (AIRAIT) provide physics professionals who can speak to students, as well as producing positive publicity. Our experiences suggest that students greatly appreciate the information and insight. The most important point, however, is simply to keep an open mind about the many alternatives a physics graduate can pursue.

The upcoming physics generation will be cost conscious, and it is crucial that physics professionals work together with others to provide interesting and useful experiences that will attract students to physics. This will be especially important if the industry wants to be a significant force in bringing generations of scientists to physics.

Committee on Committees Finds the Talent That Keeps APS Running

Editor's Note: With this article, APS News begins an occasional series on the various standing committees of the American Physical Society.

The 17 standing committees— including nine operating committees and eight public affairs and outreach committees — that exist within the society's APS News and other publications. They include a teacher-in-residence program (AIP, FIAP) provide physicists with opportunities to teach in K-12 schools. These programs, such as the entrepreneurial physics research program at Case Western Reserve University, are a number of innovative programs in physics at the most basic level of teacher preparation. These programs are helping to attract physicists to this exciting field.
More on Alternate Theories

I have some additional information regarding an "alternate theory of perpetual motion" (Zero Gravity, APS News, October 2000), some of which was explained by Julian Griffiths in the August/September issue. The buttered cat theory did indeed originate with a magazine contest. He had no way of knowing this. No versions of the emails I have seen have properly acknowledged the source of this ingenious theory. But I recalled reading the announcement of the OMNI magazine in the July 1993 issue (Vol. 15, No. 9, p. 96). The true originator of the theory is also the winner of the contest: John Frazee of Kingston, New York.

Further curiosity led me to the November 1992 issue of OMNI, which first announced the competition. It should not come as a surprise to most readers that the inspiration for the contest was The Journal of Irreproducible Results. Some of the theories of the runners-up and honorable mentions are quite amusing.

Jason C. Verley
Albuquerque, NM

Editors' Note: The other theories were amusing indeed. Our favorites:

- Clothes dryers produce a tunnel effect that throws socks into an alternate universe. Scientists should use this effect to dispose of nuclear waste: just put chunks of it into socks and set the timer for 40 minutes. (Thaddeus P. Rosen, Bakersfield, CA)
- Using cutting-edge, state-of-the-art, high-tech, and other dash-laden Clichés are a window into the past, even if they are red-shifted like the Boson turned up many old favorites, while Big Bang adherents smile patronizingly at the microscopists. At times, it can feel like metaphor war—about what they're doing—or a "time machine" reproducing the structure of DNA or the fossil bones of a megadinosaur. The geologists have done this sort of thing before. (John A. Banker, Shaw Low A2)
- The background temperature is 2.73 kelvins. But an international system of units obviously cannot be based on the grammar rules of one foreign language. Therefore, one does not add "es" to make plurals of SI units. The backgound temperature is therefore 2.73 K. (Arne Reitan, Arendal, Norway)

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Early next year, the APS will close a seven-year chapter in the Society’s ongoing efforts to help reform science education through the Teacher Scientist Alliance Institutes (TSAI) program. TSAI is a comprehensive initiative designed to promote the systemic reform of K-8 science education from the traditional, lecture-oriented methodology to a hands-on, inquiry-centered approach. The program provided institutes, workshops, and other support for educators and scientists throughout the country all of which have been free of charge to participants.

"In the last ten years, a broad consensus has developed in the U.S. that what science education should be is in meeting the goals of the new consensus, the APS believes that the involvement of the public, especially young people, is central to achieving the goal of an "engineering oriented" society rather than one in which science is just a tool for economic development. The APS, therefore, established the "Hands-On Science" program (HOSP) in 1980, with the goal of promoting science education and involving the public in science-related activities. HOSP has since evolved into the "Teacher Scientist Alliance Institutes (TSAI) program".

TSAI was formed to get scientists and other technical professionals involved in support of hands-on, inquiry-centered science education in K-8 schools. It was established in 1995 by Ramon Lopez, then director of the APS Education and Outreach Department, initially with funds from the APS/APAPT Campaign for Physics and later with an NSF grant to support its continued operation. Initially, the focus of the reform of elementary school science education, the program was eventually expanded to include middle school education.

Since its inception, a principal aspect of the program has been the annual Lead Scientists Institutes (LSI), five-day events held in Washington, D.C., to promote participants to support the science education program. These institutes have provided an intensive introduction into the basics of science education reform. Applicants are usually accepted in teams of two or three from school districts already involved in systemic reform, teams comprising scientists, engineers, and educators. These are professional gatherings with a demonstrated commitment to improving science education, as well as opportunities for participants to help integrate scientists into reform efforts.

In addition, TSAI has conducted Regional Leadership Institutes in New England, the Southeast, San Diego, and Texas, as well as three-day "day out" workshops, as part of the APS Centennial celebration. At the request of individual school districts, TSAI-trained scientists have provided workshops to help integrate scientists into science education in the other states, in the Southeast, and in Texas, and now include three-day "day out" workshops to help integrate scientists into science education in these states.

Schultz retired from IBM and found a position at the National Science Resources Center (NSRC), a joint enterprise of the Smithsonian Institution and the National Academy of Sciences based in Washington, D.C., where he met mañana Ramon Lopez. When Schultz’s NSRC project ended, he moved half time to the National Research Council, researching the ways scientists have become involved in science education, and half time to the APS to assist Lopez in the TSAI program. Nine months later, when Lopez left the APS, he took over the TSAI directorship.

Schultz hoped to raise new funds to continue the TSAI program once the NSF grant funds ran out, but health problems have since forced his retirement from the program. One last leadership institute is planned for January 2002. I may be quixotic, but I’ve been hoping to introduce this institute to a number of other scientific societies, and to demonstrate its successes, so that the baton can be passed on to another generation of scientists who involved. I’m pretty sure about this, but I’m hoping to introduce this institute to a number of other scientific societies, and to demonstrate its successes, so that the baton can be passed on to another generation of scientists. I’ve been hoping to introduce this institute to a number of other scientific societies, and to demonstrate its successes, so that the baton can be passed on to another generation of scientists.

Schultz and Lopez co-authored an article entitled "Two Revolutions in Science Education" in the September, 2001 issue of Physics Today.

"We all know the importance of building on one another’s work, but too often we go our separate ways, often to the detriment of science education," said Lopez. "It’s important to understand that science education is changing rapidly and that educators need to keep up with the latest developments in the field. It’s also important to recognize that science education is changing rapidly and that educators need to keep up with the latest developments in the field.

"This year's report noted that some teams have struggled with ways to make the most effective use of scientists, and expressed concern that without on-going support, fleeting initiatives may die out in many districts. Nevertheless, TSAI's additional goal, of spawning second-generations of scientists, has been accomplished. By the time the report was published, the program was supporting 15 institutes in the U.S. In 1980, after an appointment as an IBM postdoctoral fellow at the University of California at Berkeley, she joined the APS's Research Laboratory, now the IBM Almaden Research Center. Her research is in the area of physics, chemistry and thermal and radiation processes and properties of condensed matter systems. In recent years he has concentrated mainly on the theory of strongly correlated electrons and its applications to the microscopic theory of the high temperature superconductors.

Ted Schultz, right, makes a point to Wolf Berger at one of the TSAI Institutes.

"There are still some questions in getting started on this. The APS is” Mahan bridge the culture gap between them and work closely together,” and the results have been verified (see http://www.aps.org/units/sum-mary/2001/schultz.html). Often scientists are interested in becoming involved, but lack support from the school district, which does not know how to integrate the participation of scientists. Ideally, the goal should be to achieve a large number of scientists who are moderately involved. Even if their contribution is only two or three per year, scientists and engineers can add some unique elements, such as their active and interactive nature. They can act as "bridges" to integrate the participation of scientists.

A 2000 report by the National Center for Education Statistics and the National Science Foundation concluded that the impact of the TSAI program was overwhelming in the science education program, appreciative and supportive of the program’s impact in their districts, believing they had made substantial progress in reform efforts. While recognizing that much work remained to be done, the report noted, “The new emphasis on science education reform is changing rapidly and that educators need to keep up with the latest developments in the field.

Edward Lee/APS

According to the Times report, there is no question in China but that the US government has cracked down arbitrarily and unfairly on Chinese students. It cited numerous multi-part series and angry editorial that have appeared in Chinese newspapers, while internet chat rooms have vented the hardship of overworked American visa officers in one of five consular offices around China who issue thousands of visas each year.

In the US, colleges and universities have complained to the State Department, while a number of physics departments have contacted the APS detailing their problems in getting students and visitor exchange visas.

"Until about 1998, we had a case where an F-1 visa was denied. In fact, it never occurred to me that a student with an I-20 (a document required of international students) would not be granted a visa," said Kurt Haller, the head of the physics department at the University of Connecticut, Storrs. "One person was denied in 1999 and couldn't come and one was denied in 2000 but subsequently accepted. This year, we accepted seven Chinese students, but only two received an F-1 (and) five were denied. That's a big jump."

At the University of Utah in Salt Lake City, Heidi Frank deals with international student issues for the physics department. She expressed a great deal of frustration because all ten of the Chinese students accepted into the program were rejected on their first attempt.

Frank recounted how the ultimate reason for getting the ten into the program through the intervention of Utah Sen. Orrin Hatch, who sent letters on behalf of several applicants from China, was denied in 2000, but subsequently accepted on her second try. She had been absolutely no changes in the procedures or policies our consular officers abroad use to accept Chinese citizens' applications for student visas," Haller said. He also pointed out that the 1952 law governing such visa issues requires consular officers to assume that the applicant intends to migrate to the US. He also pointed out that the 1952 law governing such visa issues requires consular officers to assume that the applicant intends to migrate to the US. The State Department cites this as a good thing for the country, and if the consular officer is not satisfied, the officer is required to reject the application. Car I. Shakin, who oversees the physics graduate program at Brooklyn College, one of the five main campuses comprising the City University of New York system, criticized this aspect of the law as essentially arbitrary and subjective. "They can use this argument from Congress and have the okay from the State Department who are sympathetic, but now is not the time to press the case." The hundredth anniversary of Enrico Fermi's birth took place on September 29. The event was held at the University of Chicago, where Fermi taught and where he developed the first nuclear reactor on or 28th. Fermi, the President of the APS in 1953, the year before his death. Happy Birthday Enrico!

The APS survey, from page 1, contains an amusingly heterodox formula for the fine-structure constant in the upper right hand corner of the page.

Survey, from page 1

<table>
<thead>
<tr>
<th>Problems Resolved In Time</th>
<th>Problems Not Resolved</th>
<th>Visa Problems Overall</th>
</tr>
</thead>
<tbody>
<tr>
<td>26%</td>
<td>46%</td>
<td>30%</td>
</tr>
<tr>
<td>(63/243)</td>
<td></td>
<td>(27/350)</td>
</tr>
<tr>
<td>20%</td>
<td>46%</td>
<td></td>
</tr>
<tr>
<td>(49/243)</td>
<td></td>
<td>(112/243)</td>
</tr>
<tr>
<td>8%</td>
<td>15%</td>
<td>7%</td>
</tr>
<tr>
<td>(24/350)</td>
<td>(51/350)</td>
<td>(30/400)</td>
</tr>
</tbody>
</table>

(THE survey did not take into account individuals who were accepted into more than one program and in opting for one program they essentially did not "arrive on time" for the other program, even though they may have experienced any visa difficulties.)

Percentages of Students with Visa Problems

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Physicists Honored at Fall Unit Meetings

Nine APS members were honored with prizes and awards at the fall meetings of three separate units. The 2001 Arthur Schawlow Prize was awarded at the Interdisciplinary Laser Science Conference, held in San Diego, California, October 14-18. The ILS is the annual meeting of the APS Division of Laser Science. At the APS Division of Plasma Physics meeting, also held in Long Beach, October 29-November 2, physicists were honored with the Maxwell Prize and the Excellence in Plasma Physics Award, and the award for Outstanding Doctoral Thesis in Plasma Physics. Finally, the Fluid Dynamics Prize and Otto Laporte Award will be presented later this month at the meeting of the APS Division of Fluid Dynamics, November 18-20, in San Diego, CA.

ARTHUR SCHAWLOW PRIZE

David J. Wineland
National Institute of Standards and Technology, Gaithersburg, MD

Citation: “For an extraordinary range of pioneering contributions integrating applications and theory.”

Wineland received his PhD in 1970 from Harvard University and spent five years as a postdoctoral fellow at the University of Washington before joining what was then known as the National Bureau of Standards as a staff scientist. His research interests are focused on the laser characterization of atomic and molecular systems with pulse spectroscopy of trapped ions with applications to atomic clocks, cold plasmas, and fundamental tests of quantum state engineering with applications to quantum information processing and quantum-limited measurement. He has won numerous prizes and awards for his research over the years, including the 1990 APS Davison-Garwin Prize.

JAMES CLARK MAXWELL PRIZE

Roiad Sagadeev
University of Maryland

Citation: “For an unexcelled set of contributions to modern plasma theory including, collisions, shocks, stochastic magnetic fields, ion temperature gradients, quasi-linear theory, nonclassical transport, and wake turbulence.”

Sagadeev is a Distinguished University Professor of the University of Maryland, College Park, and director of the East-West Space Science Center in the Department of Physics. After graduating from Moscow State University in 1956, he became a member of the controlled fusion team at Kurchatov Institute of Atomic Energy in Moscow, and was a driving force behind the development in our understanding of nonlinear phenomena in rarefied plasmas. In 1965, he founded the Plasma Theory Lab at the Budker Institute of Nuclear Physics in Novosibirsk, expanding the original scope of his work on nonlinear plasmas. And from 1973-1985, he was director of Moscow Institute for Space Research. He was also politically involved as an advisor to Mikhail Gorbachev on arms control and space, and in 1989 was elected to the USSR Congress of People’s Deputies, together with fellow physicist Andrei Sakharov.

EXCELLENCE IN PLASMA PHYSICS AWARD

Keith H. Powell
General Atomics

Richard Joseph Groebner General Atomics

Edward Dowd
University of California, Los Angeles

Emeritus

Szymon Wiktorowski
Princeton Plasma Physics Laboratory

Citation: “For experiments that show that breathes Far to Scandinavian support turbulence and transport in tokamak plasmas, and that flows spontaneously arise at the edge and in the core of tokamak plasmas.”

Burrell received his PhD from CalTech in 1974 and has spent the last 27 years at General Atomics working on a variety of experimental and theoretical topics in controlled fusion research. He is currently program manager in the company’s Experimental Science Division, overseeing fusion research work on the DIII-D tokamak. His primary research focus is on energy and angular momentum transport in plasmas and he has developed numerous diagnostics, including the highly successful change recombination spectroscopy technique.

Szymon Wiktorowski received his PhD in physics from the University of Texas at Austin in 1999. His research interests include tokamak plasma physics, and he has been a scientific advisor to Princeton Plasma Physics Laboratory, where he is currently director of the National Spherical Torus Experiment. His most recent research efforts include a focus on bifurcating plasma systems and studies of the effects of shaped plasmas on transport and trans-ported bar turbulence. He has recently extended this work to include joint re-search on the DIII-D tokamak and General Atomics.

OUTSTANDING DOCTORAL THESIS IN PLASMA PHYSICS AWARD

Kevin James Bowers
University of California, Berkeley

Citation: “For comprehensive and insightful theories and simulations of electron transport in resonant (ESR) and ESR surface-wave plasmas, which show how the distributed ESR wave ex-citation might produce plasma discharge for processing and other applications.”

Bowers graduated with highest distinction from Purdue University in 1997 with a BS in electrical engineering. He received his PhD in electrical engineering from the University of California, Berkeley, earlier this year, with thesis work on high frequency plasma surface waves. Since then he has joined Agere Systems (formerly the Lucent Tech-nologies), and is going on a nationwide tour with two separate companies: one traveling to large cities, and the other focusing on performances in smaller cities and college towns.

The first performances kick off in Salt Lake City mid-November with two separate companies: one traveling to large cities, and the other focusing on performances in smaller cities and college towns.

FLUID DYNAMICS PRIZE

Howard Brenner
Massachusetts Institute of Technology

Citation: “For his outstanding and sa-tisfactory research in the areas of astrophysical, laboratory, and applied fluid dynamics.”

Brenner received his PhD in mechanical engineering from New York University in 1957. His 46-year career as a chemical engineer and turbomachinery expert has included stints at NTU, Carnegie-Mellon University, the University of Rochester, and MIT, where he is currently W. H. Dow Professor. The co-author of three books on fluid dy-namics, his lifelong research interests focus on modeling and simulation of chemical transport processes. Current research efforts involve modeling chromotographic bio-particle separa-tion processes in microfluidic devices, and further, quantifying the molecular and con-structive transport of volume.

OTTO LAPORTE AWARD

John Kim
University of California, Los Angeles

Citation: “For his pioneering work in the development of laser-based controlled fusion as a tool in turbulence research, and for his important contributions to the understanding of the fundamental structure of turbulent boundary layers.”

Kim received his BS degree from Seoul National University in Korea and earned his MS from Brown University before completing his PhD in mechanical engineering at Stanford University in 1978. Before joining UCLA, he has conducted research in the areas of transition and turbulence physics at NASA Ames Research Center, serving as chief scientist for the Turbulence and Plasma Physics Branch. He is currently active in investigating control strategies for turbulent boundary layers, using systems theory and control techniques. Since 1998 he has been the editor of the journal Physics of Fluids.
Unity of Physics in Action: Voices from Around the World

Editor's Note: The entire country was deeply affected by the tragic events of September 11, 2001, which claimed the lives of more than 6,000 people. In the midst of such horror and loss, we were particularly gratified by the outpouring of support and consolations received from our friends and colleagues in other countries. The sampling below represents but a small fraction of the encouraging notes received by various APS offices and staff in the aftermath of the attacks. We reprint them here as a testament to the universality of physics, whose community knows no national borders.

The Executive Board of The American Physical Society expresses its profound sorrow at the loss of so many innocent victims of terrorism on September 11, and offers deep sympathy and condolences to their family and friends. We mourn as well the deaths of members of our own physics community. We grieve with our members and staff who have lost loved ones, friends and colleagues.

APS Executive Board
Motion Passed September 22, 2001

The Deutsche Physikalische Gesellschaft unreservedly condemns the recent appalling terrorist attacks in the United States. They are attacks upon our whole civilization.

The Deutsche Physikalische Gesellschaft assures The American Physical Society and the whole world of people of its complete solidarity with them at this difficult time.

In memory of the victims and with our deepest sympathy for their families, I remain in great sadness,

Dirk B. Bass, our President, DPG

We are sorry (about) what has happened to your country. Please have our heartfelt sympathies.

Santanu Datta
Secretary, Indian Physics Association, Calcutta

Chapter

All of us in the Indian Physics Association are most distressed with the human tragedies that have struck New York and Washington. Our hearts and sympathies are with the innocent victims of these acts of madness. We stand by you in this hour of grief.

C. L. Bhat
Secretary, Indian Physics Association

We are deeply in consternation for the tragic and violent events in the United States. We hope that everybody and everything by the American Physical Society.

Gerardo Contreras Puente
President, Sociedad Mexicana de Física

On behalf of the Cuban Physical Society, we would like to transmit to you our sad feelings and human solidarity because of the tragic facts that occurred in New York and Washington.

Víctor Fajer
President, Sociedad Cubana de Física

With deepest shock we have seen the totally senseless attack on humans and institutions in the United States. Helpless as anyone in this situation, we would like at least to share with all of you our deep sympathy. Scientific collaborations have played for many years an important role in fostering the understanding of humans across borders. I hope this spirit will finally win over fanaticism.

Albrecht Wagner
Director, DESY
German High Energy Physics Laboratory

I and my colleagues sympathize with you in your sorrow on the terrorism in New York and Washington. We were sorry to hear of the death of the people in the United States. V.M. Matveev and V.V. Matveev State Research Institute of Physical Problems Zelenograd, Moscow, Russia

We hope very much that you are safe and mourning with all the unimaginably large losses today. To all we are Americans.

Eberhard Hilber
University of Oldenburg, Germany

Please accept my condolences for the tragedy that has hit your great country.

Taleb Gasmi
Universidad Complutense de Madrid, Spain

I was shocked to learn of the recent terrorist attacks in the United States. I share the concern with the people of the United States and express my heartfelt condolences to the dependent victims. I am very sure such attacks by cowards will not stop the United States from its targeted missions against global terrorism.

K. Shadman
Cochin University of Science & Technology
Kerala, India

We are shocked and saddened by the tragedy because of the terrorist attacks in the United States. All of us from the Central American and Caribbean Physical Society (SOCEAF) want to express our condolences to the families and friends of the victims in these tragic events. Please let us know if we can be of any help in this terrible situation.

Leonardo Esquivel
President, SOCEAF

I send my sincere condolences to everybody in America on behalf of JINR... Mikhail Kissel
University of Wuerzburg, Germany

I would like to express my condolences to the American people at this dark and tragic moment for the attack on the free and democratic world. This is not only an attack on the United States, but an attack on the civilized world. We stand close by you. Let me hope that you never forgive these monstrous criminal suicide attackers.

Vitaly Gasparov
Institute of Solid State Physics
Russian Academy of Sciences

After the dramatic events of last week, I would like to express to all US people our deepest thoughts in these terrible moments. We French people have a very special debt to you all who began in 1945 when you came as liberators.

Be sure that we are with all of you.

Thierry Jolicoeur
Ecole Normale Superiure, France

The scientists of the Joint Institute for Nuclear Research at Dubna feel deeply indignated at the unprecedented terrorist acts committed on September 11 in New York, Washington, and Pittsburgh. In these tragic days we join you in your grief over the innumerable loss of human life and express our sincere condolences to the families of the victims. We wish you, dear colleagues, and the entire US people all the courage to overcome the aftermaths of this tragedy. Please accept our profound sympathy. On behalf of the staff members of JINR and all your true friends from Dubna...

Vladimir Kadyshhevsky, Alexey Sissakian, Tsvetan Vyllov
Russia

May 1, on behalf of the Institute of Physics, express deep sympathy to all American physicists for the tragic events of last week. These catastrophic occurrences still seem incredible and the trivializing of human life is so alien to us in the Western world. Here in London, we have suffered for the past 30 years from terrorist activities, but none has been on the scale of those on New York and Washington. We hear today of 250 Britons who were victims in the World Trade Center, making this one of the worst ever peaceful tragedies for our country. It is also probable that amongst the dead there will be physicists, who in increasing numbers in recent years, with their mathematical and model building skills, have added an extra dimension to the financial world. I am confident, however, that the American people with their resolve and determination will continue to progress in spite of the mental and physical scars which last week’s acts of terrorism have inflicted upon your country.

Alun Jones
Institute of Physics, England

In shock and horror I followed the news of last Tuesday’s terror attack, together with many of our faculty and staff, as uneventful events unfolded in lower Manhattan, Washington, DC, and Pennsylvania. We share in the suffering, the sadness, anger, and confusion of all Americans. Our thoughts and prayers are especially with those of you who may now be confronted with the loss of a loved one. I pray that the burden of grief will not break your spirit, and that in an act of standing together hearts will be healed, made strong enough to withstand, free to pursue dreams again. But any words seem lost like chaff in the wind in the face of this tragedy. There is little else I can say except that my heart goes out to you.

Juergen T. Stockburger
Universitätsstift, Stuttgart, Germany