A. K. Shukla
(continued from previous page)

electrochemistry and has participated in its advancement on many levels."

The Central Electrochemical Research Institute (CECRI) is one of 40 national laboratories under the aegis of the Council of Scientific and Industrial Research (CSIR) in New Delhi. During the last 50 years CECRI has been recognized as the premier institution for R&D in the field of electrochemical science and technology, not only in India but also in the Southeast Asia, with a total strength of over 600 personnel comprising scientists, engineers, technologists, skilled workers, and other staff, with a combined laboratory space of over 400,000 sq.ft. There are four extension centers for CECRI located at Chennai, Cochin, Mandapam, and Tuticorin.

Dr. Shukla has held many positions at the Indian Institute of Science in Bangalore. From 1978 to 1979, he was a Senior Research Fellow; a Lecturer from 1981 to 1983; an assistant professor from 1983 to 1989; an associate professor from 1989 to 1995.; and a full professor from 1995 to 2003. In 2003, he was named as Director of CECRI.

At the Indian Institute of Technology, Dr. Shukla was a research associate from 1974 to 1976. Dr. Shukla was an Alexander von Humboldt Foundation Fellow at the Technical University of Hannover in Germany from 1976 to 1978; and held the same fellowship at the University of Münster in 1988.

In 1983, Dr. Shukla was a Royal Society Visiting Fellow at the University of Oxford (UK); and returned as a Senior Visiting Scientist in 1987. He was also a Royal Society Visiting Fellow at University of New Castle (UK), 1992-1993, in 1994, 1997, and 2001-2002. Dr. Shukla was a Visiting Professor at Monash University in Australia in 1999.

Dr. Shukla was an R. A. Welch Foundation Visiting Fellow at the University of Texas at Austin in 1987. At CNR/TAE in Messina, Italy, Dr. Shukla was a visiting professor in 1990, 1992, 1993, 1998, and in 2000. In 1994, Dr. Shukla was a guest researcher at ONRI in Japan.

Dr. Shukla's research interests include materials electrochemistry with a special emphasis to batteries, fuel cells, electrochemical supercapacitors, and solid-state ionics. He has published 208 research papers and holds 12 technical patents. Dr. Shukla has also been a member of the editorial advisory board for the *Journal of Applied Electrochemistry* and a member of the editorial board of the *Bulletin of Materials Science*. ■

currents

News from Washington

Ed. Note: The following items were excerpted from the January 5, 2006 report of the Federation of Materials Societies (FMS)

http://www.materialsocieties.org/

Federal Research Investment Continues Downward Trend

The final appropriations for FY 2006 show an estimated $134.8 billion research and development portfolio, a record high and an increase of 1.7 percent over F&Y 2005. But 97 percent of the funding goes to defense weapons development and human space exploration technologies. Otherwise, federal spending on R&D programs will fall nearly 2 percent after adjustment for inflation, according to the American Association for the Advancement of Science, whose analysis is recognized as authoritative by experts both on and off the Hill. The AAAS analysis also concludes that federal research investments are shrinking as a share of the U.S. economy, even as other nations are increasing their investments.

www.aaas.org/spp/rd

A New Regulatory Framework for Nanotech?

The Woodrow Wilson International Center has released a report by Terry Davies, former Assistant Administrator of the Environmental Protection Agency, which calls for a new regulatory approach to nanotechnology. David Rejeski, director of the Wilson Center's Project on Emerging Nanotechnologies, said that "if nanotechnology is to succeed, there needs to be a dialogue around the proactive approach Davies suggests. Government, business, and citizen groups need to exchange views and discuss options to assure the American public that as nanotechnology matures, any adverse health and environmental effects will be identified and prevented or controlled." Davies' report concludes that nanotechnology is difficult to address using existing regulations; and that a new law may be required to manage potential risks of nanotechnology.

www.wilsoncenter.org/events/docs/EffectsNanotechFINAL.pdf

Nanotechnology Safety to Be Assessed

The National Institute for Occupational Safety and Health (NIOSH) is forming an interdisciplinary field team of researchers to partner with employers and others in conducting field studies to observe and assess occupational health and safety practices in facilities where nanotechnology processes and applications are used. The field team will assess and obtain insight on materials, processes, current and potential worker exposure, work practices, control procedures, and medical monitoring in operations where nanomaterials are developed or utilized.

www.cdc.gov/niosh/topics/nanotech.

New U.S. Government Websites Launched

The latest version of science.gov has been launched to allow more refined queries for searches of federal science databases. Science.gov 3.0 introduces "MetaRank" which uses a sophisticated method for ranking science queries by searching bibliographic information such as title, author, date, abstract, or other keyword identifiers. A single query searches across 30 databases and 1,800 websites.

science.gov and www.energy.gov

Survey Shows Increase in Tech Transfer

The Association of University Technology Managers has released its 14th annual U.S. Licensing Survey. It shows that nearly 25 percent more new companies, based on academic research, were launched in FY 2004 than a year earlier. The survey also shows that research funding at U.S. institutions was up 7.1 percent compared with FY 2003. Invention disclosures among U.S. institutions increased to 16, 871 while patents issued decreased 6.4 percent to 3,680. In FY 2004, 462 new companies based on academic discovery began operations in North America, with 74.5 percent in the originating institution's home state.

www.autm.net

S&E Doctorates Up, But Still Below Peak

A new survey released by the National Science Foundation shows that the number of PhDs granted in science and engineering increased in the 2004 academic year for the second year in a row. The 26,275 degrees are still below the 1998 peak of 27,728. The report cautions that there is not yet sufficient evidence to determine if the increase is a new trend. "Materials/Metallurgical Engineering" increased from 474 new doctoral degrees in 2003 to 509 in 2004. Biological science was the only S&E field to issue more doctorates than ever before. Physical sciences, psychology, and engineering were still well below their historical peaks, with doctorates in physics declining nearly 20 percent in the last 10 years.

www.nsf.gov/statistics/infbrief/nsf06301/

New Science and Security Panel

The National Academies ad hoc Committee on a New Government-University Partnership for Science and Security convened in January. The panel will address issues such as the application of the USA Patriot Act to universities, the impact of export controls on university research, and sensitive but unclassified research.

www.nas.edu/weber.nsf/CommitteeDisplay/STLP-Q-02-04-A/