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For immediate release

## Argonne's Arun Wagh named IPLAC 'inventor of the year'

ARGONNE, Ill. (May 23, 2006) — The Intellectual Property Law Association of Chicago (IPLAC) has named Arun Wagh of the U.S. Department of Energy's Argonne National Laboratory Inventor of the Year.

Wagh, of the laboratory's Energy Technology Division, was recognized for his work in the field of material sciences, including his work in phosphate ceramics and concrete structures. This work has led to the development of a new material called Grancrete®, a tough reinforcement-free ceramic material that is almost twice as strong as concrete and that may be the key to providing high-quality, low-cost housing throughout developing nations.

One of Wagh's advancements permits the use of these materials in low cost, energy saving and reduced-pollution housing.

Houses can be built using Grancrete® by spraying it onto a rudimentary frame. Grancrete® dries to form a lightweight but durable surface. The resulting structure is a major upgrade to the fragile structures in which millions of the world's poorest currently live.

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Argonne National Laboratory  
is managed by the  
University of Chicago for the  
U.S. Department of Energy.

Inventor – add one

These types of materials could be readily adapted to provide temporary and permanent housing in disaster areas, and have been suggested for use in regions affected by the tsunami disaster in 2004 and the Gulf Coast by last year's hurricanes.

Experiments have shown that Grancrete® is stronger than concrete, is fire resistant and can withstand both tropical and sub-freezing temperatures. It has the ability to set quickly in a much greater range of temperatures than concrete.

Grancrete® is based on a material called Ceramicrete®, which was developed by Wagh at Argonne in 1996 to encase nuclear waste. The versatile Ceramicrete® has many different applications, ranging from treatment of hazardous waste to the creation of a variety of consumer products such as construction materials, structural materials requiring high compressive strength, sealants and coatings. Ceramicrete® also has dental and medical applications.

Wagh holds more than 14 U.S. patents and has additional pending applications on which he is a named inventor.

Wagh holds a Bachelor of Science degree in Physics from Bombay University in India, a Master of Arts degree in Physics from Temple University in Philadelphia and a Ph.D. in Physics from State University of New York, Buffalo. He has authored more than 120 scientific articles, written a book, *Chemically Bonded Phosphate Ceramics*, and has won several awards for outstanding achievement, including the 1996 R&D 100 Award, the 2000 Federal Laboratory Consortium Award for Excellence in Technology Transfer, both for the Development of Ceramicrete®, and the 2004 R&D 100 Award for Grancrete®. Wagh has worked at Argonne National Laboratory since 1990.

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Inventor – add two

IPLAC is the oldest intellectual property association in the country. Originally founded in 1884 as “The Patent Law Association,” IPLAC is a not-for-profit organization whose more than 1025 members include lawyers and other professionals practicing in the intellectual property field, including patents, trademarks, copyrights, trade secrets, unfair competition and related areas. IPLAC offers educational and professional programs of interest to those practicing in the field as well as to the public at large. For further information regarding IPLAC's calendar of events, visit the association's Web site at [www.IPLAC.org](http://www.IPLAC.org).

The nation's first national laboratory, Argonne National Laboratory conducts basic and applied scientific research across a wide spectrum of disciplines, ranging from high-energy physics to climatology and biotechnology. Since 1990, Argonne has worked with more than 600 companies and numerous federal agencies and other organizations to help advance America's scientific leadership and prepare the nation for the future. Argonne is managed by the University of Chicago as part of the U.S. Department of Energy Office of Science national laboratory system.