

DISCOVERIES AND BREAKTHROUGHS INSIDE SCIENCE:

Bringing science from the laboratory to the living room.



A partnership between the National Science Foundation, the American Institute of Physics, the Materials Research Society, and many more for the advocacy of science and technology in society.

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Have you ever kicked back to watch your favorite science-based TV programming and had the thought, “That’s not so hard, I could do that.” With the help of a partnership between the National Science Foundation (NSF), the American Institute of Physics (AIP), 19 professional scientific organizations, including the Materials Research Society (MRS), and Ivanhoe Broadcast Network, Inc., you might have the chance to be a science-star for a day and to bring your work in the laboratory to the living rooms of millions of American television viewers.

The program, entitled Discoveries and Breakthroughs Inside Science (DBIS), is a syndicated science and engineering news service for local television newscasts. DBIS, which produces twelve 90-second news segments per month, makes sure that each segment is reviewed for scientific accuracy and is centered on a broad range of topics in engineering, science, technology, and mathematics (STEM). DBIS has been producing science related news stories since 2000 with the goal of promoting awareness and appreciation among local TV news viewers of the role of STEM in society. By delivering a broad spectrum of research news, DBIS hopes to highlight the critical role of science and engineering to society while exposing audiences to a diverse array of STEM professionals.

DBIS was founded on the premise that most of the American public does not pick up the latest copy of *JUMR*, *Science*, *Nature*,

or other science-related publications to get their science news. Studies have shown that the majority of the American public gets their (limited!) science-based news exclusively from TV. Studies by the Pew Research Center have found that since 2000 more than 56% of those polled regularly watched TV news programming^[1] and a NSF Science and Engineering Indicators (SEI) study that same year found that 44% of those polled cited TV as their leading source for science and technology information.^[2] Of those polled in these studies, only 8% noted that they watched in-depth science programming like *NOVA* on PBS. Furthermore, the 2004 NSF SEI study found that 50% of those surveyed would be interested in hearing about STEM developments; however, only 15% of those surveyed considered themselves “well informed” while 30% considered themselves “poorly informed” about science and technology in society today.^[3] Over the last decade, the way in which the public gets their news and information has changed greatly. However, even as internet and online news sources have flourished at the expense of other more traditional news sources, TV has remained a steady source of news for many individuals.^[1]

With this in mind, the American Institute of Physics and the NSF paired up with a number of scientific professional organizations to create the DBIS program. DBIS focuses its efforts on creating over 144, 90-second peer-reviewed reports for dissemination on TV news casts and on the internet each year.

The stories produced by DBIS come from many locations—in a period from May 2005 to April 2006 DBIS produced 59 stories from research universities press releases, 29 from partnership contacts, like MRS, 19 from journals or news magazines, 17 from professional STEM meetings, 11 from newspaper articles, 7 from government or company press releases, and 2 from internet science news websites. As partnerships organizations evolve the symbiotic nature of DBIS has grown. MRS, for instance, has seen fit to extend their involvement with DBIS after an exciting and fruitful initial experience in the program. The MRS-based DBIS Committee consists of members of different ages, scientific backgrounds, and geographic locales, in order to bring well-balanced, broadly interesting materials-related news from the ranks of the MRS membership to the American public. When searching for new stories for submission, the MRS committee is looking for stories that will be visually stimulating and transition well from paper to the camera. In order to impact the broadest number of viewers, stories must be of interest nationally and should provide direct benefits to the general public in the next few years. All in all, the committee tries to identify new materials research that has resulted in a tangible solution or explains a scientific or technical mystery that is of interest to more than just their scientific colleagues. Most importantly, the news is about the people, about the researchers involved, and the committee is always searching for a scientist or outside expert who can illustrate a complex concept to a general audience. By putting a face to the research, DBIS has the best chance to bring science to the general public.

In the first year of the MRS committee's involvement with the DBIS program, we have experienced great success in bringing the work of MRS members to story production. We have successfully been involved in the production of stories ranging from Man-Made Diamonds to Metal Rubber to bioactive toothpaste. And most importantly, the program works. As of February 2007, there were over 110 stations in the United States with subscriptions to the DBIS program. This means that on any given day a DBIS story could reach over 70 million viewers in the United States as well as the viewers of another 48 Spanish language stations. Furthermore, DBIS has partnered with public transit organization in cities like Atlanta, Chicago, Los Angeles, Milwaukee, Norfolk, Orlando, and San Diego, to bring DBIS clips to the riders of public transportation. Finally, DBIS has also extended its dissemination to new platforms including Roo Media, ScienceDaily, Voxant, Clip Syndicate, and Voice of America (seen in over 13 countries). This continued growth has led to the production of the 1000th DBIS segment in 2006 and hope for continued success in years to come.

If you are interested in seeing your research gain nationwide attention or know of a great scientific mind who could bridge the divide between the general public and science, please contact the MRS-DBIS committee: Chair - Prof. Jerry Floro, Uni-

versity of Virginia, floro@virginia.edu, or Anita Miller, MRS Headquarters, amiller@mrs.org. Our stories can be viewed at: www.aip.org/dibs.

DBIS Partner Organizations:

Acoustical Society of America; American Association of Physics Teachers; American Association of Physicists in Medicine; American Geophysical Union; American Industrial Hygiene Association; American Institute of Physics; American Mathematical Society; American Meteorological Society; AVS Science and Technology Society; American Society of Civil Engineers; American Society for Microbiology; American Water Works Association; Human Factors and Ergonomics Society; Incorporated Research Institutions for Seismology; Institute of Electrical and Electronic Engineers – USA; Materials Research Society; Mathematical Association of America; National Science Foundation; Optical Society of America; Space Telescope Science Institute; Universities Research Association

Related Links:

DBIS - www.aip.org/dibs
 Pew Research Center - <http://people-press.org>
 Gemesis Corp. - <http://www.gemesis.com>
 Nanosonic, Inc. - <http://www.nanosonic.com>
 U.S. Biomaterials Corp. - <http://www.usbiomat.com>
 Roo Media - <http://www.roomedia.com>
 ScienceDaily - <http://www.sciencedaily.com>
 Voxant - <http://www.voxant.com>
 Clip Syndicate - <http://www.clipsyndicate.com>
 Voice of America - <http://www.voanews.com>

References:

- [1] Pew Research Center, Pew Research Center Biennial News Consumption Survey: *Online News Audience Larger, More Diverse – New Audiences Increasingly Politicized*. June 8, 2004.
- [2] National Science Board, *Science and Engineering Indicators – 2002*. Arlington, VA: National Science Foundation, 2002 (NSB-02-1).
- [3] National Science Board. 2004. *Science and Engineering Indicators – 2004*. Two Volumes. Arlington, VA: National Science Foundation, 2004 (NSB-04-1(A))

Figure: (From left to right) Screen shots from various DBIS stories including: Metal Rubber, Man-Made Diamonds, Bug Breakthrough, and Molding Fingerprints.