# WORLD'S SMALLEST MCA



6.5 x 2.8 x 0.8 inches (165 x 71 x 20 mm) <300 grams (including batteries)

## Runs for 24 Hours on 2 AA Batteries

The **MCA8000A** is a full featured, low power **Multichannel Analyzer** intended to be used with a wide variety of detector systems.

#### **POWERFUL**

- · 16k data channels
- Conversion time ≤5 µs (≥200k cps)
- 2 stage input analog pipeline
- Differential nonlinearity <±0.6% Integral nonlinearity <±0.02% Sliding-scale linearization
- 2 TTL compatible gates for coincidence and anticoincidence
- Stand alone data acquisition

#### **VERSATILE**

- Stores up to 128 different spectra
- Two peak detection modes:

   First peak after threshold
   (nuclear spectroscopy)

   Absolute peak after threshold
   (Particle counter calibration in clean rooms)
- 115.2 kbps serial interface
- Serial ID number via software

#### **INGENIOUS**

• Of course - it's from Amptek

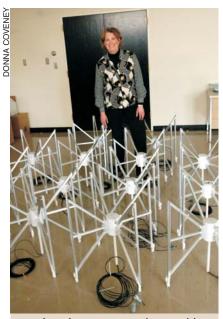
#### **Free Software**

**Download now from www.amptek.com**Free PC software supports ROI, energy calibration, peak information, MCA configuration, and file management

XRF-FP Quantitative Analysis Software available now for use with the MCA8000A



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A radio telescope array that would probe the early universe from the far side of the Moon is one of 19 missions NASA has selected for further study. A prototype is shown with the project's leader, MIT's Jacqueline Hewitt.

about \$12 million over two years.

The observatories include space telescopes to study organic molecules, take a census of black holes, test theories of inflationary expansion, and explore the origins of cosmic rays. Awards will also go to develop, among other things, several methods to search for and characterize exoplanets, telescopes that would observe filaments of intergalactic hy-

drogen gas (the cosmic-web gas), telescopes for studying star formation, next-generation optics for x-ray and optical astronomy, laser beacons on Mars to test general relativity, and an array of radio telescopes on the Moon to map clouds of hydrogen gas that formed in the infancy of our universe.

Free e-journals. Through 2008, journals published online by the American Institute of Physics and the American Physical Society will be available at no cost to HBCUs (historically black colleges and universities) and other US minority-serving institutions with physics programs. Officers from the National Society of Black Physicists and the National Society of Hispanic Physicists initiated the agreement, which also includes discounted rates on electronic subscriptions to the journals in 2009.

"Many of the physics programs at HBCUs are at institutions with very limited library budgets that will not accommodate subscriptions to AIP or APS journals," says Quinton Williams, chair of the physics department at Jackson State University and immediate past president of the NSBP. "This initiative with AIP and APS will open an otherwise closed door to the latest results in physics research to both faculty and student researchers."

According to AIP's Statistical Research Center, more than 60% of African Americans with physics bachelor's degrees graduate from HBCUs, even though HBCUs account for only 4.5% of the institutions that award the degree.

JNAM

### web watch

To suggest topics or sites for Web Watch, please visit http://www.physicstoday.org/suggestwebwatch.html. Compiled and edited by Charles Day

#### http://www.iop.org/EJ/news/-topic=1286/njp

The **New Journal of Physics** was one of the first online-only physics journals. Published by the UK's Institute of Physics, *NJP* is now in its 10th year. To celebrate that milestone, the journal's editors and staff have compiled a selection of notable papers, along with nonspecialist summaries and brief interviews with the papers' authors.

http://www.aip.org/statistics/trends/states/state.html
Who's Hiring Physics Bachelors is what the statistics division of the American
Institute of Physics determines when it surveys US employers. The survey's latest
state-by-state breakdown is now available online.

#### http://sciencewatch.com

Since 1997 **ScienceWatch** has provided its subscribers with short, statistics-packed items about trends and performance in the basic sciences. Last month,



the bimonthly newsletter, which is published by Thomson Scientific, transformed into a free, online website that offers a wider range of coverage.