

## Biological Sciences Division

### Mass spectrometry detectors—eye on ions

Pacific Northwest National Laboratory chief scientist Dave Koppenaal and senior research scientist Charles Barinaga were among the authors of an article entitled “Mass spectrometry detectors—eye on ions” that was featured on the cover of the November 1 issue of *Analytical Chemistry*. ([http://pubs.acs.org/journals/ancham/index\\_magazine.html](http://pubs.acs.org/journals/ancham/index_magazine.html))

Mass spectrometry (MS) technology is divided into three processes: ion generation, ion separation, and ion detection. The first two have received significant and focused attention; however, ion detection technology has lagged. The article was an invited feature, and it describes the various kinds of MS detectors and their applications and the technologies needed to improve ion detection in particular.

Koppenaal was the lead author of the article, which includes a discussion of the MS detector development efforts at PNNL, the University of Arizona, and Indiana University that are funded by DOE’s National Nuclear Security Administration’s Office of Defense Nuclear Nonproliferation (NA-20) in a Grand Challenge that started in 2001.

#### Reference

Koppenaal DW, CJ Barinaga, MB Denton, RP Sperline, GM Hieftje, GD Schilling, FJ Andrade, and JH Barnes IV. 2005. “Mass spectrometry detectors—eye on ions” *Analytical Chemistry* 77(21):418A-427A.



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