Putting color in 'e-reader' displays

July 14 2010

Electronic readers (e-readers), those increasingly popular devices that replace ink on paper, may have color displays in the future thanks to new advances in display technology. That's among the topics highlighted in a three-part cover story on electronic materials in the current issue of Chemical & Engineering News (C&EN), ACS' weekly newsmagazine.

C&EN Senior Editor Alex Tullo notes that sales of e-readers, such as Amazon's Kindle and Sony's Reader, are on the rise. Manufacturers sold a million e-readers in 2008 and 5 million units last year alone.

The figure could reach more than 20 million strong by 2013, according to one market analyst cited in the article.

But so far the e-readers only have black and white displays. Color displays could open up new markets, such as those for textbooks and magazines, and help them compete with multifunction devices like Apple's iPad, the article notes.

But colorizing e-readers has been a difficult challenge. One company is trying to overcome it by using simple color filters to dress-up the black and white "ink" used in many e-reader displays. Others companies are developing entirely new types of electronic ink, including colored oils and special polymers that mimic gemstone opals.

More information: This story is available at: pubs.acs.org/cen/coverstory/88/8828cover4.html

Provided by American Chemical Society