

BIOCHEM show case

Development of disc materials from sustainable sources with reduced waste impact

Problem

Hundreds of millions of CDs and DVDs are disposed of each year ending up in landfill and depleting fossil fuel feedstocks.

Technical solution

Several approaches are being pioneered for the next generation of data discs (Blu-Ray which hold 25 GB of information). Pioneer are using a corn starch based polymer to manufacture the majority of the disc, with a single ear of corn able to make about 10 discs.

Sanyo will use polylactic acid for their biodegradable MildDisc CDs and DVDs.

Sony and Toppan Printing have developed a material that is 51% paper for their Blu-Ray Disc format.

Benefits

Advantages include being able to print complex designs on the label side, and post-disposal security since you can cut them in half with a pair of scissors.

Reduced use of fossil fuels is the main benefit.