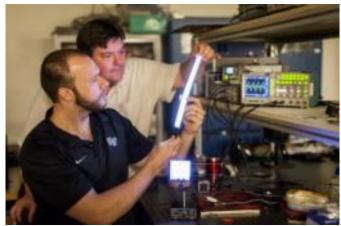
Is plastic key to the next generation of lighting? Scientists at Wake Forest University claim to have developed a type of light bulbs as efficient as LEDs but without any of the drawbacks.



Called FIPEL (Field-Induced Polymer Electrolumeniscent), the technology consists of 3 layers of moldable light-emitting polymer (aka plastic) blended with a small amount of glowing nanomaterials. Once an electric current is applied the system produces a bright white light without the harsh, bluish tint LEDs tend to have

The scientists say the system is "at least twice as efficient" as CFL bulbs and is on par with LEDs. It can also be moulded in any shape (from 2x4-foot sheets to regular bulbs with Edison sockets) and bulbs produced are unbreakable, non-toxic, non-buzzing and long-lasting.

"People often complain that fluorescent lights bother their eyes, and the hum from the fluorescent tubes irritates anyone sitting at a desk underneath them," research leader David Carroll says. "The new lights we have created can cure both of those problems and more.

Carroll also says he has a working FIPEL bulb that has been in his office for nearly 10 years.

The Wake Forest team already has a "corporate partner" planning to mass produce the technology, and hopes FIPEL bulbs will hit the market as early as 2013.

An End to Flourescent Lighting?

Written by Marco Attard 05. 12. 2012

Go Goodbye, Flourescent Light Bulbs (Phys.org)