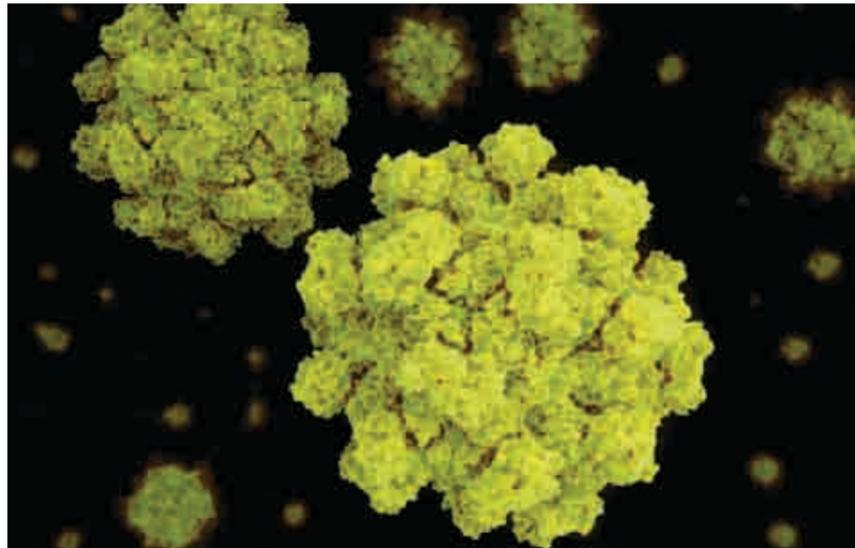


Robotic emesis emulator helps fight against norovirus

Norovirus has caused havoc this winter, shutting down entire hospital wards and, according to Health Protection Agency data, affecting over 1 million people in the UK alone. Contamination through infected bodily fluids, mainly vomitus, is the key transmission path, so scientists at the Health Research laboratory in Derby have managed to develop an ingenious robot that simulates as closely as possible the kind of vomiting associated with the disease. Just like sneezing, very small particles of infected matter are carried far beyond the close proximity of a patient. The cleverly designed robot, named by the researchers 'Vomiting Larry', spews out a fluorescent marker so scientists can detect how far particles are spread. 'Larry' has already become an international star, with several YouTube video clips available where you can see him in action, if you so wish.



Doors can save tons of CO₂, and money

The Co-op is replacing all of its open refrigerator units with closed door versions and in the process the chain hasn't just slashed CO₂ emission, but has saved itself £50 million in electricity. According to The Guardian, if all our supermarkets installed such a simple device as doors on their refrigerators, the electricity saved would be equivalent to that of Drax power station. However, while the Co-op is racing ahead, other supermarket chains are less than convinced, mainly fearing reduced sales, though the Co-op's experience shows that there was no significant downturn. In France, meanwhile, all supermarkets have undertaken to install fridge doors by 2020 resulting in an estimated 1% reduction in the country's electricity bill. Regardless, this action demonstrates that often by making simple changes we can dramatically reduce costs, as well as benefiting the environment.



Top ten strategic technology trends for 2013

Gartner, the world's leading IT research company, has once again issued its predictions for 2013. According to this behemoth the year ahead will continue to be dominated by further integration of internet applications in a mobile environment and Cloud based computing. This view is supported by most other analysts too, with added emphasis on voice activated technology, backed by a greater integration of social media channels. Another trend will be the explosion of cheap

gadgets coming from the BRICs nations. However, this latter trend will be counteracted to an extent by a propensity to buy more 'made here' products, as well as greater business and consumer concern for environmentally sound and ethically manufactured products. So a mixed bag, but definitely a year dominated by a greater degree of technological innovation and IT integration – more work for those already well paid IT boffins then.



UK stands behind bioenergy



The UK has pledged £10 million towards an EU fund, the ERA-NET Plus BESTF scheme, that is going to stimulate up to £80 million of bioenergy innovation projects in the region. According to Energy Minister John Hayes the scheme will help businesses develop a range of different innovative projects by combining public and private sector investment to make the most of this exciting technology.

There are generous grants for organisations that can put forward proposals in early 2013, so if you are thinking of developing an innovative bioenergy scheme, this may be the right time.

Streets ahead in road development

According to an infographic published by loan company Car Loan 4u, the earth is covered in over 20 million miles of asphalt, enough to go around the Equator almost 900 times. Road technology, however, hasn't changed much for the last 100 years or so and with reduced budgets our highways are suffering from decreased maintenance, rapidly turning into obsolete infrastructure. The road of the future, however, will require less maintenance and will be made of smart organic based materials, some made up of recycled industrial products. Dynamic paint (that appears when required) and glow-in-the-dark signage will greatly help motorists, as well as in-built anti-icing technology and even solar-powered cells that will recharge car batteries! We can only hope that some of this technology will not get stuck for decades in the Government's office, but be implemented as soon as possible.

