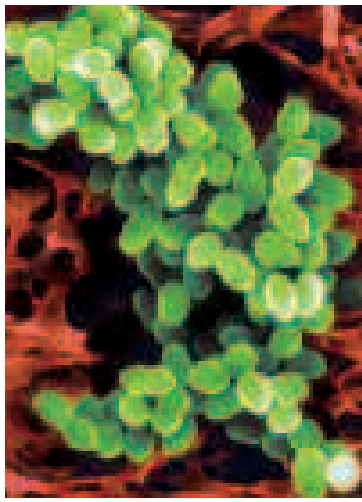
Materials Innovations

NEW USE FOR EXISTING MATERIAL

Bacteriocidal surfaces for a safer world

MRSA contributed to the deaths of over 800 people in the UK last year, with infection control estimated to be costing the NHS £1 billion annually. While the debate goes on about who or what is to blame, materials scientists have developed a practical solution.

Using technology developed at the University of Manchester, Brimaid has developed the BioKab hospital bedside cabinet made from polyethylene impregnated with Ciba® IRGAGUARD®B5120.



IRGAGUARD inorganic broad spectrum antimicrobial agent

- Active against both Gram-positive and Gram-negative bacteria, including MRSA
- Protects against mould and yeast cultures
- Highly effective and stable, non toxic to humans and shows very long life efficacy
- Does not vaporize or decompose,
- Heat resistant up to 500ºC, so material processing is not a problem

Benefits of BioKab cabinets:

- Kill germs
- Lightweight, can readily be moved by one person, enabling easy cleaning of floor beneath
- Rounded edges protect patients who accidentally roll or fall against cabinet



Active ingredient in IRGAGUARD - silver ions:

- Silver long recognised as anti-infective
- Silver ions absorbed by infective agent
- Interfere with cell membrane, causing cells to leak and break down
- Sites targeted on surface of bacteria are different from those targeted by organic antibiotics
- Use of silver should reduce likelihood of bugs becoming resistant to antibiotics

Background

Methicillin Resistant Staphylococcus Aureus, the 'MRSA' superbug, has achieved considerable notoriety since it was first observed in the 1960s. In the UK, much of the media interest has focused on the incidence of MRSA infection in NHS hospitals, which has increased by 600% in the past decade. There has been interminable debate about who is to blame for this, with hospital overcrowding, outsourced cleaning services and over-prescription of antibiotics all being implicated.