

Press release

2014 Nov.17th
Shinshu Ceramics Co.,Ltd.

“earthplus™”, a “breakdown technology for multi drug-resistant bacteria”, the result of a study of this technology is released to internationally acknowledged British infection Society by Tohoku University - Fukushima Medical University !

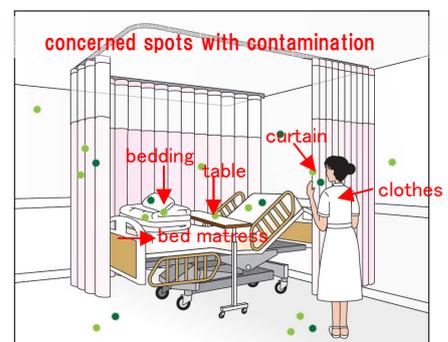
Shinshu Ceramics Co.,Ltd.(CEO : Osamu Sakurada, located in Kiso-Gun, Nagano-Pref.,Japan) had a contract research with Prof. Mitsuo Kaku and Assistant Prof. Shiro Endo, Tohoku University Graduate (Department of Infection Control and Laboratory Diagnostics, Internal Medicine), and Prof. Keiji Kanemitsu, Fukushima Medical University (Department of Infection Control) on “earthplus™” that is a patented anti-bacteria, anti-virus technology with features of being solid form unlike conventional chemicals and having sustainability.

These two universities confirmed an outstanding effect and anti-bacterial sustainability (after 150 times of industrial washing) against Hospital-acquired methicillin-resistant *Staphylococcus aureus* (ATCC BAA-1699), Community-acquired methicillin-resistant *Staphylococcus aureus* (ATCC BAA-1680), Vancomycin-resistant *Enterococcus faecalis* (ATCC 51299), Extended spectrum β -lactamase-producing *Escherichia coli* (clinical isolate), Multi-drug resistant *Pseudomonas aeruginosa* (clinical isolate), Multi-drug resistant *Acinetobacter* species (clinical isolate) by using polyester clothes of which “earthplus™” technology was coated. Following this result, they presented in HIS (Healthcare Infection Society) between Nov.16th-18th at Lyon Convention Center, Lyon, France.

※¹Healthcare Infection Society: this Society is acknowledged to be one of the most authoritative Societies on Healthcare Associated Infection field. Also originated in United Kingdom.

■background

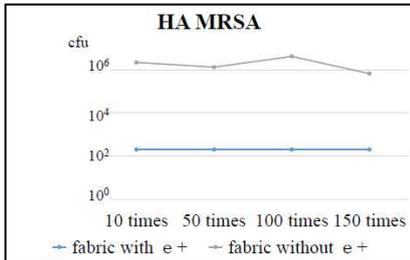
They say infection by contact occupies 80% of all infections. And this problem remains unsolved. Especially, hospital curtains in patient rooms since they are not frequently replaced with new ones, clothes, beddings, mattresses etc. as they are placed near beds, those textile products have been concerned with contamination from bacteria. Furthermore, they are placed exactly near patients and also are considered to be one of the sources of infection. Still, conventional chemicals that are available in the market might limit its efficacy due to their unsustained function, another method which can control sustainably bacteria etc has been needed. A recent presentation from Japanese Society For Infection Prevention and Control indicates that multi drug-resistant bacteria (gram negative, gram positive bacteria) are on the increase.



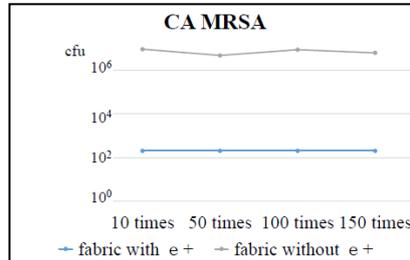
■ contents and result of the presentation in HIS

Earthpls™ coated clothes showed more than 99% antibacterial sustainability against the below multi drug-resistant bacteria even after as maximum 150 times of industrial washing. This result indicates an expectation of decrease of risk of healthcare associated infection (cross infection) while they say multi drug-resistant bacteria are the cause.

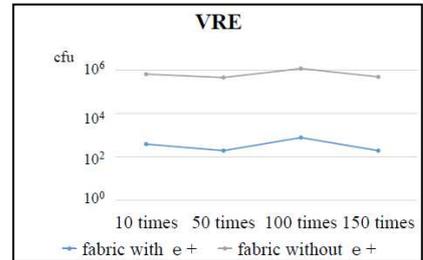
Hospital-acquired methicillin-resistant *Staphylococcus aureus*



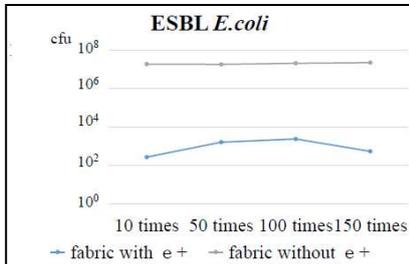
Community-acquired methicillin-resistant *Staphylococcus aureus*



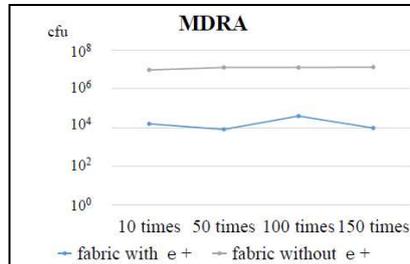
Vancomycin-resistant *Enterococcus faecalis*



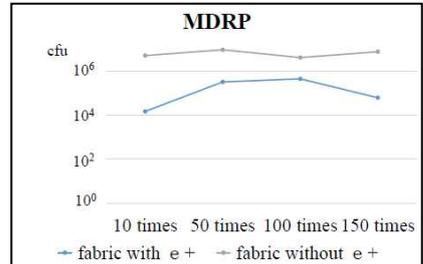
Extended spectrum β -lactamase-producing *Escherichia coli*



Multiple drug-resistant *Acinetobacter* species



Multiple drug-resistant *Pseudomonas aeruginosa*



■ earthplus™ products series ;

✳this newly developed material is available for medical textile - medical fabric.

✳for reference ; hospital curtain, air purifier(both for industrial, home use), mask etc. are currently already in the market.

■ company information

corporate name : Shinshu Ceramics Co.,Ltd. CEO : Osamu Sakurada stated capital : JPY91,000,000

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FAX : +(81) 0 264-55-1181 E-mail : info@shincera.co.jp established in 1984, July 2nd Shinshu Ceramics Co.,Ltd. is engaged in development and sales of earthplus™.