

## **RYDER Julie (Aus)**

### ***The Use Of Microbes In The Colouration And Manufacture Of Textiles - paper***

The use of bacteria to permanently dye or stain cloth is not new. Fermentation processes essential to some forms of natural dyeing use bacteria and enzymes to digest, transform and synthesise natural materials from one form to another. These processes have been dated back to over 5,000 BC.

With the advent of synthetic dyes and industrial manufacturing, many of these processes became obsolete. However in the last 20 years various textile artists and designers have developed new techniques and technologies for use on textiles that can be used to colour, coat and impregnate cloth for specific purposes. Whilst many of these processes may seem beneficial, even ecologically sound to mankind at first, there are serious implications involved on a global level. With the emergence of many “super-bugs” and antibiotic-resistant strains of microorganisms in recent times many of these new textile inventions may do more harm than good.

This paper will trace the history of the use of microorganisms in the colouration and manufacture of textiles, from indigo through to the anti-microbial impregnation of clothing today. It will discuss the social, psychological and ecological implications of the latter and the effects this may have globally.

Since 1995 Ryder has been investigating the colouration and staining of cloth with bacteria and moulds in her art practice. She completed her Master of Arts (Visual Arts) degree in textiles at the ANU in 2003, which involved growing and isolating specific bacteria and fungi for this purpose. Results of her investigations will be highlighted in this presentation.

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