Victoria leads charge for child-safe batteries

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Design lecturer Jeongbin Ok has hit upon a solution to minimise the damage of swallowing coin-sized, button cell lithium batteries, commonly found in electronic devices such as toys and remote controls, which can result in serious harm or death if not treated within two hours.

In collaboration with one of the world's largest battery manufacturers, Mr Ok, who has qualifications in design and chemical engineering, has spent the last three years developing modifications to button batteries.

His invention involves applying a thin layer of highly concentrated food

colouring to the surface of button batteries during production. The food colouring is activated by saliva.

"If a child swallows a battery it will immediately stain their mouth, so that caregivers know what has happened and can seek medical treatment immediately," says Mr Ok.

To assess the viability of his invention, Viclink, Victoria's commercialisation office, helped Mr Ok to identify a suitable partner, putting in place a joint development and licensing agreement. Mass production is expected to begin early next year.

"For Victoria University to be involved in a project that will have global implications for the safety of children is a great opportunity. I hope that once the product is commercialised it will become an industry standard," he says.

Mr Ok is also working on new packaging technology to keep loose batteries secure and provide a safe way of disposing of used batteries.

His research has led to Victoria University being the only academic institution to partner in a national and global initiative, called The Battery Controlled, which is focused on preventing children from swallowing button batteries.

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