

## Gold Award

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### *Patented invention for self-extinguishing button batteries*

Button battery ingestion is a major product safety issue. If swallowed and in only a few hours, button batteries can cause electrochemical burns to the oesophagus that could be fatal.

Every year, many children worldwide die or experience serious injuries due to accidentally ingested button batteries. There are often no immediate symptoms when a child swallows a button battery and at the point of realisation, it is often too late to prevent the consequences. Button batteries are present in many children's objects including toys, books, watches, and flashing shoes and clothing, in addition to household items such as remote controls, calculators and thermometers.

The researchers have designed a fused button battery whose current shuts off following ingestion and contact with saliva. Stopping the current of the ingested battery reduces the problem to that of an inert object, such as a coin. This means that these batteries will no longer cause internal burns. The researchers obtained a patent for their technology in 2022.

*"This technology is groundbreaking. If adopted, it would prevent deaths and severe injuries, in particular amongst young children,"* concluded the Jury.

Please read more about the research project [here](#)



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