# SSERC logo

**SSERC Risk Assessment** (revised version March 2018)

(based on HSE’s INDG 163 ‘Risk assessment - A brief guide to controlling risks in the workplace’)

2 Pitreavie Court, South Pitreavie Business Park, Dunfermline KY11 8UU

tel : 01383 626070 e-mail : [enquiries@sserc.org.uk](mailto:enquiries@sserc.org.uk) web : [www.sserc.org.uk](http://www.sserc.org.uk)

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| Activity assessed | Supercorroding galvanic cells |
| *Date of assessment* | 30th June 2020 |
| *Date of review (****Step 5****)* |  |
| *School* |  |
| *Department* |  |

| Step 1 | Step 2 | Step 3 | Step 4 | | | | |
| --- | --- | --- | --- | --- | --- | --- | --- |
| *List Significant hazards here:* | *Who might be harmed and how?* | *What are you already doing?*  *What further action is needed?* | *Actions* | | | | |
| *by whom?* | | *Due date* | | *Done* |
| Magnesium ribbon is flammable | Demonstrator / audience if it ignites | Keep away from source of ignition. |  |  | |  | |
| Hydrogen is flammable | Possible minor explosion | Extremely unlikely unless the reaction is carried out with no ventilation in a confined space. Keep quantities small and work in a well-ventilated space. |  |  | |  | |
| Steel wool can cause cuts when being handled. | Demonstrator during experiment. | Take care, possibly wear gloves. |  |  | |  | |

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| **Description of activity:**  Samples of magnesium and iron are dropped separately into test tubes of sodium chloride solution. Little if any reaction happens. Then magnesium ribbon is cleaned and steel wool wrapped tightly round it. On this being placed into salt water, bubbles are seen as it reacts. |
| **Additional comments:** |