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

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

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| Activity assessed | Electrolysis of water |
| *Date of assessment* | 8th December 2019 |
| *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* |
| Sulphuric acid is highly corrosive | Technician while preparing 2 mol l-1 solution | Wear gloves and goggles (BS EN166 3) or possibly a face shield. |  |  |  |
| 2 mol l-1 sulphuric acid is corrosive | Demonstrator and audience using 2 mol l-1 solution | Wear goggles (BS EN166 3)  If spilled on skin, wash off with copious amounts of water.  Avoid filling the Hoffman with acid when it is above eye level.  Be careful of acid spray when taps are opened to fill boiling tubes. |  |  |  |

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| **Description of activity:**  Dilute sulphuric acid is electrolysed and samples of the 2 gases produced, (hydrogen and oxygen) are tested to prove their identities. |

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| **Additional comments:**  Sodium sulphate is a safer electrolyte to use. |