GENERAL HEALTH AND SAFETY RISK ASSESSMENT FORM

| Site | | | **Public engagement events** | | | **Department** | | | | | **School of Chemistry** | | | | | | | **Version / Ref No.** | | **1** | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Activity Location** | | | **Indoor or outdoor** | | | **Activity Description** | | | | | **Crystallisation of a Magic Crystal Tree – public engagement exhibit** | | | | | | | | | | |
| **Assessor** | | | **Hamish Yeung** | | | **Assessment Date** | | | | | **02/07/24** | | **Date of Review** | | | | | **02/07/25** | | | |
| **Academic / Manager Name** | | | **Hamish Yeung** | | | **Signature** | | | | | **Hamish Yeung (02/07/2024)** | | | | | | | | | | |
| Description of activity assessed: | | | | | Setting up, running and packing up of Crystallisation of a Magic Crystal Tree – a public engagement exhibit.  Setup: Transporting activity boxes and equipment, setting up the activity (involving handling non-hazardous chemicals).  Running: Public engagement involving observing a growing ‘magic crystal tree’, led by trained demonstrators.  Packing up: Packing away the activity (involving handling non-hazardous chemicals). | | | | | | | | | | | |  | | | | |
| Hazard Assessment | | | | | Control Assessment | | | | | | | | | | | | Actions | | | | |
| Hazard Category | Hazards Identified | Who might be harmed? | | How might people be harmed? | Existing Control Measures | | Initial Risk Rating | | | Are these adequate?  Yes/No | | Changes to/ Additional Controls | | Residual Risk Rating | | | Owner | | Due  Date | | Action Complete |
| S | L | R | S | L | R |
| Physical injury | Loading and unloading activities from car | Staff, students | | Back injuries from lifting and lowering heavy objects | Use gripper gloves for heavy loads and multiple objects.  Observe good practice in manual handling; e.g., lift from the legs and keep back upright.  Handle heavy objects with multiple people. | | Medium | Low | Low | Yes | | None | |  |  |  |  | |  | |  |
| Physical injury | Packing and unpacking heavy boxes, potentially containing broken parts after transit | Staff, students | | Back injuries from lifting and lowering heavy objects.  Skin piercing from sharp broken objects.  Skin irritation from split chemicals | When lifting boxes, observe good practice in manual handling; e.g., lift from the legs and keep back upright.  Handle heavy objects with multiple people.  Take care when opening boxes and inspect visually before reaching in in case contents have broken in transit.  If contents have broken, carefully remove from box (wearing suitable gloves if chemical spill) and dispose of in suitable waste.  Ensure all chemicals transported and used are not harmful.  Mop up any spills using paper towel while wearing gloves and dispose of towels in household waste.  Place contents carefully into boxes and ensure any fragile items are suitably wrapped.  Do not overfill boxes. | | Medium | Medium | Medium | Yes | | None | |  |  |  |  | |  | |  |
| Chemical | Use of chemical (non-hazardous) | Staff, students, members of public | | Magic crystal tree solutions and crystals may cause skin irritation | Magic crystal trees to be prepared and disposed of by trained demonstrator only.  Follow manufacturer’s instructions, wearing appropriate PPE (e.g., safety glasses and nitrile gloves).  Wash hands immediately after preparation and disposal.  Magic crystal tree should be covered when not in use and left undisturbed until disposed of.  Participants are advised to look but not touch. If they inadvertently touch the magic crystal tree, they should wash hands immediately.  If the solution or magic crystal tree are swallowed, drink of water (two glasses at most) and consult a doctor if feeling unwell.  In case of eye contact, rinse out with plenty of water. Remove contact lenses.  In case of inhalation, fresh air. | | Low | Medium | Low | Yes | | None | |  |  |  |  | |  | |  |
| Physical injury | Congestion – people, tables, equipment and activities in close proximity | Staff, students, members of public | | Bruising on elbows, knees, heads or other extremities | Ensure a gap of at least 1m between tables to allow free movement of people around this activity.  Ensure tables are placed such that participant areas are obvious and only demonstrators can go behind them.  Keep area clear by storing activities not in use in their boxes and placing boxes out of the way, e.g., under tables. | | Low | Medium | Low | Yes | | None | |  |  |  |  | |  | |  |
| Allergic reaction | Allergic reaction to stickers | Staff, students, members of public | | Development of itchy, red raised skin | When giving out stickers, advise participants to place them on clothing, avoiding skin. | | Low | Low | Low | Yes | | None | |  |  |  |  | |  | |  |
| Paper cuts | Paper cuts from paper and card materials | Staff, students, members of public | | Paper cuts to fingers from paper and card materials | Handle paper and card materials with care.  Do not run fingers along edges of paper materials. | | Low | Low | Low | Yes | | None | |  |  |  |  | |  | |  |