GAME RULES

1. Each lift will be given one opportunity per round to rise to a specified height carrying different loads. The height to be achieved by the lift is 2ft±0.5ft for the performance competition.

2. Teams may not add or remove any 'load' (or other inert items) to adjust their lift's weight once the poster presentation has concluded. Teams are allowed to adjust 'fuel' or reactants used in the lift's chemical reaction.

3. The lift will start with its pan just touching a designated starting point. There will be a vertical scale which has to be attached to the setup. The height that the lift rises to would be observed on this scale. The distance will be measured with respect to the top most the pan.

4. A lift that goes outside the bounds (i.e. more/less than 6 inches of the specified height) will have its load lifted calculated as:

$$\text{Weight registered} = \text{Weight lifted} \times \left(1 - \left|\frac{\text{Height reached (in ft)} - 2}{2}\right|\right)$$

5. An objective of this contest is the demonstration of the ability to control a chemical reaction. The only energy source for the propulsion of the lift is a chemical reaction. Commercial batteries (for example, AA batteries), Commercial engines (combustion engines) are not allowed as the power source.

6. The lift must be an autonomous vehicle and cannot be controlled remotely. **Pushing to start the lift or a mechanical starting device is not allowed.** There can be no electronic timing device(s) to stop the chemical reaction.

7. The lift must carry a pan that holds the weights. At the competition, only the weights will be supplied, thus each lift must already have its own pan. The size o the pan should at least be 15cms x 15 cms. Weight of the pan will not be considered at the time of calculation of maximum weight lifted by the lift.

8. Students are responsible for transportation of the chemicals to the competition site. Students are also responsible for arranging for the disposal of their chemicals and wastes. The possibility of on-site waste disposal will be posted here, if available.

9. The poster display judging will occur prior to the lift performance competition. Team members should be present during judging to answer questions from the judges.

10. A poster board must be displayed with the setup on the day of the competition. This poster should describe how the lift is powered using the chemical reaction, the unique features of the lift, and environmental and safety features in the design. Material Safety Data Sheets (MSDS) must be present for each chemical used by the entry.

11. The poster display will carry a weightage of 20%. Posters will be judged according to the following criteria, with a maximum of 20 possible points (equal weighting):
    - Description of the chemical reaction / power source .

- Unique features of the lift.
- Environmental and safety features.

GENERAL RULES:

1. The competition will be conducted on the honor system. Faculty can only act as sounding boards to the student queries. The faculty cannot be idea generators for the project.

2. Every team has to register online at our website for the competition. A registration number will be allocated to the team on registration which shall be used for future reference.

3. Judges decision shall be treated as final and binding on all.

WINNING CRITERIA:

1. The team which lifts the maximum amount of load in three rounds, to the above said height would be declared as the winner. Ties will be decided by considering the second/third best weight lifted by the two teams.

2. Apart from this, three more categories have been created. They are the award for **most consistent performance**, the award for **most creative drive system** and the award for **most creative lift design.**

SAFETY NORMS:

1. Safety and safe transportation procedures are important items to address. Hazardous chemical protocols must be followed and reported on the poster. Each team must have a MSDS for each chemical it is using. If obvious safety violations have occurred, the judges have the discretion to disqualify the entry.

2. If a lift is deemed unsafe, then the judges may disqualify it. Given the general public's lack of understanding of general chemistry, anything that is visibly left behind, may well be construed as chemical pollution, and even hazardous. Any entry using or producing a corrosive chemical(s) must have the chemical(s) sealed in a container, or at least use a spill-proof container.

3. Appropriate personal protection must be worn by the team members operating the lift. All lifts must safely operate inside a building.
4. Chemicals **must not** be stored in hostel rooms. Check here for the latest information on where chemicals may be stored at the competition site: www.techfest.org/chemsplash.

5. In order to facilitate chemical safety at the competition site, a designated area will be identified where teams must mix or prepare their chemicals (unless the materials are pre-mixed). Unfortunately, due to hostel safety regulations it is not possible to allow teams to do "trial runs" in the hostels. Teams that violate these safety rules jeopardize the continued operation of High Spirits Competition and will be disqualified.