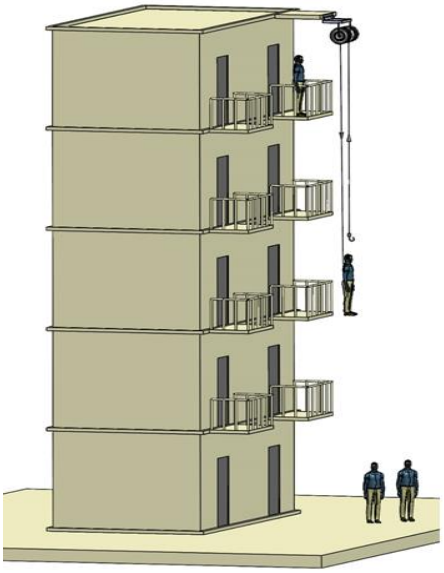
A Multi Usable Self-Rescue Descent Device to Escape from High Rise Buildings During Disasters

Technology in Brief

This innovative device integrates a dual system comprising a centrifugal brake and a cam follower mechanism, fortified with additional safety components. The synergy of these mechanisms results in a cutting-edge solution that operates solely on mechanical principles. What sets this apparatus apart is its capacity to function independently of electrical power, a crucial attribute in emergency situations, particularly during fires in tall structures.

Salient features/Advantages

a. Self-rescue type device and no electric power
b. Multi usable and additional two safety factors
c. Portable and weight of the rescue device: 20 kg
d. Hanging type from Balcony
e. Easy maintenance and user friendly
f. Speed of descent is 2-2.5 m/s may be used by human being weighing between 30kg to 150 kg and can function effectively from max 150m height



Prototype based on braking mechanism

End Product(s)	Multi Usable Self-Rescue Descent Device
License/Commercialization	Under process
TRL	07
Environmental Impact	This device is easily recyclable at the end of its life cycle. As the device operates mechanically, it doesn't rely on electricity, reducing energy consumption and the associated environmental impacts and no pollution impact on environment
Setup - Equipment required	Fabrication facility