

1. Simulate various flood scenarios using numerical models or field experiments to evaluate the capsule's performance under various conditions, such as flash floods, urban flooding, or rising river levels. Design an innovative, portable capsule capable of sheltering one or more people in flooding situations, providing protection from drowning and external shocks, constructed from water- and pressure-resistant materials. Study suitable materials for the capsule's construction, ensuring it is lightweight, low-cost, and environmentally friendly, with the potential for local production in developing countries or countries prone to recurrent flooding. 2. 3. 4. 5. 6. 7. 8. 9. 10.