**CMR Institute of Technology **

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**Institute Innovation cell**

**Developing Online Repository of Ideas Developed and Wayforward plan**

**Team Name:**

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Idea Title: Smart Umbrella

Problem Statement:

It is difficult to carry both an umbrella and torch light especially in the rainy season and difficult to find a path while it is raining at nights.

**OVERVIEW**

**GOALS/Objectives**

1. By using piezoelectric mechanism it generates DC power.

2. It helps farmers to walk in fields on rainy nights.

**SPECIFICATIONS**

The electricity generated by piezoelectric plates can be used in many ways (charging mobile phones),there is a torch light enabled in the system.

**MILESTONES**

**1. Ideation/Data collection**

Farmers find difficulty while walking in fields when it is raining ,obviously it is a difficult task to carry both umbrella ,torch ,and any other equipment . This umbrella enables farmers to carry the umbrella in heavy rain which has a torch and electricity generation system at night time.

Fig 1: Problem scenario

**2. Model Building**

Fig 2 Model or blueprint: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**3. Components/Tools Understanding and usage**

Fig 3.1: Component 1

Fig 3.2 : Component 2

Fig 3.3: Component 3

**4. Prototyping**

Fig 4 Prototype: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**5. Testing**

Fig 5 Testing/Users feedback