**INDIAN INSTITUTE OF TECHNOLOGY KHARAGPUR**



***DEPARTMENT OF AEROSPACE ENGINEERING***

***INNOVATION LAB***

***AUTUMN SEMESTER***

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***PROVISIONAL PATENT DOCUMENT***

**#HerSafeInnovators**

***AuraSafe***

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1. **Title of the Invention**

**Aura Safe**

Empowering Women’s Safety Through Technology

1. **Background of the Innovation**

Women’s safety has become a global issue, with alarming increases in incidents of harassment, assault, and violence. According to 97% of women have faced unsafe situations, but in many cases, they cannot alert anyone in real-time due to the lack of proper safety tools. Current safety solutions are either inefficient or require manual intervention, which may not always be possible during emergencies.

Our Focus: Addressing these critical gaps through a combination of innovative hardware and software for real-time protection and support.

1. **Summary of the Invention**

AuraSafe is an integrated safety system that combines wearable technology with a powerful web platform. Our hardware solution includes a safety gadget equipped with GPS, GSM, and sound sensors, designed to send automatic alerts when activated. The website enables real-time tracking, provides emergency alerts to trusted contacts, and offers a dashboard to manage and monitor the user’s location. This dual-layer protection ensures that women can access help quickly, even if they are unable to physically reach out.

1. **Detailed Explanation of AuraSafe**

**AuraSafe** is the name of our product. AuraSafe refers to a system or concept designed for safety, security, or protection, often through the use of technology or specific features that create a protective "aura" or shield around an individual, place, or object.

This is a wearable device that ensures personal safety by alerting emergency contacts or authorities in dangerous situations. A software solution that provides data encryption or cybersecurity to protect digital information from unauthorized access. A security system that creates a protective zone around the area, notifying users of any intrusion.

Our Device is based on the **SOS Live Location Tracking System**. **SOS live location tracking** is a safety feature commonly integrated into mobile devices, wearable technology, or dedicated personal safety apps. It allows a person to send an emergency alert along with their **real-time location** to pre-designated contacts or authorities when they find themselves in a critical situation. This feature is particularly useful in emergencies where immediate help or rescue is needed.