

# International Journal Research Publication Analysis

Page: 01-02

## SMART URO BAG & DIAPER FOR PATIENT

\*Dr. Ashish Kumar Mahana

Scientist, Innovater, Reviewer of scientific Journal, Rengali, Sambalpur, Odisha, India.

Article Received: 27 December 2025

\*Corresponding Author: Dr. Ashish Kumar Mahana

Article Revised: 16 January 2026

Scientist, Innovater, Reviewer of scientific Journal, Rengali, Sambalpur, Odisha,

Published on: 05 February 2026

India.

DOI: <https://doi-doi.org/101555/ijrpa.1979>

### Problem Statement Understanding

For a bed rest patient proper and timely nursing medical support is very important. In medical or home the changing of diaper and emptying/changing of Uro bag is an important as well as irritating job. For this purpose the attendant also suffer a lot with the patient. He/she has to alert all the time. But it is a common issue everywhere.

### Proposed Solution:-

To overcome from such type of problem I am testing an idea .....

- Smart Diaper** - I am using an attachable/detachable alarming system with moisture sensor. When diaper gets wet the sensor will activate and inform the attendant thru buzzer, light or vibration which is applicable as per condition.
- Smart Uro Bag** - In this system the drain pipe of Uro bag will be connected with urine collection bin or drain. I am using a low cost affordable small submersible motor and a alert sensor with the Uro bag. When the bag will fill with Urine the sensor will alert the attendant or it may also start the motor which drains the bag in few seconds. The patient can also empty the uro bag if he is capable.

### Impact / Use case

- I feel my innovation will definitely be helpful in medical, ICU, home etc.
- Scalability/ Usability – High potential
- Save manpower, lower the irritation of attendant & nursing staff.

**Prototype**



(Picture taken for Example only)