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(57) Abstract :
The invention “An IoT-Based System for Smart Pipeline Leakage Detection” discloses a real-time monitoring system employing IoT sensor nodes (101), pressure sensors (102), flow monitoring units (103), and a cloud-based analytics unit (105) for accurate detection of pipeline leaks. The data acquisition module (104) collects and transmits readings to the cloud for analysis, while the alert and control unit (106) provides instant notifications to users through the dashboard (107). The system enables efficient maintenance, minimizes fluid loss, and enhances operational reliability.

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