

# Experimental Investigation on Automated Fire Protection System

V. G. Nimbolkar, P. S. Nanaware, A. C. Shingade, O. D. Pertkar,  
S. R. Vishwakarma, Prof. P. B. Kale, Dr. M. S. Yadav

Department of Mechanical Engineering

Bhivrabai Sawant Polytechnic, Wagholi, India

nimbolkarvaibhav@gmail.com, omkarpethkar72@gmail.com, ajitshingade27@gmail.com

pranavnanaware69@gmail.com, vishwakarmasuraj1112@gmail.com, priya.pk271@gmail.com

yadavmahesh1989@gmail.com

**Abstract:** *With its unique ability to fight flames on its own, the 360 Fire Fighting Robots improves efficiency and safety in dangerous situations. The brain of this system is an Arduino microcontroller, which uses inputs from sophisticated fire sensors to determine what to do. The robot can precisely locate the fire because to the sensors' ability to detect heat and flames. The robot has a motorized base that allows it to go in the direction of the fire and rotate 360 degrees to cover the entire area. Its main purpose is to quickly put out fires while causing the least amount of harm and danger to human fire fighters. With its ability to efficiently battle fires by combining mobility, accuracy, and cognitive decision-making, this robot represents a significant development in automated emergency response.*

**Keywords:** automated fire protection system

## REFERENCES

- [1] Vinayak Tilavi, Sairaj Ghodake et.al "360 Degree Automated Fire Fighting Robotic Platform" Volume: 10 Issue: 06 | Jun 2023
- [2] Shreyas B Jadhav, Shuchith Gowda G P et.al "FUNDAMENTALS OF 360° ROTATING AND SOUND WAVE FIREFIGHTING ROBOT" Vol-12 Issue-11 No. 01 December 2022
- [3] Shrirang Sandip Panat, Parth Patil et.al "Design and Development of a 360-degree Fire Extinguisher Robot using Microcontroller" Volume: 09 Issue: 05 | May 2022
- [4] N.Parsuram, g.Marurhpsad et.al "ANALYSIS ON ASSOCIATION OF FUNDAMENTALS ON 360° ROTATING AND SOUND WAVE FIREFIGHTING ROBOT" Volume 6, Issue 4 November 2018 |
- [5] Naveen Gupta, Aditya Raj Mehra, Harsh Gehlot et.al "Fire Fighting Robot" Vol 4, no 7, pp 1-6 July 2023