

1 a new sensor elements that will increase

[Literature](#), [Russian Literature](#)



1 Introduction Sensor systems for surveillancing monitoring residential or industrial areas and to prevent accidents that can be obtained are vital importance to the safety of these areas and safe of the lives of occupants and workers. This practical research presents an integrated system in order to developing a detection techniques by introducing a smart integrated system with a new sensor elements that will increase the efficiency of the smoke detector system and develop it into an intelligent device that performs more than one task simultaneously which is a high sensitive and detection to the smoke, fire, vapours, gases, air quality, temperature, and in the same time sending multiple warning text messages to firefighters, civil defence and ambulance, as well as sending locations and site coordinates in the event of any accident. Text messages include the following information and details:-Detailed information about the readings that were detected by this smart device (fire, temperature, smoke, gases, degree of air pollution and radiation).

-Accurate coordinates and the location of the site where the accident occurred within the first 3 seconds. This innovation offers many unique features to firefighters, civil defence personnel and others who are based on residential sites and homeowners to deal quickly with the accident and thus greatly reduce casualties. Also, through this smart device, only one person can observe a whole city and its facilities (houses, factories, institutions and other buildings, camp complexes, pilgrims and others). The observer will be informed directly and within the first three seconds of any danger that may be obtained at any location. Thus, this new intelligent integrated device will play a key role in maintaining the safety of the lives of citizens and reduce

the damage to a large extent in the buildings, schools and colleges, official facilities, factories in the event of any accident, as well as maintain the safety of pilgrims from fire incidents, air pollution, vapours, gases and others.