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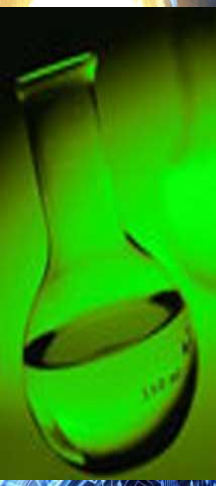
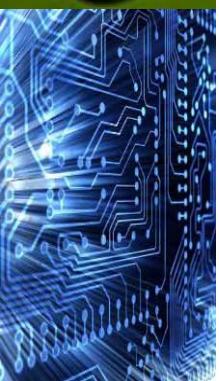


Automated Fire Identifying and Extinguishing Robot (AFIER)

Seeking parties interested in licensing and commercializing of technology.

Applications:

- Fire extinguishing

Technology Description:

This invention relates to an automated fire identifying and extinguishing robot. It has two-axis manipulators, two servo motors, a camera attached above the manipulators, yet another servo attached with cam gear for actuating the fire extinguisher, a Raspberry pi controller for acquiring the camera input and commanding the servos and an external equipment like a fire extinguisher is attached along with cam gear. The AFIER robot detects fire with help of continuous surveillance using an image processing algorithm. The camera identifies the correct position of fire pixel, and that position is converted to x and y coordinates. The coordinates are then converted into rotational angle which is sent to the controller. The manipulator moves according to the controller's input. The cam servo actuates and switches on the extinguisher. This process continues until fire is extinguished.

Advantages of the Technology:

- Detects and extinguishes fire without human effort.
- Protects important materials from the fire extinguishing chemical or water by spraying only on the burning areas by using image processing algorithm.

Development Status:

Patent Number:	402502
Application Number:	3607/CHE/2015
Filing Date:	July 15,2015

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Technology Transfer from the institute:

For more details

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