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ABSTRACT The main objective is to design the monitoring and control system for industrial parameter using Li-Fi communication. The industrial parameters are not monitored and controlled properly, it occurs to an abnormal condition. Monitoring is most important in industry. Monitoring is done by sensor with most accuracy and reliability. Control process will also be handled by this Li-Fi communication. Arduino decodes the commands are given through Li-Fi with the help of LED and control the industrial devices through relays. The interfacing between Li-Fi transmitter and Li-Fi receiver is done by Arduino. Li-Fi technology uses LED's for transmitting data. It is derivative of optical wireless communication technology using light from Led to deliver high speed communication. Visible light communication works by switching the Led off and on at very high speed, it can't be noticed by the human eye. The intensity of the Li-Fi LED emitter is kept low enough so that it cannot be seen by the human eye but high enough to carry out the communication easily. This concept was taken this paper to reduce human efforts in industry. Keywords:LED's, Transmitter, Receiver, Arduino, Solar panel, Sensors

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