

RESEARCH AND DEVELOPMENT

Name of the Researcher	Designation & Department	Research Topic	Year of Completion
Dr .P.G. Agone	Professor, Department of App. Physics	Investigation on some conducting polymers.	1998

BRIEF SUMMARY OF THE WORK:

This work was carried out as a part of doctoral work at Institute Of Science, Nagpur (Nagpur University Nagpur). Thesis contains the results of experimental investigations on polythiophene, phenol formaldehyde urea formaldehyde, polyacrylonitrile and polyaniline, resulting as conducting polymers. They have made an enormous impact on science and technology. This is because of their ever increasing applications. The physical properties that make these materials most suitable in day to day life due to their strength, elasticity, plasticity, toughness, lighter weight, greater work ability and economy etc. The unique properties these compounds render mankind to depend more and more on them. As such the use of conducting polymers has been found to be more advantageous over metals. These materials were found to be almost semi conducting for long time.

INDUSTRY RELEVANCE :

Applications of conducting polymers in the development of rechargeable battery appear to be feasible and is at the threshold of commercialization. A number of electronic devices such as Schottky diodes, plastic transistors, p-n junction etc. have been developed by using conducting polymers.

RESEARCH OUTCOMES :

Two Papers in National Conferences have been published on this work.