the existence of minute capillary spaces. The catalytic activity to enzymes is intimately connected with adsorption. Experiments with inorganic adsorbents have shown that the molecules in the adsorbed layer are oriented in characteristic manner. A similar process is considered to be operative in the case of enzymes, where the peculiar frame work of the adsorbed molecules resulting from orientation will produce a factor of specificity in their action. There is a clear parallelism between toxicity and adsorption, which also lies at the basis of many biological phenomenon.

Peptisation and flocculation are essential properties of colloidal systems. These principles find their applications in the diagnosis of certain diseases and the pathological examination of body fluids. It has been found advantageous to use many medicines in a colloidal form rather than as ionogenic salts. Such a method of administration of a medicine secures a low osmotic activity and a large surface. Thus, medicine in all its aspects has made free use of colloid chemical methods.

There are many other spheres of biological activity where colloids play an important part. Again and again we find predominant colloidal characteristics like electric charge, cataphoretic migration, iso-electric point, coagulation, peptisation, adsorption, membrane permeability and many others, playing a fundamental rôle in most vital processes. Life is a continuance of the colloidal state and coagulation means death. As cytology marches onwards, many a chapter of the interplay of colloid behaviour and life processes will be revealed.

THE PATENT SYSTEM AND THE SCIENTIST*

IN the course of a thought-provoking article stressing the need for Scientists in India to pay greater attention to the Patent System than they have done hitherto, Sri. K. Rama Pai observes that Society looks up to the Scientists not only to expand the frontiers of knowledge, but also to solve numerous problems which face it, such as the economic problem of finding food and employment, the defence problem of maintaining an adequate war potential which would ensure freedom to the nation, and a thousand and one other problems which would assist men in passing through life with maximum comfort, and that the Scientist has a duty to concern himself with every factor which would be helpful to him for adapting his discoveries in the field of applied research, for utilitarian purposes.

Explaining the advantages of the Patent System, he remarks that it has been designed to encourage inventors to develop inventions from the laboratory stage to the industrial stage.

Commenting on the present attitude of the average Scientist in India to the System of Patents, he says that, as a rule, the Indian scientist either views the Patent System with positive disfavour or is supremely indifferent to it, as a result whereof many inventions of great merit which were known in the past have been lost to the country, or, the resources of research have been utilised unfortunately for re-inventing what has already been invented by others.

By way of breaking down the popular prejudice on the subject, Sri. Rama Pai argues that while it is true that the Patent system gives a formal recognition to the inventor of his exclusive right to his invention, this is done only in exchange for two privileges surrendered by the inventor, namely,

(i) The prompt disclosure of the invention o the public ; and

(ii) The unreserved dedication of the invention to the public on the expiry of the Patent.

What the Patent System actually does therefore is merely to restrict the period of exclusive right to a reasonable period of 16 years. There can be no doubt that in this transaction it is the public who get the better of the bargain in the long run.

* Abstract of an article on "Patent System and the Scientist" by Sri. Rama Pai, Secretary of the Patents' Enquiry Committee, constituted by the Government of India, to the symposium on Patent System arranged at the 36th Session of the Indian Science Congress.