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Study of biosorption process of gold using nanofiber chitosan/PVA

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Nanofiber has been widely used in various applications including agriculture, biomedical, pharmaceutical and many other industries. In this study, nanofiber chitosan/PVA is utilised as an adsorbent for gold recovery due to its superior properties to adsorb metal ions from a solution. This research aims to investigate the efficiency of gold recovery by using nanofiber chitosan/PVA. Several adsorption isotherm models including Langmuir and Freundlich are employed to evaluate the experimental data. It is found that Freundlich offers the best model for this study with parameters. It also indicates that biosorption process of gold in the nanofiber chitosan/PVA is a multilayer in heterogen surface and physical process.

Biography

Dwi Sabda Budi Prasetya has complete his Master from Gadjah Mada University. He is a Lecturer in Physics Education Departement of IKIP Mataram.

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