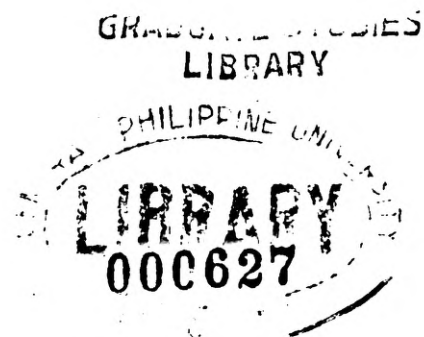


**A PROPOSAL FOR THE ACQUISITION OF AN  
AGILENT 1100 SERIES HPLC SYSTEM**

**A Special Problem  
Presented to  
the Faculty of the School of Graduate Studies  
Central Philippine University  
Iloilo City**

**In Partial Fulfillment  
of the Requirement for the degree  
MASTER OF ENGINEERING**

by



**PHOTOCOPYING NOT ALLOWED**

**SHARON ROSE G. DUMAM-AG  
March 2006**

## ABSTRACT

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### A PROPOSAL FOR THE ACQUISITION OF AN AGILENT 1100 SERIES HPLC SYSTEM

By

**Engr. Sharon Rose G. Dumam-ag**

This study aimed to put into proper perspective the importance of acquiring a High Performance Liquid Chromatography (HPLC) for the Department of Chemical Engineering of CPU through the help of alumni and friends who have been blessed to work abroad.

In an effort to upgrade undergraduate teaching and research laboratories, the Department of Chemical Engineering of CPU aims to acquire an HPLC system more specifically an Agilent 1100 Series HPLC System with an autosampler, wavelength detector, an assortment of columns and a Chemstation. Speed, high separation power and automation make the Agilent 1100 Series purification system an invaluable workhorse in the laboratory. The system is configured to optimize the amount of sample to be isolated, purity, throughput and costs.

It is important to recognize that laboratories are the training grounds for our undergraduate students and researchers. Thus, the investment in improving the laboratories will directly affect the productivity of student (and faculty) researchers. A knowledge and hands-on exposure in HPLC will be a great edge for our students especially when they later on, practice their profession. This state-of-the-art liquid chromatography instrument will also be used by faculty members in their funded research projects. The estimated cost of the instrument in Canadian dollar is 57,748.00. This cost estimate applies only if installation is within Canada.

Additional cost should be allotted for installation, freight, and other miscellaneous expenses if done in Central Philippine University.