



ACTIVITY DESIGN

Title : In-house Training and Seminar on HPLC Concept, Handling and Troubleshooting

Participants : DoPAC Faculty and Laboratory/Chemical Technicians

Date : July ¹⁶⁻¹⁷~~17-18~~, 2024 @ 8:30 AM to 5:00 PM (Wednesday and Thursday)

Venue : DoPAC Conference and Instrumentation Rooms

Rationale

The Department of Pure and Applied Chemistry has been doing research and extension activities to deliver impactful outputs relating to the university's core functions. One of these activities includes the regular conduct of trainings that require the proper handling of instruments that are valuable to the conduct of the departments research and extension.

This activity is an offshoot of CHED RQAT's recommendation to conduct training and seminars for VSU constituents. Thus, this activity will support the DoPAC and the VSU Graduate School's application for the CHED Certificate of Program Compliance (COPC) to offer MS Chemistry. Because of this, we strongly propose the conduct of an In-house training and seminar on HPLC Concept, Handling and Troubleshooting.

The proposed activity aims to (1) provide the VSU DoPAC laboratory technicians, researchers, and faculty with the knowledge in understanding key concepts in instrumentation and (2) heighten everyone's awareness of specialized laboratory instruments such as the HPLC, its concept, handling and troubleshooting for the proper conduct of research, laboratory and extension related experiments.

Moreover, as one of the academic and research units of the university, we at the Department of Pure and Applied Chemistry envision building a research and analytical facility that would cater to the university's needs as well as its stakeholders that will serve as our steppingstone to achieving the university's long-term goal.

Objectives

At the end of the training-seminar, the participants are expected to:

1. Learn the key concepts about the HPLC instrument and analysis;
2. Familiarize the different problems encountered in using an HPLC and how to troubleshoot such challenges; and
3. Acquire the proper skill sets in system verifications, operations, handling, and termination of experiments related to HPLC analysis.

Methodologies/Strategies

The proposed training-seminar is a 2-day activity designed for the participants to gain knowledge on the basic concept of conducting an HPLC analysis and trouble shooting. The resource speaker will present and discuss topics on (1) Concepts of HPLC Analysis; (2) HPLC



Handling, Common Problems Encountered and Trouble Shooting; (3) Hands-on experience in Operating an HPLC unit, data processing, and experiment termination. A moderator will be assigned to facilitate the open forum of each topic/discussion. Icebreakers and/or games will be given in between topics to energize the participants. The activity will be concluded with the giving of the certificates/token and professional fee for the resource person.

Resources Needed;

A. Manpower Requirements

Overall Supervision: Allan A. Ramal

Activity Coordinators: Genesis C. Albarico
David Winston W. Tabada
Mark Ryan R. Tripole

Technical Staff: Jude P. Israel
Noreve Jean M. Agad
Jane M. Abapo
Susana B. Miñoza

B. Supplies and Materials

General Description	Unit	Qty./Size
<i>Chemical/Laboratory Supplies</i>		
Acetaminophen 500mg (ex. Biogesic or Tylenol)	pc	25
Meclizine HCl 25mg (ex. Bonamine)	pc	25
Glacial Acetic Acid	L	4
Methanol HPLC Grade	L	4
Ammonium Phosphate Dibasic	g	500
Phosphoric Acid	L	4
Acetonitrile HPLC grade	L	4
Distilled Water	L	20
<i>Office Supplies</i>		
Bond paper, A4	ream	5
Special paper, A4	pck	5
Photo Paper, A4, Matte	pck	5
ID Jacket, B4, Transparent	pc	30
Whyteboard Marker, Black	pc	24
<i>Food and Drinks</i>		
Lunch on July 17, 2024	pax	30
AM & PM snacks July 17, 2024	pax	30
Lunch on July 18, 2024	pax	30
AM & PM snacks July 18, 2024	pax	30
Tarpaulin	pc	2

C. Facilities and Equipment

Facilities

DoPAC Conference Room
DoPAC Instrumentation Room
Internet Connection

Equipment

AV equipment (Sound System, Camera etc.)
Laptop
UHPLC
DLP Projector with screen

Expected Outcome

1. Updated DoPAC Laboratory Safety Manual.
2. Compliant to CHED requirements for MS Chemistry Program (and BS Chemistry)
3. Improved Safety Protocols in DoPAC Laboratories and/or other VSU laboratories.
4. Create an instruction material for HPLC Operations and Verification.

Estimated Budget

Particulars	Cost in peso (Php)
Meals & Refreshments	
Morning (2) and afternoon (2) snacks for 30 participants and facilitators @ Php80.00 each	9,600.00
Sub-total	9,600.00
Supplies and Materials	
Chemical Supplies	30,000.00
Office Supplies	1,500.00
Sub-total	31,500.00
Professional fee	5,000.00 5,000.00
Others	1,000.00 1,000.00
TOTAL	47,100.00

Prepared by:

ALLAN A. RAMAL
Training Coordinator

Noted by:

HONEY SOFIA V. COLIS
Director, HRMO

Availability of funds:

ALICIA M. FLORES
Budget Officer

Recommending Approval:

ELWIN JAY V. YU
Vice President, OVPAF

Approved:

PROSE IVY G. YEPES
President

PROGRAM OF ACTIVITIES

In-House Training and Seminar on HPLC Concept, Handling and Troubleshooting 17-18 July 2024 | 8:30 am

DAY/TIME	ACTIVITY	RESPONSIBLE PERSON
DAY 1		
8:30 AM	Opening program	
	Registration	Ms. Susana B. Miñoza <i>Secretariat, DoPAC</i>
	Prayer	Mr. Jude P. Israel, RCh <i>Laboratory Chemist</i>
	National Anthem	Ms. Noreve Jean M. Agad, RChT <i>Head, Instrumentation Room</i>
	Welcome Remarks	Mr. Mark Ryan R. Tripole, RCh <i>Head, DoPAC</i>
	Pre-test	Ms. Susana B. Miñoza <i>Secretariat, DoPAC</i>
	Photo Opportunity	
9:30 AM	Seminar Proper	
	Overview of the Training	Dr. Felix M. Salas, RCh <i>Senior Faculty, DoPAC</i>
	Level of Expectations	Dr. Felix M. Salas, RCh <i>Senior Faculty, DoPAC</i>
	Ice Breaker	Mr. Allan A. Ramal, RCh <i>Senior Faculty, DoPAC</i>
	Seminar on the Principles and Concepts of HPLC Instrumentation	Mr. Jerald Villarmino, RCh <i>Faculty, VSU Tolosa</i>
	Open Forum	
12:00 NN	Lunch Break	
1:00 PM	Training Proper (Cont.)	
	Demonstration on HPLC Handling, Sample Preparation and Troubleshooting	Mr. Jerald Villarmino, RCh <i>Faculty, VSU Tolosa</i>
5:00 PM	End of Day 1	

DAY/TIME	ACTIVITY	RESPONSIBLE PERSON
DAY 2		
8:30 AM	Training Proper (Cont.)	
	Demonstration on HPLC Handling, Sample Preparation and Troubleshooting	Mr. Jerald Villarmino, RCh Faculty, VSU Tolosa
12:00 NN	Lunch Break	
1:00 PM	Training Proper (Cont.)	
	Demonstration on HPLC Handling, Sample Preparation and Troubleshooting	Mr. Jerald Villarmino, RCh Faculty, VSU Tolosa
4:30 PM	Closing Program	
	Post-Test and Training Evaluation Participants' Impression	Ms. Susana B. Miñoza Secretariat, DoPAC
	Giving of Certificates	Dr. James A. Patindol, RCh Director, ARIC
	Closing Remarks	Dr. Elizabeth S. Quevedo, RCh Senior Faculty, DoPAC

(*This should include the date, time, opening, closing and the topics to be discussed)