Workshop/ Seminar/Web	inar/Ha	nds on Trainin	g Coi	nducted:		
(a) Title:	Hand	ls-on worksh	ор (	on Protein P	urificatior	1
(b)	Partici	pating Student	s fro	m Departmen	t of	
	Enviro	nmental Scien	ce, S	t. Edmunds; D	epartment	of
	Bioche	emistry, St. Ant	hony	y's College; De	partment o	of
	Biotec	hnology, St. Ar	nthor	ny's College; D	epartment	of
	Bioche	emistry, Lady K	eane	e College.		
(c) Mode:	Hands	on training se	ssion	in the labora	tory	
(d) Duration	From	13 <sup>th</sup>	То	14 <sup>th</sup>	Contact	14
		December		December	hrs	hours
		2021		2022		
(e) Collaboration (if any):	None	I	l	I		
(f) No of Students	28					

# Hands-on workshop on Protein Purification







Biochemistry Department St. Edmund's College Shillong December 13-14, 2021 Last Date of Registration: 4.12.2021 9.30 AM

#### Description

The 2.5 days workshop encompasss essential of protein purification techniques. This workshop provide hands-on training in Protein Chemistry . This workshop also provides understanding of various purification techniques and parameters governing separation. You will operate lab scale purification system using GE Akta-Start and Electrophoresis System



End of the session, participants will be awarded with "Certificate of Participation"

#### Who should attend

Third & Fifth Semester Bachelor of Science students of Life Sciences & Chemical Science

#### After the course, you will be able to:

- Design and purify protein from any sources
- Apply effective chromatographic technique and electrophoresis system
- Understand issues associated with optimizing chromatographic unit

## For Registrations( click the link below):

https://forms.gle/oc3aWRUdDyh5KFVw6

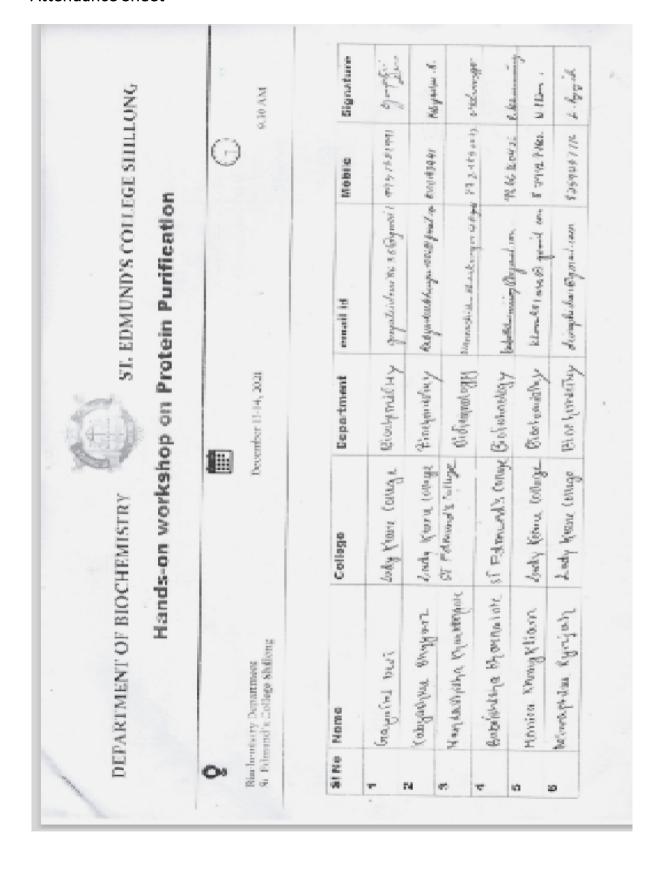
For more details:



Dr. B.Kharwanlang-8575598145 Prof. Purna B.Chettri- 9863923141 Dr. O.Kyndiah-7085488084 Dr. J.Wahlang - 9089086266



proteintech2021@gmail.com



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# DEPARTMENT OF BIOCHEMISTRY ST. EDMUND'S COLLEGE SHILLONG

Hands-on workshop on Protein Purification

# CERTIFICATE OF PARTICIPATION

This certificate is awarded to

Damanroi Maubki

in recognition of your participation in the Hands-on Workshop on Protein Purification held from 13-15° December 2021

Dr. Sylvanus Lamare

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Head

Dr. Benteiskhem Kharwonlang

Convener

### **Programme**



# Hands-on workshop on Protein Purification

(Beginners Level)

DAY 1

8.45 AM REGISTRATION OF PARTICIPANTS

9:30 AM

Inaugural Session

Host: Ibankdup Nongbet, Fifth Semester

Welcome Address: Kuldeep Mishra, Fifth Semester

Speech: Dr. Omarlin Kyndiah, Head, Deapartment of Biochemistry

: Bro. Raj Narona, Secretary

: Br.(Dr) Simon Coelho, Coordinator, IQAC

Inaugural Address: Dr. Sylvanus Lamare, Principal

TEA BREAK

10:30 am - 11:00 am

Introduction on "The World of Proteins"

Dr. H. S. Ranhotra

11:00 am -12:00 pm

Theory: Sample Preparation, Homogenization, Centrifugation, Salt Precipitation & Estimation of proteins

Dr. B. Kharwanlang

1:00 pm - 1:30 pm

LUNCH

1:30 pm - 3:00

Practical: Sample Preparation, Homogenization, Centrifugation & Salt Precipitation

DAY 2

9:00 am - 10:00 am

Theory: Chromotographic Techniques

Dr. Purna B Chettri

10:00 am - 10:15 am

TEA BREAK

#### 10:15 am-1:00pm

Practical: Gel Chromotagraphy using GE AKTA-START System

1:00 pm -1:30 pm

#### LUNCH

1:30 pm - 2:30 pm

Theory: Native PAGE & SDS PAGE

Dr. James Wahlang

2:30 pm - 3:30 pm

Practical: SDS PAGE

#### Valedictory Session

#### 4.30 PM

#### Host: Hadassah Lapang & Kristi K. Bharadwaj, First Semester

Speech: Dr. Harmit S.Ranhotra

: Prof. M. Chakravarty, Vice Principal

: Dr. Sylvanus Lamare, Principal

#### Distribution of Certificate of Participation

Vote of Thank: Dr. B. Kharwanlang

# Photos







# Feedback (via Google Form)

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# Report

**Number of Participants:** 28 UG students from Department of Environmental Science, St. Edmunds; Department of Biochemistry, St. Anthony's College; Department of Biotechnology, St. Anthony's College; Department of Biochemistry, Lady Keane College; Department of Zoology, St. Edmund's College. The application received was overwhelming but only 28 participants were accepted giving priority to Fifth Semester students.

**Registration**: Free (Including Refreshment and Lunch)

**Resource Persons:** Dr. Omarlin Kyndiah, Dr. H. S. Ranhotra, Dr. James Wahlang, Dr. B. Kharwanlang and Dr. Purna Chettri.

**Student as Demonstrators:** The Fifth Semester students which include Nishan V. D. D. Chagas E Silva, Kuldeep Mishra, Rani Kumari, Priyanka Paul and Ibankdup Nongbet.

**Techniques covered during the training**: Salt Cut/Fractionation, Column chromatography, SDS PAGE, Estimation of Proteins and calculations.

**Outcome:** Students were able to perform the hands on in for the techniques after demonstration by resource person along with the support of the student's demonstrators.