

13.09.2023
Pollachi

From

Dr. K. Poonkodi
Assistant Professor and Head
P. G. Department of Chemistry
Nallamuthu Gounder Mahalingam College
Pollachi.

Through

The Deans
Nallamuthu Gounder Mahalingam College
Pollachi.

To

The Principal
Nallamuthu Gounder Mahalingam College
Pollachi.

Respected Sir,

Subject: Requisition for organizing skill enhancement Programme- **Reg.**

The PG Department of Chemistry planned to conduct one day **Skill Enhancement Programme on "Quantitative Analysis Natural Products by TLC"** on 13.09.2023 to in our college. So kindly permit us for the same.

Thanking You

Forwarded
M - nohm
11/9



Yours sincerely

lc. P-LL
11/9/23

Dr. K. Poonkodi



**NALLAMUTHU GOUNDER MAHALINGAM
COLLEGE, POLLACHI**

PG DEPARTMENT OF CHEMISTRY

ORGANIZES

SKILL ENHANCEMENT PROGRAMME

ON

Quantitative Analysis of Natural Products By TLC

Resource Person

Mr. S. Siva Shanmugam

Chief Executive Officer

Polyhedron

Erode-11

CHAIRMAN

**DR. R. MUTHUKUMARAN
PRINCIPAL**

ADVISORS

**DR.S.SARAVANA BABU
DEAN- ACADEMIC**

**DR. S. UMAPATHY
DEAN-RESEARCH**

ORGANISING SECRETARY

DR. K. POONKODI

**HEAD /ASSISTANT PROFESSOR
DEPARTMENT OF PG CHEMISTRY**



FACULTY COORDINATORS

Ms. K. Vimaladevi

Dr. V. Prabhu

Dr. M. Velayutham Pillai

Asst. Professors

Department of PG Chemistry

13.09.2023

11.00 AM

MSC CHEMISTRY LAB

IQAC/2023-24/SEP/089



Nallamuthu Gounder Mahalingam College, Pollachi
Post Graduate Department of Chemistry

SKILL ENHANCEMENT PROGRAMME
On
“QUANTITATIVE ANALYSIS OF NATURAL PRODUCTS BY TLC”

REPORT

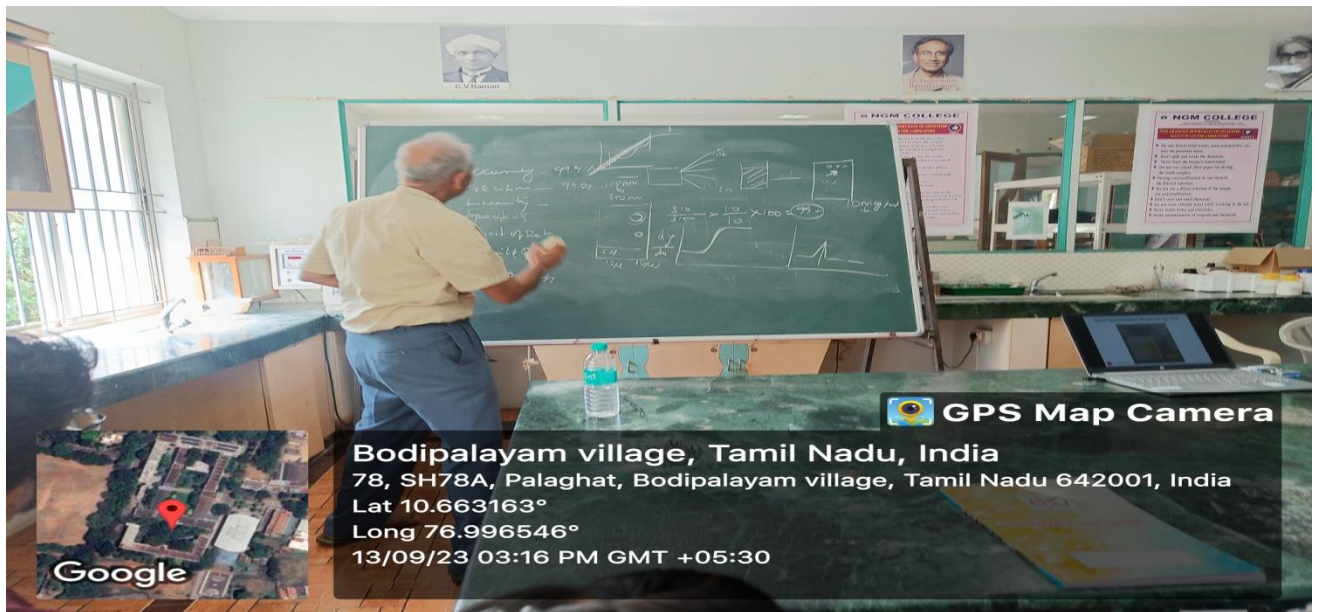
Post Graduate Department of Chemistry, Nallamuthu Gounder Mahalingam College, Pollachi organized one day Skill Enhancement Program on **“QUANTITATIVE ANALYSIS OF NATURAL PRODUCTS BY TLC” on 13th September 2023** with a focus on quantitative and semi quantitative analysis of natural products by TLC. The session started with invocation by M.Sc students and lighting of lamp by dignitaries.

Dr. V.Prabhu, Assistant Professor welcomed the gathering **Dr. R. Muthukumaran, Principal** delivered Presidential address. **Dr. K. Poonkodi, Assistant Professor and Head,** Department of Chemistry, inaugurated the program. The technical session was handled by **Mr. S. Siva Shanmugam**, Chief Executive Officer, Erode.

Resource person highlights the importance of quantitative analysis by Thin-Layer Chromatography (TLC), which is a powerful analytical technique used in chemistry to separate, identify, and quantify components of a mixture. It combines the principles of chromatography with quantitative measurement methods to provide valuable information about the composition of a sample. In this method, a stationary phase (thin layer of an inert material like silica gel or alumina) and a mobile phase (liquid solvent) are used to separate the components of a mixture based on their affinity for the stationary and mobile phases. Retention Factor (R_f) is a crucial parameter in TLC. It is a ratio representing the distance traveled by a compound (spot) on the TLC plate to the distance traveled by the solvent front. R_f values are specific to a given combination of stationary phase, mobile phase, and compound. The sample is dissolved in an appropriate solvent to create a solution that can be applied onto the TLC plate. This solution is then spotted onto a specific location on the TLC plate. The TLC plate is placed in a suitable chamber containing the mobile phase. Capillary action causes the solvent to rise up the plate, carrying the sample components with it. As the solvent moves, it interacts with the stationary phase, causing separation of the components. After the TLC plate is removed from the chamber, it needs to be dried. Then, the separated spots are visualized. This can be achieved using various techniques like UV light, staining reagents, or by chemical reactions specific to certain compounds. Once the spots are visible, their intensity or area can be measured. This can be done using specialized equipment or by manual methods. Quantitative analysis by TLC is a valuable tool in analytical chemistry, particularly for preliminary screening, quality control, and research purposes. It complements other analytical techniques and can provide valuable insights into the composition of complex mixtures. The end of the session questions were asked and clarified.

Mr. M. Vellayutham Pillai , Assistant Professor PG Department of Chemistry, NGM College, delivered vote of thanks to all the dignitaries.



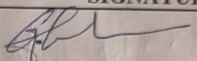
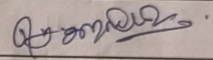
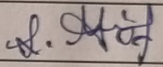
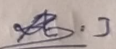
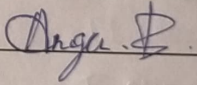


NGM COLLEGE, POLLACHI
PG DEPARTMENT OF CHEMISTRY
SKILL ENHANCEMENT PROGRAMME

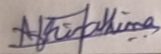
On

"QUANTITATIVE ANALYSIS OF NATURAL PRODUCTS BY TLC"

Date: 13.09.2023

S.NO	NAME	DESIGNATION	SIGNATURE
1	GOKUL. S	II. M.Sc chemistry student	
2	Hari Krishnan . S	II - M.Sc chemistry student	
3	Kavirantam . N	II Msc Chemistry student	N. Kavirantam
4	Mukilan . L	II - M.Sc chemistry student	
5	Sabareeswaran . G	II nd M.Sc chemistry student	G. Sabareeswaran
6	Vishnuvardhan . S	Ind. M.Sc. chemistry student	S. Vishnuvardhan
7	Ammu Drishya . J	II nd M.Sc chemistry student	
8	Angulakshmi . B	II nd M.Sc chemistry student	

9	Ansiya. M	II. MSc chemistry student	Ansiya. M.
10	Atulya. G	II, M.Sc., chemistry student	Atulya G
11	Imayavarchini. P.	II - M.Sc., Chemistry student	Imayavarchini. P.
12	Joona. J	II MSc. chemistry student	Joona. J.
13	Kavya. P	II - M.Sc. chemistry student	Kavya
14	Keerthi. M.	II - M.Sc. Chemistry student	M Keerthi.
15	Misra. H	II MSc. chemistry student	Misra. H.
16			
17			
18	Princy. S	I Msc. chemistry student	Princy. S.
19	Priya. D	II - M.Sc., Chemistry student	Priya. D.
20	Prityavarchini. M	II - M.Sc., chemistry student.	Prityavarchini. M
21	Vishalini. M	II - Msc. chemistry student	M. Vishalini.
22	Vismaya. D	II - M.Sc., chemistry student	Vismaya. D.

1	Namith Nath - S	I st M.S.C chemistry student -	
2	Prin Fathima - S.H	I st M.S.C chemistry student	
3	Anusha . B	I st M.Sc Chemistry student	B. Anusha
4	Kalaivani . M	T - M.Sc chemistry student	M. Lani
5	Masudha Begum . M	T - M.Sc chemistry student	M. Masudha
6	Neethu John .	I st - M.Sc chemistry student	Neethu John
7	Noushira - K	I st - M.S.C chemistry student -	Noushira
8	Shanmitha . T	T - M.Sc chemistry student	T. Shan
9	Thamaraishevi . S	T - M.Sc. Chemistry Student	S. Thamaraishevi
10	Vismaya - S	I st - M.S.C chemistry student	Vismaya S.