



J.K.K.MUNIRAJAH MEDICAL RESEARCH FOUNDATION'S ANNAI JKK SAMPOORANI AMMAL COLLEGE OF PHARMACY

Ethirmedu, B.Komarapalayam – 638 183, Namakkal Dist. Tamilnadu. India
Approved by : Pharmacy Council of India, New Delhi & The Tamilnadu Dr.M.G.R Medical University, Chennai.

Website : www.jkkmmrfpharmacy.edu.in | E-Mail : principal@jkkmmrfpharmacy.edu.in

Contact No. : +919789456750, +919943069944, +919943066944

DEPARTMENT OF PHARMACEUTICS

ONE DAY WORKSHOP ON **PILOT PLANTS SCALEUP TECHNIQUES IN DRUG FORMULATION**

VENUE: SEMINAR HALL

Date: 11.10.2019

RESOURCE PERSONS

1. Dr. N. SENTHILKUMAR, M. PHARM, Ph.D.,

PRINCIPAL

JKKMMRF'S ANNAI JKK SAMPOORANI AMMAL
COLLEGE OF PHARMACY,
KOMARAPALAYAM.

2. Dr. S. CHANDRA, M. PHARM, Ph.D.,

PROFESSOR AND HOD,

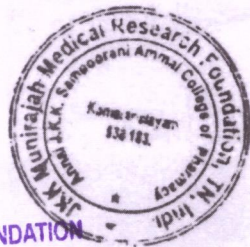
JKKMMRF'S ANNAI JKK SAMPOORANI AMMAL
COLLEGE OF PHARMACY,
KOMARAPALAYAM.

No. of students enrolled: 250

No. of students certified in our institution: 12

No. of students certified: 238

**Dr. N. SENTHILKUMAR,
PRINCIPAL**



**Dr. N. SENTHILKUMAR,
PRINCIPAL,**

JKK MUNIRAJAH MEDICAL RESEARCH FOUNDATION
ANNAI JKK SAMPOORANI AMMAL COLLEGE OF PHARMACY,
ETHIRMEDU, KOMARAPALAYAM - 638 183.
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DEPARTMENT OF PHARMACEUTICS

REPORT

RESOURCE PERSONS

1. Dr. N. SENTHILKUMAR., M. PHARM, Ph.D.,
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Objective:

Pilot plants are small-scale production systems used to practically test and validate a production technology before commercialization. Generally, the primary motivation behind building and operating pilot plants is to understand and explore a new technology. The objectives of the pilot testing are: To evaluate the feasibility, cost, and other attributes. To better utilize time and resources. To find end users' reactions toward the software

Learning outcomes:

Learning your scales, if nothing else, builds finger strength and agility. Think of your scales as being a workout for your fingers. As you learn different scale shapes you might not notice it at first, but your hands are becoming stronger and more agile—exactly what is needed to effectively play chords.

Head of the Department



Principal

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REF.NO: JKKM/PHARM/CEU/REQ/2019/001

Date: 10.10.2019

From

Department of Pharmaceutics,
JKKMMRF'S Annai JKK Sampoorani Ammal College of Pharmacy.
Komarapalayam, Namakkal [Dist]
Tamil Nadu, PIN:638183.

To

The Principal,
JKKMMRF'S Annai JKK Sampoorani Ammal College of Pharmacy.
Komarapalayam, Namakkal [Dist]
Tamil Nadu, PIN:638183.

Subject: **Letter for requesting Permission to Conduct an one day seminar regarding: -**

Respected Sir,

We Are writing this letter to request permission to conduct an one day workshop in the **SEMINAR HALL** on **11.10.2019**. We wish to conduct workshop regarding the **PILOT PLANTS SCALEUP TECHNIQUES IN DRUG FORMULATION**. We request you to kindly permit to conduct workshop program as this would be a great opportunity for Students to learn and that would help a great deal to shape the students.

Looking forward to hearing from you.

Thank you,


Yours sincerely,


Head of the Department





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DATE:10.10.2019


CIRCULAR

This is informed to the B. Pharm-I, II, III, IV Students that the following **workshop** can be conducted by the Department of Pharmaceutics, JKKMMRF'S ANNAI JKK SAMPOORANI AMMAL COLLEGE OF PHARMACY, KOMARAPALAYAM and it will be commenced as per the schedule:

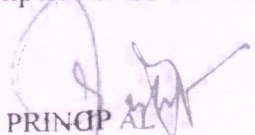
WORKSHOP NAME	SCHEDULE	DURATION	VENUE	RESOURCE PERSON
PILOT PLANTS SCALEUP TECHNIQUES IN DRUG FORMULATION	11.10.2019	3 HOURS	SEMINAR HALL	Dr.N.SENTHILKUMAR Dr.S.CHANDRA

All the above-mentioned students must enroll and actively participate in the course without fail.

NOTE: Certificates should be issued to all the students after completion of the course and examination.


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PRINCIPAL
Dr. N. SENTHILKUMAR
PRINCIPAL,
JKK MUNIRAJAH MEDICAL RESEARCH FOUNDATION
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JKKMMRF's-ANNAI JKK
SAMPOORANI AMMAL COLLEGE
OF PHARMACY

Komarapalayam, Nammakal Dt-638183

DEPARTMENT OF PHARMACEUTICS

One day workshop on

PILOT PLANTS SCALEUP TECHNIQUES IN
DRUG FORMULATION

held on

11.10.2019



Venue: SEMINAR HALL



**Dr. N. SENTHILKUMAR,
PRINCIPAL,**

**JKK MUNIRAJAH MEDICAL RESEARCH FOUNDATION
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SYLLABUS

DATE	HOURS	WORKSHOP TOPIC	SUB TOPICS	RESOURCE PERSON
11.10.2019	3 HOURS	PILOT PLANTS SCALEUP TECHNIQUES IN DRUG FORMULATION	Pharmaceutical Process Development & Pilot Plants	Dr.N.SENTHILKUMAR
			<u>Perspectives on Pilot Plants</u>	Dr.S.CHANDRA

TOTAL HOURS=3 hours

Head Of the Department



Principal

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DEPARTMENT OF PHARMACEUTICS

ONE DAY WORKSHOP ON PILOT PLANTS SCALEUP TECHNIQUES IN DRUG FORMULATION

ABOUT THE WORKSHOP

Pilot plant scale-up techniques involve reproducible manufacture of an experimental formulation on high-speed production equipment, in a cost-effective manner. It is a part of the pharmaceutical industry where the same processes used during Research and Development (R&D) of dosage forms are applied to different output volumes; usually greater than that obtained during R&D.

In every emerging pharmaceutical industry or an already existing one, there is always a need to have an intermediate batch scale representing procedures and simulating that used for commercial manufacturing. This is achieved by determining the ability of formula to withstand batch-scale and process modification.

There is equally a need for equipment evaluation and validation to ensure that the aim of your company which is the mass production of the drug in question is not defeated. For a pilot scale up to be successful a product must be capable of being processed in a large scale often with equipment that only remotely resembles that used in the development laboratory. The idea is that you

- Understand what makes these processes similar, identify and eliminate many scale-up problems before investing large sum of money on a production unit
- Maintain the chemical attributes of the product, its quality and efficacy even though the production processes are modified as a result of sample size increase, and equipment changes.

Pilot plant scale-up must include:

- A close examination of the formula to determine its ability to withstand large scale and process modification.
- A review of a range of relevant processing equipment to determine which would be most compatible with the formulation as well as the most economical, simple, and reliable in producing the product.




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- Determination of the availability of raw materials that consistently meet the specifications required to produce the product.
- Determination of the physical space required and the layout of related functions to provide short term and long term efficiency.
- Evaluation, validation, and finalizing of production and process controls.
- Issuing of adequate records and reports to support Good Manufacturing Practices (GMPs) and provide the historical development of the production formulation process, equipment train, and specifications
- Development and validation of meaningful product reprocessing procedures.



A handwritten signature in blue ink, appearing to be "Dr. N. Senthilkumar".

**Dr. N. SENTHILKUMAR,
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STUDENT FEEDBACK FORM

NAME OF STUDENT :
COURSE :

REGISTRATION NO :
YEAR & SEMESTER:

SEMINAR TOPIC :

DATE & TIME: -

1. Overall, how satisfied were you with this seminar?

- Very satisfied
- Satisfied
- Neutral
- Dissatisfied
- Very dissatisfied

2. How clear were the ideas and concepts we presented?

- Extremely clear
- Very clear
- Moderately clear
- Not very clear
- Not at all clear

3. What percentage of the information was new to you?




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- 100%
- 75%
- 50%
- 25%
- 0%

4. **How informative did you find our seminar?**

- Extremely Informative
- Very Informative
- Moderately Informative
- Not very informative
- Not informative at all

5. **Were there any technical issues that prevented you from seeing or hearing the seminar?**

- Yes
- No

6. **Would you like to learn more about this topic?**

- Yes
- No


7. **Rate the content of the slides/virtual aid?**

- Extremely clear
- Very clear
- Moderately clear
- Not very clear
- Not at all clear

8. **How accurate was the session description?**

- Extremely clear
- Very clear
- Moderately clear
- Not very clear
- Not at all clear




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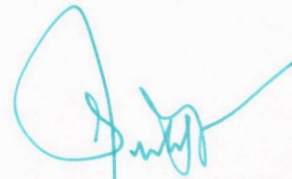
9. How did the session compare to your expectations?

- Excellent
- Good
- Fair
- Poor
- Not at all clear

10. How Would you rate the content of the seminar?

- 1
- 2
- 3
- 4
- 5

Student Name With Signature



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STUDENTS FEEDBACK ANALYSIS

DATE: 11.10.2019

S.NO	QUESTION DESCRIPTION	ANSWERS	MARKS	TOTAL MARKS
1	Satisfaction	Very satisfied	5	5
		Satisfied	3	
		Neutral	2	
		Dissatisfied	1	
		Very dissatisfied	0	
2	Clarity	Extremely clear	5	5
		Very clear	4	
		Moderately clear	2	
		Not very clear	1	
		Not at all clear	0	
3	Percentage of the information was new	100%	5	5
		75%	4	
		50%	3	
		25%	2	
		0%	1	
4	Informative	Extremely Informative	5	5
		Very Informative	3	
		Moderately Informative	2	
		Not very informative	1	



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		Not informative at all	0	
5	Technical issues	Yes	5	5
		No	0	
6	Like to learn more about this topic	Yes	5	5
		No	0	
7	Rate the content of the slides/virtual aid	Extremely clear	5	5
		Very clear	3	
		Moderately clear	2	
		Not very clear	1	
		Not at all clear	0	
8	Accuracy of the sessions	Extremely clear	5	5
		Very clear	3	
		Moderately clear	2	
		Not very clear	1	
		Not at all clear	0	
9	Session expectations	Excellent	5	5
		Good	3	
		Fair	2	
		Poor	1	
		Not at all clear	0	
10	Rate the content of the seminar	1	1	5
		2	2	
		3	3	
		4	4	
		5	5	

Total marks = 50

Head Of the Department



Principal
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REPORT SUMMARY

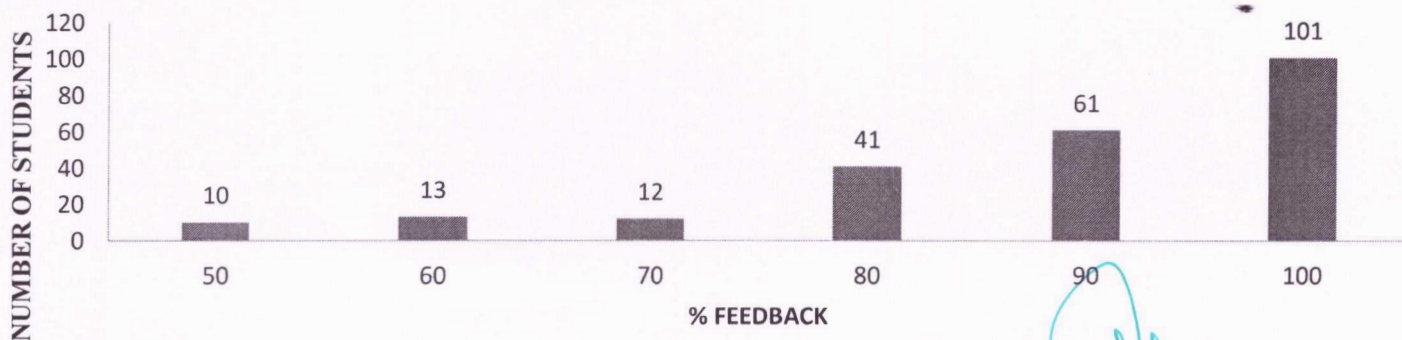
DATE: 11.10.2019

Duration of the Course	3 HOURS
Total participants Enrolled	250
Successfully Completed	238
Type of Feedback Assessment	Multiple Choice Questions (MCQ's)
Course Outcome	Learning your scales, if nothing else, builds finger strength and agility. Think of your scales as being a workout for your fingers. As you learn different scale shapes you might not notice it at first, but your hands are becoming stronger and more agile—exactly what is needed to effectively play chords..

Feedback Question Analysis – Question Asked-Feedback Rating

1.Satisfaction	6.Like to learn more about this topic
2.Clarity	7.Rate the content of the slides/virtual aid
3. Percentage of the information was new	8.Accuracy of the sessions
4.Informative	9.Session expectations
5.Technical issues	10.Rate the content of the seminar

STUDENT FEEDBACK ANALYSIS



Dr. N. Senthilkumar,
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LIST OF PARTICIPANTS

1	381610418	NIKINS	
2	381610419	RAJARAJARATHINAM	
3	381610420	ROSHNYA	
4	381610421	SABEERBASHAK	
5	381610422	SATHYANK	
6	381610423	SHEEBASKOSHY	
7	381610424	SUBHASHINIA	
8	381610425	TAMILSELVANN	
9	381610426	TAMJIDB	
10	381610427	UDHAYAKUMARP	
11	381610428	VELSREEYARAJR	
12	381610429	VISWAS	



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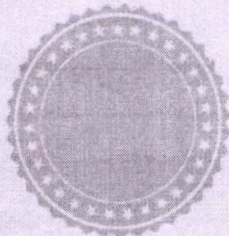
Certificate of Appreciation

DEPARTMENT OF PHARMACEUTICS

ONE DAY WORKSHOP

Mr/Ms.....has participate in one day seminar about **PILOT PLANTS SCALEUP TECHNIQUES IN DRUG FORMULATION** was organized by department of pharmaceutics held on 11 october 2019

convenor



co-convenor

Dr. N. SENTHILKUMAR,
PRINCIPAL



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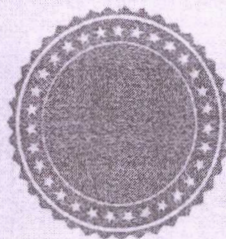
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NIKIN S

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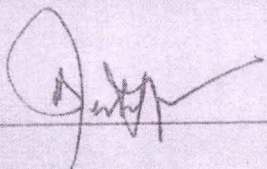
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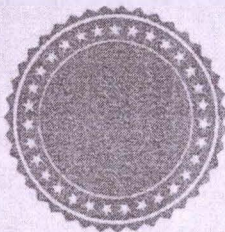
ONE DAY WORKSHOP

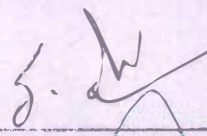
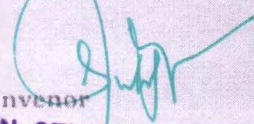
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convenor



co-convenor

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