

# 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 TamilnaduDr.M.G.R Medical University, Chennai.

Website: <a href="www.jkkmmrfpharmacy.edu.in">www.jkkmmrfpharmacy.edu.in</a> [E-Mail: <a href="principal@jkkmmrfpharmacy.edu.in">principal@jkkmmrfpharmacy.edu.in</a> Contact No.: +919789456750, +919943069944, +919943066944

DATE: 09.02.2022

#### **DEPARTMENT OF PHARMACEUTICS**

#### REPORT

RESOURCE PERSONS

1. Dr.S.CHANDRA., M. PHARM, Ph.D.,
PROFESSOR AND HOD,
JKKMMRF'S ANNAI JKK SAMPOORANIAMMAL
COLLEGE OF PHARMACY,
KOMARAPALAYAM.

2.Mr.R.SURESH., M.PHARM.,
ASSOCIATE PROFESSOR

ASSOCIATE PROFESSOR,
JKKMMRF'S ANNAI JKK SAMPOORANIAMMAL
COLLEGE OF PHARMACY,
KOMARAPALAYAM.

No. of students enrolled: 365
No. of students certified in our Institution: 22

No. of students certified: 358

#### Objective:

The goal of using drug delivery systems is to provide a therapeutic amount of medication while improving safety and efficacy by controlling the location, rate, and time of release of a particular drug in the body. The term *controlled-release drug product* was previously used to describe various types of oral extended-release-rate dosage forms, including sustained-release, sustained-action, prolonged-action, long-action, slow-release, and programmed drug delivery. Other terms, such as ER, SR, XL, XR, and CD, are also used to indicate an extended-release drug product. Retarded release is an older term for a slow release drug product. Many of these terms for modified-release drug products were introduced by drug companies to reflect either a special design for an extended-release drug product or for use in marketing.

#### Learning outcomes:

Students know about Matrix based systems—pellets, mini-matrices, or small tablets Membrane diffusion-controlled systems—coated pellets, tablets, and osmotic pumps

Head of the Department

Dr. N.SENTHIKUMAR PRINCIPAL

JKK MUNIRAJAH MEDICAL RESEARCH FOUNDATION ANNAI JKK SAMPOORANI AMMAL COLLEGE OF PHARMACY

ETHIRMEDU, KOMARAPALAYAM - 638 183. NAMAKKAL DISTRICT. TAMILNADU. INDIA. Dr. N.SENTHILKUMAR,

PRINCIPAL

JKK MUNIRAJAH MEDICAL RESEARCH FOUNDATIO ANNAI JKK SAMPOORANI AMMAL COLLEGE OF PHARMAC ETHIRMEDU, KOMARAPALAYAM - 538 183.

NAMAKKAL DISTRICT, TAMILNADU, INDIA.



#### 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 TamilnaduDr.M.G.R Medical University, Chennai.

Website: <a href="www.jkkmmrfpharmacy.edu.in|E-Mail:principal@jkkmmrfpharmacy.edu.in">www.jkkmmrfpharmacy.edu.in</a>

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

REF.NO: JKKM/PHARM/CEU/REQ/2022/002

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 seminar in the SEMINAR HALL of 09.02.2022. We wish to conduct seminar regardingMODIFIED RELEASE ON DOSAGE FORMS & DRUC DELIVERY SYSTEM. We request you to kindly permit to conduct seminar 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,

AND STATE THE STATE OF THE STAT

Dr. N. SENTHILKUMAR,
PRINCIPAL,
JKK MUNIRAJAH MEDICAL RESEARCH FOUNDATION
ANNAI JKK SAMPGORANI AMMAL COLLEGE OF PHARMACY,
ETHIRMEDU, KOMARAPALAYAM - 638 183.
NAMAKKAL DISTRICT, TAMILNADU.

Your sincerely Dr.S.CHANDRA

Date: 08.02.2022

HOD



## 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 TamilnaduDr.M.G.R Medical University, Chennai. Website: <a href="www.jkkmmrfpharmacy.edu.in">www.jkkmmrfpharmacy.edu.in</a> E-Mail: <a href="principal@jkkmmrfpharmacy.edu.in">principal@jkkmmrfpharmacy.edu.in</a> Contact No.: +919789456750, +919943069944, +919943066944

#### **CIRCULAR**

This is informed to the B. Pharm-I, II, III, IV Students that the following **SEMINAR** 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:

SEMINAR NAME	SCHEDULE	DURATION	VENUE	RESOURCE PERSON
MODIFIED RELEASE ON  DOSAGE FORMS &  DRUG DELIVERY  SYSTEM	09.02.2022	3 HOURS	SEMINAR HALL	Dr.S.CHANDRA Mr.R.SURESH

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

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

HILKUMAR,

JKK MUNIRAJAH MEDIC<sup>A</sup>L RESEARCH FOUNDATION ANNAI JKK SAMPOORANI AMMAL COLLEGE OF PHARMACY ETHIRMEDU, KOMARAPALAYAM - 638.183.

NAMAKKAL DISTRICT. TAMILNADU. INDIA.

PRINCIPAL

Dr. N. SENTHILKUMAR, PRINCIPAL,



#### 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 TamilnaduDr.M.G.R Medical University, Chennai.

Website: <a href="www.jkkmmrfpharmacy.edu.in">www.jkkmmrfpharmacy.edu.in</a> E-Mail: <a href="principal@jkkmmrfpharmacy.edu.in">principal@jkkmmrfpharmacy.edu.in</a>

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

#### DEPARTMENT OF PHARMACEUTICS

ONE DAY SEMINAR ON MODIFIED RELEASE ON DOSAGE FORMS & DRUG DELIVERY SYSTEM

**VENUE: SEMINAR HALL** 

Date:09.02.2022

#### RESOURCE PERSONS

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

PROFESSOR AND HOD ,

JKKMMRF'S ANNAI JKK SAMPOORANIAMMAL

COLLEGE OF PHARMACY,

KOMARAPALAYAM.

2.Mr.R.SURESH., M.PHARM.,

ASSOCIATE PROFESSOR ,

JKKMMRF'S ANNAI JKK SAMPOORANIAMMAL

COLLEGE OF PHARMACY,

KOMARAPALAYAM.

No. of students enrolled: 365

No. of students certified in our Institution: 22

No. of students certified: 358

SM



Dr. N. SENTHILKUMAR, PRINCIPAL,



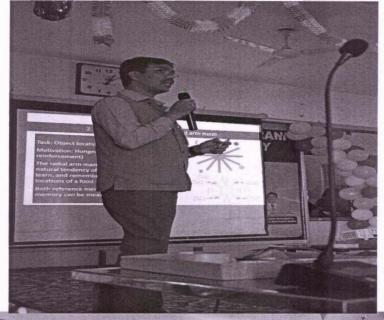
# J.K.K.MUNIRAJAH MEDICAL RESEARCH FOUNDATION'S ANNAI JKK SAMPOORANI AMMAL COLLEGE OF PHARMACY

Ethirmedu, **B.Komarapalayam** – 638 183, Namakkal Dist. Tamilnadu. India Approved by: Pharmacy Council of India, New Delhi & The TamilnaduDr.M.G.R Medical University, Chennai. Website: <a href="www.jkkmmrfpharmacy.edu.in">www.jkkmmrfpharmacy.edu.in</a> | E-Mail: <a href="mailto:principal@jkkmmrfpharmacy.edu.in">principal@jkkmmrfpharmacy.edu.in</a> | Contact No.: +919789456750, +919943069944, +919943066944

### SEMINAR ON MODIFIED RELEASE ON DOSAGE FORMS & DRUG DELIVERY SYSTEM

Date:09/02/22

Resource person speech about the seminar topic to the students





Dr. N. S INT HIL UMAR, P RNCIPAL,





# JKKMMRF's-ANNAI JKK SAMPOORANI AMMAL COLLEGE OF PHARMACY

Komarapalayam, Nammakal Dt-638183

DEPARTMENT OF PHARMACEUTICS
SEMINAR TOPIC

Modified release on dosage forms & drug delivery system

held on 09.02.2022



**Venue: SEMINAR HALL** 



#### ABOUT US

Dr.J.K.KMunirajah is a reputed industrialist technocrat and educational besides, being a social worker ,a person imbibed in deep spiritual values and philanthropist. At Present Annai J.K.K Sampoorani Ammal Charitable Trust runs Paramedical Institutions offering Diploma, Graduate, Post Graduate & Ph.D, Courses and Research Scholarships in Pharmacy, Nursing, Physiotherapy and Occupational Therapy at Komarapalayam. The Trust has won many national and state awards. These renowned Educational Institutions spared education to promote knowledge, wisdom and service -Orientation.

#### RESOURCE PERSONS

Dr. S. CHANDRA., M. Pharm., Ph. D.,

PROFESSOR & HOD,

DEPARTMENT OF PHARMACEUTICS,

JKKMMRF'S College of Pharmacy,

Komarapalayam-638183

Mr.R.SURESH., M. Pharm.,

ASSOCIATE PROFESSOR ,

DEPARTMENT OF PHARMACEUTICS,





#### 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 TamilnaduDr.M.G.R Medical University, Chennai. Website: <a href="www.jkkmmrfpharmacy.edu.in">www.jkkmmrfpharmacy.edu.in</a> E-Mail: <a href="principal@jkkmmrfpharmacy.edu.in">principal@jkkmmrfpharmacy.edu.in</a> Contact No.: +919789456750, +919943069944, +919943066944

#### DEPARTMENT OF PHARMACEUTICS

REGISTRATION NO : YEAR & SEMESTER:
DATE & TIME:
seminar?
presented?
new to you?

Colonia Armando

Dr. N. SENTHILKUMAR, PRINCIPAL,

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?	
0.	would you like to learn more about this topic:	
	Yes	
	C 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	
9.	How did the session compare to your expectations?	
	Excellent	
	Good	
	C Fair	
	Poor	
	Dr. N. SENTHILKUMAR,	
	PRINCIPAL,  JKK MUNIRAJAH MEDICAL RESEARCH FOUNDATI	ON

ANNAI JKK SAMPOORANI AMMAL COLLEGE OF PHARMACY, ETHIRMEDU, KOMARAPALAYAM - 638 183. NAMAKKAL DISTRICT, TAMILNADU. 10. How Would you rate the content of the seminar?

1 2 3

Student Name With Signature







#### 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 TamilnaduDr.M.G.R Medical University, Chennai. Website: <a href="www.jkkmmrfpharmacy.edu.in">www.jkkmmrfpharmacy.edu.in</a> E-Mail: <a href="mailto:principal@jkkmmrfpharmacy.edu.in">principal@jkkmmrfpharmacy.edu.in</a> Contact No.: +919789456750, +919943069944, +919943066944

#### STUDENTS FEEDBACK ANALYSIS

DATE: 09.02.2022

S.NO	QUESTION DESCRIPTION	ANSWERS	MARKS	TOTAL MARKS	
1 Satisfaction		Verysatisfied	5		
		Satisfied	3		
	Satisfaction	Neutral	2	5	
		Dissatisfied	1		
		Very dissatisfied	0	1 10' 10 20 10'	
		Extremely clear	5		
		Very clear	4		
2	Clarity	Moderately clear	2	5	
		Not very clear	1		
	Not at all clear	Not at all clear	0		
		100%	5		
3 Percentage of the information was	75%	75%	4		
	Percentage of the information was new	50%	3	5	
		25%	2		
	0%	0%	1		
		ExtremelyInformative	5		
		Very Informative	3		
4	Informative	Moderately Informative	2	5	
4 informative	N	Not very informative	1		
		Not informative at all	0		
		Yes	5	-5	
5	Technical issues	No	0	5	
	Like to learn more shout this tonic	Yes	5	. 5	
6	Like to learn more about this topic	No	0	, 5	



Dr. N. SENTHILKUMAR, PRINCIPAL,

		Extremely clear	5	
* ,	· 1	Very clear	3	
7	Rate the content of the slides/virtual aid	Moderately clear	2	5
		Not very clear	1	
		Not at all clear	0	
		Extremely clear	5	
		Very clear	3	
8	Accuracy of the sessions	Moderately clear	2	5
		Not very clear	1	
		Not at all clear	0	
		Excellent	5	
		Good	3	•
9 Session 6	Session expectations	Fair	2	5
		Poor	1	
		Not at all clear	0	
10	Rate the content of the seminar	1	1	
		2	2	
		3	3	5
		4	4	
		5	5	

Total marks = 50

Head Of the Department

S. W



Principal

Dr. N. SENTHILKUMAR, PRINCIPAL.



#### 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 TamilnaduDr.M.G.R Medical University, Chennai. Website: <a href="www.jkkmmrfpharmacy.edu.in">www.jkkmmrfpharmacy.edu.in</a> E-Mail: <a href="principal@jkkmmrfpharmacy.edu.in">principal@jkkmmrfpharmacy.edu.in</a> Contact No.: +919789456750, +919943066944, +919943066944

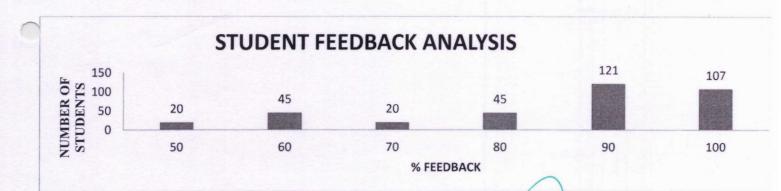
#### REPORT SUMMARY

DATE: 09.02.2022

<b>Duration of the Course</b>	3 HOURS	
Total participants Enrolled	365	
Successfully Completed	358	
Type of Feedback Assessment	Multiple Choice Questions (MCQ's)	
Course Outcome  1. Matrix based systems—pellets, mini-matrices, or small tablets 2. Membrane diffusion-controlled systems—coated pellets, tablets, and osmotic pumps		

#### 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	





Dr. N. SENTHILKUMAR,



#### 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 TamilnaduDr.M.G.R Medical University, Chennai. Website: <a href="www.jkkmmrfpharmacy.edu.in">www.jkkmmrfpharmacy.edu.in</a> E-Mail: <a href="principal@jkkmmrfpharmacy.edu.in">principal@jkkmmrfpharmacy.edu.in</a> Contact No.: +919789456750, +919943066944, +919943066944

#### **DEPARTMENT OF PHARMACEUTICS**

ONE DAY SEMINAR ON MODIFIED RELEASE ON DOSAGE FORMS & DRUG DELIVERY SYSTEM

#### ABOUT THE SEMINAR

Pharmaceutical drug delivery embraces a range of delivery carriers and constructs that have dimensions ranging from several nanometers (nanotechnology) to numerous millimeters (conventional dosage forms, i.e., pellets, tablets, and capsules). Such delivery systems spawn a whole array of assemblies for delivery of highly potent active drugs through different routes of administrations to numerous sites and targets in the human or animal body to treat disease conditions. Such delivery types and carrier systems, with their relative sizes together with some molecules and bacterial cells, Modified-release drug delivery technologies, which include both enteric-coated systems and a variety of controlled-release solid dosage forms, including capsules, have evolved as a multidisciplinary science. For example, the extended-release Spansule capsule, containing a large number of coated and uncoated drug beads (i.e., coated spheres) to modify drug dissolution by controlling access of GI fluids to the drug through a coating barrier, was first introduced and patented in 1952 Because of the space restrictions for the chapter, complete coverage of all types of mechanisms and delivery innovations related to modified-release capsules as drug delivery was not probable. However, an attempt has been made to comprehensively elucidate and cover the major and more commonly used extended-release capsules that are FDA approved and currently marketed. The development of hard shell capsule products for modified-release drug delivery is focused on the choice and/or construction of the most desirable dosage form for a drug that will provide safe and effective drug delivery to treat patients. Other objectives of drug delivery are improvement in patient compliance, enhancement of bioavailability and drug efficacy, and reduction in dosing frequency with improved therapeutic performance. Capsules are the second most frequently used dosage forms for oral drug delivery (e.g., first being the tablets). The major advantage of capsules as delivery systems is that the shell can be used as a carrier for formulated drugs, coated pellets, mini-tablets, multiparticulates, fixed-dose combinations, as well as inclusion of smaller capsules or delivery systems. The capsule shell can be enteric coated for drug delivery to the proximal and/ or distal intestine, especially for delivery of acid-labile drugs, peptides, proteins, biotechnologyderived drugs, and macromolecules that are destroyed by mechanical shearing or manufacturing processes. Additionally, controlled or extended release of drug from capsule delivery system with potential for pulsatile and targeted delivery within the GI tract is easily attainable. Drug targeting of the GI tract and specifically colon is advantageous in that many side effects are reduced, lower drug dose is used, and drug is released as close as possible to the target region. In some cases, the content of capsules can be easily dispersed onto semisolid food or liquids for patients who cannot swallow the dosage form. Furthermore, a variety of innovations in design of new capsule shells





#### 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 TamilnaduDr.M.G.R Medical University, Chennai. Website: <a href="www.jkkmmrfpharmacy.edu.in">www.jkkmmrfpharmacy.edu.in</a> E-Mail: <a href="principal@jkkmmrfpharmacy.edu.in">principal@jkkmmrfpharmacy.edu.in</a> Contact No.: +919789456750, +919943066944, +919943066944

#### LIST OF PARTICIPANTS

01	381410407	BENYMARGRATCF	W The W
02	381410408	GEENA.K.REJI	IV.
03	381410409	GEOLINRP	N N
04	381410411	JISAELIZABETHJOSEPH	IV
05	381410412	JITTAMARYJOSE	Williams
06	381410413	MARIAJOY	IV-
07	381410414	MEGHAKBAIJU	IV.
08	381410415	MOHAMEDADNANP.K	N W
09	381410416	MOHANK	IV.
10	381410417	NAVEENKUMARD	V
11	381410419	REEMAKA	Was I
12	381410420	REENAK.A.	IV
13	381410421	RIYAELIZABETHSUNNY	N. IV
14	381410422	SMINUSUNNY	Valley IV
15	381410423	SMRITISURESHGEORGE	adeles IV
16	381410424	SONIYAVARGHESE	IV IV
17	381410425	SOPHYS	www.siana. IV.
18	381410427	VIDHYALAKSHMIKB	W W
19	381410428	VIJAYARANGANS	IV - The
20	381410429	VIMMYANNATHOMAS	IV AND IN
21	381410430	VISHNUKUMARVA	N THE
22	381310401	ABHIRAMIJAYACHANDRAN	V



Dr. N. SENTHILKUMAR, PRINCIPAL,



#### JKKMMRF'S ANNAI JKK SAMPOORANI AMMAL COLLEGE OF PHARMACY



# Certificate of Excellence Department of Pharmaceutics

ONE DAY SEMINAR

This certificate is proudly awarded to

Mr./Ms \_\_\_\_\_ has participated in one day SEMINAR about Modified release on dosage

forms & drug delivery system

was organized by department of pharmaceutics

held on 09 FEBRUARY 2022

CONVENOR



CO-CONVENOR



Dr. N. SENTHILKUMAR, PRINCIPAL,



### KKMMRF'S ANNAI JKK SAMPOORANI AMMAL COLLEGE OF PHARMACY



# Certificate of Excellence Department of Pharmaceutics

ONE DAY SEMINAN

This certificate is proudly awarded to

Mr./Ms ... SOPHY S...... has participated in one day SEMINAR about Modified release on dosage

forms & drug delivery system

was organized by department of pharmaceutics held on 09 FEBRUARY 2022

CONVENOR



CO-CONVENOR



Dr. N. SENTHILKUMAR, PRINCIPAL,



#### JKKMMRF'S ANNAI JKK SAMPOORANI AMMAL **COLLEGE OF PHARMACY**



### **Certificate of Excellence Department of Pharmaceutics**

ONE DAY SEMINAR

This certificate is proudly awarded to

Mr./Ms MARTATOY has participated in one day SEMINAR about Modified release on dosage

forms & drug delivery system

was organized by department of pharmaceutics held on 09 FEBRUARY 2022

CONVENOR



CO-CONVENOR



Dr. N. SENTHILKUMAR, PRINCIPAL,