



**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

REPORT

SEMINAR- HYDROGEL SCAFFOLDS FOR TISSUE ENGINEERING

VENUE: SEMINAR HALL DATED: 30/04/2021

RESOURCE PERSON

DR.C.SUNDARAMOORTHY, M.PHARM, PH.D

ASSOCIATE PROFESSOR, KMCH COLLEGE OF PHARMACY, COIMBATORE.

No. of students enrolled: 400

No. of students certified: 400

No. of students certified in our Institution : 30

On 30th April 2021, the Department of Pharmaceutical Chemistry at JKKMMRF's Annai JKK sampoorani Ammal College of Pharmacy held a workshop on HYDROGEL SCAFFOLDS FOR TISSUE ENGINEERING in the Seminar hall. The workshop was attended by 400 students and was certified by the college.

The workshop began with an introduction to HYDROGEL SCAFFOLDS FOR TISSUE ENGINEERING and its importance in research studies. The speaker discussed the different types of questionnaires, including structured, semi-structured, and unstructured, and the pros and cons of each type.

The speaker also covered the steps involved in designing a questionnaire, including defining the research objectives, identifying the target population, selecting the questionnaire format, and writing and pretesting the questions.

The students participated actively in the workshop, asking questions and engaging in discussions. They also had the opportunity to practice designing their own questionnaires and received feedback from the speaker.

Overall, the workshop was well-received by the students and provided them with valuable knowledge and skills in questionnaire design. The Department of Pharmaceutical Chemistry at JKKMMRF's Sampoorani Ammal College of Pharmacy is committed to providing high-quality education and training to its students and plans to hold similar workshops in the future.

PROGRAMME CO-ORDINATOR

HOD

PRINCIPAL

**Dr. N.SENTHILKUMAR,
PRINCIPAL**

JKK MUNIRAJAH MEDICAL RESEARCH FOUNDATION
ANNAI JKK SAMPOORANI AMMAL COLLEGE OF PHARMACY
ETHIRMEDU, KOMARAPALAYAM - 638 183.
NAMAKKAL DISTRICT. TAMILNADU. INDIA.



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Date:20.04.2021

REF.NO: JKKM/PH/WORKSHOP/REQ/2021/04

From

Department of Pharmaceutical Chemistry,
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.

Respected Sir,

Subject: Letter for requesting Permission to Conduct workshop regarding:-

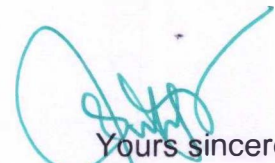
We Are writing this letter to request permission to conduct a workshop in the Seminar hall on 30/04/2021. We wish to conduct the workshop on **HYDROGEL SCAFFOLDS FOR TISSUE ENGINEERING**. We believe that this will be a very informative session that many students will wish to attend.

We request you to kindly permit to conduct training program as this would be a great opportunity for Students to learn all about **HYDROGEL SCAFFOLDS FOR TISSUE ENGINEERING** that would help to shape the students.

Looking forward for your approval.

Thank you




Yours sincerely,

**Dr. N. SENTHILKUMAR,
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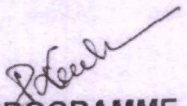
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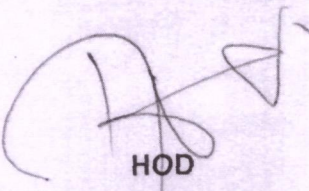
This is to inform all the students of our college that the workshop on **HYDROGEL SCAFFOLDS FOR TISSUE ENGINEERING** for the academic year 2020-2021 will be commenced on 30/04/2021 for all the batches. Hence request all the interested candidates to register for the workshop.

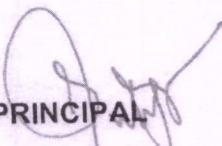
Course Name	Schedule	Venue	Resource Person
HYDROGEL SCAFFOLDS FOR TISSUE ENGINEERING	30/04/2021	SEMINAR HALL	DR. C. Sundaramoorthi

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

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

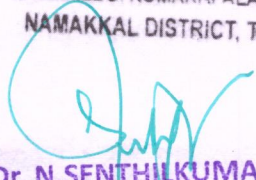

**PROGRAMME
CO-ORDINATOR**


HOD

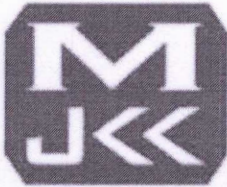

PRINCIPAL
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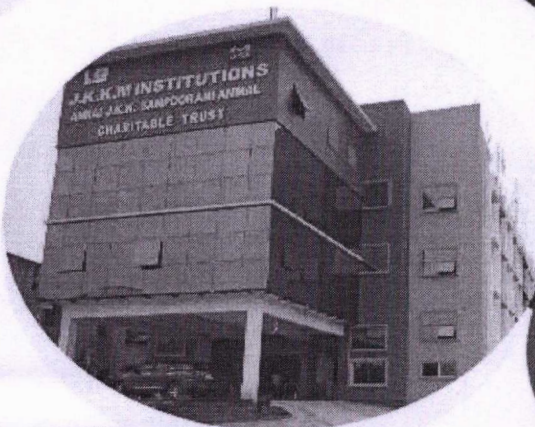



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Hydrogel Scaffolds For Tissue Engineering



SEMINAR

30 APRIL
2021
10AM TO
2.30PM

SPEAKER

Dr.C.Sundaramoorthi
KMCH College of Pharmacy
Coimbatore

Venue: Seminar Hall

JKKMMRF's Annai JKK Sampoorani Ammal
College of Pharmacy
Komarapalayam

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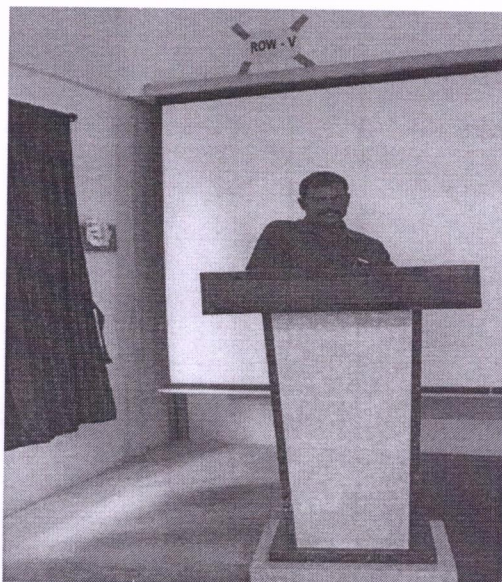


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Title : seminar on hydrogel scaffolds for tissue engineering (IPR)

Date :30/04/2021




Resource person speech



Students listening the seminar




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ABOUT THE TOPIC

HYDROGEL SCAFFOLDS FOR TISSUE ENGINEERING

INTRODUCTION

Tissue engineering is a rapidly expanding interdisciplinary field involving biomaterials science, cell biology, cell-material interactions and surface characterization. Research in this field aims to restore, preserve, or enhance tissue functions. It also aims to replace diseased or damaged organs, or tissues that are defective or have been lost as a result of accidents or disease. Tissue engineering typically involves four key components as illustrated in (a) selected and isolated cells (progenitor or stem cells from different origins), (b) biomaterial scaffolds which may be natural or synthetic, to provide a platform for cell function, adhesion and transplantation, (c) signaling molecules such as proteins and growth factors deriving the cellular functions of interest, and (d) bioreactors that support a biologically active environment for cell expansion and differentiation such as cell culture.

Design criteria for hydrogel scaffolds in tissue engineering

The extracellular matrix (ECM) is the extracellular component of natural tissue that provides structural support to the cells as well as performing various other important functions. Hence, the ECM is one of the most significant guides in the design of scaffolds for tissue engineering. The ECM is a hydrophilic 3D micro-matrix with two major solid structures; collagen fibers and the proteoglycan filaments. The collagen fibers present as bundles and extend through the interstitium, providing the tensile strength and durability for the surrounding tissue. The proteoglycan filaments are coiled structures and made from protein and hyaluronic acid. Together with the entrapped interstitial fluid, which is a plasma-like fluid but of a lower protein concentration, ECM demonstrates a gel-like uniformity.

Scaffold design variables

Selection or synthesis of the appropriate hydrogel scaffold materials is governed by the physical property, the mass transport property, and the biological interaction requirements of each specific application. These properties or design variables are specified by the intended scaffold application and environment into which the scaffold will be placed. For example, scaffolds designed to encapsulate cells must be capable of being gelled without damaging the cells, must be nontoxic to the cells

Summary and future directions

The success of many space-filling agents, bioactive molecule delivery vehicles, and tissue constructs is highly dependent on the design of the scaffold. That design, in turn, depends on both the tissue as well as the environment in which the tissue resides.



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DEPARTMENT OF PHARMACEUTICAL CHEMISTRY

SEMINAR FEEDBACK FORM

STUDENT NAME:

DATE:

YEAR/ COURSE :

NAME OF THE WORKSHOP:

COURSE CODE:

DURATION:

EVALUATE HONESTLY:

Questions	Excellent	Good	Fair	Poor
The objectives of the training were				
The instructor's contribution to the course was:				
The presentation materials were relevant				
The instructor's effectiveness in teaching the subject matter was:				
Answers to the students questions by the instructor				
The venue was appropriate for the event				
Course organisation was:				
Level of course was				
Course content was:				

Student Participation

1. On average, how many hours a week did you spend on this course (in and out of class)?
A) 0-2 B) 2-5 C) 6-10 D) 11-14 E) 15UP
2. What grade do you expect in this course?
A) BELOW 50% B) 50-60% C) 60-70% D) 70-80% E) ABOVE 80%



SIGNATURE

**Dr. N. SENTHILKUMAR,
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STUDENT FEEDBACK FORM

NAME OF STUDENT:
COURSE:
SEMINAR TOPIC:

REGISTRATION NO:
YEAR & SEMESTER:
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?

- 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



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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


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

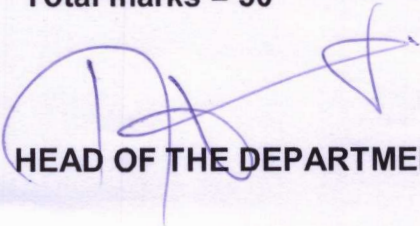




Student Name With Signature
Dr. N. SENTHILKUMAR,
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		Not at all clear	0	
8	Accuracy of the sessions	Extremely clear	5	5
		Very clear	3	
		Moderately clear	2	
		Not very clear	1	
		Not at all clear	0	
9	Session expectations	Excellent	5	5
		Good	3	
		Fair	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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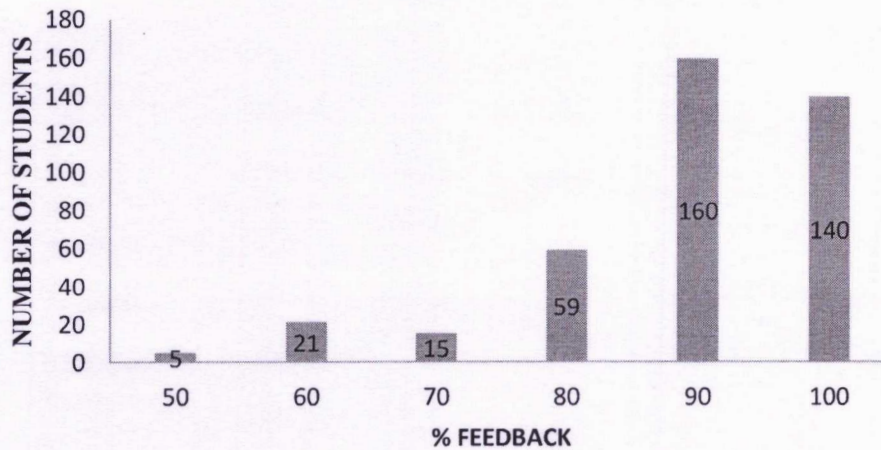
REPORT SUMMARY

DATE: 30.04.2021

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




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LIST OF PARTICIPANTS

S.NO	NAME OF STUDENT	YEAR/SEM
1	ABIRAMI S	I
2	AKESH S	I
3	CHARANKUMAR C	I
4	DHANUSHKUMAR S	I
5	EDWIN V REJI	I
6	FALAHUDDHARAIN R	I
7	GEHESH S V	I
8	GUNASEKAR M	I
9	KALAIKARUNA K	I
10	KARTHIKEYAN K	I
11	KEERTHI VASAN A	I
12	KEERTHIVEL T S	I
13	KESTIN K SABU	I
14	KIRTHIGA A	I
15	MAGCELINE CHRISTOPHER	I
16	MARSHAL RAJ S	I
17	MUKESHKUMAR M	I
18	MUKILAN S	I
19	RAGUL VIGNESHA K	I
20	RAJASEKAR R	I
21	RAKSHANA B	I
22	SABARINATHAN A	I
23	SHEPHIA S S	I
24	SHYLA I	I
25	SRINITHI C G	I
26	SURYA R	I
27	SURYA S	I
28	TAMILARASAN P	I
29	VASANTH KUMAR C	I
30	VINYA BHAGATH B	I




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JKKMRF ANNAI SAMPOORANI AMMAL
COLLEGE OF PHARMACY
KUMARAPALAYAM-638183,NAMAKKAL



CERTIFICATE

of Participating

DEPARTMENT OF PHARMACEUTICAL CHEMISTRY
one day seminar on

Hydrogel scaffolds for tissue engineering

For his participation in the one day Grand seminar on topic of

HYDROGL SCAFFOLDS FOR TISSUE ENGINEERING which is

held on **30 april 2021**

organizing secretary

convener



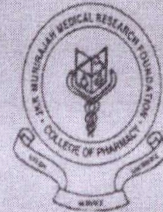
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SURVA R

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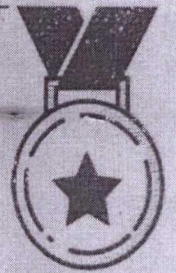
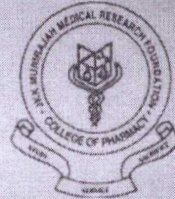


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ETHIRMEDU, KOMARAPALAYAM, NAMAKKAL DISTRICT. T. N. A.