(Sponsored by the Exhibition Society) Tarnaka, Secunderabad.

Affiliated to Osmania University, Approved by PCI ISO: 21001:2018 Certified Institution, NBA Accredited B.Pharmacy Course

Accredited Grade A+ by NAAC

Ref.: SNVPMV/

Date: 119/2025

#### CIRCULAR

Topic: Seminar on "Advances in Pharmaceutical Sciences" Organized by: Department of Pharmaceutical Chemistry in collaboration with Royal Society of Chemistry (UK) - Local Section Deccan (RSC-LSD)

Dear Faculty Members and Students.

We are delighted to announce that the Department of Pharmaceutical Chemistry, in collaboration with the Royal Society of Chemistry (UK) - Local Section Deccan (RSC-LSD), is organizing a seminar on "Advances in Pharmaceutical Sciences." on 31sep 2025 SHYPMY Auditorium. at

This seminar aims to bring together scientists, academicians, students, and industry professionals to exchange knowledge and insights. The sessions will particularly focus on Drug Discovery, Nanotechnology, and Nutrition Science in addressing current healthcare challenges.

The Inaugural Session will feature:

Book Release by Dr. Ahmed Kamal

About the Book - Presentation by Dr. Y. V. D. Nageswar

Following the inauguration, the seminar will include keynote addresses and invited lectures by eminent speakers on contemporary topics in the pharmaceutical sciences.

We cordially invite all faculty members and students to actively participate in this academic event and make it a grand success.

With regards,

Head of the Department

Principal

# (Sponsored by The Exhibition Society) Tarnaka, Secunderabad.

SI.No	Name	Faculty List	Signature
1	1.13-30.197	Designation	The le
2	Dr.N.Srinivas	Professor & Director	None
	Dr.T.Mamatha	Professor & Principal	C. Harite
3	Dr.B.Haarika	Professor & Vice-Principal	C. Hyaun
4	Dr.S.Hemalatha	Professor & HOD	34
5	Dr.S.Anuradha Bai		TALA
6	Dr.T.Venu	Professor & HOD	- June
7	Dr. P. Vivek Sagar	Professor & HOD	0.000
8	Dr. B. Chandra Shekar Reddy	Professor & HOD	Y
9	Smt. R.V.S.Latha Sree	Professor & HOD	-
10		Associate Professor	
	Dr.K.Neelima	Associate Professor	
11	Dr.B. Siva Jyothi	Associate Professor	- We
12	Dr. M.Swetha	Associate Professor	100
13	Dr. S.Rohini Reddy	Associate Professor	- OTO:
14	Dr. CH.Shanthi Priya	Associate Professor	Diamba
15	Dr.K.Vinutha	Associate Professor	Nonubha
16	Dr. K.R.V.S. Chaltanya	Associate Professor	- Comment
17	Dr. M. Sreekanth	Associate Professor & HOD	might key he
18	Dr. P. Ravi Kumar	Associate Professor & HOD	My -
19	Mrs. K. Geethanjali	Associate Professor	- ANV
20	Dr. Leemol Shaju	Sr. Assistant Professor	Color
21	Smt.G.Srilalitha	Assistant Professor	0 0
22		Assistant Professor	1 11/2
23	A CONTRACTOR OF THE PARTY OF TH	Assistant Professor	The state of the s
24		Assistant Professor	Leave.
25		Assistant Professor	N.
26		Assistant Professor	
27		Assistant Professor	And
28		Assistant Professor	
29		Assistant Professor Assistant Professor	Link
30		Assistant Professor	Market
3		Assistant Professor	Alt
3		Assistant Professor	Q Man
	3 Dr Jithender	Assistant Professor	My .
	Dr. V. Santhoshini	Assistant Professor	Hatch
-	Dr. Hadiya Iram  Ms. P. Sri Varsha	Assistant Professor	Hilley
-	37 Dr.M. Shiva Rama Krishna	Assistant Professor	112.
_	38 Mrs. J. Sarika	Assistant Professor	885
_	39 Mrs. P. Uma	Assistant Professor	2.42
-	40 Mr. D. Suresh	Assistant Professor	Styl
_	41 Mrs. P. Rajyalakshmi Devi	Assistant Professor	Law.
_	42 Mrs. Samreen	Assistant Professor	W 1
	43 Mr. K. Sandeep	Assistant Professor	3
	44 Mrs. Ritu Jain	Assistant Professor	Kiboan
	45 Mrs. J. Sunayana	Assistant Professor	majara
	46 Ms. N. Rojaramani	Assistant Professor	North Contraction



(Sponsored by the Exhibition Society)
Affiliated to Osmania University, Approved by PCI-New Delhi
NBA Accredited B. Pharmacy Course, Accredited A+ grade by NAAC





(Sponsored by the Exhibition Society)
Affiliated to Osmania University, Approved by PCI-New Delhi
NBA Accredited B. Pharmacy Course, Accredited A+ grade by NAAC

Report on "Seminar on Advances in Pharmaceutical Sciences" Organized by the Department of Pharmaceutical Chemistry, in association with the Royal Society of Chemistry (RSC) and book release.

Welcoming of guests: The seminar started with a warm welcome to the distinguished guests: Prof. Ahmed Kamal, Senior Professor Emeritus, BITS-Pilani, Hyderabad Campus, Former Pro-Vice Chancellor, Jamia Hamdard University, NewDelhi, Former Acting Director / Outstanding Scientist, CSIR-IICT, Former Project Director, NIPER, Hyderabad. Dr. Y.V.D. Nageswar sir Former Chief Scientist, CSIR-IICT & Ex-Dean, NIPER, Hyderabad. Keynote Lecture by Prof Ahmed Kamal, "Advances in Organic Chemistry-I", Dr.Rambhau Devraj, Director (Technical), Pulse Pharma, Hyderabad, Former Professor, University College of Pharmaceutical Sciences, Kakatiya University, Warangal. Invited lecture: "Importance of Dietary Polyenes by Dr. R.B.N Prasad sir Former Chief Scientist & Head, Centre for Lipid Research, CSIR-Indian Institute of Chemical Technology, Hyderabad. Dr. M.V. Narendra Kumar Thalluri. Secretary, RSC-LSD. Lighting of the lamp was done by the dignitaries, prayer song was sung by Mahathi of M.Pharm III sem.

**Book Release Event:** The main event of this seminar was the Book Release Ceremony, the name of the book is "Advanced Organic Chemistry-I", presided over by Dr. Y.V.D. Nageshwar Sir. Dr. Nageshwar, with his remarkable academic and professional journey, has been a guiding force in the scientific community. This book is based on Pharmacy Council of India (PCI) syllabus, making it highly relevant for students of pharmaceutical chemistry. The content of the book is:

- Unit 1: Covers the fundamentals of pharmaceutical chemistry, including nomenclature, classification of reactions, and applications with suitable examples.
- Unit 2: This unit contain 15 important named reactions with detailed mechanisms.
- Unit 3: Focuses on named reactions involving heterocyclic compounds,
- Unit 4: Encourages learners to explore current trends in reactions, highlighting the importance of staying updated with modern scientific advancements.



(Sponsored by the Exhibition Society)
Affiliated to Osmania University, Approved by PCI-New Delhi
NBA Accredited B. Pharmacy Course, Accredited A+ grade by NAAC

This book will serve as a valuable academic resource, bridging theoretical knowledge with practical applications for pharmacy students.

#### **Followed by the Invited Lectures:**

#### 1. Topic: Challenges in Drug Discovery and Development

Speaker: Prof. Ahmed Kamal sir, gave an seminar on the challenges faced in drug discovery and development. Sir said about Medicinal Chemistry – An Overview, he began by giving a broad overview of medicinal chemistry, tracing its evolution:

Ancient and Early Periods – Reliance on natural products and traditional remedies.

Medieval Period – Alchemy-based formulations and empirical approaches.

Modern Era – Rise of organic chemistry and synthetic drugs.

Current Era – Rational drug design, high-throughput screening and advanced computational tools.

#### Key Concepts in Drug Discovery

- 1. Target Identification Selection and validation of biological targets such as proteins, enzymes, or receptors, crucial for effective drug design.
- 2. Molecular Modelling Use of computational techniques to predict interactions between drug molecules and biological targets.
- 3. Chemical Genetics Application of small molecules to study gene functions and biological pathways.
- 4. Genomics and Proteomics Understanding the genome and proteome to discover novel therapeutic targets.
- 5. Bioinformatics Integration of biological data using computational methods to accelerate the drug discovery process.

**Preclinical Studies** 



(Sponsored by the Exhibition Society)
Affiliated to Osmania University, Approved by PCI-New Delhi
NBA Accredited B. Pharmacy Course, Accredited A+ grade by NAAC

Prof. Ahmed Kamal explained about the stages involved preclinical studies: *In vitro* and *in vivo* studies for pharmacokinetics, pharmacodynamics, toxicity, and safety evaluation.

Phases of Drug Development

He highlighted the long and complex journey of drug development, breaking it into major phases:

- 1. Research Phase (1–3 years): Basic research, identification of lead compounds, and preliminary screening.
- 2. Preclinical Development (3–6 years): Laboratory and animal studies to test safety, toxicity, and biological activity.
- 3. Clinical Development (3–6 years): Human trials in phases I, II, and III to evaluate safety, efficacy, dosage, and side effects.
- 4. Regulatory Approval: Submission of data to agencies (such as FDA, EMA, DCGI) for marketing approval, followed by post-marketing surveillance (Phase IV trials).
- **2. Topic:** "My Journey of Nanotechnology from concept to commodity"

**Speaker:** Dr. Rambhau Devraj sir said about the topic "My Journey of Nanotechnology from concept to commodity".

1. Introduction to Nanoscience & Technology

Nanoscience deals with materials and systems at the nanoscale (1–100 nm).

Nanotechnology applies this knowledge to improve therapeutic and diagnostic efficiency in medicine.

2. Overcoming Challenges in Drug Delivery with Nanotechnology

Conventional drug delivery faces issues like poor solubility, low bioavailability, systemic toxicity, and lack of target specificity.

Nanotechnology offers solutions by:



(Sponsored by the Exhibition Society)
Affiliated to Osmania University, Approved by PCI-New Delhi
NBA Accredited B. Pharmacy Course, Accredited A+ grade by NAAC

- Improving solubility and stability of drugs.
- Enhancing therapeutic efficacy.
- Providing targeted delivery to reduce side effects.

#### 3. Nano Drug Delivery Systems

Drug nanocarriers: liposomes, micelles, dendrimers, polymeric nanoparticles.

Nano particulate drugs: engineered particles for controlled and sustained release.

#### 4. Concepts & Applications

Sir explained about the theory of Magic Bullet Concept (Paul Ehrlich): Early idea of drug targeting—delivering therapeutic agents directly to diseased cells without harming healthy ones.and also

Doxil Concept: Liposomal formulation of doxorubicin. Reduces cardiotoxicity and improves circulation time.

Functionalised Nanoliposomes: Surface-modified liposomes with ligands/antibodies for active targeting.

Doxorubicin Delivery (NAB Technology): Nanoparticle albumin-bound technology improves drug solubility and delivery.

#### 5. Novel Nano-Formulations

Deksel Nanosyrup: Example of a nano formulation to enhance bioavailability and patient compliance. *In vivo* synthesis & distribution of Vitamin D3: Nano-carriers improve absorption and sustained release of fat-soluble vitamins.

3. **Topic:** "Importance of Dietary Polyunsaturated Fatty Acids (PUFAs) in Health and Disease"

Dr. R.B.N Prasad sir gave a seminar on topic 'Importance of Dietary Polyunsaturated Fatty Acids (PUFAs) in Health and Disease'



(Sponsored by the Exhibition Society)
Affiliated to Osmania University, Approved by PCI-New Delhi
NBA Accredited B. Pharmacy Course, Accredited A+ grade by NAAC

- 1. Why Lipids Are So Important: Lipids are not just energy reserves (9 kcal/g) but also: Form structural components of cell membranes. Act as signaling molecules (eicosanoids, prostaglandins). Help in absorption of fat-soluble vitamins (A, D, E, K). Provide thermal insulation and protection to organs.
- 2. Why Lipids Work So Well: Amphipathic nature (hydrophobic + hydrophilic)  $\rightarrow$  ideal for membrane formation. Flexibility in energy metabolism  $\rightarrow$  lipids can be oxidized during fasting. Reservoirs for essential fatty acids that cannot be synthesized de novo.
- 3. Lipids: More Than Just Dietary Fat Lipids = triglycerides + phospholipids + cholesterol + free fatty acids. Beyond storage, they regulate gene expression, immune response, inflammation, and cardiovascular health.
- 4. Polyunsaturated Fatty Acids (PUFAs): Contain more than one double bond in their hydrocarbon chain. Two essential PUFAs: Linoleic acid (LA, Omega-6), Alpha-linolenic acid (ALA, Omega-3)
- 5. Importance of Essential Fatty Acids: Cannot be synthesized by humans, must be obtained from diet. Precursors of bioactive lipids (prostaglandins, thromboxanes, leukotrienes). Maintain skin integrity, growth, neural development, and cardiovascular health.
- 6. Role of Omega-6 PUFAs: Major dietary Omega-6 PUFA: Linoleic acid → converted to Arachidonic Acid (AA).

Functions: Cell signaling. Immune response. Inflammatory mediators (prostaglandins, leukotrienes).

- 7. Risks of Excess Omega-6: High intake → excess Arachidonic acid metabolites (proinflammatory).Linked to: Chronic inflammation, cardiovascular diseases, Cancer risk. Autoimmune conditions. Balance with Omega-3 fatty acids is crucial (recommended ratio ~ 4:1).
- 8. Metabolic Pathways for Bioactive Derivatives (Eicosanoids): Omega-6 pathway: Linoleic acid  $\rightarrow \gamma$ -Linolenic acid (GLA)  $\rightarrow$  Dihomo- $\gamma$ -linolenic acid (DGLA)  $\rightarrow$  Arachidonic acid. Arachidonic acid  $\rightarrow$  Prostaglandins, Leukotrienes, Thromboxanes (via COX & LOX enzymes).



(Sponsored by the Exhibition Society)
Affiliated to Osmania University, Approved by PCI-New Delhi
NBA Accredited B. Pharmacy Course, Accredited A+ grade by NAAC

Omega-3 pathway (protective): ALA  $\rightarrow$  EPA & DHA  $\rightarrow$  anti-inflammatory eicosanoids & resolvins.

Felicitation to the Speakers: After the seminar was completed, a felicitation ceremony was conducted. The speakers were honored with mementos and shawls as a token of appreciation for their valuable contribution. Faculty members and students of different colleges expressed their gratitude for the in-depth knowledge shared on drug discovery and development, nanoparticles, amd unsaturated fatty acids, health and disease. The session was concluded with a vote of thanks by Dr. M.V. Narendra Kumar Thalluri, Secretary, RSC-LSD and group photographs were taken to mark the occasion.







(Sponsored by the Exhibition Society)
Affiliated to Osmania University, Approved by PCI-New Delhi
NBA Accredited B. Pharmacy Course, Accredited A+ grade by NAAC











(Sponsored by the Exhibition Society)
Affiliated to Osmania University, Approved by PCI-New Delhi
NBA Accredited B. Pharmacy Course, Accredited A+ grade by NAAC









(Sponsored by the Exhibition Society) Affiliated to Osmania University, Approved by PCI-New Delhi NBA Accredited B. Pharmacy Course, Accredited A+ grade by NAAC



# SAROJINI NAIDU VANITA PHARMACY MAHA VIDYALAYA

(Sponsored by the Exhibition Society) Approved by PCI, Affiliated to Osmania University NBA Accredited B.Pharmacy Course (ISO 21000:2018 Certified Institute) Accredited with A+ Grade by NAAC



# SEMINAR ON "ADVANCES IN PHARMACEUTICAL SCIENCES"

Organized by: Department of Pharmaceutical Chemistry in Association with Royal Society of Chemistry Local Section Decean (RSC-LSD)

Date:3<sup>rd</sup> September 2025

# Gokaraju Rangaraju College of Pharmacy

S.No	NAME OF THE DELEGATE	Protou	JBaraja Cont	ege of that macy		
1	The second secon	The state of the s	NAME OF THE COLLEGE	MOBILE NUMBER	EMAIL.ID .	SIGNATURE
2	E. Ananya	Student W. Charge and	Gokakiju Rangaraju Gilege of	8585667938	eangrupa@gmail.com	Jun.E
3	B. Nihaika	M du da	antorail Promote Pharma	AZALIANTED	nihailahnyini 3 Hagman	Distriction of the last of the
4	P. Revatli Bai	- Lycal	protocogu kangasaju college a plan	9391469208	revoluivasa agaleg maile	
5	P. Nagalikhitha	In pharm II Sem	Gokaraji tengraju collegeot	9581353493	likhithapadalaza@gmila	low
6	Sd. Mafrez	M. pharm II Son	Grakaraju Rangaraju College of plan		Sydmfrez 88@ gmall.com	Patrox
7	N. Valshmavi M. Liuhnu Varolhan	M. pharm Ilkem	Gokaralu kargaraju	917190276	latchravinay motto had amail or	Valeman
8				9347118248	mashetti ultuwardhan Samaik	on Vishny
9	D. Krichnaven!	m Phum II cem		R304795058	Knishnaveni dae Ognai	
10	Lovany a. P	M. Phona Disen	The second second	6301011992	Lawanya Paman H 2997 @ ga	to lot
11	R. Rohani N	Myum Indian		8329157399	navalimai estapromii lun	Mi
12		Mohram Isen		7095405844	The second in the last	ion BH
13	Shaheda	Miphon I Car	The second secon	9390238196	Shakeda 8196 @gma	for Shike
14	1 14 4	M. Pharmilia			Arth Iralay MY 2076 gus	Ham /
15		M-phamoffson	GRCP	7032960818	The state of the s	ilcom Be
		M. phamilter		The Property of the Control of the C	Chandana salenti admai	
16	b. thia	M-Phandsen	y yrp	70752157	barboothi a agmail tom	SHIP SHIP AND ADDRESS OF THE PERSON NAMED IN
7	B. Usha devi	P		4032612099	balagawhadeindonai) co	m 300



(Sponsored by the Exhibition Society) Affiliated to Osmania University, Approved by PCI-New Delhi NBA Accredited B. Pharmacy Course, Accredited A+ grade by NAAC



# SAROJINI NAIDU VANITA PHARMACY MAHA VIDYALAYA

(Sponsored by the Exhibition Society) Approved by PCI, Affiliated to Osmania University NBA Accredited B.Pharmacy Course (ISO 21000:2018 Certified Institute) Accredited with A+ Grade by NAAC



# SEMINAR ON "ADVANCES IN PHARMACEUTICAL SCIENCES"

Organized by: Department of Pharmaceutical Chemistry in Association with Royal Society of Chemistry Local Section Deccan (RSC-LSD) Date:3<sup>rd</sup> September 2025

### Deccan School of Pharmacy

No	THE DELEGATE	DESIGNATION	NAME OF THE COLLEGE	MOBILE NUMBER	EMAILID	SIGNATURE	
1	Nikhat fahma	student	Deccan School of plan	999916266	fahimanikhat sasagnalli	NIO	
2	Syeda Daniya Fatima	Student	Deccan School of phosing	8688631718	Syedada niyafagrail con	D	
3	Na sur fatime.	Bardent.	Decon Schol of short	920 4558319	calsun anne 106 Dam	Way.	
	Azha Tallarum	Student	Decan School Belong	8639649739	as action of the	A TOUR	Syed
5	Damy Mohamm a	Sludenz	Deccan schools phon	830920615	gamer mon 1980 gm/10	outal	6
	Nalecha fallan	Student	Accom school of Pro	70936714	forlan, paleely 10/2	1.74	1
	BABERA MAAZ	Student	D SOP	7993901604	babeza ruaz moy@om	AT CO	
	Maaz fatima.	student	Decan school pharma	7993968211	noon fatima 2168 & amily con	Manne	
_	Ummul Shair Afilla Fati	Student	Deccar School of Phan	KY 7330840461	affauk@gmail.com	Afila	
	MADIHA SHAHVEEN	Student	Deccan school of Phurma	6300417430	madihasha 3210 gmall.co		1
	Maniya Begum	Student	Decrean school of phanner		Maniyashaik 1017 agmilka		1
F	Green Sultana	Student	Decran School of Pharmacus		afreensultana o Il bamai		1
1	My CLS LLAH. DA	Shuden	THE RESERVE AND ADDRESS OF THE PARTY OF THE	THE RESERVE OF THE PERSON NAMED IN	786 abdul zubeironil.	The state of the s	
1	96 Faraz Khain	Ofucler!	Decear school a dis	A66997) 601	Farox flor 1818 als		7
1	Syed Zulais Hit	Statent	Decen Schools the	-			
5	nodice barie	Mybute	DELLOW THANKED		application of and	in Mey	-
			Account Manhantin	1 107154500	SIND WARRANGE	adort	-



(Sponsored by the Exhibition Society)
Affiliated to Osmania University, Approved by PCI-New Delhi
NBA Accredited B. Pharmacy Course, Accredited A+ grade by NAAC

### "Advances in Pharmaceutical Sciences

Royal Society of Chemistry (UK)-Local Section Deccan (RSC-LSD) & Dept. of Pharmaceutical Chemistry, Sarojini Naidu Vanita Pharmacy Maha Vidyalaya, Tarnaka

Date: 3rd September 2025

## List of the Student Participants from SNVPMV

S. No	Name of the Participant	Program/Course	Signature
1.	R. Sharanya	M. Pharmacy I yr Pharmaculics	Diff.
2.	B. Argali	M. Pharmacy II Tr Pharmaceutical Analysis	Auguli.
3,	M. Damya Sri	phonon Analysis	Domya.
4.	k. Mahathi Tyothirmay	M. Phasmay Tyr	manisthi
5.	P. Ramya	miphaimistry	Jamps
6.	Gi. Pooja	mipharm, illyear	Pooju
7.	K. Manisha Redoly	4 0	mail
8.	KiSheha /	Mpharm 1str Pharmacolog	- \$C-1
9.	U. Bharathi	U	Bhi
10.	B Jayasni	4	Jayani
m. k	K. Bhane Deepilea	Homework of	Bhour.
12.	M:Anitha	h	AL
13.	G. Indlou	¥	TH
14	Sumbiya	Y	Sut.
15	M. Lahan	o o	Lahan