SAROJINI NAIDU VANITA PHARMACY MAHA VIDYALAYA

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Approved by PCI-NEW DELHI & B.PHARMACY COURSE ACCREDITED BY NBA
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We cordially invite you to the lecture on

"Application of Radiation Technology in Biomedical Sciences"

Organized by: Department of Pharmaceutics

Resource Person
Dr.M.N.Reddy
(Retired Senior scientist &
Associate Director
LASTEC, DRDO)

On 3rd July 2025

Time : 3 P.M.

Venue: SNVPMV Auditorium

Presided by:
Dr. B. Prabha Shankar
Chairman, SNVPMV

Coordinated by :
Dr.B.Chandrashekar Reddy

Co-Coordinators:
Dr.Ch.Shanthi Priya,
Dr.Ch.Bhargavi,
Mrs. A.Jyothi

Dr. B. Haarika	Dr. T. Mamatha	Dr. N. Srinivas	Sri. B. Hanumanth Rao
Vice Principal	Principal	Director	Hon.Secretary

SAROJINI NAIDU VANITA PHARMACY MAHA VIDYALAYA

College for Women Tarnaka, Secunderabad.
(Sponsored by the Exhibition Society,
Affiliated to Osmania University, Approved by PCI
ISO : 9001:2015 Certified Institution
NBA Accredited B.Pharmacy Course

Ref.: SNVPMV/

Date : 9/7/2025

CIRCULAR

Topic: "Applications of Radiation Technology in Biomedical sciences"

Organized By: Department of Pharmaceutics

Speaker: Dr. M. N. Reddy, Retired Senior Scientist & Associate Director LASTEC, DRDO.

Dear Staff & Students,

We are pleased to inform you that we are going to conduct a seminar on "Applications of Radiation Technology in Biomedical sciences" by **Dr. M. N. Reddy**, Retired Senior Scientist & Associate Director LASTEC, DRDO.

The lecture will be delivered by **Dr. M. N. Reddy**, Retired Senior Scientist & Associate Director LASTEC, DRDO in our college auditorium on 03.07.2025 at 3:00 P.M. All faculty members, M. Pharmacy students, B. Pharm III years, Pharm.D IV and V year students are cordially invited to attend the seminar. Let us make the most of this opportunity and contribute to its grand success through your active participation.

(Dr. T. Mamatha)
Principal

H.No. 12-5-31 & 32, Vijayapuri Colony, Tarnaka, Secunderabad - 500 017. Telangana, INDIA.
Phone : 040-27002221, Mobile : 92480 77972
e-mail : principal@snvpharmacycollege.com www.snvpharmacycollege.com

"Report On Application of Radiation Technology in Biomedical sciences"

Date: 03.07.2025

Organized by: Department of Pharmaceutics, Sarojini Naidu Vanita Pharmacy Maha Vidyalaya (SNVPMV), Tarnaka, Secunderabad.

Time: 03:00 P.M.

Venue: Auditorium, SNVPMV.

Speaker: Dr. M. N. Reddy, Retired Senior Scientist & Associate Director LASTEC, DRDO.

Sarojini Naidu Vanita Pharmacy Maha Vidyalaya (SNVPMV) hosted a guest lecture titled "Application of Radiation Technology in Biomedical sciences", designed to provide insights into personal happiness and well-being. The event was coordinated by Department of Pharmaceutics (Dr.B.Chandrashekar Reddy, Dr.Ch.Shanthi Priya, Mrs. CH. Bhargavi and Mrs. A. Jyothi) and anchored by Salma Sultana and Syeda sana ilsa, M.Pharm II Sem (Pharmaceutics) students. Dignitaries were welcomed to the dais with eco-friendly floral greetings, including: Dr. N. Srinivas Direcor, SNVPMV. Dr. B.Haarika, Vice- Principal, SNVPMV, Dr.R.Ashok Kumar R&D Advisor, SNVPMV, Dr.B.Chandrashekar Reddy, Professor & HOD, Dept. of Pharmaceutics, SNVPMV and Dr. M. N. Reddy, Retired Senior Scientist & Associate Director LASTEC, DRDO.

The program opened with a welcome address, introduced by Ms. Syeda sana ilsa, Dr. M. N. Reddy, Retired Senior Scientist & Associate Director LASTEC, DRDO, captivated attendees with an interactive and his talk began with applications of radiation and laser in pharmacy and biomedicine introduction.

Introduction

Radiation and laser technologies have revolutionized various fields, including pharmacy and biomedicine, by offering innovative solutions for diagnosis, treatment, and research. These tools leverage the unique properties of electromagnetic waves and light energy to interact with biological tissues and pharmaceutical substances at both macro and molecular levels.

EM waves span a broad **spectrum**, categorized by wavelength and frequency, ranging from **radio waves** (long wavelength, low frequency) to **gamma rays** (short wavelength, high frequency). The major regions of the electromagnetic spectrum include: **Radio waves, Microwaves, Infrared radiation, Visible light, Ultraviolet (UV) radiation, X-rays, Gamma rays**

Importance of Light for Life

Light is a fundamental form of energy that sustains life on Earth. Without light, life as we know it would not exist. It is the primary source of energy for almost all ecosystems, and its role in biological processes, especially **photosynthesis**, is vital. He highlighted **"nothing is at rest, isolated, and absolute"** and said it means **"pure vibratory energy,"**

Progress of the Nation

The progress of any nation is fundamentally rooted in the development and empowerment of its citizens. The key indicators that define national progress include:

Highly Educated, Skilled, and Empowered Citizens:
A knowledgeable and capable population is essential for innovation, governance, and economic development.

Technologies, Products & Systems:
Advancing in research and development leads to the creation of indigenous technologies and systems that support growth.

Infrastructure, Services & Exports:
Robust infrastructure and efficient services enhance productivity and global trade competitiveness.

Self-Reliance in Energy, Space & Defence Technologies:
Independence in critical sectors ensures security, sustainability, and global standing.

Quality of Life of the Citizens:
The ultimate goal of national progress is to enhance the well-being, health, and happiness of its people.

Essence of Education

Education is the foundation upon which the progress of individuals and the nation is built. The essence of education can be summarized as follows:

Knowledge, Skills, Values, Character:
True education nurtures a well-rounded personality that integrates intellectual, practical, and ethical development.

Learning by Thinking:
Encouraging inquiry and curiosity fosters a deeper understanding and lifelong learning.

Emotional Intelligence, Purpose of Living:
Education should also address emotional maturity and guide individuals towards meaningful, purposeful lives.

Attitude of Critical Thinking, Problem Solving & Success:
Cultivating an analytical mindset and the ability to tackle challenges creatively is essential for personal and professional growth.

What is science

Science is not just a field of study but a **powerful tool** for understanding and shaping the world. It thrives on observation, experimentation, and logical thinking. Through science, humanity not only explores the universe but also develops the **technologies and solutions** that shape our future.

Learning by Thinking – The Power of Curiosity

Learning is most effective when driven by **curiosity** and **critical thinking**. The slide titled *"Learning by Thinking"* highlights the crucial role of curiosity in discovery, innovation, and personal growth. It emphasizes that true learning comes not just from being taught, but from thinking and exploring independently.

Albert Einstein:

> *"I have no special talent. I am only passionately curious."*

Einstein attributes his success not to inherent genius, but to a strong sense of curiosity — reinforcing that **anyone can achieve greatness through deep interest and inquiry**.

Science through Observation and Measurement

Observation and measurement are the foundation of scientific discovery. From the **microscopic world of molecules and cells** to the **vast structures of galaxies**, scientific tools help us explore, understand, and explain the universe. Among these tools, **optical imaging** and **spectroscopy** are some of the most powerful and timeless analytical methods.

What is Laser?

A **laser** is one of the most powerful and precise tools developed in modern science and technology. The word **LASER** is an acronym for:

Light Amplification by Stimulated Emission of Radiation

This principle allows the generation of highly focused and coherent light beams with exceptional precision.

Key Characteristics of Laser Light:

Coherent: All light waves move in phase with each other.

Monochromatic: Consists of a single wavelength or color.

Highly Directional: The beam travels in a straight, narrow line with minimal spread.

High Intensity: Focused energy in a small area makes lasers powerful tools for cutting, targeting, and precision measurement.

Types of Lasers

Lasers are categorized based on the **type of active medium** used and the **mode of operation**. Each type of laser exhibits unique characteristics and is suited for specific applications in medicine, industry, defense, communication, and research.

Solid-State Lasers, Gas Lasers,Ion Lasers, Excimer Lasers, Metal Vapour Lasers, Dye Lasers, Semiconductor Diode Lasers, Colour Centre Lasers, Fiber Lasers, Gas Dynamic Lasers, Chemical Lasers

Conclusion

Radiation and laser technologies have become indispensable tools in modern science, particularly in the fields of pharmacy and biomedicine. Their ability to interact with matter at both microscopic and macroscopic levels has enabled groundbreaking advances in diagnosis, treatment, and research. The foundational understanding of electromagnetic waves and light energy not only enhances scientific exploration but also emphasizes the critical role of light in sustaining life.

Moreover, the integration of scientific knowledge with national development—through education, innovation, infrastructure, and self-reliance—illustrates the broader impact of technology on society. Education plays a pivotal role in nurturing curiosity, critical thinking, and values that drive personal and societal progress. As Einstein rightly said, "I am only passionately curious," reminding us that curiosity is the spark behind all innovation and discovery.

Lasers, with their unique characteristics such as coherence, monochromaticity, and precision, stand as a testament to the power of applied science. The various types of lasers serve vital roles across disciplines, reflecting how deeply science is woven into the fabric of modern life.

In essence, the synergy of scientific understanding, technological application, and value-based education is the true driver of progress—for individuals, for science, and for the nation as a whole.

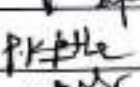
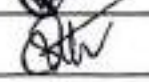
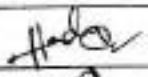
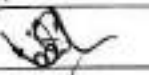
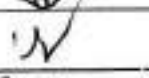
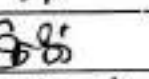
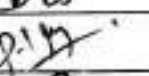
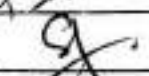
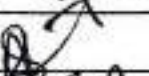
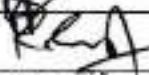
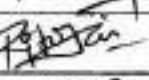
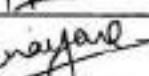

Secunderabad, Telangana, India
,vijayapuri Colony,tarnaka, Opp. To St. Anns High School, 12-5-31/32, S Lala Guda Rd, Vijayapuri Colony, Tarnaka, Secunderabad, Telangana 500017, India
Lat 17.430243° Long 78.532319°
03/07/2023 03:15 PM GMT +05:30
Google

SAROJINI NAIDU VANITA PHARMACY MAHA VIDYALAYA

(Sponsored by the Exhibition Society),
Tarnaka, Secunderabad. Guest Lecture

Faculty List – Circular dt 02/7/2025

Sl.No	Name	Designation	Signature
1	Dr. N. Srinivas	Professor & Director	
2	Dr. T. Mamatha	Professor & Principal	
3	Dr. B. Haarika	Professor & Vice Principal	
4	Dr. S. Hemalatha	Professor & HOD	
5	Dr. S. Anuradha Bai	Professor & HOD	
6	Dr. T. Venu	Professor & HOD	
7	Dr. P. Vivek Sagar	Professor & HOD	
8	Dr. B. Chandra Shekhar Reddy	Professor & HOD	
9	Smt. R.V.S. Latha Sree	Associate Professor	
10	Dr. K. Neelima	Associate Professor	
11	Dr. B. Siva Jyothi	Associate Professor	
12	Dr. M. Swetha	Associate Professor&HOD	
13	Dr. S. Rohini Reddy	Associate Professor	
14	Dr. CH. Shanthi Priya	Associate Professor	
15	Dr. K. Vinutha	Associate Professor	
16	Dr. K.R.V.S. Chaitanya	Associate Professor	
17	Dr. M. Sreekanth	Associate Professor & HOD	
18	Dr. P. Ravi Kumar	Associate Professor & HOD	
19	Smt. Leemol Shaju	Sr. Assistant Professor	
20	Smt. G. Srilalitha	Assistant Professor	
21	Smt. Ch. Bhargavi	Assistant Professor	
22	Smt. N. Indira Rani	Assistant Professor	
23	Smt. S. Muni Sireesha	Assistant Professor	
24	Smt. P.M. Sameera	Assistant Professor	
25	Dr. R. Prasanthi	Assistant Professor	
26	Ms. S. Divya	Assistant Professor	
27	Dr. Akaram Sujala	Assistant Professor	

Sl.No	Name	Designation	Signature
28	Smt. Azmeera Jyothi	Assistant Professor	
29	Smt. K. Silpa	Assistant Professor	
30	Smt. P. Kavitha Babu Rao	Assistant Professor	
31	Mrs. A. Shailaja	Assistant Professor	
32	Mrs. Jutta Swathi	Assistant Professor	
33	Dr. K. Jithender	Assistant Professor	
34	Dr. V. Santhoshini	Assistant Professor	
35	Dr. Hadiya Iram	Assistant Professor	
36	Ms. P. Sri Varsha	Assistant Professor	
37	Dr. M. Shiva Rama Krishna	Assistant Professor	
38	Mrs. J. Sarika	Assistant Professor	
39	Mrs. P. Uma	Assistant Professor	
40	Mr. D. Suresh	Assistant Professor	
41	Mrs. P. Rajyalakshmi Devi	Assistant Professor	
42	Mr. K. Sandeep	Assistant Professor	
43	Mrs. Ritu Jain	Assistant Professor	
44	Mrs. J. Sunayana	Assistant Professor	
45	Ms. N. Rojaramani	Assistant Professor	

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ATTENDANCE SHEET

Event: "Application of Radiation Technology in Biomedical sciences"
Organized by
Department of Pharmaceutics

Speaker: Dr.M.N.Reddy, Rtd. Senior Scientist & Associate Director, LASTEC, DRDO Date:03/07/2025

Sl.No	Roll No	Name of the Student	Class	Signature
1	170427881001	A.V.Vasanthi	B.Pharm 3rd Yr	
2	170422681002	A.Tharmai	"	
3	170422881011	B.Medha	"	
4	" 018	Ch Sreeja	"	
5	" 032	G. Mallaiswarya	"	
6	" 035	G. Rusvitha	"	
7	" 021	C. Nandini	"	
8	" 042	J. Rakshitha	"	
9	" 053	K. Meghana	"	
10	" 027	E. Vaishnavi	"	
11	045	K Achmitha	"	
12	047	K chaithanya	"	
13	046	K soumya	"	
14	014	B Sai Jyothi	"	
15	036	G. Navya	"	
16	037	I. Soumya	"	
17	029	G. Sravani	"	
18	028	E. Dikshitha	"	Dikshitha
19	030	G. kamal	"	Kamal
20	038	T. Suvarna	"	Suvarna
21	040	Tapleen	"	
22	039	Ishika Agarwal	"	
23	022	Smrithi	"	Smrithi
24	050	Deekshitha	"	
25	019	C. Vaishnavi	"	
26	024	K. Dikshitha	"	
27	025	D. Aksana	"	
28	052	K. Sreevani	"	
29	048	K. Gauthami	"	
30	026	D. Akshitha	"	
31	08	Shalini	"	
32	06	Asfiya	"	

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Sl.No	Roll No	Name of the Student	Class	Signature
34	03	Aarzoo	II	
35	07	Arshia	II	
36	043	j Uvasia	II	
37	33	G. Gayathri	II	
38	41	T. Radhika	II	
39	170422851012	B. Kaachana	II	
40	170422851013	B. Preethi Raj	II	
41	170422851023	D Jyothi	II	
42	170422851020	Ch Sucaitha	II	
43	170422851015	B Swamy	II	
44	170423881076	R. Malsawmkimi	B Pharm 2nd yr	
45	1704-23-881083	Sana Fathima	B. Pharm 2nd yr	
46	1704-22-881031	Ch Sulochi	B. Ph 3rd yr	
47	1704-22-881[illegible]6	Vidya Sri		
48	1704-23-881-107	Teresha nanaal	B.pharm 2nd yr	
49	1704-23-881-088	Simran	II	
50	1704-23-881-092	Rekha	II	
51	1704-23-881-095	P. Bhavana.	B.pharm 2nd yr	
52	1704-23-881-078	R. Bhagyasri	II	
53	1704-23-881-096	T. Sukanaya	B.pharm 2nd yr	
54	1704-23-881-064	N. Shivathmika	B.pharm 2nd yr	
55	1704-23-881-099	V Shravani	II	
56	1704-23-881-100	V. Nikitha	II	
57	1704-23-881-67	M Spoorthy	II	
58	1704-23-881-102	V. Anitha	II	
59	1704-23-881-101	V. Srinitha	II	
60	1704-23-881-69	P Thanu	II	
61	1704-23-881-068	P. Deepthi	II	
62	1704-23-881-061	M. Manisha	II	
63	1704-23-881-064	Shivathmika	II	
64	1704-23-881-073	Sanjeevani	II	

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Sl.No	Roll No	Name of the Student	Class	Signature
65	1704-22-881-034	G. Siddhi	B.pharm 3rd yr	
66	1704-22-881-010	Pimple Sowmya	"	
67	1704-22-881-020	ch. Swetha	"	
68	1704-22-881-015	B. Sowmya	"	
69	A04-22-881-059	Sai Priya	"	
70	1704-22-881-091	G. Jyothirmai Bai	"	
71	1704-22-881-097	T Sakshi	"	
72	1704-22-881101	V Ramdeva Naag	"	
73	1704-22-881-106	Y. Udaya Sri	"	
74	1704-22881-082	P. Ruchitha	"	
75	1704-22-881-099	V. Anjali	"	
76	17042288L-085	Vedamukhi	"	
77	17042288L-095	Lakshitha	"	
78	17042288I-101	Hamsika	"	
79	17042288I-102	Veena	"	
80	170422-881 103	Navya	"	
81	1704 23 881-005	Vaishnavi.A	" 2nd yr	
82	170423881002	Keerthana.A	"	
83	170429887013	Sumaiya	M.Pharm (Pharmacology)	
84	170424887004	Hajera	"	
85	170424887002	B. Vaishnavi	"	
86	1704-24-887-003	G. Indu	"	
87	1704-24-887-010	Nabila KULSUM	"	
88	1704-24-887-012	Savarth Swetha	"	
89	1704-24-887-007	Swathi	"	
90	1704-24-887-009	M. Anitha	"	
91	1704-24-887-011	N Pavani	"	
92	1704-23-881-028	D. Prasanna Jyothi	B. Pharm 2nd yr	
93	1704-23-881-027	D. Navya	"	
94	1704-23-881-004	Rani	"	
95	1704-23-881-028	Sravani	"	

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Sl.No	Roll No	Name of the Student	Class	Signature
96	1704-24-867-003	Niharika	M.pharm 2 sem	
97	1704-24-867-006	Ashwitha	"	
98	1704-24-861-002	Sahithi	M.pharm "	
99	1704-24-861-015	Manjula	"	
100	1704-24-867-011	Moiza	"	
101	1704-24-867-010	Sai Sree	"	
102	1704-23-881-096	T.Rashmi	B.pharm IV com	
103	1704-23-881-062	M pooja	"	
104	1704-23-881-060	M Akshitha	"	
105	1704-23-881-052	K.Bhavani	"	
106	1704-23-881-029	D.Tejaswi	"	
107	1704-23-881-093	S.Saisharanya	"	
108	1704-23-881-095	T.S.Sranavthi	"	
109	1704-23-881-103	V Sravanthi	"	
110	1704-23-881-104	Yachishetty	"	
111	1704-23-881-060	Madhura	"	
112	1704-23-881-050	Bhargavi	"	
113	1704-23-881-049	Jayasree	"	
114	1704-23-881-023	Bindushreya	"	
115	1704-23-881-016	Sushmapsri	"	
116	1704-23-881-046	Keerthana	"	
117	1704-23-881-104	Yachi sheik	"	
118	1704-23-881-095	T.S.S.Pranathi	"	
119	1704-23-881-044	H.Akhila	B.pharm IV sem	
120	1704-23-881-012	B.pavani	"	
121	1704-21-881-04	Bhavani	"	
122	1704-23-881-089	Spandana.ch	B.Pharm IV sem	
123	1704-23-881-090	Vasavitha.S	B.pharm III sem	
124	1704-23-881-079	Archana R	"	
125	1704-23-881-033	D.Sanjana	"	
126	1704-23-881-094	Rajani Gandha	"	
127	1704-23-881-046	Keerthana	"	

SAROJINI NAIDU VANITA PHARMACY MAHA VIDYALAYA
(Sponsored by the Exhibition Society), Tarnaka, Secunderabad
Affiliated to Osmania University
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ATTENDANCE SHEET

Event: "Application of Radiation Technology in Biomedical sciences"
Organized by
Department of Pharmaceutics

Speaker: Dr.M.N.Reddy, Rtd. Senior Scientist & Associate Director, LASTEC, DRDO **Date:03/07/2025**

Sl.No	Roll No	Name of the Student	Class	Signature
128.	1704-23-881-033	Sanjana	B.Pharm IV Yr	Sanjana
129.	1704-23-881-077	Rani	B.Pharm IV yr	Rani
130.	1704-23-881-065	Nandana	B.Pharm IV yr	Nandana
131.	1704-23-881-078	Bhagyasri	"	Bhagyasri
132.	1704-23-881-062	N. Nagasri Sravya	"	
133.	1704-23-881-071	P. Laasya	"	Laasya
134.	1704-23-881-105	Hiranyayalavarthy	"	Hiranya
135.	1704-23-881-074	P.S. Hrithika	B.Pharmacy IV Yr	P.S. Hrithika
136	1704-23-881-098	V. Pravallika.	B.Pharmacy-IV yr	V. Pravallika
137	1704-23-881-082	Sai Smalli P	"	Smalli
138	1704-20-882-006	ch. Deepika	Pharm D 5th yr	
139	1704-22-881-088	Safura	B.Pharmacy IV Yr	Safura
140	1704-21-881-083	Nazima Sareen	"	Nazima
141	1704-22-881-090	Samreen	"	Samreen
142	204-20-882015	Monika kanchan	Pharm D 5th yr	
143	1704-20-882003	Dhanyatha	pharm D 5th yr	Dhanya
145	1704-23-881-097	T. Deekshitha	B.Pharm IV yr	Deekshitha
146	1704-23-881-086	S. Sanjana	B. Pharm 2nd yr	Sanjana
147	1704-23-881-080	Y. Deekshitha	B Pharm 2nd yr	Deekshitha
148	1704-23-881-108	Sowparnika	B Pharm 2nd yr	Sowparnika
149				
150				