



Annai Violet Arts & Science College

(Affiliated to the University of Madras, Co-Ed | NAAC Reaccredited)

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MoE's
INNOVATION CELL
(GOVERNMENT OF INDIA)

Kindly join us for the



INSTITUTION'S
INNOVATION
COUNCIL
(GOVERNMENT OF INDIA & AICTE)



Impact Lecture Session -I Phase II [Virtual]

on 30.06.2022 Thursday

Organized by
AVASC in Association with IIC

Sponsored by
MoE's Innovation Cell (MIC), AICTE, New Delhi

Session I | Lecture I

Time: 10.00 a.m - 11.30 a.m

Topic: Sustainability Science for Materials Innovation



Dr. T. Prakash

Assistant Professor,
National Centre for Nanoscience &
Nanotechnology (NCNSNT),
University of Madras, Guindy Campus, Chennai-25.

YouTube https://youtu.be/XhZS7eJrO_I

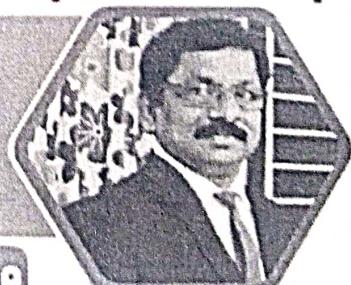
Session I | Lecture II

Time: 2.00 p.m - 3.30 p.m

Topic: New ways to foster Innovations & Entrepreneurship

Mr. B.S. Lokesh, B.E (Chem)

Founder and Director,
Agastya Academy,
Bangalore.



<https://youtu.be/OhBNalmnVvA> YouTube

Chev.Dr.N.R.Dhanapalan
Chairman

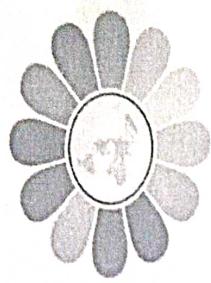
Mr.N.R.D.Prem Kumar
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Dr.P.E.R.Premchand
Joint Secretary

Dr. C. Initha Lebanon Ebency
Principal & IIC President

Mrs. Japhia Solomon
Vice Principal & IQAC Coordinator

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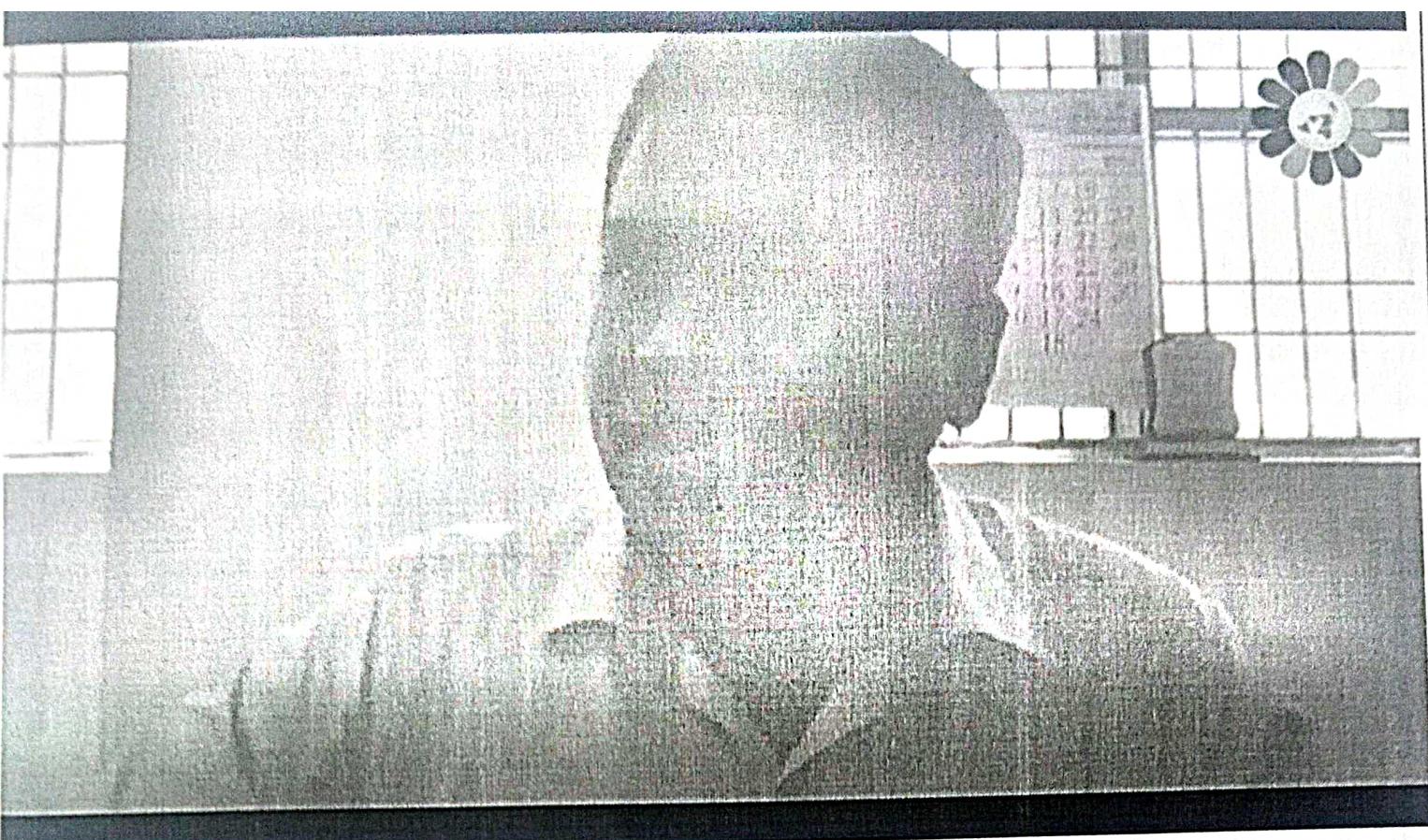


EVENT ORGANISED REPORT – (2021-2022)

Name of the Department/ Club	Institution's Innovation Council
Name of the Convenor	Dr. Thyriyalakshmi P
Name of the Event Organized	Impact Lecture Session I Phase II (Virtual)
Title(s) of the Event	Session I Lecture I: Sustainability Science for Materials Innovation
Date of the Event Organized	30/6/2022
Designation/ Class of the Participants	Faculty Members and Students
No. of Participants / Viewers	350
Name of the Expert(s) with Designation	Session I Lecture I: Dr. Prakash T, Assistant Professor, National Centre for Nanoscience & Nanotechnology (NCNSNT), University of Madras, Guindy Campus, Chennai – 25.
Objective of the Event	To enlighten students on nanoscience and entrepreneurial skills. The lecture serves as a platform to explore about nanotechnology with the advent of modernization to bring about innovation.
Description of the Event	Session I Lecture I: The lecture began with a welcome address presented by

	<p>Dr. Nadhiya K, Assistant Professor, Department of Biochemistry. Followed by this, Principal and IIC President Dr. C. Initha Lebanon Ebency gave the presidential address. Dr. Nadhiya K gave a brief note on the journey and achievements of IIC at the institution. The program then proceeded with the introduction of resource person by Dr. Hamsavathani, Head and Assistant Professor, Department of Microbiology. The resource person, Dr. Prakash T, Assistant Professor, National Centre for Nanoscience & Nanotechnology (NCNSNT), University of Madras, began the session with the objective of his presentation. He stated that he would be dealing with the way to extract materials from nanocrystalline solids innovatively and the way to alter or tailor them for certain applications. He continued the presentation on the process using which the objective can be done. Three kinds of routes were explained to attain the operation. They were physical route – Inert Gas Condensation Technique (IGCT), mechanical route and chemical route. He proceeded to brief on the three dimensions of the morphology of nanocrystallites. In the following segment he briefed on the application potential of nanotechnology in diverse fields such as X rays. The following segments of the session had had an extensive view on the chemical process involved in X rays. He explicated the way to read photocurrent too. Towards the end of the program, he explained on the variation in X ray reports when different effect is applied such as bias effect. The session concluded with a thanking note to the resource person by Mr. Pradeep, II B Sc Physics. The program ended with vote of thanks rendered by Mr. Pradeep, II B Sc Physics.</p>
<p>Outcome of the Event</p>	<p>The lectures benefitted students vastly as it covered a immense range of prospects in the respective topic. The lecture helped to imbibe an accurate knowledge on nanoscience and its technology .</p>



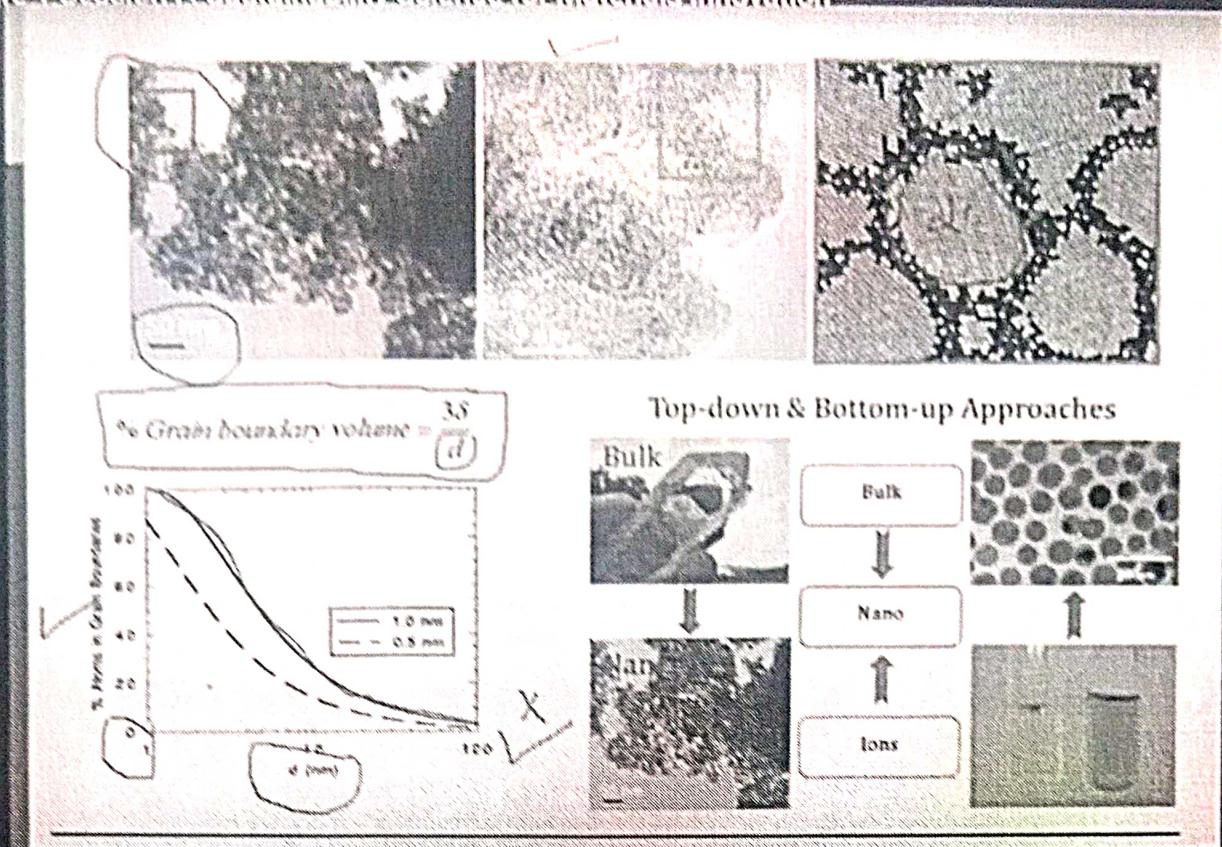


Impact Lecture 1 Session I : Sustainability Science for Materials Innovation

Impact Lecture I on Sustainability Science for Mat

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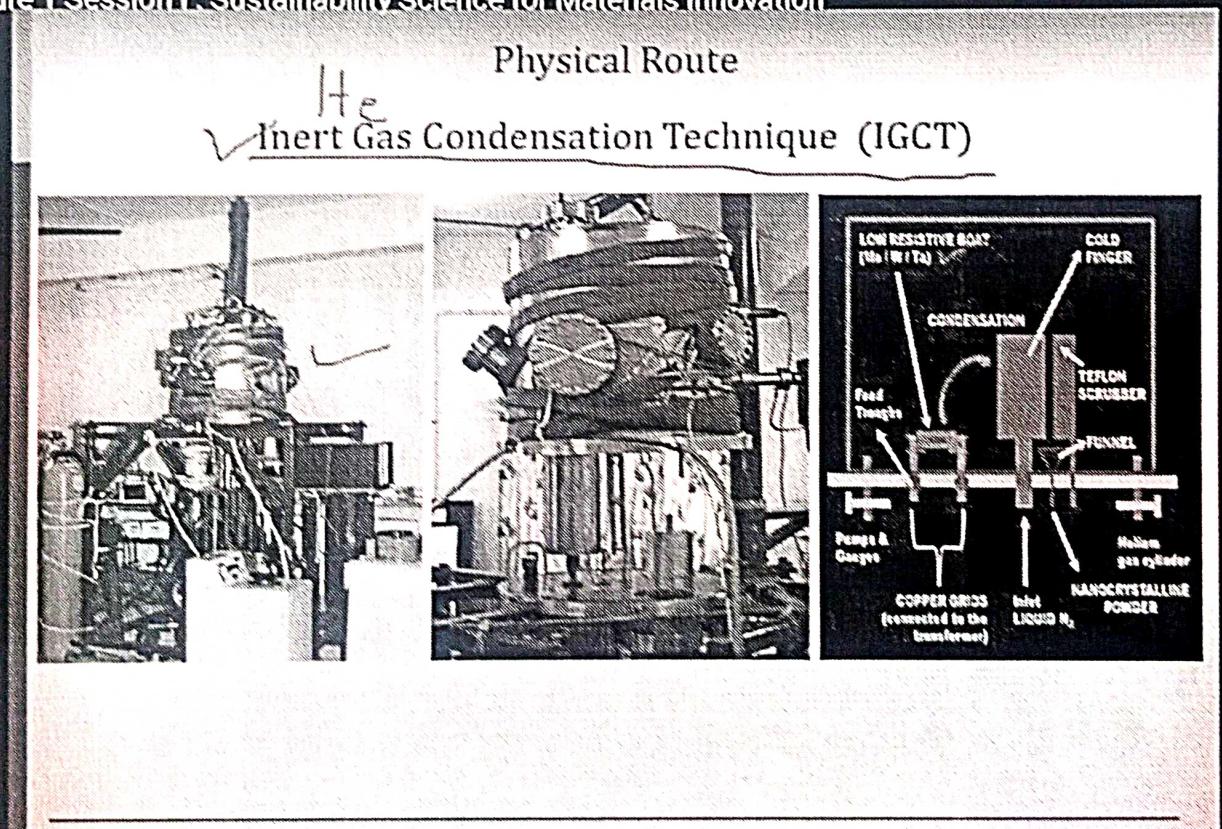
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Impact Lecture 1 on Sustainability Science for Materials Innovation

21:37 / 1:33:14

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Impact Lecture 1 on Sustainability Science for Materials Innovation

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Morphology

One dimension:
Rods/wires/tubes



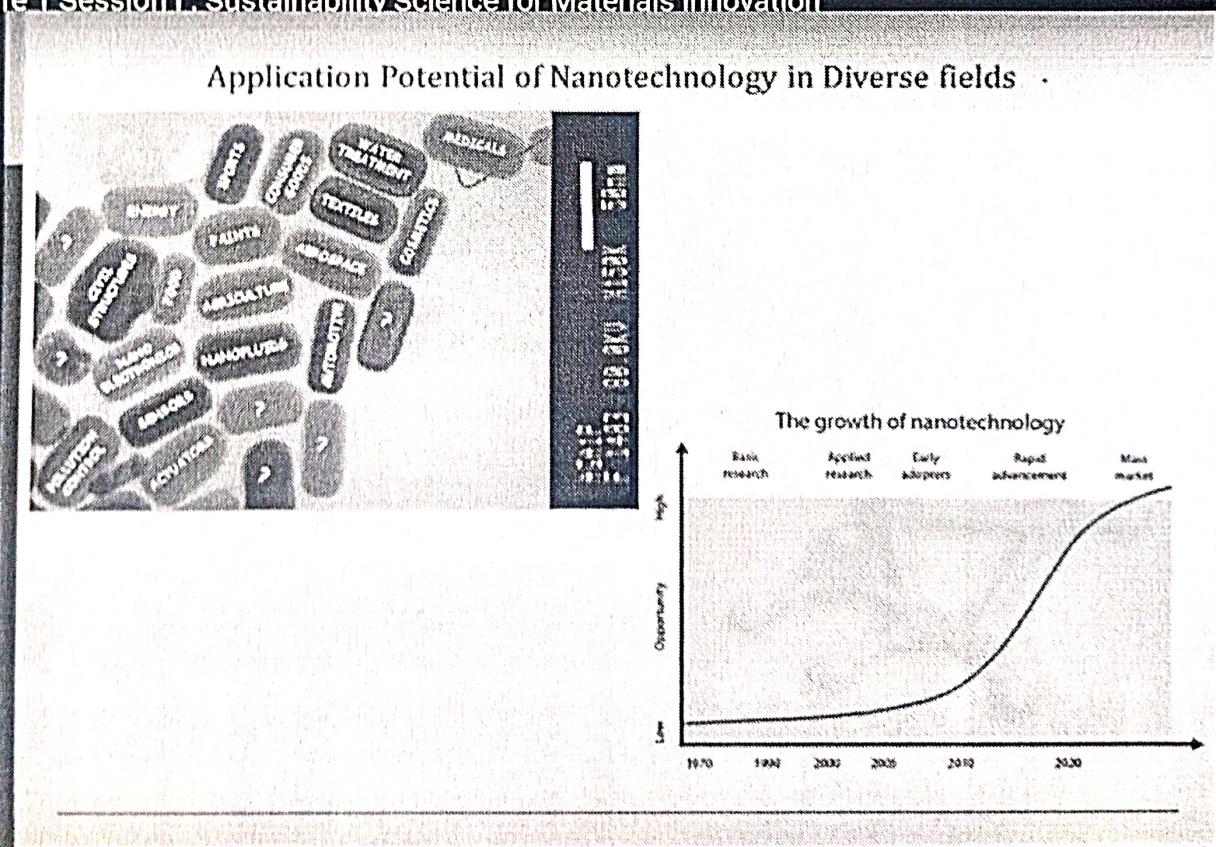
Two dimension:
Thin films

Three dimension:
Nanocrystals

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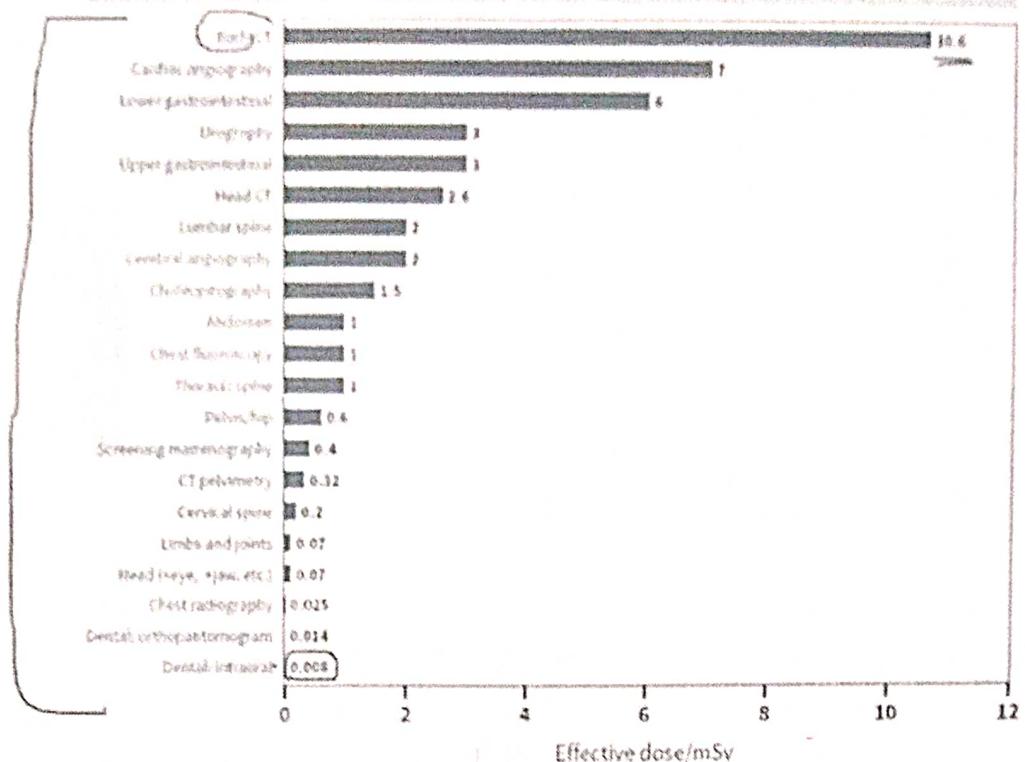


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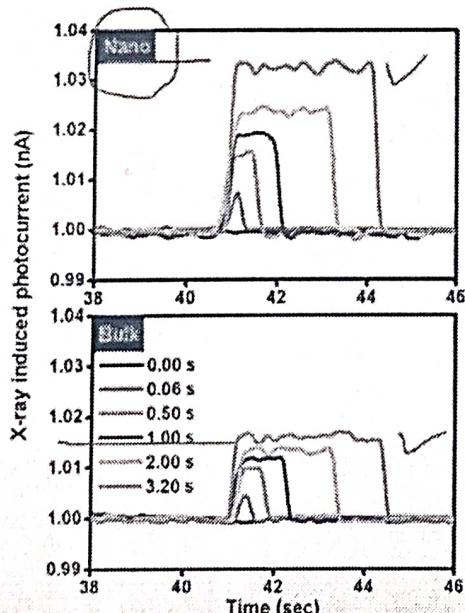
Typical values of effective dose for various medical X-rays



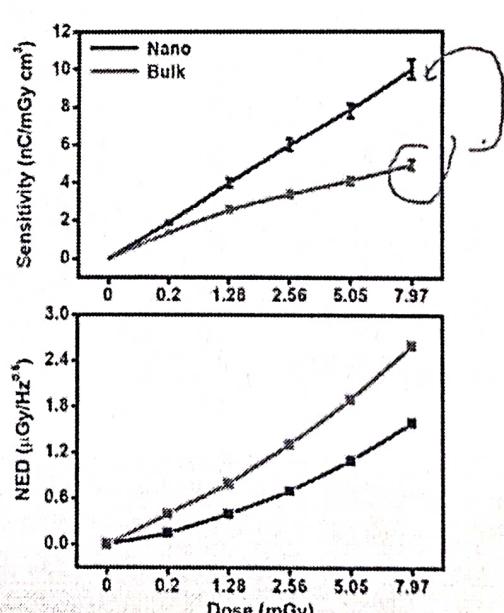
Impact Lecture I on Sustainability Science for Materials Innovation

Impact Lecture 1 Session I: Sustainability Science for Materials Innovation

X-ray sensing nature of nano and bulk Bi_2O_3



Sensitivity and NED plots



Material	7.97 mGy	5.05 mGy	2.56 mGy	1.28 mGy	0.20 mGy
n- Bi_2O_3	10	7.8	6	4	1.9
B- Bi_2O_3	4.9	4.1	3.4	2.6	1.4



Physuke

CONVENOR

AVASC-IIC Convenor

Annai Violet Arts and Science College
No: 53, Violet College Road, Menambedu,
Ambattur, Chennai-600 053.

Japhia

IQAC COORDINATOR

IQAC Co-ordinator

Annai Violet Arts and Science College
No: 53, Violet College Road, Menambedu,
Ambattur, Chennai-600 053.

PRINCIPAL & IIC PRESIDENT

DR.C. Initha Lebanon Ebency
M.Sc., M.Phil., Ph.D., PGDSA.
Principal

Annai Violet Arts & Science College
No: 53, Violet College Road, Menambedu,
Ambattur, Chennai-600 053.