COLLEGE OF PHARMACY Approved by AICTE & PCI - NEW DELHI, Affiliated to JNTUK KAKINADA

(Formerly known as Sri Sai Aditya Institute of Pharmaceutical Sciences & Research)

Ph: 99498 76664
Email: office@acop.edu.in
Website: www.acop.edu.in

ADD ON / CERTIFICATE PROGRAM 2023-2024

s. NO	Name of add on / certificate course offered	Branch & year of offering	Number of students completing the course in the year	Type of add-on course	Duration of course
1	Value added Course on "Screening methods for analgesic & anti-inflammatory activity"	IV PHARM D & V PHARM D	60	Self framed course	30 Hrs
2	Value added Course on "Computer aided drug design"	IV B.PHARMACY	90	Self framed course	36 Hrs
3	Value added course on "Hands on training on FT-IR from basics to advanced"	III B.PHARMACY	85	Self framed course	30 Hrs
4	Value-added course on "Green Chemistry and Sustainable Synthesis"	II B.PHARMACY	102	Self framed course	30 Hrs
5	Value Added Course on "Health guidance and First aid education"	I B.PHARMACY	92	Self framed course	36 Hrs
6	Value-added course on "Applied Pharmaceutical compounding and Dispensing techniques"	I & II PHARM D	50	Self framed course	36 Hrs
7	Value added course on "Handling of Animals"	III PHARM D	24	Self framed course	30 Hrs
Total number of students enrolled			503		



Xuan chaver

PRINCIPAL

PRINCIPAL
Aditya College of Pharmacy
SURAMPALEM- 533 437

Approved by PCI, Recognized by UGC (section 2f) ISO 9001:2015 Certified Institution NAAC "A" Accredited with CGPA of 3.24



Value added course on screening methods for Analgesics & Anti-inflammatory activity

ELIGIBILITY:
IV PHARM
D &
V PHARM D

RESOURCE PERSON

Dr.K.Ravi Shankar,
Principal,
Aditya college of Pharmacy

DURATION

1st July to 5th August, 2023 (Every saturday)

CO ORDINATOR

S.Amala Asst.Professor, Aditya college of Pharmacy



Aditya College of Pharmacy

Students who are having interest to juin this course must be enrol their names at respective coordinator





Approved by PCI, Recognised by UGC (Section 2f) ISO 90001:2015 Certified Institution NAAC "A" Accredited with CGPA of 3.24

(ADITYA NAGAR, ADB ROAD, SURAMPALEM 533 437, E.G.Dt, Ph.9949876664, 08852-200005)

Website: www.acop.edu.in, Email: office@acop.edu.in

15-06-2023

<u>CIRCULAR</u>

All the students of IV PHARMD &V PHARM D of Aditya college of pharmacy are hereby informed that our college will be offering a value added course on "Value addedcourse onscreening methods for Analgesics & Anti-inflammatory activity" on the below listed dates. Interested students can enroll in this course and can contact the corresponding coordinator for further queries.

Coordinator: S.Amala

 ${\sf Timings:1}^{\sf st} \ Julyto5^{\sf th} \ August, 2023 \ ({\sf Every \ saturday})$

STANDARD STANDARDS

PRINCIPAL

PRINCIPAL

Aditya College of Pharmac,

SURAMPALFM-533 437





Approved by PCI, Recognised by UGC (Section 2f)
ISO 90001:2015 Certified Institution
NAAC "A" Accredited with CGPA of 3.24

(ADITYA NAGAR, ADB ROAD, SURAMPALEM 533 437, E.G.Dt, Ph.9949876664, 08852-200005)

Website: www.acop.edu.in, Email: office@acop.edu.in

COURSE SYLLABUS

DURATION: 30 Hrs

COURSE NAME: Value added course on "screening methods for analgesic & anti-inflammatory activity".

Course Objectives:

- Have a proper knowledge on the legislations, Ethics, and about the rules & regulations of CPCSEA.
- To study different categories of analgesics and understand the pharmacodynamic principles.
- To study various screening models for analgesic and anti- inflammatory activity using experimental animals.
- Training also provides the information about IAEC approvals while conducting research works on laboratory animals.

Course outcomes:

Upon successful completion, students will have the knowledge and skills to:

- 1. To understand the concepts on nociception and pain pathways.
- 2. Maintenance of laboratory animals with proper diet and facilities.
- 3. To understand the properties of pharmaceutical products exhibiting analgesic and anti-inflammatory activity.

DAY 1: 01-07-2023, 6Hrs

Module 1:

Introduction- definition, acute and chronic pain, pain mediators, components of pain fibre. Introduction- types of inflammation, mechanism of inflammation





Approved by PCI, Recognised by UGC (Section 2f)
ISO 90001:2015 Certified Institution
NAAC "A" Accredited with CGPA of 3.24

(ADITYA NAGAR, ADB ROAD, SURAMPALEM 533 437, E.G.Dt. Ph.994987.6664, 08852-200005)

Website: www.acop.edu.in, Email: office@acop.edu.in

DAY 2: 08-07-2023, 6Hrs

Module 2:

Introduction to Analgesics and anti-inflammatory drugs- definition, opioid analgesics &non-steroidal anti-inflammatory drugs, types of receptors, mechanism of drug actions, pharmacokinetic properties, adverse effects.

DAY 3: 15-07-2023, 6Hrs

Module 3:

Introduction to various screening methods for analgesic activity-Tail-flick method,hot - plate test, Paw withdrawal test, Electrical stimulation of the tail, Grid - shock test, Stimulation of the limbs, Pain - state method using Chemical stimuli (Formalin test, Acetic acid induced writhing test).

Introduction to various screening methods for anti-inflammatory activity- The carrageenan-induced paw oedema, Croton Oil-Induced Ear Oedema, Oxazolone induced ear oedema, Cotton wool granuloma

DAY 4: 22-07-2023, 6Hrs

Module 4:

Appropriate methods & principles of handling animals. Demonstrate various routes of administration & describe about the importance of providing an enriched environment to laboratory animals.

DAY 5:05-08 -2023, 6Hrs

Module 5:

In vivo models

Demonstrate analgesic activity by hot plate method, tail flick method, tail immersion method, acetic acid induced writhings. Demonstrate anti-inflammatory activity by carrageenan-induced paw oedema and egg white induced paw oedema using mercureplethysmometer.





Approved by PCI, Recognised by UGC (Section 2f)
ISO 90001:2015 Certified Institution
NAAC "A" Accredited with CGPA of 3.24

(ADITYA NAGAR, ADB ROAD, SURAMPALEM 533 437, E.G.Dt, Ph.9949876664, 08852-200005)

Website: www.acop.edu.in, Email: office@acop.edu.in

References:

- 1. Handbook of Laboratory Animal Anesthesia and Pain Management: Rodents. 1st Edition.
- 2. Animal handling techniques and protocol development strategies, *Bhushan P Hatwar*, *Arunabha Mallik*.
- 3. Pharmacology: A Comprehensive Approach by Ravi Shankar K, G.V.N Kiranmayee Pharma Med Press, ISBN: 9789383635566.
- 4. Drug screening methods (preclinical evaluation of new drugs), SK Gupta 2nd edition.
- 5. Rang & Dale's Pharmacology, 7th edition.

PRINCIPAL

PRINCIPAL Aditya College of Pharmaty SURAMPALEM-533 437

Approved by AICTE & PCI - NEW DELHI, Affiliated to JNTUK KAKINADA (Formerly known as Sri Sai Aditya Institute of Pharmaceutical Sciences & Research)

Ph: 99498 76664 Email: office@acop.edu.in Website: www.acop.edu.in

VALUE ADDED COURSE SUMMARY 2023-24

COURSE CODE AND NAME

VSAA, Screening methods for Analgesic &

Anti-inflammatory activity

COURSE DURATION

30Hrs

BRANCH AND YEAR OFFERED:

IV & V PharmD

COURSE INSTRUCTORS

Dr.K.Ravi Shankar, Principal and Professor

COURSE OUTCOME

Upon successful completion, students will have the knowledge and skills to understand the concepts of nociception and pain pathways. Students will be able to understand how to maintain laboratory animals with proper diet and facilities. Students will understand the properties of pharmaceutical products exhibiting analgesic activity.

COURSE TYPE

Self framed course

ASSESSMENT MODE

ATTENDANCE

30 Hours

NO. OF PARTICIPANTS

60

SCHEME OF EXAM

MCQ Offline

DATE OF EXAM

:

07-08-2023

Course coordinator



Principal
PRINCIPAL
Aditya College of Pharmacv
SURAMPALEM-533 437





PRINCE KUMAR YADAV

completed the Value added course entitled

"screening methods for Analgesics & Anti-inflammatory activity"

held in Aditya College of Pharmacy, Surampalem from 1st July to 5th August, 2023 (Every saturday).

Vice-Chairman

Principal

PRINCIPAL
Aditya College of Pharmac



SANNIDHIRAJU V B S R NAGAMANI INDRAJA

completed the Value added course entitled

"screening methods for Analgesics & Anti-inflammatory activity"

held in Aditya College of Pharmacy, Surampalem from 1st July to 5th August, 2023 (Every saturday).

Vice-Chairman

SURAMPAIEM-522 /2



SAMANA SURYA ISWARYAMBICA POOJA

completed the Value added course entitled

"screening methods for Analgesics & Anti-inflammatory activity"

held in Aditya College of Pharmacy, Surampalem from 1st July to 5th August, 2023 (Every saturday).

Vice-Chairman

Principal

PRINCIPAL
Aditya College of Pharmacy



MABUTO MICHELLE TANAKA

completed the Value added course entitled

"screening methods for Analgesics & Anti-inflammatory activity"

held in Aditya College of Pharmacy, Surampalem from 1st July to 5th August, 2023 (Every saturday).

Vice-Chairman



ANKAM BABY SAI DURGA PADMASRI

completed the Value added course entitled

"screening methods for Analgesics & Anti-inflammatory activity"

held in Aditya College of Pharmacy, Surampalem from 1st July to 5th August, 2023 (Every saturday).

Vice-Chairman

Principal



Approved by PCI, Recognized by UGC (section 2f)
ISO 9001:2015 Certified Institution
NAAC "A" Accredited with CGPA of 3.24

VALUE ADDED COURSE ON COMPUTER AIDED DRUG DESIGN

E-Certificate will be provided upon successful completion of course

COURSE COORDINATOR

M.SESHA SAI DURGA,
Asst.Professor,
Aditya college of
pharmacy

RESOURCE PERSON

S.P.N.KUMAR, Asso. Professor, Aditya college of pharmacy

URATION

26/08/2023 to 07/10/2023 (EVERY SATURDAY)

IV B.PHARM STUDENTS

ELIGIBILIT

STEDE OF SALES

Aditya College 01





Approved by PCI, Recognised by UGC (Section 2f) ISO 90001:2015 Certified Institution NAAC "A" Accredited with CGPA of 3.24

(ADITYA NAGAR, ADB ROAD, SURAMPALEM 533 437, E.G.Dt, Ph.9949876664, 08852-200005)

Website: www.acop.edu.in, Email: office@acop.edu.in

07-08-2023

CIRCULAR

All the students of IV B PHARMACY of Aditya college of pharmacy are hereby informed that our college will be offering a value added course on "COMPUTER AIDED DRUG DESIGN" on the below listed dates. Interested students can enroll in this coursecan contact the corresponding coordinator for further queries.

Coordinator: Mrs. M. Sesha Sai Durga

Timings:26th August, 2023 to7thOctober, 2023 (Every Saturday)

SOLEGE C.

PRINCIPAL
PRINCIPAL
Aditya College of Pharmac
SURAMPALEM-533 437





Approved by PCI, Recognised by UGC (Section 2f)
ISO 90001:2015 Certified Institution
NAAC "A" Accredited with CGPA of 3.24

(ADITYA NAGAR, ADB ROAD, SURAMPALEM 533.437, E.G.Dt, Ph.9949876664, 08852-200005)

Website: www.acop.edu.in, Email: office@acop.edu.in

COURSE SYLLABUS

DURATION: 36Hrs

COURSE NAME: Value added course on "Computer aided drug design"

Course Description:

This course introduces students to the principles and practices of computer-aided drug design. Students will learn to use computational methods and tools to design and optimize potential drug candidates.

Course Objectives:

Upon successful completion of this course, students should be able to:

- Understand Drug Discovery: Explain the drug discovery and development process, including the various stages and the role of CADD in this process.
- Utilize CADD Software: Demonstrate proficiency in using CADD software and tools, including molecular modeling, virtual screening, and molecular dynamics simulation programs.
- **Predict Molecular Structures:** Apply molecular modeling techniques to predict molecular structures of drug candidates and targets.
- Ligand-Based Design: Apply ligand-based design methods such as pharmacophore modeling and quantitative structure-activity relationships (QSAR) to design potential drug candidates.
- Structure-Based Design: Employ structure-based design principles, including proteinligand docking and homology modeling, to design drugs that target specific protein structures.
- Virtual Screening: Perform virtual screening to identify and prioritize potential drug candidates from large compound libraries.





Approved by PCI, Recognised by UGC (Section 2f)
ISO 90001:2015 Certified Institution
NAAC "A" Accredited with CGPA of 3.24

(ADITYA NAGAR, ADB ROAD, SURAMPALEM 533 437, E.G.Dt, Ph.9949876664, 08852-200005)

Website: www.acop.edu.in, Email: office@acop.edu.in

- **Molecular Dynamics Simulations:** Conduct molecular dynamics simulations, analyze the results, and understand their role in understanding protein-ligand interactions.
- Quality Assessment: Critically evaluate the quality of CADD predictions and their relevance to drug development.
- **Applied Knowledge:** Apply the knowledge and skills acquired in this course to design a virtual drug candidate through a final project.
- Effective Communication: Communicate findings and insights effectively, both in written and oral formats.
- Collaboration: Collaborate with peers in the final project, demonstrating teamwork and shared learning.

Course Outcomes:

Upon completing this course, students will be able to:

- Explain the key principles and stages of the drug discovery and development process, emphasizing the role of computational methods.
- Identify and describe relevant CADD software tools and their applications.
- Describe and apply principles of molecular modeling for predicting molecular structures and interactions.
- Apply ligand-based design methods, including pharmacophore modeling and QSAR, to design potential drug candidates.
- Apply structure-based design principles, including protein-ligand docking and homology modeling, in designing drugs targeting specific proteins.
- Understand and apply virtual screening techniques to identify potential drug candidates from compound libraries.
- Conduct molecular dynamics simulations, interpret the results, and understand their implications for drug design.





Approved by PCI, Recognised by UGC (Section 2f) ISO 90001:2015 Certified Institution

NAAC "A" Accredited with CGPA of 3.24

(ADITYA NAGAR, ADB ROAD, SURAMPALEM 533 437, E.G.Dt, Ph.9949876664, 08852-200005)

Website: www.acop.edu.in, Email: office@acop.edu.in

DAY 1: 26-08-2023, 6 Hrs

Introduction to Drug Discovery and CADD

Overview of Drug Discovery and Development

Role of Computational Methods in Drug Design

CADD Software and Tools

Molecular Databases in Drug Design

DAY 2:02-09-2023, 6 Hrs

Molecular Modeling

Molecular Structure and Representation

Molecular Mechanics and Force Fields

Molecular Docking

Scoring Functions

DAY 3: 09-09-2023, 6 Hrs

Ligand-Based Design

Pharmacophore Modeling

Quantitative Structure-Activity Relationships (QSAR)

3D-QSAR

Cheminformatics in Drug Design





Approved by PCI, Recognised by UGC (Section 2f) ISO 90001:2015 Certified Institution NAAC "A" Accredited with CGPA of 3.24

(ADITYA NAGAR, ADB ROAD, SURAMPALEM 533 437, E.G.Dt, Ph.9949876664, 08852-200005)

Website: www.acop.edu.in, Email: office@acop.edu.in

DAY 4: 16-09-2023, 6 Hrs

Structure-Based Design

Protein Structure and Function

Protein-Ligand Interactions

Homology Modeling

Protein-Ligand Docking

DAY 5: 30-09-2023, 6 Hrs

Virtual Screening

High-Throughput Virtual Screening

Pharmacophore-Based Virtual Screening

Structure-Based Virtual Screening

Hit Identification and Validation

DAY 6: 07-10-2023, 6 Hrs

Molecular Dynamics Simulations

Introduction to Molecular Dynamics

Force Fields in MD Simulations

Trajectory Analysis

Applications of MD in Drug Design





Approved by PCI, Recognised by UGC (Section 2f)
ISO 90001:2015 Certified Institution
NAAC "A" Accredited with CGPA of 3.24

(ADITYA NAGAR, ADB ROAD, SURAMPALEM 533 437, E.G.Dt, Ph.9949876664, 08852-200005)

Website: www.acop.edu.in, Email: office@acop.edu.in

REFERENCES:

- 1. Computer-Aided Drug Design by Jörgensen and Apostolakis.
- 2. Introduction to Computer-Aided Drug Design by Andrew Leach.
- 3. Computer-Aided Drug Design: Structure-Based Design and Ligand-Based Design by Hugo Kubinyi.
- 4. Drug-Like Properties: Concepts, Structure Design and Methodsby Li Di.
- 5. Pharmacophore Perception, Development, and Use in Drug Design by Güner.
- 6. Principles of Computer-Aided Drug Discovery by Daniel A. Erlanson.
- 7. Computer-Aided Drug Design and Delivery Systems by Ahindra Nag.

WHANDALEN S.

PRINCIPAL Aditya College of Pharmac

A D T Y A COLLEGE OF PHARMACY

Approved by AICTE & PCI - NEW DELHI, Affiliated to JNTUK KAKINADA (Formerly known as Sri Sai Aditya Institute of Pharmaceutical Sciences & Research)

Ph: 99498 76664 Email: office@acop.edu.in Website: www.acop.edu.in

VALUE ADDED COURSE SUMMARY 2023-24

COURSE CODE AND NAME

VCADD,

COMPUTER AIDED DRUG DESIGN

COURSE DURATION

36 Hrs

BRANCH AND YEAR OFFERED:

IV B. Pharmacy

COURSE INSTRUCTORS

Mr.S.P.N.Kumar, Associate Professor

COURSE OUTCOME

Upon successful completion, students will have the knowledge and skills to be able to design drug from the scratch. Students will be able to understand how drugs function at the molecular level. Students will be familiar with the modern techniques in the field of drug design such as Computer based methods of QSAR and Molecular graphics.

COURSE TYPE

Self framed course

ASSESSMENT MODE

ATTENDANCE

36 Hours

NO. OF PARTICIPANTS

90

SCHEME OF EXAM

MCQ Offline

DATE OF EXAM

.

:

09-10-2023

Course coordinator



Principal
PRINCIPAL
Aditya College of Pharmacy
SURAMPALFM-533 437







CERTIFICATE OF COMPLETION



THIS IS TO CERTIFY THAT

SUNKARA PUSHPA

bearing the roll no. 203H1R0047
completed the Value added course entitled
"COMPUTER AIDED DRUG DESIGN"
held in Aditya College of Pharmacy, Surampalem from
26th August to 10th October, 2023 (Every saturday)





PRINCIPAL Aditya College of Pharmacy





CERTIFICATE OF COMPLETION



THIS IS TO CERTIFY THAT

KOTIPALLI MOHAN KRISHNA SAI SRI RAM

bearing the roll no. 203H1R0071
completed the Value added course entitled
"COMPUTER AIDED DRUG DESIGN"
held in Aditya College of Pharmacy, Surampalem from
26th August to 10th October, 2023 (Every saturday)



Aditya College of Pharmacy
SURAMPALEM-533 437





CERTIFICATE OF COMPLETION



THIS IS TO CERTIFY THAT

BALASADI JAYANTHI

bearing the roll no. 213H5R0001
completed the Value added course entitled
"COMPUTER AIDED DRUG DESIGN"
held in Aditya College of Pharmacy, Surampalem from
26th August to 10th October, 2023 (Every saturday)



Aditya College of Pharmacy





CERTIFICATE OF COMPLETION



THIS IS TO CERTIFY THAT

MARRIPUDI PULLAIAH

bearing the roll no. 203H1R0029
completed the Value added course entitled
"COMPUTER AIDED DRUG DESIGN"
held in Aditya College of Pharmacy, Surampalem from
26th August to 10th October, 2023 (Every saturday)



Aditya College of Pharmacy





CERTIFICATE OF COMPLETION





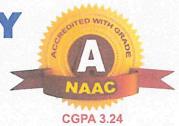
bearing the roll no. 203H1R0008
completed the Value added course entitled
"COMPUTER AIDED DRUG DESIGN"
held in Aditya College of Pharmacy, Surampalem from
26th August to 10th October, 2023 (Every saturday)



Aditya College of Pharmacy
SURAMPALEM-533 437



Approved by PCI, Recognized by UGC (section 2f) ISO 9001:2015 Certified Institution NAAC "A" Accredited with CGPA of 3.24



VALUE ADDED COURSE ON HANDS ON TRAINING ON FTIR FROM BASICS TO ADVANCED

DURATION

04th November, 2023 to 09th
December, 2023
(Every Saturday)

ELIGIBILITY

III B.PHARMACY

RESOURCE PERSON

Mrs.N.Divya,
Associate Professor
COORDINATOR
Ms.K.Sai Privanka

Ms.K.Sai Priyanka, Assistant Professor

E-Certificate will be provided upon successful completion of course

Aditya College of Pharm.
SURAMPALEM- 533 437





Approved by PCI, Recognised by UGC (Section 2f) ISO 90001:2015 Certified Institution NAAC "A" Accredited with CGPA of 3.24

(ADITYA NAGAR, ADB ROAD, SURAMPALEM 533 437, E.G.Dt, Ph.9949876664, 08852-200005)

Website: www.acop.edu.in, Email: office@acop.edu.in

30-10-2023

CIRCULAR

This is to inform that the students of IIIB PHARMACY will be offering a value added course on "HANDS ON TRAINING ON FT-IR FROM BASICS TO ADVANCED" on the below listed dates. Interested students can enroll their names at corresponding coordinator.

Coordinator: Ms. K. Sai Priyanka

Duration:04thNovember, 2023 to09thDecember, 2023 (Every Saturday)

ST STRANSEN

PRINCIPAL
PRINCIPAL
Aditya College of Pharmacy
SURAMPALEM-533 437





Approved by PCI, Recognised by UGC (Section 2f)
ISO 90001:2015 Certified Institution
NAAC "A" Accredited with CGPA of 3.24

(ADITYA NAGAR, ADB ROAD, SURAMPALEM 533 437, E.G.Dt, Ph.9949876664, 08852-200005)

Website: www.acop.edu.in, Email: office@acop.edu.in

COURSE SYLLABUS

DURATION: 30Hrs

COURSE NAME: Value added course on "HANDS ON TRAINING ON FT-IR FROM BASICS TO ADVANCED"

COURSE DESCRIPTION:

This course offers comprehensive hands-on training on Fourier Transform Infrared (FT-IR) spectroscopy, covering fundamental concepts to advanced applications. This course aims to equip participants with the practical skills and theoretical knowledge needed to effectively utilize FT-IR spectroscopy in various scientific and industrial settings.

COURSE OBJECTIVES:

- To provide a thorough understanding of the principles and theory behind FT-IR spectroscopy.
- To train participants in the practical use of FT-IR instruments and software.
- To demonstrate the application of FT-IR in different fields such as chemistry, materials science, and pharmaceuticals.
- To enhance the ability to interpret FT-IR spectra and troubleshoot common issues.
- To familiarize participants with advanced techniques and applications of FT-IR spectroscopy.
- To develop the skills needed to design and conduct FT-IR experiments independently.

COURSE OUTCOMES:

By the end of this course, participants will be able to:

- Understand the basic and advanced principles of FT-IR spectroscopy.
- Operate FT-IR instrumentation with confidence and accuracy.
- Prepare samples and conduct FT-IR experiments.
- Analyze and interpret FT-IR spectra.





Approved by PCI, Recognised by UGC (Section 2f) ISO 90001:2015 Certified Institution

NAAC "A" Accredited with CGPA of 3.24

(ADITYA NAGAR, ADB ROAD, SURAMPALEM 533 437, E.G.Dt, Ph.9949876664, 08852-200005)

- Website: www.acop.edu.in, Email: office@acop.edu.in
- Identify and resolve common problems encountered in FT-IR spectroscopy.
- Apply FT-IR techniques to real-world research and industrial problems.

COURSE MODULES:

DAY 1: 04-11-2023, 6 Hrs

Module 1: Introduction to FT-IR Spectroscopy

- Overview of spectroscopy
- Basic principles of infrared spectroscopy
- Introduction to Fourier Transform Infrared (FT-IR) spectroscopy
- Components of an FT-IR spectrometer
- Comparison between dispersive IR and FT-IR

DAY 2: 11-11-2023, 6 Hrs

Module 2: Instrumentation and Operation

- Detailed look at FT-IR spectrometer components
- Understanding the interferometer and its role
- Detector types and their applications
- Step-by-step guide to operating an FT-IR instrument
- Safety practices and maintenance

DAY 3: 25-11-2023, 6 Hrs

Module 3: Sample Preparation Techniques

- Sample preparation methods for different states (solid, liquid, gas)
- Use of ATR (Attenuated Total Reflectance) and other accessories
- Best practices for sample handling and preparation
- Avoiding common pitfalls in sample preparation





Approved by PCI, Recognised by UGC (Section 2f)
ISO 90001:2015 Certified Institution

NAAC "A" Accredited with CGPA of 3.24

(ADITYA NAGAR, ADB ROAD, SURAMPALEM 533 437, E.G.Dt, Ph.9949876664, 08852-200005)

Website: www.acop.edu.in, Email: office@acop.edu.in

DAY 4: 02-12-2023, 6 Hrs

Module 4: Spectral Analysis and Interpretation

- Basics of spectral data acquisition
- Understanding and interpreting FT-IR spectra
- Identifying functional groups and chemical bonds
- Quantitative and qualitative analysis using FT-IR
- Software tools for spectral analysis

DAY 5: 09-12-2023, 6 Hrs

Module 5: Advanced FT-IR Techniques and Applications

- FT-IR microscopy and imaging
- Time-resolved FT-IR spectroscopy
- High-throughput FT-IR
- Applications in various fields: pharmaceuticals, polymers, environmental science, etc.
- Case studies and recent advancements

REFERENCES:

- 1. Smith, B. C. (2011). Infrared Spectral Interpretation: A Systematic Approach. CRC Press.
- 2. **Stuart, B.** (2004). *Infrared Spectroscopy: Fundamentals and Applications*. John Wiley & Sons.
- 3. Griffiths, P. R., & De Haseth, J. A. (2007). Fourier Transform Infrared Spectrometry. John Wiley & Sons.
- 4. Larkin, P. (2017). Infrared and Raman Spectroscopy: Principles and Spectral Interpretation. Elsevier.





Approved by PCI, Recognised by UGC (Section 2f)
ISO 90001:2015 Certified Institution
NAAC "A" Accredited with CGPA of 3.24

(ADITYA NAGAR, ADB ROAD, SURAMPALEM 533 437, E.G.Dt, Ph.9949876664, 08852-200005)

Website: www.acop.edu.in, Email: office@acop.edu.in

- 5. Colthup, N. B., Daly, L. H., & Wiberley, S. E. (1990). Introduction to Infrared and Raman Spectroscopy. Academic Press.
- 6. Müller, T. J. J. (2013). Green and Sustainable Medicinal Chemistry: Methods, Tools and Strategies for the 21st Century Pharmaceutical Industry. RSC Green Chemistry Series, Royal Society of Chemistry.
- 7. Anastas, P. T., & Warner, J. C. (1998). Green Chemistry: Theory and Practice. Oxford University Press.
- 8. Linstrom, P. J., & Mallard, W. G. (Eds.). (2001). NIST Chemistry WebBook. NIST Standard Reference Database Number 69. National Institute of Standards and Technology, Gaithersburg MD.
- 9. Hollas, J. M. (2004). Modern Spectroscopy. John Wiley & Sons.
- 10. Barth, A. (2007). Infrared spectroscopy of proteins. *Biochimica et Biophysica Acta* (BBA) Bioenergetics, 1767(9), 1073-1101.

STANFORM STANFORM

PRINCIPAL
PRINCIPAL
Aditya College of Pharmacy
SURAMPALEM-533 437

Approved by AICTE & PCI - NEW DELHI, Affiliated to JNTUK KAKINADA (Formerly known as Sri Sai Aditya Institute of Pharmaceutical Sciences & Research) Ph: 99498 76664 Email: office@acop.edu.in Website: www.acop.edu.in

VALUE ADDED COURSE SUMMARY 2023-24

COURSE CODE AND NAME

VFTIR, Hands on training on FT-IR from

basics to advanced

COURSE DURATION

30 Hrs

BRANCH AND YEAR OFFERED

III B.Pharmacy

COURSE INSTRUCTORS

:

Mrs.N.Divya, Associate Professor

COURSE OUTCOME

By the end of this course, participants will be able to Understand the basic and advanced principles of FT-IR spectroscopy, Operate FT-IR instrumentation with confidence and accuracy, Prepare samples and conduct FT-IR experiments, Analyze and interpret FT-IR spectra, Identify and resolve common problems encountered in FT-IR spectroscopy and Apply FT-IR techniques to real-world research and industrial problems.

COURSE TYPE

Self framed course

ASSESSMENT MODE

ATTENDANCE

30 Hours

NO. OF PARTICIPANTS

85

SCHEME OF EXAM

MCQ Offline

DATE OF EXAM

:

11-12-2023

Course coordinator

SURAMPANEM !!

Principal
PRINCIPAL
Aditya College of Pharmag
SURAMPALEM-533 437



Approved by PCI, Recognized by UGC (section 2f) ISO 9001:2015 Certified Institution NAAC "A" Accredited with CGPA of 3.24

Certificate

Of Appreciation

This is to certify that

BALANAGU DINESH VENKAT RAJU,

bearing roll number 213H1R0003 has completed the Value added Course on "HANDS ON TRAINING ON FTIR FROM BASICS TO ADVANCED" held from 04th November, 2023 to 09th December, 2023 (Every Saturday) conducted by Aditya College of Pharmacy, Surampalem.

V. Scila Gidley

Dr. N. Sesha Reddy Chairman Dr. N. Satish Reddy

Vice-Chairman

Can'man _

Dr. K. Ravishankar Principal and Convenor



PRINCIPAL Pharmacy
Aditya College of Pharmacy
SURAMPALFM-533 437



Approved by PCI, Recognized by UGC (section 2f) ISO 9001:2015 Certified Institution NAAC "A" Accredited with CGPA of 3.24

Certificate

Of Appreciation

This is to certify that

VURADASU NAVYA LATHA,

bearing roll number 213H1R0048 has completed the Value added Course on "HANDS ON TRAINING ON FTIR FROM BASICS TO ADVANCED" held from 04th November, 2023 to 09th December, 2023 (Every Saturday) conducted by Aditya College of Pharmacy, Surampalem.

M. Scile Gibby

Dr. N. Sesha Reddy Chairman Dr. N. Satish Reddy Vice-Chairman Dr. K. Ravishankar Principal and Convenor

xam'ana



PRINCIPAL
Aditya College of Pharmacy
SURAMPALEM-533 437



Approved by PCI, Recognized by UGC (section 2f) ISO 9001:2015 Certified Institution NAAC "A" Accredited with CGPA of 3.24

Certificate

Of Appreciation

This is to certify that

MALLA RAVISYAMALA,

bearing roll number 213H1R0026 has completed the Value added Course on "HANDS ON TRAINING ON FTIR FROM BASICS TO ADVANCED" held from 04th November, 2023 to 09th December, 2023 (Every Saturday) conducted by Aditya College of Pharmacy, Surampalem.

M. Scha Gibby

Dr. N. Sesha Reddy Chairman Dr. N. Satish Reddy Vice-Chairman Dr. K. Ravishankar Principal and Convenor

xawia



PRINCIPAL
Aditya College of Pharmacy
SURAMPALEM-533 437



Approved by PCI, Recognized by UGC (section 2f) ISO 9001:2015 Certified Institution NAAC "A" Accredited with CGPA of 3.24

Certificate

Of Appreciation

This is to certify that

GEDDAM NAGA MAHITHA,

bearing roll number 213H1R0013 has completed the Value added Course on "HANDS ON TRAINING ON FTIR FROM BASICS TO ADVANCED" held from 04th November, 2023 to 09th December, 2023 (Every Saturday) conducted by Aditya College of Pharmacy, Surampalem.

M. Scile Tibly

Dr. N. Sesha Reddy Chairman Dr. N. Satish Reddy Vice-Chairman

Dr. K. Ravishankar Principal and Convenor

cawion



PRINCIPAL PRINCI



Approved by PCI, Recognized by UGC (section 2f) ISO 9001:2015 Certified Institution NAAC "A" Accredited with CGPA of 3.24

Certificate

Of Appreciation

This is to certify that

VANGA RAMA KRANTHI,

bearing roll number 213H1R0098 has completed the Value added Course on "HANDS ON TRAINING ON FTIR FROM BASICS TO ADVANCED" held from 04th November, 2023 to 09th December, 2023 (Every Saturday) conducted by Aditya College of Pharmacy, Surampalem.

M. Scha Tibby

Dr. N. Sesha Reddy Chairman Dr. N. Satish Reddy Vice-Chairman

Dr. K. Ravishankar Principal and Convenor

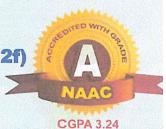
xawima



Aditya College of Pharmacy
SURAMPALFM-533 437



Approved by PCI, Recognized by UGC (section 2f) ISO 9001:2015 Certified Institution NAAC "A" Accredited with CGPA of 3.24



Value-added course on "Green Chemistry and Sustainable Synthesis"

RESOURCE PERSON

Mr.K.Rama Krishna,
Associate Professor,
Aditya College of Pharmacy

COORDINATOR

Mr.B.Raju,
Assistant Professor,
Aditya College of Pharmacy

DURATION

15th December, 2023 to

12th January, 2024 (Every Friday)

ELIGIBILITYIII B.PHARMACY

Janiaa

E-Certificate will be provided upon successful completion of course Aditya College Completion of course Surampalem- 533 437





Approved by PCI, Recognised by UGC (Section 2f)
-ISO 90001:2015 Certified Institution
NAAC "A" Accredited with CGPA of 3.24

(ADITYA NAGAR, ADB ROAD, SURAMPALEM 533 437, E.G.Dt, Ph.9949876664, 08852-200005)

Website: www.acop.edu.in, Email: office@acop.edu.in

04-12-2023

CIRCULAR

All the students of II B.PHARMACY of Aditya college of pharmacy are hereby informed that our college will be offering a value-added course on "Green Chemistry and Sustainable Synthesis" on the below listed dates. Interested students can enroll in this course and can contact the corresponding coordinator for further queries.

Coordinator:Mr.B.Raju

Duration:15th December,2023 to 12th January, 2024 (Every Friday)

EGE OF THE PROPERTY OF THE PRO

PRINCIPAL

PRINCIPAL
Aditya College of Pharmacy
SURAMPALFM-533 437





Approved by PCI, Recognised by UGC (Section 2f)
ISO 90001:2015 Certified Institution
NAAC "A" Accredited with CGPA of 3.24

(ADITYA NAGAR, ADB ROAD, SURAMPALEM 533 437, E.G.Dt, Ph.9949876664, 08852-200005) Website: www.acop.edu.in, Email: office@acop.edu.in

COURSE SYLLABUS

DURATION: 30Hrs

COURSE NAME: Value added course on "Green Chemistry and Sustainable Synthesis"

Course Description:

This course provides a comprehensive introduction to the principles of green chemistry and their application to sustainable synthesis. Students will learn how to design chemical processes that are environmentally friendly, reduce waste, and conserve energy. The curriculum covers the 12 principles of green chemistry, sustainable synthesis techniques, and real-world applications in various industries. Through a combination of lectures, interactive discussions, and hands-on workshops, students will gain the skills needed to implement green chemistry practices effectively.

Course Objectives:

- 1. **Understand Fundamental Principles**: Gain a deep understanding of the 12 principles of green chemistry and their importance in sustainable chemical practices.
- 2. **Develop Sustainable Synthesis Skills**: Learn to design and execute chemical syntheses that are efficient, less hazardous, and environmentally benign.
- 3. **Assess Environmental Impact**: Develop the ability to evaluate and minimize the environmental impact of chemical processes using green chemistry metrics.
- 4. **Apply Green Technologies**: Explore and apply innovative green technologies, including alternative solvents, renewable feedstocks, and catalytic methods, to chemical synthesis.
- 5. **Promote Sustainability**: Instill a commitment to sustainable practices and continuous improvement in chemical processes.

Course Outcomes:

By the end of this course, students will be able to:

1. **Explain Green Chemistry Principles**: Articulate the 12 principles of green chemistry and their applications in various chemical processes.





Approved by PCI, Recognised by UGC (Section 2f)
ISO 90001:2015 Certified Institution

NAAC "A" Accredited with CGPA of 3.24

(ADITYA NAGAR, ADB ROAD, SURAMPALEM 533 437, E.G.Dt, Ph.9949876664, 08852-200005)

Website: www.acop.edu.in, Email: office@acop.edu.in

- 2. **Design Green Syntheses**: Design and implement synthetic pathways that adhere to green chemistry principles, optimizing for efficiency and minimal environmental impact.
- 3. **Evaluate Processes Using Metrics**: Use green chemistry metrics such as E-factor, atom economy, and process mass intensity to assess and improve chemical processes.
- 4. **Utilize Renewable Resources**: Identify and employ renewable feedstocks and alternative solvents in chemical synthesis.
- 5. **Implement Catalytic Methods**: Apply catalytic methods, including biocatalysis and heterogeneous catalysis, to enhance the sustainability of chemical reactions.
- 6. Conduct Life Cycle Assessments: Perform life cycle assessments (LCA) to determine the overall environmental impact of chemical products and processes.

. .

Course Modules

DAY 1: 15-12-2023, 6 Hrs

Module 1: Introduction to Green Chemistry

- Overview and Importance: Definition, history, and relevance of green chemistry.
- 12 Principles of Green Chemistry: Detailed examination of each principle with examples.
- Case Studies: Real-world applications of green chemistry principles in industry and research.

DAY 2: 22-12-2023, 6 Hrs

Module 2: Green Chemistry Metrics and Evaluation

- **Metrics Overview**: Introduction to metrics like E-factor, atom economy, and process mass intensity.
- Calculation and Application: Practical exercises in calculating and applying these metrics to various chemical processes.
- Life Cycle Analysis (LCA): Methods for conducting LCAs and interpreting results to minimize environmental impact.





Approved by PCI, Recognised by UGC (Section 2f) ISO 90001:2015 Certified Institution

NAAC "A" Accredited with CGPA of 3.24

(ADITYA NAGAR, ADB ROAD, SURAMPALEM 533 437, E.G.Dt, Ph.9949876664, 08852-200005)

Website: www.acop.edu.in, Email: office@acop.edu.in

Module 3: Renewable Feedstocks and Green Solvents

- Renewable Feedstocks: Types and sources of renewable feedstocks, and their role in sustainable synthesis.
- Green Solvents: Overview of green solvents, including water, supercritical CO2, ionic liquids, and deep eutectic solvents.
- Solvent-Free Reactions: Techniques and benefits of performing reactions without solvents.

DAY 4: 05-01-2024, 6 Hrs

Module 4: Catalysis in Green Chemistry

- Types of Catalysis: Homogeneous, heterogeneous, and biocatalysis.
- Green Catalysts: Design and use of catalysts that improve reaction efficiency and selectivity while minimizing waste.
- **Applications**: Examples of catalytic processes in green chemistry, including hydrogenation, oxidation, and C-H activation.

DAY 5: 12-01-2024, 6 Hrs

Module 5: Energy Efficiency in Chemical Processes, Green Chemistry Applications and Future Trends

- **Alternative Energy Sources**: Use of microwaves, ultrasound, and photochemistry to enhance reaction conditions.
- **Energy Efficient Techniques**: Methods to reduce energy consumption in chemical processes.
- Case Studies: Examples of energy-efficient processes and their industrial applications.
- Current Applications: Overview of how green chemistry is applied in pharmaceuticals, agrochemicals, and materials science.
- **Innovative Technologies**: Emerging technologies and their potential to further green chemistry objectives.
- Challenges and Solutions: Discussion of current challenges in the field and potential solutions to overcome them.





Approved by PCI, Recognised by UGC (Section 2f)
ISO 90001:2015 Certified Institution
NAAC "A" Accredited with CGPA of 3.24

(ADITYA NAGAR, ADB ROAD, SURAMPALEM 533 437, E.G.Dt, Ph.9949876664, 08852-200005)

Website: www.acop.edu.in, Email: office@acop.edu.in

REFERENCES:

- Anastas, P. T., & Warner, J. C. (1998). Green Chemistry: Theory and Practice. Oxford University Press.
- Clark, J. H., & Macquarrie, D. J. (2002). *Handbook of Green Chemistry and Technology*. Blackwell Science.
- Lancaster, M. (2016). *Green Chemistry: An Introductory Text* (2nd ed.). Royal Society of Chemistry.
- Poliakoff, M., Fitzpatrick, J. M., Farren, T. R., & Anastas, P. T. (2002). Green Chemistry: Science and Politics of Change. *Science*, 297(5582), 807-810.
- Dunn, P. J., Wells, A. S., & Williams, M. T. (2010). Green Chemistry in the Phārmaceutical Industry. Wiley-VCH.
- Tundo, P., & Perosa, A. (2008). Methods and Reagents for Green Chemistry: An Introduction. Wiley-VCH.

STEGE O.

PRINCIPAL

PRINCIPAL

tya College of Pharmac

SURAMPALEM-533 437

A D T Y A COLLEGE OF PHARMACY

Approved by AICTE & PCI - NEW DELHI, Affiliated to JNTUK KAKINADA (Formerly known as Sri Sai Aditya Institute of Pharmaceutical Sciences & Research)

Ph: 99498 76664 Email: office@acop.edu.in Website: www.acop.edu.in

VALUE ADDED COURSE SUMMARY 2023-24

COURSE CODE AND NAME

VGCS, Value added course on Green Chemistry

and Sustainable Synthesis

COURSE DURATION

30 Hrs

BRANCH AND YEAR OFFERED:

II B.Pharmacy

COURSE INSTRUCTORS

Dr.K.Rama Krishna, Associate Professor

COURSE OUTCOME

By the end of this course, students will be able to Explain the 12 principles of green chemistry and their applications in various chemical processes, Design synthetic pathways that adhere to green chemistry principles, optimizing for efficiency and minimal environmental impact, Use metrics like E-factor, atom economy, and process mass intensity to assess and improve chemical processes and Identify and employ renewable feedstocks and alternative solvents in chemical synthesis.

COURSE TYPE

Self framed course

ASSESSMENT MODE

ATTENDANCE

30 Hours

NO. OF PARTICIPANTS

102

SCHEME OF EXAM

MCQ Offline

DATE OF EXAM

.

12-01-2024

Course coordinator



Principal
PRINCIPAL
Aditya College of Pharmacy
SURAMPALEM-533-437





Approved by PCI, Recognized by UGC (section 2f) ISO 9001:2015 Certified Institution NAAC "A" Accredited with CGPA of 3.24

CERTIFICATE

This is to certify that

KOMANDURI E LAKSHMI SAMYUKTHA, bearing roll number 223H1R0084 of II BPharm has completed the Value-Added Course on "Green Chemistry and Sustainable Synthesis" held from 15th December 2023 to 12th January, 2024 conducted by Aditya College of Pharmacy, Surampalem

Dr. N. SESHA REDDY

CHAIRMAN

Dr. N. SATISH REDDY VICE-CHAIRMAN

Dr. K. RAVISHANKAR PRINCIPAL

A CONSTANDATES

PRINCIPAL
Aditya College of Pharmat
SURAMPALEM-533 437



Approved by PCI, Recognized by UGC (section 2f) ISO 9001:2015 Certified Institution NAAC "A" Accredited with CGPA of 3.24



CERTIFICATE

This is to certify that

PALLA RANI, bearing roll number 223H1R0090 of II BPharm has completed the Value-Added Course on "Green Chemistry and Sustainable Synthesis" held from 15th December 2023 to 12th January, 2024 conducted by Aditya College of Pharmacy, Surampalem

M. Scha Realy

N. SESHA REDDY CHAIRMAN Dr. N. SATISH REDDY VICE-CHAIRMAN

Dr. K. RAVISHANKAR PRINCIPAL



Aditya College of Dhamas





Approved by PCI, Recognized by UGC (section 2f) ISO 9001:2015 Certified Institution NAAC "A" Accredited with CGPA of 3.24

CERTIFICATE

This is to certify that

DHIRAJ SAH, bearing roll number 223H1R0072 of II BPharm has completed the Value-Added Course on "Green Chemistry and Sustainable Synthesis" held from 15th December 2023 to 12th January, 2024 conducted by Aditya College of Pharmacy, Surampalem

N. Scha Gibby

Dr. N. SESHA REDDY CHAIRMAN Dr. N. SATISH REDDY VICE-CHAIRMAN

Dr. K. RAVISHANKAR PRINCIPAL



PRINCIPAL
Aditya College of Pharmacol
SURAMPALEM-533 437



Approved by PCI, Recognized by UGC (section 2f) ISO 9001:2015 Certified Institution NAAC "A" Accredited with CGPA of 3.24



CERTIFICATE

This is to certify that

BUSALA GOWTHAMI, bearing roll number 223H1R0069 of II BPharm has completed the Value-Added Course on "Green Chemistry and Sustainable Synthesis" held from 15th December 2023 to 12th January, 2024 conducted by Aditya College of Pharmacy, Surampalem

M. Scha Redby

r. N. SESHA REDDY CHAIRMAN Dr. N. SATISH REDDY VICE-CHAIRMAN

Dr. K. RAVISHANKAR PRINCIPAL

A CHAMBAIN A

Aditya College of Pharmac SURAMPALEM-533 437





CGPA 3.24

Approved by PCI, Recognized by UGC (section 2f) ISO 9001:2015 Certified Institution NAAC "A" Accredited with CGPA of 3.24

CERTIFICATE

This is to certify that

BARAVA RAMYA, bearing roll number 223H1R0005 of II BPharm has completed the Value-Added Course on "Green Chemistry and Sustainable Synthesis" held from 15th December 2023 to 12th January, 2024 conducted by Aditya College of Pharmacy, Surampalem

ر، ڪريڪ ڪو ه او Dr. N. SESHA REDDY CHAIRMAN

Dr. N. SATISH REDDY VICE-CHAIRMAN

Dr. K. RAVISHANKAR PRINCIPAL



PRINCIPAL
Aditya College of Pharmac

Approved by PCI, Recognized by UGC (section 2f)
ISO 9001:2015 Certified Institution
NAAC "A" Accredited with CGPA of 3.24



Value added course on
"Health guidance and First aid education"

COURSE COORDINATOR

Dr. Divya S Nair, Asst.Professor, Aditya college of pharmacy

RESOURCE PERSON

Dr. P. Vineela
Asst. Professor,
Aditya college of
pharmacy

OURATION

10th
February to
16th March
2024 (Every
Saturday)

I B.PHARM STUDENTS ELIGIBILIT

E-Certificate will be provided typology of Pharmacy successful completion of course





(Affiliated to JNTUK, Approved by AICTE)

(ADITYA NAGAR, ADB ROAD, SURAMPALEM 533 437, E.G.Dt, Ph.9949876664, 08852-200005)

Website: www.acop.edu.in, Email: office@acop.edu.in

01-02-2024

CIRCULAR

This is to inform all **IB.PHARMACY**students that, our college will be offering a Value Added Course on **"Health guidance and First aid education"** on the dates listed below. Students interested to enrolling in this value-added course should contact the appropriate coordinator.

Coordinator:Dr. Divya S Nair

Duration:10th February to16th March2024 (Every Saturday)

C COSMINANT C

PRINCIPAL PRINCIPAL

Aditya College of Pharmac SURAMPALFM-533 437





Approved by PCI, Recognised by UGC (Section 2f)
ISO 90001:2015 Certified Institution
NAAC "A" Accredited with CGPA of 3.24

(ADITYA NAGAR, ADB ROAD, SURAMPALEM 533 437, E.G.Dt, Ph.9949876664, 08852-200005) . Website: www.acop.edu.in, Email: office@acop.edu.in

COURSE SYLLABUS

DURATION: 36Hrs

COURSE NAME: Value added course on "Health guidance and First aid education"

Course Description:

This course is designed to provide essential knowledge and practical skills in health guidance and first aid. It is aimed at individuals who want to be better prepared to handle health emergencies and provide basic medical assistance. The course covers a range of topics, from understanding common health issues to performing lifesaving techniques. Participants will gain the confidence and competence needed to respond effectively in emergency situations.

Course Objectives:

- To impart fundamental knowledge of common health issues and their management.
- To teach basic first aid techniques and emergency response skills.
- To enhance awareness of health and safety practices.
- To prepare participants to provide immediate and effective assistance in medical emergencies.
- To promote understanding of the importance of health education and preventive care.
- To develop the skills necessary for conducting health guidance sessions and workshops.

Course Outcomes:

By the end of this course, participants will be able to:

- Recognize and manage common health conditions.
- Perform essential first aid procedures such as CPR, wound care, and choking relief.
- Assess emergency situations and make informed decisions.
- Implement health and safety measures to prevent injuries and illnesses.
- Educate others on health maintenance and emergency preparedness.
- Conduct basic health guidance sessions in their communities or workplaces.





Approved by PCI, Recognised by UGC (Section 2f) ISO 90001:2015 Certified Institution NAAC "A" Accredited with CGPA of 3.24

(ADITYA NAGAR, ADB ROAD, SURAMPALEM 533 437, E.G.Dt, Ph.9949876664, 08852-200005)

Website: www.acop.edu.in, Email: office@acop.edu.in

Course Modules:

DAY 1: 10-02-2024, 6 Hrs

Module 1: Introduction to Health Guidance

- Overview of health guidance and its importance
- Understanding the principles of health education
- Role of health guidance in community well-being
- Basics of preventive health care and lifestyle management

DAY 2: 17-02-2024, 6 Hrs

Module 2: Basic First Aid Principles

- Introduction to first aid and its significance
- Legal and ethical considerations in first aid
- The primary survey: DRABC (Danger, Response, Airway, Breathing, Circulation)
- The secondary survey: head-to-toe assessment

DAY 3: 24-02-2024, 6 Hrs

Module 3: First Aid Techniques and Procedures

- Cardiopulmonary resuscitation (CPR) for adults, children, and infants
- Management of choking (Heimlich maneuver)
- Wound care and bandaging techniques
- Treatment of burns, fractures, and sprains
- Handling bleeding and shock

DAY 4: 02-03-2024, 6 Hrs

Module 4: Managing Common Medical Emergencies

- Recognizing and responding to heart attacks and strokes
- First aid for respiratory emergencies (asthma, allergic reactions)





Approved by PCI, Recognised by UGC (Section 2f) ISO 90001:2015 Certified Institution

NAAC "A" Accredited with CGPA of 3.24

(ADITYA NAGAR, ADB ROAD, SURAMPALEM 533 437, E.G.Dt, Ph.9949876664, 08852-200005)

Website: www.acop.edu.in, Email: office@acop.edu.in

- Handling seizures and diabetic emergencies
- Poisoning and overdose management
- Emergency childbirth procedures

DAY 5: 09-03-2024, 6 Hrs

Module 5: Health and Safety Practices

- Creating a safe environment at home, school, and workplace
- Understanding and using personal protective equipment (PPE)
- Hygiene and infection control practices
- Nutrition and exercise for health maintenance
- • Mental health first aid and support

DAY 6: 16-03-2024, 6 Hrs

Module 6: Conducting Health Guidance and First Aid Workshops

- Planning and organizing health education sessions
- Effective communication skills for health educators
- Developing and using educational materials and resources
- Engaging the community in health and safety initiatives
- Evaluating the impact of health guidance programs

References

- 1. American Red Cross. (2021). First Aid/CPR/AED Participant's Manual. Staywell Publishing.
- 2. St John Ambulance. (2016). First Aid Manual: The Authorised Manual of St John Ambulance, St Andrew's First Aid and the British Red Cross. Dorling Kindersley.
- 3. Mayo Clinic. (2020). Mayo Clinic Guide to Self-Care. Mayo Clinic Health Solutions.



:

ADITYA COLLEGE OF PHARMACY



Approved by PCI, Recognised by UGC (Section 2f)
ISO 90001:2015 Certified Institution
NAAC "A" Accredited with CGPA of 3.24

(ADITYA NAGAR, ADB ROAD, SURAMPALEM 533 437, E.G.Dt, Ph.9949876664, 08852-200005)

Website: www.acop.edu.in, Email: office@acop.edu.in

- 4. World Health Organization. (2018). *Basic Emergency Care: Approach to the Acutely Ill and Injured*. WHO Press.
- 5. American Heart Association. (2020). *Heartsaver First Aid CPR AED Student Workbook*. American Heart Association.
- 6. National Safety Council. (2019). First Aid, CPR, and AED Essentials. Jones & Bartlett Learning.

E CONTRIBUTION OF THE PROPERTY OF THE PROPERTY

PRINCIPAL

PRINCIPAL Aditya College of Pharmac: SURAMPALEM-533 427

Approved by AICTE & PCI - NEW DELHI, Affiliated to JNTUK KAKINADA (Formerly known as Sri Sai Aditya Institute of Pharmaceutical Sciences & Research)

Ph: 99498 76664 Email: office@acop.edu.in Website: www.acop.edu.in

VALUE ADDED COURSE SUMMARY 2023-24

COURSE CODE AND NAME

VHFE, Health guidance and First aid education

COURSE DURATION

36 Hrs

BRANCH AND YEAR OFFERED:

I B.Pharmacy

COURSE INSTRUCTORS

Dr.P. Vineela, Asst. Professor

COURSE OUTCOME

Upon successful completion, This course is designed to provide essential knowledge and practical skills in health guidance and first aid. It is aimed at individuals who want to be better prepared to handle health emergencies and provide basic medical assistance. The course covers a range of topics, from understanding common health issues to performing lifesaving techniques. Participants will gain the confidence and competence needed to respond effectively in emergency situations.

COURSE TYPE

Self framed course

ASSESSMENT MODE

ATTENDANCE

36 Hours

NO. OF PARTICIPANTS

92

SCHEME OF EXAM

MCQ Offline

DATE OF EXAM

:

18-03-2024

Course coordinator



SURAMPALEM-533







Approved by PCI, Recognized by UGC (section 2f) ISO 9001:2015 Certified Institution NAAC "A" Accredited with CGPA of 3.24

CERTIFICATE

OF APPRECIATION

This is to certify that

TROYEE DEY, bearing roll number 233H1R0093 of I BPharm has completed the Value-Added Course on "Health guidance and First-aid education" held from 10th February to 16th March 2024 conducted by Aditya College of Pharmacy, Surampalem.

Dr. N. SESHA REDDY

CHAIRMAN

Dr. N. SATISH REDDY VICE-CHAIRMAN

Dr. K. RAVISHANKAR PRINCIPAL

PRINCIPAL
Aditya College of Pharmacy





Approved by PCI, Recognized by UGC (section 2f) ISO 9001:2015 Certified Institution NAAC "A" Accredited with CGPA of 3.24

OF APPRECIATION

This is to certify that

SATTI LEKHA BHARGAVI, bearing roll number 233H1R0058 of I BPharm has completed the Value-Added Course on "Health guidance and First-aid education" held from 10th February to 16th March 2024 conducted by Aditya College of Pharmacy, Surampalem.

M. Scile Tibber Dr. N. SESHA REDDY **CHAIRMAN**

VICE-CHAIRMAN

Dr. K. RAVISHANKAR PRINCIPAL



CGPA 3.24

Approved by PCI, Recognized by UGC (section 2f) ISO 9001:2015 Certified Institution NAAC "A" Accredited with CGPA of 3.24

ERTIFICATE

OF APPRECIATION

This is to certify that

KARNAM MOUNIKA, bearing roll number 233H1R0031 of I BPharm has completed the Value-Added Course on "Health guidance and First-aid education" held from 10th February to 16th March 2024 conducted by Aditya College of Pharmacy, Surampalem.

M. Sche Tidly **CHAIRMAN**

Dr. N. SATISH REDDY VICE-CHAIRMAN

Dr. K. RAVISHANKAR

PRINCIPAL







Approved by PCI, Recognized by UGC (section 2f) ISO 9001:2015 Certified Institution NAAC "A" Accredited with CGPA of 3.24

OF APPRECIATION

This is to certify that

GUDURI SPANDANA DEVI, bearing roll number 233H1R0023 of I BPharm has completed the Value-Added Course on "Health guidance and First-aid education" held from 10th February to 16th March 2024 conducted by Aditya College of Pharmacy, Surampalem.

N. Scha Ridby

CHAIRMAN

Dr. N. SATISH REDDY VICE-CHAIRMAN

Dr. K. RAVISHANKAR

PRINCIPAL







Approved by PCI, Recognized by UGC (section 2f) ISO 9001:2015 Certified Institution NAAC "A" Accredited with CGPA of 3.24

CERTIFICATE

OF APPRECIATION

This is to certify that

GARIKINA MARY, bearing roll number 233H1R0017 of I BPharm has completed the Value-Added Course on "Health guidance" and First-aid education" held from 10th February to 16th March 2024 conducted by Aditya College of Pharmacy, Surampalem.

Dr. N. SESHA REDDY

CHAIRMAN

Dr. N. SATISH REDDY VICE-CHAIRMAN

Dr. K. RAVISHANKAR PRINCIPAL

Aditya College of Pharmac



ISO 9001:2015 Certified Institu NAAC "A" Accredited with CGPA of 3.24

Value-added course on "Applied Pharmaceutical compounding and Dispensing techniques"

DURATION

22nd Febraury to 28th March, 2024 (every Thursday)

ELIGIBILITY

I & II Pharm D

RESOURCE PERSON

Mr.K.Venkateswarulu, Associate Professor, Aditya College of Pharmacy

COORDINATOR

Mrs.A.Hema Kiranmayi Assistant Professor, Aditya College of Pharmacy

College of Pharmacy completion of course E-Certificate will be provided

SURAMPALEM)





Approved by PCI, Recognised by UGC (Section 2f)
ISO 90001:2015 Certified Institution
NAAC "A" Accredited with CGPA of 3.24

(ADITYA NAGAR, ADB ROAD, SURAMPALEM 533 437, E.G.Dt, Ph.9949876664, 08852-200005)

Website: www.acop.edu.in, Email: office@acop.edu.in

12-02-2024

CIRCULAR

All the students of I& II Pharm D of Aditya college of pharmacy are hereby informed that our college will be offering a value-added course on "Applied Pharmaceutical compounding and Dispensing techniques" on the below listed dates. Interested students can enroll in this course and can contact the corresponding coordinator for further queries.

Coordinator: Mrs. A. Hema Kiranmayi

Duration:22nd February to 28th March, 2024 (Every Thursday)



PRINCIPAL

PRINCIPAL Aditya College of Pharmacy SURAMPALFM-533 437





Approved by PCI, Recognised by UGC (Section 2f)
ISO 90001:2015 Certified Institution
NAAC "A" Accredited with CGPA of 3.24

(ADITYA NAGAR, ADB ROAD, SURAMPALEM 533 437, E.G.Dt, Ph.9949876664, 08852-200005)

Website: www.acop.edu.in, Email: office@acop.edu.in

COURSE SYLLABUS

DURATION: 36Hrs

COURSE NAME: Value added course on "Applied Pharmaceutical compounding and Dispensing techniques"

Course Description:

This course provides an in-depth understanding of the principles and practices involved in the compounding and dispensing of pharmaceutical products. It emphasizes the application of theoretical knowledge to practical scenarios, ensuring that students can accurately prepare, compound, and dispense medications in various forms. The course covers essential techniques, regulatory standards, and quality control measures required for safe and effective pharmaceutical practice.

Course Objectives

- 1. To understand the fundamental principles of pharmaceutical compounding and dispensing.
- 2. To develop proficiency in preparing and compounding various pharmaceutical dosage forms.
- 3. To ensure knowledge of regulatory standards and quality control measures in pharmaceutical compounding.
- 4. To enhance skills in the safe and accurate dispensing of medications.
- 5. To foster an understanding of the ethical and legal aspects of pharmaceutical practice.
- 6. To integrate theoretical knowledge with practical applications in a professional setting.

Course Outcomes

By the end of the course, students will be able to:

1. Demonstrate proficiency in compounding various pharmaceutical dosage forms, including solutions, suspensions, emulsions, creams, ointments, and capsules.





Approved by PCI, Recognised by UGC (Section 2f) ISO 90001:2015 Certified Institution NAAC "A" Accredited with CGPA of 3.24

(ADITYA NAGAR, ADB ROAD, SURAMPALEM 533 437, E.G.Dt, Ph.9949876664, 08852-200005)

Website: www.acop.edu.in, Email: office@acop.edu.in

- 2. Apply regulatory standards and quality control measures to ensure the safety and efficacy of compounded medications.
- 3. Accurately dispense medications, ensuring proper labeling, packaging, and patient counseling.
- 4. Navigate the ethical and legal considerations in pharmaceutical compounding and dispensing.
- 5. Utilize problem-solving skills to address and resolve compounding and dispensing challenges.
- 6. Implement best practices in pharmaceutical compounding and dispensing in a professional healthcare setting.

.

Course Modules

DAY 1: 22-02-2024, 6 Hrs

Module 1: Introduction to Pharmaceutical Compounding

- History and evolution of pharmaceutical compounding
- Basic principles and terminology
- Types of compounded preparations

DAY 2: 29-02-2024, 6 Hrs

Module 2: Dosage Forms and Compounding Techniques

- Solid dosage forms: powders, capsules, tablets
- Liquid dosage forms: solutions, suspensions, emulsions
- Semi-solid dosage forms: creams, ointments, gels

DAY 3: 07-03-2024, 6 Hrs

Module 3: Equipment and Materials in Compounding

- Commonly used equipment and their maintenance
- Selection and handling of raw materials
- Compounding records and documentation





Approved by PCI, Recognised by UGC (Section 2f) ISO 90001:2015 Certified Institution

NAAC "A" Accredited with CGPA of 3.24

(ADITYA NAGAR, ADB ROAD, SURAMPALEM 533 437, E.G.Dt, Ph.9949876664, 08852-200005)

Website: www.acop.edu.in, Email: office@acop.edu.in

DAY 4: 14-03-2024, 6 Hrs

Module 4: Regulatory Standards and Quality Control

- Regulatory guidelines and compliance (e.g., USP, FDA)
- Quality assurance and quality control measures
- Good compounding practices (GCP)

DAY 5: 21-03-2024, 6 Hrs

Module 5: Dispensing Techniques and Patient Counseling

- Prescription interpretation and verification
- Accurate medication dispensing and labeling
- Patient counseling and education on compounded medications

DAY 6: 28-03-2024, 6 Hrs

Module 6: Ethical and Legal Considerations in Compounding

- Legal requirements and professional responsibilities
- Ethical issues and decision-making in compounding
- Case studies and real-world applications

REFERENCES:

- Allen, L. V., Popovich, N. G., & Ansel, H. C. (2014). Ansel's Pharmaceutical Dosage Forms and Drug Delivery Systems (10th ed.). Lippincott Williams & Wilkins.
- Allen, L. V. (2012). The Art, Science, and Technology of Pharmaceutical Compounding (4th ed.). American Pharmacists Association.
- Trissel, L. A. (2012). Trissel's Stability of Compounded Formulations (4th ed.). American Pharmacists Association.
- Allen, L. V. (2013). *Remington: The Science and Practice of Pharmacy* (22nd ed.). Pharmaceutical Press.
- U.S. Pharmacopeial Convention (2022). *United States Pharmacopeia and National Formulary (USP-NF)*. United States Pharmacopeial Convention.





Approved by PCI, Recognised by UGC (Section 2f)
ISO 90001:2015 Certified Institution
NAAC "A" Accredited with CGPA of 3.24

(ADITYA NAGAR, ADB ROAD, SURAMPALEM 533 437, E.G.Dt, Ph.9949876664, 08852-200005)

Website: www.acop.edu.in, Email: office@acop.edu.in

- Beringer, P., DerMarderosian, A., Felton, L., et al. (2017). Remington: Essentials of Pharmaceutics. Pharmaceutical Press.
- Shrewsbury, R. P. (2017). *Applied Pharmaceutics and Contemporary Compounding* (4th ed.). Morton Publishing Company.
- Green, C. R. (2015). Compounding Sterile Preparations (4th ed.). American Society of Health-System Pharmacists.
- Hoag, S. W. (2017). Handbook of Pharmaceutical Excipients (8th ed.). Pharmaceutical Press.
- Newton, D. W., & Anderson, S. L. (2011). A Practical Guide to Contemporary Pharmacy Practice (3rd ed.). Lippincott Williams & Wilkins.

CONTAINED CONTAI

PRINCIPAL

PRINCIPAL Aditya College of Pharmacy SURAMPALFM-533 437

A D T A A COLLEGE OF PHARMACY

Approved by AICTE & PCI - NEW DELHI, Affiliated to JNTUK KAKINADA (Formerly known as Sri Sai Aditya Institute of Pharmaceutical Sciences & Research)

Ph: 99498 76664 Email: office@acop.edu.in Website: www.acop.edu.in

VALUE ADDED COURSE SUMMARY 2023-24

COURSE CODE AND NAME

VPCD, Applied Pharmaceutical compounding and

Dispensing techniques

COURSE DURATION

36 Hrs

BRANCH AND YEAR OFFERED:

I & II Pharm D

COURSE INSTRUCTORS

Mr.K. Venkateswarulu, Associate Professor

COURSE OUTCOME

By the end of the course, students will be able to demonstrate proficiency in compounding various pharmaceutical dosage forms, including solutions, suspensions, emulsions, creams, ointments, and capsules. They will apply regulatory standards and quality control measures to ensure the safety and efficacy of compounded medications, accurately dispense medications with proper labeling, packaging, and patient counseling, and navigate the ethical and legal considerations in pharmaceutical compounding and dispensing. Additionally, students will utilize problem-solving skills to address and resolve compounding and dispensing challenges and implement best practices in pharmaceutical compounding and dispensing in a professional healthcare setting.

COURSE TYPE

Self framed course

ASSESSMENT MODE

ATTENDANCE

36 Hours

NO. OF PARTICIPANTS

50

SCHEME OF EXAM

MCQ Offline

DATE OF EXAM

31

DATE OF EXAM :

30-03-2024

A. Hema Kiranmayi
Course coordinator

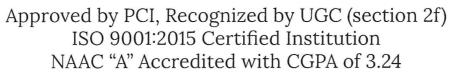


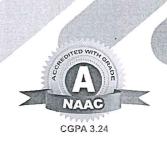
Principal

PRINCIPAL
Aditya College of Pharmac
SURAMPALEM-533 437



A COLLEGE OF PHARM





CERTIFICATE OF PARTICIPATION

This is to certify that

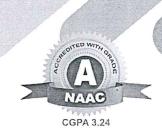
ARNAB GIRI, bearing roll number 223H1T0005 of II PharmD has completed the Value-Added Course on "Applied Pharmaceutical compounding and Dispensing techniques" held from 22nd February to 28th March, 2024 conducted by Aditya College of Pharmacy, Surampalem.

> N. Sche Tibby **CHAIRMAN**



YA COLLEGE OF PHARMAC'

Approved by PCI, Recognized by UGC (section 2f) ISO 9001:2015 Certified Institution NAAC "A" Accredited with CGPA of 3.24



CERTIFICATE OF PARTICIPATION

This is to certify that

MOYO ACTION, bearing roll number 233H1T0013 of I PharmD has completed the Value-Added Course on "Applied Pharmaceutical compounding and Dispensing techniques" held from 22nd February to 28th March, 2024 conducted by Aditya College of Pharmacy, Surampalem.

> N. Sche Tedly **CHAIRMAN**



NAAG
CGPA 3.24

Approved by PCI, Recognized by UGC (section 2f) ISO 9001:2015 Certified Institution NAAC "A" Accredited with CGPA of 3.24

CERTIFICATE OF PARTICIPATION

This is to certify that

MUDAVATH YASWANTH NAIK, bearing roll number 223H1T0022 of II PharmD has completed the Value-Added Course on "Applied Pharmaceutical compounding and Dispensing techniques" held from 22nd February to 28th March, 2024 conducted by Aditya College of Pharmacy, Surampalem.

CHAIRMAN

VICE-CHAIRMAN

PRINCIPAL

PRINCIPAL Aditya College of Pharmac



/A COLLEGE OF PHARM

Approved by PCI, Recognized by UGC (section 2f) ISO 9001:2015 Certified Institution NAAC "A" Accredited with CGPA of 3.24



CERTIFICATE OF PARTICIPATION

This is to certify that

SAAHITI VODDEPALLY, bearing roll number 233H1T0018 of I PharmD has completed the Value-Added Course on "Applied Pharmaceutical compounding and Dispensing techniques" held from 22nd February to 28th March, 2024 conducted by Aditya College of Pharmacy, Surampalem.

M. Scile Tible

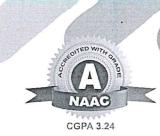
CHAIRMAN





A COLLEGE OF PHARM

Approved by PCI, Recognized by UGC (section 2f) ISO 9001:2015 Certified Institution NAAC "A" Accredited with CGPA of 3.24



CERTIFICATE OF PARTICIPATION

This is to certify that

YAKA BHAVITHA SRI, bearing roll number 233H1T0025 of I PharmD has completed the Value-Added Course on "Applied Pharmaceutical compounding and Dispensing techniques" held from 22nd February to 28th March, 2024 conducted by Aditya College of Pharmacy, Surampalem.

> N. Scile Tibby **CHAIRMAN**



Approved by PCI, Recognized by UGC (section 2f)
ISO 9001:2015 Certified Autonomous Institution
NAAC "A" Accredited with CGPA of 3.24

VALUE ADDED COURSE ON "HANDLING OF ANIMALS"

RESOURCE PERSON

Dr.K.Ravi Shankar,
Professor & Principal,
Aditya college of Pharmacy

CO ORDINATOR

S.Amala
Asst.Professor,
Aditya college of Pharmacy

DURATION:

23rd March To 20th April, 2024 (Every Saturday)

ELIGIBILITY:

III PHARM D



PRINCIPAL Pharmacy
Aditya College of Pharmacy

Students who are having interest to join this course must be enrol their names at respective coordinator





Approved by PCI, Recognised by UGC (Section 2f)
ISO 90001:2015 Certified Institution
NAAC "A" Accredited with CGPA of 3.24

(ADITYA NAGAR, ADB ROAD, SURAMPALEM 533 437, E.G.Dt, Ph.9949876664, 08852-200005)

Website: www.acop.edu.in, Email: office@acop.edu.in

11-03-2024

CIRCULAR

This is to inform that the students of **IIIPHARM D** will be offering a value-added course on "**Handling of Animals**" on the below listed dates. Interested students can enroll their names at corresponding coordinator.

Coordinator: Mrs. S. Amala

DURATION:23rd March to 20th April, 2024 (Every Saturday)

PRINCIPAL
PRINCIPAL
Aditya College of Pharmacy
SURAMPALFM-533 437

A D T Y A COLLEGE OF PHARMACY

Approved by AICTE & PCI - NEW DELHI, Affiliated to JNTUK KAKINADA (Formerly known as Sri Sai Aditya Institute of Pharmaceutical Sciences & Research)

Ph: 99498 76664 Email: office@acop.edu.in Website: www.acop.edu.in

VALUE ADDED COURSE SUMMARY 2023-24

COURSE CODE AND NAME

VHA, Value added course on Handling of Animals

COURSE DURATION

30 Hrs

BRANCH AND YEAR OFFERED:

III Pharm D

COURSE INSTRUCTORS

Dr.K.Ravi Shankar, Principal and Professor

COURSE OUTCOME

Upon successful completion, students will be able to Understand the species-specific biology of laboratory animals, Maintain laboratory animals with appropriate diet and facilities, Identify environmental factors that may influence animal experiments and Apply euthanasia, anesthesia, and analgesia for minor and long-lasting procedures.

COURSE TYPE

Self framed course

ASSESSMENT MODE

ATTENDANCE

30 Hours

NO. OF PARTICIPANTS

24

SCHEME OF EXAM

MCQ Offline

DATE OF EXAM

22-04-2024

Course coordinator



Principal
PRINCIPAL
Aditya College of Pharmacy
SURAMPALEM-533







Approved by PCI, Recognized by UGC (section 2f) ISO 9001:2015 Certified NAAC "A" Accredited Autonomous Institutions

Certificate

Of Appreciation

This is to certify that

DIDLA SUSHMITHA, bearing roll number 213H1T0006 of III PharmD has completed the Value-Added Course on "Handling of Animals" held from 23rd March to 20th April 2024 conducted by Aditya College of Pharmacy, Surampalem.

N. Scha Ridby

Dr. N. Sesha Reddy Chairman Dr. N. Satish Reddy Vice-Chairman Dr. K. Ravishankar Organizing Director



PRINCIPAL
Aditya College of Pharmacy
SURAMBALEMARIS 107





Approved by PCI, Recognized by UGC (section 2f) ISO 9001:2015 Certified NAAC "A" Accredited Autonomous Institutions

Certificate

Of Appreciation

This is to certify that

PALIVELA JAYA JOSHNA, bearing roll number 213H1T0015 of III PharmD has completed the Value-Added Course on "Handling of Animals" held from 23rd March to 20th April 2024 conducted by Aditya College of Pharmacy, Surampalem.

N. Scha Ridby

Dr. N. Sesha Reddy Chairman Dr. N. Satish Reddy Vice-Chairman

SUEGE CONTROL OF THE PROPERTY OF THE PROPERTY

Dr. K. Ravishankar Organizing Director

PRINCIPAL Aditya College of Pharmacy





Approved by PCI, Recognized by UGC (section 2f) ISO 9001:2015 Certified NAAC "A" Accredited Autonomous Institutions

Certificate

Of Appreciation

This is to certify that

SEELAMSETTI SRI MAHALAKSHMI, bearing roll number 213H1T0021 of III PharmD has completed the Value-Added Course on "Handling of Animals" held from 23rd March to 20th April 2024 conducted by Aditya College of Pharmacy, Surampalem.

N. Sche Ribby

Dr. N. Sesha Reddy Chairman Dr. N. Satish Reddy Vice-Chairman

E TEGE ON

Dr. K. Ravishankar Organizing Director

xaniana

PRINCIPAL
Aditya College of Charmacv
SURAMPALEM COL





Approved by PCI, Recognized by UGC (section 2f) ISO 9001:2015 Certified NAAC "A" Accredited Autonomous Institutions

Certificate

Of Appreciation

This is to certify that

TANATSWA SHALOM PARIRENYATWA, bearing roll number 213H1T0026 of III PharmD has completed the Value-Added Course on "Handling of Animals" held from '23rd March to 20th April 2024 conducted by Aditya College of Pharmacy, Surampalem.

N. Sche Ridby

Dr. N. Sesha Reddy Chairman

Dr. N. Satish Reddy Vice-Chairman

Dr. K. Ravishankar Organizing Director

Camiana





Approved by PCI, Recognized by UGC (section 2f) ISO 9001:2015 Certified NAAC "A" Accredited Autonomous Institutions

Certificate

Of Appreciation

This is to certify that

AKULA HARSHITHA, bearing roll number 213H1T0002 of III PharmD has completed the Value-Added Course on "Handling of Animals" held from 23rd March to 20th April 2024 conducted by Aditya College of Pharmacy, Surampalem.

N. Sche Ribby

Dr. N. Sesha Reddy Chairman Dr. N. Satish Reddy Vice-Chairman Dr. K. Ravishankar Organizing Director

PRINCIPAL
Aditya College of Pharmacy
SURAMPALEM 532 437