



Dr.MACS BIO-PHARMA PRIVATE LIMITED

Plot No: 32/A, Western Hills, opp. JNTU, Kukatpally,

HYDERABAD-500 085, Telangana, INDIA

Tel: 040-49531211, Mobile: +91-9177211758

Email: marketing@drmacspharma.com

MEMORANDUM OF UNDERSTANDING

This Memorandum of Understanding is made and entered into as of 7th January 2019

BETWEEN

Dr.MACS Bio-Pharma Pvt.Ltd, a company incorporated in accordance with the laws of INDIA and having its factory situated at Plot-79/B&C, EPIP, Pasamylaram, Patancheru, Sangareddy (Dist),Hyderabad-502307,India represented by Dr.Murugulla Adharvana Chari, Director, Dr.MACS Bio-Pharma Pvt.Ltd

AND

RBVRR Women's College of Pharmacy, Approved by PCI, Affiliated to Osmania University having its office at Barkatpura, Hyderabad-500027 Telangana (hereinafter referred to as "RBVRR").

WITNESSETH

- A. WHEREAS, Dr.MACS Bio-Pharma Pvt.Ltd and RBVRR have entered into an MOU, dated 7th January 2019, for the purpose of R&D Activities
- B. Now therefore, in consideration of the mutual understandings, covenants and obligations hereinafter set forth, Dr.MACS Bio-Pharma Pvt.Ltd and RBVRR here to agree as follows:

A. Role of RBVRR:

1. RBVRR will conduct the research and development work provided by Dr.MACS Bio-Pharma Pvt.Ltd scale synthesis of certain API and Drug intermediates, plan for innovation of the existing Synthetic route of Dr.MACS Bio-Pharma Pvt.Ltd from the date of signing this MOU.
2. RBVRR has the requisite technical manpower to perform the various R&D projects

3. RBVRR also has the necessary labs with equipment and instruments to carry out the projects.
4. RBVRR shall update from time to time to the concerned executive of Dr.MACS Bio-Pharma Pvt.Ltd about the progress of the work.
5. RBVRR shall strictly adhere to the timelines of the projects.
6. RBVRR will maintain strict confidentiality of the R&D projects.
7. RBVRR shall not divulge any of the information of the R&D works carried out to any third party, if so Dr.MACS Bio-Pharma Pvt.Ltd will have every right to take legal action against RBVRR
8. RBVRR will not publish the R&D works in any of the scientific journals or present the data in any of the conferences
9. RBVRR shall provide the soft copy and the hardcopy of the project data.

B. Role of Dr.MACS Bio-Pharma Pvt.Ltd:

1. Will provide the details/documentation of the R&D projects to RBVRR for evaluation.
2. Arranging Placements for B. Pharm/ M. Pharm students.
3. Providing drug samples API/Intermediates for students pursuing projects.
4. Providing summer internship program for B.Pharm and M.Pharmacy students.
5. Utilization of research facilities for analysis of samples for M. Pharm students

C. The above MOU is for an initial period of 36 months,

D. The parties agree not to disclose during the term of this MOU to any third parties the existence or nature of the business

IN WITNESS WHEREOF, THE PARTIES HERETO HAVE CAUSED THIS MOU TO BE DULY EXECUTED BY THEIR RESPECTIVE OFFICERS

Dr.MACS Bio-Pharma Pvt.Ltd



Signature:

Name: Dr.Murugulla Adharvanachari

Title: Director

RBVRR Women's College of Pharmacy

Signature :

Name: Dr M. Sumakanth

Title : Principal

PRINCIPAL

RBVRR Women's College of Pharmacy
Barkatpura, Hyderabad - 500 027 (TS)

**Industry: Plot No: 79/B & C, EPIP Pashamylaram, Patancheru,
Sangareddy, PIN- 502 307, Tel:08455223655, Mob: +91-7780453094**



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7. RBVRR shall not divulge any of the information of the R&D works carried out to any third party, if so Dr.MACS Bio-Pharma Pvt.Ltd will have every right to take legal action against RBVRR
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Dr.MACS Bio-Pharma Pvt.Ltd



Signature:

Name: Dr.Murugulla Adharvanachari

Title: Director

RBVRR Women's College of Pharmacy

Signature :

Name: Dr M. Sumakanth

Title : Principal

PRINCIPAL

RBVRR Women's College of Pharmacy
Barkatpura, Hyderabad - 500 027 (TS)

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Date: 29-07-2019

TO WHOM SOEVER IT MAY CONCERN

This is to certify that **Ms. Kudumula Sreelatha** and **Ms. Nama Begum**, Students of M. Pharmacy second Year Pharmaceutical Chemistry Branch, bearing roll numbers 170618884005 and 170618884006 studying in RBVRR Women's College of Pharmacy has gone through training for three months at **Dr.MACS Bio-Pharma Pvt.Ltd** on the Synthesis and Characterisation of Compounds/Impurities.

For Dr.MACS Bio-Pharma Pvt.Ltd



Dr.M.Shobha

**Industry: Plot No: 79/B & C, EPIP Pashamylaram, Patancheru,
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Activity Report

Training Provided by Dr. Macs Biopharma Private Limited to M Pharmacy Students of Pharmaceutical Chemistry Branch in Synthesis R&D of RBVRR Women's College of Pharmacy

Introduction: Dr. Macs Biopharma Private Limited, in accordance with the Memorandum of Understanding (MOU) signed with RBVRR Women's College of Pharmacy, initiated a specialized training program focusing on synthesis Research and Development (R&D) for M Pharmacy students specializing in Pharmaceutical Chemistry. The objective was to provide students with practical exposure and hands-on experience in the field of drug synthesis and development.

Training Program Overview:

- Duration: The training program extended over three months during their project work.
- Participants: M Pharmacy students specializing in Pharmaceutical Chemistry from RBVRR Women's College of Pharmacy actively participated in the training sessions.
- Facilitators: Experienced researchers and chemists from Dr. Macs Biopharma Private Limited led the training sessions, providing expertise and guidance in synthesis R&D methodologies.

Training Modules: The training modules encompassed various facets of synthesis R&D within the pharmaceutical industry, including:

1. Principles of Drug Synthesis: Understanding the fundamental principles and techniques involved in the synthesis of pharmaceutical compounds.
2. Synthetic Chemistry Techniques: Hands-on training in synthetic chemistry techniques, including organic synthesis, purification, and characterization of compounds.
3. Reaction Optimization: Strategies for optimizing chemical reactions to enhance yield, purity, and efficiency in drug synthesis.
4. Analytical Methods: Introduction to analytical methods and instrumentation used for compound analysis and characterization.
5. Scale-up Process: Insight into the scale-up process from laboratory synthesis to industrial production, emphasizing scalability and process optimization.

Methodology: The training sessions employed a combination of theoretical lectures, laboratory experiments, and practical demonstrations to provide students with a comprehensive understanding of synthesis R&D concepts and techniques. Participants were actively engaged in experimental work under the guidance of experienced mentors from Dr. Macs Biopharma Private Limited.

Outcome and Impact:

- **Enhanced Practical Skills:** The training program equipped M Pharmacy students with practical skills essential for conducting synthesis R&D in the pharmaceutical industry, enhancing their employability and career prospects.
- **Industry-Relevant Knowledge:** Participants gained insights into industry-standard synthesis methodologies and practices, preparing them for future roles in pharmaceutical research and development.
- **Collaboration Opportunities:** The collaboration between Dr. Macs Biopharma Private Limited and RBVRR Women's College of Pharmacy facilitated knowledge exchange and collaboration opportunities between academia and industry.
- **Professional Development:** The training program contributed to the professional development of students by exposing them to real-world synthesis R&D challenges and solutions.

Conclusion: The training provided by Dr. Macs Biopharma Private Limited to M Pharmacy students specializing in Pharmaceutical Chemistry at RBVRR Women's College of Pharmacy, as part of the MOU between the two institutions, has been instrumental in bridging the gap between academic learning and practical industry requirements in synthesis R&D. The program's success underscores the value of industry-academia collaborations in nurturing skilled professionals for the pharmaceutical sector.