ಮೈಸೂರು ವಿಶ್ವವಿದ್ಯಾನಿಲಯ
UNIVERSITY OF MYSORE

DEPARTMENT OF STUDIES IN MOLECULAR BIOLOGY

Manasagangotri, Mysuru- 570 006

Genesis

The subject "Molecular Biology" is a unique multi-disciplinary post-graduate degree programme offered by the University of Mysore (UOM) in its Manasagangotri campus. The course was started during 2015-16 as a part of the centenary celebrations of the UOM. The Department of Studies (DOS) in Biochemistry provided the necessary infrastructure to run the M.Sc. in Molecular Biology programme in the initial five years. The foundation stone for the new building was laid by Prof. Ved Prakash (the then Chairman, UGC) on December 2016. In 2020, the Molecular Biology department got its independent existence and moved to the new building. The main objective of the department is to expose the students to modern biology without neglecting classical biological sciences and to develop the skills to build their career in research, academics, and industries in the field of life sciences. The department also offers a Ph.D. program in molecular biology. Since it is an upcoming department, it has both challenges and opportunities to grow. Five batches of students have successfully graduated from this department and have been placed in various biological organizations. The alumni members of DOS in Biochemistry have generously contributed books, instruments, and other necessary infrastructure to the department by realizing the importance of molecular biology which assists the growth of the department.

Academic Programme

1. M.Sc. in Molecular Biology

Eligibility : Candidates with Bachelor's Degree in life sci ences with an aggregate minimum of 55% (50 % in case of SC/ST) or equivalent grade.

Duration : Two years (4 Semesters, Choice Based Credit System).

2. Ph.D. (with course work)

Admission : National Fellowships (CSIR/DBT/ICMR/DST-INSPIRE) or through University entrance examination.

Research Projects

- The role of inflammasomes in snakebite envenomation: a possible therapeutic target in local tissue damage.(DST-SERB, India, 2018-2021)
- Development of drug-seeds that target TFF3 in mammary, gastric and hepatocellular carcinoma.(DBT, India, 2019-2022)

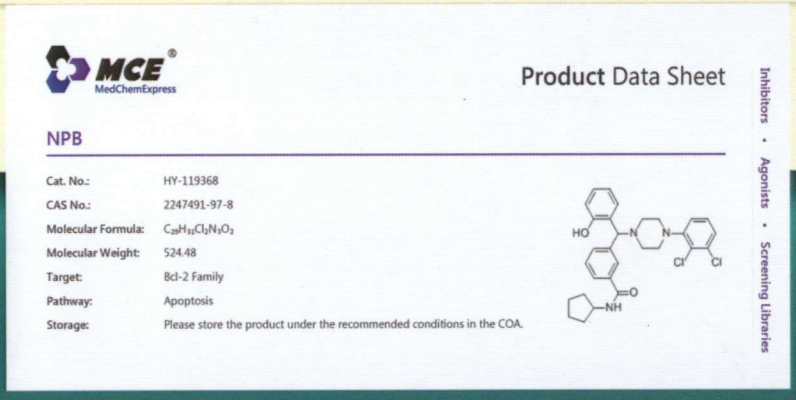
Thrust Areas of Research

- Plant enzymology- Biochemical characterization of plant arginase
- Reproductive Biology of the Indian garden lizard Calotes versicolor
- Major lipid mediators during inflammation
- Cancer Biology : Probing small molecules towards therapeutically important proteins
- Immunobiology : Role of inflammasomes in snake venom-induced toxicity
- Role of plant proteases in wound healing
- Plant pathology: host-pathogen interaction

Research credentials

Sl. No.	Name	Citations	h-Index
1	Gopal Marathe	4514	34
2	Mohan CD	1517	27
3	Rajesh R	1818	23

Product development

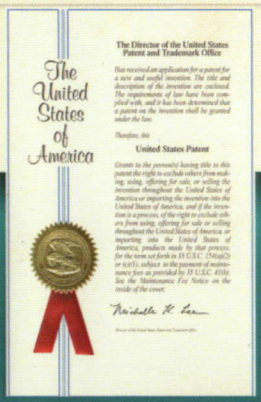

MCE MedChemExpress

Product Data Sheet

Inhibitors • Agonists • Screening Libraries

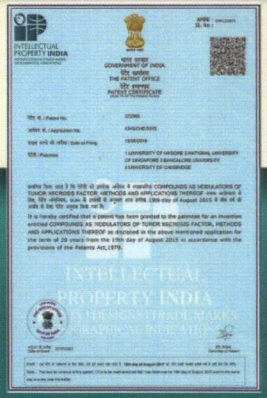
NPB

Cat. No.:	HY-119368
CAS No.:	2247491-97-8
Molecular Formula:	$C_{28}H_{31}Cl_2N_3O_2$
Molecular Weight:	524.48
Target:	Bcl-2 Family
Pathway:	Apoptosis
Storage:	Please store the product under the recommended conditions in the COA.


The United States of America

The Director of the United States Patent and Trademark Office

United States Patent


INTELLECTUAL PROPERTY INDIA

GOVERNMENT OF INDIA

THE PATENT OFFICE

PATENT CERTIFICATE

Infrastructure

Centrifuge, qRT-PCR, Laminar airflow system, inverted microscope, incubator, hot air oven, colorimeter, deep freezers (-20 and -80) CO2 incubator and other routinely used laboratory equipment.

Research Output

PhD guided	2
Publications	206
National Journals	05
International Journals	201
Patents	05 (3 PCT and 1 Indian patent)

International and National collaborations :

- Cleveland Clinic, USA
- Harvard Medical School, USA
- University of Utah, USA
- Wright State University, USA
- Texas Heart Institute, Houston, USA
- Vanderbilt University, USA University of Penn sylvania, USA
- University of Michigan, USA
- Oswald Cruz Foundation, Brazil
- Kaohsiung Medical University, Taiwan
- University of Cambridge, London
- National University of Singapore, Singapore
- University of Maryland Baltimore, USA
- MAHE, Manipal
- NIMHANS, Bangalore
- St. Philomena's College, Mysore
- Kaypeeyes biotech Pvt. Ltd, Mysore
- Ayurvedic Medical College, Mysore
- CSIR- CFTRI, Mysore

Faculty Profile

Dr. Gopal Marathe K Ph.D. Professor

Lipid mediators of inflammation, bacterial lipoproteins, plant enzymology, reproductive biology.

Honours/awards: Visiting Professor: Cleveland Clinic Ohio, USA, Texas Heart Institute, Texas, Kaohsiung Medical University, Taiwan, MAHE, Manipal, SDM, Mangalore University Ujire. Selected as member to "Society for Leukocyte Biology" and "Society for Redox Biology and Medicine", "American Society for Biochemistry and Molecular Biology".

Dr. Mohan CD Ph.D. Assistant Professor

Cancer biology: designing of small molecule inhibitors against pro-inflammatory signalling pathways in cancer.

Honours/awards: NASI-Young Scientist Platinum Jubilee award (2019) conferred by The National Academy of Sciences, India; Prof. Umakant Sinha Memorial award (2020) by the Indian Science Congress Association, Kolkata. Visiting Scientist at Adichunchanagiri Institute for Molecular Medicine. Editorial board member of PLoS One and BMC Complementary and Alternative Medicine and reviewer of 12 journals.

Dr. Rajesh R Ph.D. Assistant Professor

Immunology: Immunopathogenesis of snake venom-induced toxicities, plant proteases in wound healing.

Honours/awards: Reviewer of scientific journals including the Journal of Immunology, Journal of Leukocyte Biology and so on.

Dr. Ragi Jadimurthy Ph.D. Assistant Professor

Molecular plant pathology and bioinformatics-Molecular characterization of oomycetes species. Species delimitation and phylogenetic relationships of multiple fruit rot pathogens of Arecanut. Interaction of phosphonate fungicide on fruit rot pathogens of Arecanut.

Teaching programme is supported by four Guest Faculty Members.

Contact :

The Chairperson

Department of Studies in Molecular Biology

Ph. No-0821-2419697/ 0821-2419624

Email: chairmanmolecularbiology@gmail.com

Website:https://uni-mysore.ac.in/molecular-biology