

VMRF(DU) Salem and Indian Institute of Science, Bangalore

A Memorandum of Understanding was signed between Vinayaka Mission's Research Foundation (DU) and Indian Institute of Science, Bangalore on 1st March 2023 at IISc, Bangalore by Prof. Dr.B.Jaykar, Registrar, VMRF (DU) and Capt.Sridhar Warrier (Retd.), Registrar, IISc in the honorable presence of Prof. Dr. P.K.Sudhir, Vice Chancellor of VMRF (DU), Prof. Dr. Govindan Rangarajan, Director, IISc, Prof. Anantha Suresh, Dean, Mechanical Sciences, IISc and Professors from either side.

- Prof. (Dr.) P.K.Sudhir, Vice Chancellor, VMRF (DU) briefed the IISc team about the origin in 1982 and the growth of VMRF (DU) in to a multidisciplinary University with 24 institutions in Four Campuses. He briefed about the research culture being created in the VMRF (DU) through various mechanisms, the outcomes and the need for collaborative research.
- This MoU between VMRF (DU) & IISc enables Collaborative research between both the Universities, Use of Research Facilities, Joint Publications/Patents/Conducting conferences, exchange of students for research & internship, Joint supervision/guidance of Ph.D & Postdoctoral students, Clinical Trials where ever possible etc.
- Two Research Proposals were presented by the faculty of VMRF (DU). After detailed deliberations, to start with, these two Research Projects from VMRF (DU) were identified for joint research collaboration in the areas of Artificial Intelligence and Organic Chemistry. Prof. Chiranjib Bhattacharya and Prof. C.Jairaman of IISc will collaborate for these projects.
- Vice Chancellor & Registrar of VMRF (DU) had detailed discussions with IISc Professors on how to strengthen the collaboration and the areas of collaboration.
- The VMRF team visited some high end research facilities of IISc and held discussions with the faculty.



MOU ACTIVITIES







SCHOOL OF ARTS AND SCINECE

Vinayaka Missions Chennai Campus, Paiyanoor - 603 104

MOU ACTIVITY REPORT

Title of the Event	:	Research	Collaboration	-	Synthesis	of	2,3-dideoxy	Cyclic	
	Oligosaccharides								
Date	:	22.01	22.01.2024 - 12.07.2024 (6 Months)						
Venue	:	IISc I	IISc Bangalore, Department of Organic Chemistry,						
No. of Participants :		02 - I	02 - Dr. A. Harikrishnan & Prof. Dr. N. Jayaraman						

A Memorandum of Understanding (MoU) was signed between IISc Bangalore and VMRF-DU on March 1, 2023. The goal of this agreement is to encourage academic and research activities through faculty exchange, student exchange, and knowledge sharing for the benefit of both institutions. Dr. A. Harikrishnan of the Department of Chemistry, School of Arts and Science, Vinayaka Missions Chennai Campus Paiyanoor, conducted a research collaboration with Prof. Dr. N. Jayaraman, Chairman, Department of Organic Chemistry, IISc on the project "Synthesis



of 2,3-dideoxy Cyclic Oligosaccharides" from 22-01-2024 to 12.07.2024 (6 months).

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Carbohydrates have several, defined chiral centers, which allows for synthetic alterations. Carbohydrate-based small macrocycles are also ideal hosts for encapsulating guest

compounds. Naturally occurring cyclodextrins (CDs) have also been extensively explored. Cyclo-oligomerization, which modifies glycosidic linkages, results in newer forms of carbohydrate macrocycles.



Date:09.02.2024

Dr. A. Hari Krishnan,

Joint Collaborative Project,

Organic Dept. is permitted

to enter the IISc. Campus.

Discussion with nobleauarte prof. Morten Peter Meldal – Danish Chemist.





Attended My Lab Research scholar thesis colloquium



HPLC – Analysis for sample



Flash column chromatography



NMR (400 MHz) - Analysis for sample



Mass Spectrometry



Isothermal titration calorimetry - (ITC)

