

# **NOORUL ISLAM CENTRE FOR HIGHER EDUCATION**

(Declared as Deemed-to-be-University under section 3 of U.G.C Act 1956)

**Kumaracoil - 629180, Kanyakumari Dist., Tamilnadu**

## **CENTRE FOR BIOLOGICAL SCIENCES**

The centre for biological sciences (CBS) of Noorul Islam University was started for promoting **R&D programmes** in newly emerging and challenging areas of Biological sciences and its interdisciplinary subjects. The centre is composed of eminent scientists and technologists drawn from various Universities / National laboratories and Industries. This centre is assisted by steering committees in various disciplines of science and its interdisciplinary subjects. The centre's objective is to conduct time-bound research proposals for college students. The centre staff members have backgrounds in variety of biology and interdisciplinary subjects like chemistry, physics, mathematics and computational biology. The centre provides an integrated and cohesive approach for applying R & D programme and short term courses.

The centre will also organize Conferences / Seminars / Workshops / Short term courses / Tailor made courses in the advanced biological fields. The vibrant research team of CBS provide consultancy to the industries which need the R & D support.

### **THE OBJECTIVES OF CBS:**

- The main objective of the centre is to promote collaborative research, to create access to advanced research facilities and to impart training to young researchers in frontier areas of the respective subjects.
- To initiate and promote research in newly emerging and frontier areas of science and its interdisciplinary fields
- To encourage young teaching faculties to take up challenging R & D activities
- To give special encouragement to active students from various departments of this University

- To organize the summer and winter schools
- To provide guidance to Ph.D students of other institutes on experimental trouble shooting & research methodology
- To give support for Ph.D students those who are deprived of equipmental / laboratory facilities and
- To strengthen the collaborative research initiatives in Biological Sciences among Universities and institutes

### **STEERING COMMITTEE:**

The members of the steering committee are committed to bring up the centre as the pioneer research laboratory. The external members of the steering committee are nominated based on their expertise, experience, interest and willingness. The committee shall also function as a peer review committee for all its activities.

#### **Steering Committee Officials**

<b>SL. NO</b>	<b>NAME AND ADDRESS</b>	<b>POSITION</b>
1	<b>DR. M. MURUGAN</b> , Assistant professor, Department of Biomedical Engineering, NICHE	Coordinator
2	<b>DR. P. NAGENDRA PRASAD</b> , Professor, Department of Biomedical Engineering, NICHE	Member
3	<b>DR. J. JOSEPH</b> , Associate professor, Department of Chemistry, NICHE	Member
4	<b>DR. MOINAK BANERJEE</b> , Scientist E-II, Rajiv Gandhi Centre for Biotechnology, Thiruvananthapuram	Member
5	<b>DR. M. ARUNACHALAM</b> , Prof and Head, SPKCES, Manonmanium Sundaranar University, Alwarkurichi	Member

## Research Team

Sl. No	Name of the Investigator	Department	Designation
1.	Dr. M. Murugan	Biomedical Engineering, NICHE	Asst. Professor
2.	Dr. J. Joseph	Chemistry, NICHE	Associate professor
3.	Dr. P. Nagendra prasad	Biomedical Engineering, NICHE	Professor
4.	Dr. Minikumari Amma	Biomedical Engineering, NICHE	Professor
5.	Dr. P.K Praseetha	Nanotechnology, NICHE	Asst. Professor
6.	Dr. V.N. Meena Devi	Physics, NICHE	Asst. professor
7.	Dr. M. Muthukumar	Mathematics, NICHE	Asst. professor
8.	Dr.N.Nagasree	Chemistry, NICHE	Asst. Professor

## FUNDED PROJECTS :

### 1). DR. M. MURUGAN, Assistant professor, Dept. of Biomedical Engineering, NICHE

**Project Title :** "Identification of Bar-coding Sequence and Molecular Characterization of Puntius Species to Resolve the Taxonomic Ambiguities using Cytochrome B Gene"

**Amount :** Rs. 18,11,000.00

**Funding Agency :** DBT

**Duration :** 2012 - 2015

### 2). Dr. P. NAGENDRA PRASAD, Professor, Dept. of Biomedical Engineering, NICHE

**Project Title :** Physio-Chemical Analysis of Various Bio-diesel from Bio-energy Crops

**Funding Agency :** DST

**Amount :** Rs 18.74,000.

**Duration :** 2013 – 2015

3). **Dr. J. JOSEPH**, Associate professor, Dept. of Chemistry, NICHE

**Project Title** : Therapeutic Agents for Alzheimer's Diseases: Synthesis, Characterization and Pharmacological Studies of Copper Complexes with 2-amino benzothiazole derivatives

**Funding Agency** : CSIR

**Amount** : 18,00,000

**Duration** : 2011-2014

4). **Dr. J. JOSEPH**, Associate professor, Dept. of Chemistry, NICHE

**Project Title** : Design And Development of Therapeutic Substitute for Existing Anti Tuberculosis agents Derived from Copper Complexes

**Funding Agency** : DST

**Amount** : 27,00,000

**Duration** : 2013-2016

#### **FACILITIES:**

Well equipped laboratory in various discipline like:

- ❖ Molecular Biology
- ❖ Analytical Chemistry
- ❖ Clinical Biochemistry
- ❖ Microbiology
- ❖ Bioinformatics
- ❖ Biodiesel production and testing lab
- ❖ Bio-Inorganic Lab

The instrument available are:

- Laminar air flow Bench
- Deep freezer (-40<sup>0</sup>C)
- Centrifuge
- Incubator
- Microscopes (Compound and Stero)
- Hot air Oven

- Ophthalmoscope
- Kymograph
- Colorimeter
- Water bath
- Electrophoresis Unit (Vertical and Horizontal)
- Biochem autoanalyser
- Double distillation Unit
- Viscosity meter
- UV/Vis
- Water Analyzer
- Microbial Analysis
- DND Cleavage Study
- Electrochemical Analyzer
- FTIR