

Research

The college has taken very active initiative in extending the research and development stream with high priority. MES Central College Committee has recruited candidates with PhD and post doctoral experience who have nourished research culture in the college. At present the college has 22 PhD degree holders, and 27 ongoing PhD scholars at the faculty level. Two of the faculties are approved research guides of the University of Calicut and they are now guiding a total of 11 PhD scholars. Many faculty members have minor or major research projects from various national and international funding agencies.

- Research is mainly supported by funding agencies like the University Grants Commission and the Department of Science and Technology, Govt. of India.
- Seminars, workshops and conferences are also supported by the UGC and Kerala State Higher Education Council.
- Besides, many academic programmes and seminars are supported by the College Management.

The following table provides details of major financial allocation and utilization for the last four years.

Research Monitoring and Advisory Committee (hereafter RMAC) is entrusted to co-ordinate the entire research initiatives of the college. This includes creating awareness on the proposal submission, project work, documentation, final bill settlement etc. For the Purpose, RMAC has been constituted with Principal as the Chairman, one senior Associate Professor as coordinator, and giving due consideration to science, Arts and commerce, with a PhD holder as member.

RMAC Responsibilities include:

- Advancing of funds for sanctioned projects –
Upon presentation of the approval order of the project by the PI, the College will hand over an advance amount for the immediate execution of the research project.
- Providing seed money
The College used to provide seed money to the PI, depending on the urgency and relevance of the case.
- Autonomy to the principal investigator/coordinator for utilizing overhead charges
As decided by the RMAC, 70 % of the OHC will be utilized for the development of research atmosphere in the departments.
- Timely release of grants
The head accountant used to make surety in the accurate and timely release of the grants and settlement of the bills.
- Timely auditing
Efforts have been taken to ensure the proper discharge of the claims as envisaged by the funding authorities.

- Submission of utilization certificate to the funding authorities
RMAC has been entrusted to monitor the successful completion of the projects and settlement claims in time.

Interdisciplinary Research Promotion

Research is promoted in a number of ways at the college and significant priority is assigned to Interdisciplinary Research.

- Interdisciplinary Research between/among different departments of the College

The department of Zoology and Chemistry are jointly working on the project, on tree holes insects and the water quality parameters of the water inhabited by the insects. More collaboration is envisaged in the near future.

- Collaboration with national/international institutes / industries.

a) MoU-

1. United Nations Environment Programme (UNEP)- Eco Peace Leadership Centre, South Korea has signed an MoU agreement to make an earmarked contribution to MES Mampad College in the amount of USD 2,000 for the project of DrAnoop Das, titled “Strengthening Capacity and Awareness in the Conservation of Sacred Groves in the Southern Western Ghats” in India.
2. United Nations Development Program UNDP, Govt of India with TBGRI, Palode and MES Mampad College have signed an MoU agreement to make an earmarked contribution to TBGRI in the amount of 15,86,650 for the project of Dr. Balakrishnan and Dr.Anoop Das, titled “Identification of Indicator Species for Special Conservation Efforts in India High Range Munnar Landscape Project ” in India.
3. All process have been finalized on signing the MOU with Department of International Affairs, Leshan Normal University (LNU), Sichuan, Peoples Republic of China. The president of the Leshan Normal University will be visiting our institute in March 2016 for signing the MoU.

Research Promotion through Exchange of Teachers:

Dr. Anoop Das has served as visiting professor in the Department of Biosciences, Leshan Normal University (LNU), Sichuan, Peoples Republic of China, and further plans of faculty exchange are underway.

The College takes serious efforts to attract researchers of eminence to visit the campus and interact with teachers and students. The Workshop on AIS in collaboration with Kerala Forest Research Institute and the APFISN (Asia-Pacific Forest Invasive Species Network), was such a venture. More instances of the kind are listed below:

- a. Dr. Anoop Das along with two research fellows collaborated with KFRI, Peechi, to organize a workshop on Alien Invasive Species. Dr. TV Sajeev, and Dr. Henry James from Nederland were the experts in the workshop. The APFISN has been established as a response to the immense costs and dangers posed by invasive species to the sustainable management of forests in the Asia-Pacific region. It is a cooperative alliance of 32 member countries of the Asia-Pacific Forestry Commission (APFC). The network operates under the umbrella of APFC which is a statutory body of the Food and Agricultural Organization of the United Nations. The APFISN focusses on inter-country cooperation that helps to detect, prevent, monitor, eradicate and/or control forest invasive species in the Asia-Pacific region.
- b. Dr. Freek Molleman, (Netherlands) working in IISER, Trivandrum had given a talk on Butterfly wing damages: a window to prey predator relationships for the students of Dept. of Zoology. Dr. Anoop Das, Drafted a proposal with Dr. Ullasa, IISER and Dr. Freek Molleman, on Seasonal polyphenism, and polymorphism in the dry season form of the common evening brown, *Melanatis leda*, in the Western Ghats.
- c. In 2015 academic year the Department of Zoology, MES Mampad College hosted Prof (Dr.) Marcel Holyoak from the University of California, USA who was selected as the Erudite Scholar by the Kerala State higher Education Council. The renowned professor visited the campus on 23rd February 2015 and started his one week programme by interaction with the young research scholars of the Centre for Conservation Ecology of the Department of Zoology. The session was very useful for the budding researchers to enhance their research thoughts and future plans. Research publication, scientific writing, global trends in the field of science and technology and research methodology preparation were the major topics elaborated and discussed in the morning session. In the second session, the Professor was introduced to the college members by the Zoology department faculty and the function was chaired by the Principal of the College. Prof. Holyoak interacted with the Graduate and Post Graduate students of the Zoology department. He made an excellent talk and interaction on Global climate change and its wide range effects on earth.
- d. DIVERSITAS in the Western Pacific and Asia (DIWPA) of Kyoto University, Japan has been organising the “capacity building of scientists from developing countries” for the past few years. Dr. Anoop Das was selected as a faculty of International Field Biology Course (IFBC) conducted in Mae Klong Watershed Research Station, Kanchanaburi Province, Western Thailand from 8th to 14th November, 2015.
- e. Dr. Anoop Das presented a paper titled “Functional diversity of aquatic insects in water-filled tree holes in the tropical forests of the Western Ghats, India” (2015) page 34-35, in

proceedings of 32nd International Union of Biological Sciences' General Assembly and Conference, Berlin, 14–16 December . Dr. Anoop Das, has been selected as member scientist for IUBS and one among the ten young scientists with travel award being given globally, to give a presentation at the 32nd International Union of Biological Sciences' General Assembly and Conference held in Berlin, during 14–16 December 2015.

- f. Dr. K.S Anoop Das – Selected for Group Study Exchange Program, in the USA. Dr. K S AnoopDas, of the Department of Zoology was selected for the Group Study Exchange Programme for Rotary International, for getting exposure to the vocational training and cultural exchange held at Mississippi and Louisiana, during 21st March to 22nd April 2013, for a duration of one month.

- g. Dr. K.S Anoop Das worked as Visiting Professor with the “Sichuan Institute Key Laboratory for Protecting Endangered Birds in the Southwest Mountains, Leshan Normal University”, during 24th May to 25th June 2015, with a scholarship support of 20000 RMB. He had also managed to write some papers, project proposals and conducted classes to the students of college of life sciences. He had successfully completed the field work in the mountains which have developed a clear idea on how the natural forest has been partitioned along an altitudinal gradient.

- h. Dr. Anoop Das represented India, at United Nations Environment Programme UNEP-Eco Peace Leadership Centre, South Korea Asia Pacific Environment Forum, South Korea. UNEP signed a MOU agreement to make an earmarked contribution to MES Mampad College in the amount of USD 2,000 for the project for DrAnoop Das, titled “Strengthening Capacity And Awareness In The Conservation of Sacred Groves in the Southern Western Ghats” in India.