

FACULTY DEVELOPMENT PROGRAM (FDP)

The Role of Research Collaboration and Funding in Higher Education to Achieve Academic Excellence

The Department of Chemistry, in collaboration with the AIU-USTM-Academic & Administrative Development Centre organized an online One Week Faculty Development Programme titled **The Role of Research Collaboration and Funding in Higher Education to Achieve Academic Excellence** " from June 24-29, 2024, with 46 participants.

Inaugural Session, June 24, 2024: Prof. Saket Khuswaha, Vice Chancellor of Rajiv Gandhi University, Arunachal Pradesh The session started with a brief introduction of AIU and its role by the Nodal Officer, Dr. Monalisa Bora Deka, Director IQAC, USTM. She highlighted about the list of 5 FDPs organized by the AIU-USTM from January to June 2024. **Prof. Saket Khuswaha, Vice Chancellor of Rajiv Gandhi University, Arunachal Pradesh was the chief Guest of this inaugural session.** Prof. Khuswaha appreciated USTM for the successful in organizing successful FDPs. Prof. Khuswaha talk was mainly aimed at the introduction of NEP and its role of universities for successful implementation. He stressed on developing collaborative research in different field of interests between RGU and USTM. Prof. Khuswaha also highlighted on the fact how the collaborative research would help in strengthening the connections of the two universities under the umbrella of NEP. He also talked about how some Indian Universities are extending collaborations beyond the boundaries with western countries like Spain for developing high level research. Prof. Khuswaha answered the queries of participants and talked about the importance of signing a MoU between universities before starting any collaborative work in order to avail the facilities. He concluded the talk by appreciating the remarkable journey of USTM and its growth. This was followed by the talk by Prof. G. D. Sharma spoke about the speaker and the importance of AIU. This was followed by a brief vote of thanks by Dr. Sarifuddin Gazi, HOD, Department of Chemistry.

Prof. Probodh Bora, Director of Research, Assam Agricultural University, Guwahati, Assam, gave a very insightful and detailed talk on research proposals. He gave a step-by-step detailed instruction on how to generate and utilize the idea for writing proposals after fruitful discussion and understanding. The talk highlighted the role of research and the precautions needed for writing a proposal. He also stated the time needed for research proposal should be sufficient for writing the detailed proposal and asked the participants to kindly check the updated format for proposal writing. He also urged the participants to write the project summary with sufficient information so that it will be clear, well addressed, background and justification of the problem or hypothesis. He also stated that the budget proposed should be project specific and frame the budget accordingly to the supplied guidelines. The participants were highly delighted with his talk. Prof. Bora concluded his talk by providing detailed information to all the queries asked by the participants.

Dr. Munima B. Sahariah, Associate Professor II, Institute of Advanced Study in Science and Technology (IASST), Guwahati, Assam. Dr. Sahariah talk was mainly focussed on different Schemes available under the umbrella of major funding agencies like Department of Science and Technology (DST) and Anusandhan National Research Foundation (ANRF). She also talked about the interdisciplinary schemes like Teachers Associateship for Research Excellence (TARE), Start Up Research Grant (SRG), Mathematical Research Impact Centric Support (MATRICS) and State University Research Excellence (SURE). She gave detailed information for each of these research grants. In addition to this, Dr. Sahariah also highlighted different grants under ANRF previously SERB like SERB SUPRA, SERB IMPRINT, SERB POWER Grant specially for women, SERB SIRE (international research collaboration), etc. This session provided the participants an exposure to different research schemes which is very beneficial to design a proposal according to the requirement.

Prof. Kalpana Sarathy, Dean, Tata Institute of Social Sciences (TISS), Guwahati, Assam was the 1st speaker for the FDP Day 4 session. Prof. Kalpana Sarathy mainly focussed on the role of social sciences in the multidisciplinary research. Prof. Sarathy talked on how physical and biological sciences can collaboratively work on a common goal. She talked about the qualitative and quantitative approaches involved in the Social Sciences research. The session was actually more of interactive sessions where the participants shared different ideas and goals adopted in development of certain idea for collaborative research between natural and social sciences.

Prof. Brototi Biswas, Department of Geography & Mizoram University, Aizawl was the 2nd speaker for the Day 4 session. Prof. Biswas spoke on a very emerging topic i.e, Application of Geographic Information System (GIS) and Remote Sensing (RS) on multidisciplinary research. The talk gave a complete explanation about the role of GIS and how to use different GIS software like QGIS, ARC GIS, ERDAS. These software supports viewing, editing, printing, and analysis of geospatial data in a range of data formats. She also gave an insightful information on RS and how these systems work. It provides valuable data for mapping, environmental monitoring and data management. She also showed how data can be obtained from satellite and the problems can be identified and studied. Prof. Biswas also focussed how these tools can be utilized successfully to monitor certain interdisciplinary research works like air quality monitoring, healthcare facility etc.

Prof. Chira Ranjan Bhattacharya, Department of Chemistry, Assam University Silchar talk was mainly aimed on the need of funds or collaboration in R&D. He also highlighted the fact how the GDP of R&D in India is declining in comparison to other developing countries like Japan, South Korea, China etc. He also added that the need to develop the R&D and how it can be fulfilled via collaborations. He also added that the funding of any research project is mainly depends on the idea and execution. Prof. Bhattacharya also added different government funding agencies like DST, DBT, DRDO as well as ICSSR in the area of social sciences. He also highlighted different fellowships for students from different backgrounds willing to enrol in Ph.D. The talk provided a clear picture about the different protocols and steps needed to formulate a successful research proposal for the participants from different backgrounds.

Prof. Vimal Katiyar, Coordinator, Centre of Excellence for Sustainable Polymers, IIT Guwahati, Assam started his session with a brief introduction about IIT Guwahati. Prof. Katiyar talk is mainly aimed on how different research collaborations can be carried out with different academic institutions and industries. He also added about different induction programs and facilities which can be availed by the interested participants for collaborative research with IIT Guwahati. Prof. Katiyar also added that in order to collaborate with industries we need to write about the proposal in multidisciplinary area.

The session started with a brief report by AIU Nodal Officer, Dr. Monalisa Bora Deka who is also Director IQAC, USTM. She highlighted about the speakers of 5 FDPs organized by the AIU-USTM from June 24th to 29th, 2024. This was followed by the introduction of the honourable **Chief Guest Prof. Dibakar Ch. Deka, Vice Chancellor, Mizoram University** by host Dr. Amlan Jyoti Kalita. Prof. Deka, thanked the AIU and USTM for successfully organizing such an informative FDP. His talk was mainly aimed at the role of FDP in developing good collaboration between universities. He also thanked the organizers for timely and systematic arrangement of the program.

The next speaker of the session was **Guest of Honour, Prof. Suranjan Das, Vice Chancellor, Adamas University, Kolkata**. Prof. Das stretched on how the innovations becomes answerable between natural sciences and social sciences. He highlighted the fact the pursuit of research is inevitably related to the pedagogy system of education. He also said that research sustainability through students involves both learning and unlearning processes, which are essential for progress and adaptation in academic. He also adds the importance of such FDPs on the growth of the faculty members. This was followed by brief feedback on the FDP by participants. The participants appreciated the successful arrangement of the program with the

eminent speakers on interdisciplinary research which gave them valuable insights on proposal writing and presence of various funds. The HoD, Chemistry, Dr. Sariffuddin Gazi gave a brief introduction about the different projects, facilities and faculties of the department. This was further added by Dr. Golam Mohiuddin who highlighted the fact that allied fields are beneficiary for obtaining a fruitful project.

This was followed by the talk by Prof. G. D. Sharma, Vice- Chancellor, USTM who spoke about the importance of a collaborative approach in research that emphasizes exploring social phenomena through experimental methods. He also added the importance of collaboration by citing different realistic societal examples. In this aspect, he added that vaccine development benefitted our society through collaboration program. He also stated that how MoU will be helpful in running smooth collaborative program. He also added that next year AIU-USTM will arrange FDPs where the faculties can further strengthen their interests.

The program was concluded by vote of thanks from Dr. R. K. Sharma, Advisor, Dr. Sharma thanked all the officials of AIU and USTM including Prof. G. D. Sharma, Vice Chancellor, USTM and President, AIU; Dr. Pankaj Mittal, Secretary General AIU and Dr. Amarendra Pani, Joint Director & Head Research, Convener, AADC. He also extended his thanks to the guest Prof. Dibakar Ch. Deka and Prof. Suranjan Das for their insightful talk. The vote of thanks was further extended by Dr. Monalisa Bora Deka. She thanked each speakers of the sessions and also HoD, Chemistry, Dr. Sariffuddin Gazi; Prof. Enamul Karim, Dean, SOAS, Departmental Coordinators Dr. Golam Mohiuddin & Dr. Aditi Saikia including coordinator host of the program Dr. Amlan Jyoti Kalita for successfully and systematically arranging the FDP.