Report on "How to Improve Research Skills," A Workshop Organized by Teaching Learning Centre, BITS Pilani, Pilani Campus.

The Teaching Learning Centre (TLC), BITS Pilani, Pilani campus, organized a workshop on "How to Improve Research Skills" for Ph.D. Scholars of BITS Pilani, Pilani Campus from 27th January to 29th January 2024. The workshop was intended to disseminate knowledge about developing multiple skills that aim to nurture good research. Professor N. Sundararajan (Retd.), School of Electrical & Electronic Engineering, Nanyang Technological University, Singapore, was the resource person for the workshop. The workshop was attended by 58 Ph.D. Scholars/Post Graduate students. The objectives of the workshop have been clearly defined and implemented through four categories such as

- 1. Imparting crucial research skills such as deep-thinking habits, a questioning mind, and liberal thinking.
- 2. Operationalization of research from defining the research problem to literature review to solving the problem.
- 3. Communication of research findings through paper writing and conference presentations.
- 4. Awareness as well as knowledge of ethical research practices.

The inaugural function was held on the afternoon of 27th January. The inaugural session focused on research preparation and planning. It was a comprehensive session explicating broader themes from understanding research and its goals to topic selection tools and techniques to justification and development of research proposal. On 28th January, the forenoon session dealt with an effective literature review focused on multiple sources of online databases, search tools, etc. Moreover, the session enlightened the scholars on integrating the Artificial Intelligence tools. The afternoon session was one of the most significant ones, which was not limited to writing an influential research paper but even elaborated in detail on how to communicate the research findings effectively with both the readers and the reviewers. The second day's session was winded up by looking at how to handle the review, whether acceptance or rejection.

The final session was on 29th January. This session was particularly engaged in research ethics. It covered a more comprehensive range of ethical practices, varying from engineering and research ethics to plagiarism and duplication. The entire workshop was based on the resource person's experiences and was quite interactive. The valedictory session was on 29th January. Professor Shibani Khanra Jha, the Faculty-in-charge of TLC, offered her valedictory remarks highlighting the significance and applicability of (Specific, measurable, achievable, relevant, and time-bound) SMART goals in research. Professor Jha felicitated the resource person, and the participants shared their learning experiences during the valedictory session. The valedictory session was concluded with vote of thanks by Dr. Veena's, a member of TLC.

Post-workshop TLC received quite a lot of enthusiasm from the participants, and they shared their learning experience as beneficial based on real critical thinking and a practical approach. The student interaction has been organic since its content delivery was primarily derived from real-life scenarios and experiences. The participants lauded Professor Sundararajan's teaching method and stated the possible practical benefits they would derive from this workshop.