

Faculty Development Programme (FDP)

Open Source Software for Teaching and Research

Academic and Administrative Development Centre (AIU-AADC), Berhampur University, in collaboration with the Association of Indian Universities (AIU) and the Department of Library and Information Science, Berhampur University, inaugurated a week-long Advanced Training Programme (ATP) on Open Source Software for Teaching and Research from August 21st to 26th August 2023. The programme aimed to equip the participants with the necessary skills and knowledge to effectively leverage open-source software for educational and research purposes. Sixty-six (66) participants, including faculty members, research scholars from social sciences, humanities, basic sciences, and library professionals from different colleges and universities across India, were registered for the programme. Among the participants, there were 35 male and 31 female candidates. The ATP had 12 sessions covering various topics and hands-on training on Virtual Learning Environment (VLE), Moodle LMS, Mendeley and Zotero, Bibliometrics, Vosviewer and R, Latex, Meta-Analysis, use of AI for teaching and research.

The sessions were designed to provide a comprehensive understanding of Open Source Software (OSS) for teaching and research, and practical sessions were also included to ensure that the participants gained hands-on experience. 11 distinguished speakers from institutes of national importance like IIT, IIM, Central universities, and State Universities, delivered their sessions during ATP. During the inaugural function, Dr. Mrutyunjay Swain, Programme Convener and AADC Nodal Officer at AIU-AADC, Berhampur University, delivered the welcome address, setting the tone for the event's proceedings. Dr. Jyotshna Sahoo, Head of the Department of Library and Information Science and the Programme Convener, warmly welcomed the participants and introduced the distinguished guests. Dr. Raj Kishor Kampa, Programme Coordinator, provided an insightful introduction to the core themes and objectives of the Advanced Training Programme.

The Guest of Honour, Dr. Amarendra Pani, Joint Director & Head of the Research Division at the Association of Indian Universities, New Delhi, shared valuable perspectives on the role of open-source software in advancing education and research. Prof. Ramesh C Gaur, Dean, Director (Library & Information), and Head of Kalanidhi Division at Indira Gandhi National Centre for the Arts (IGNCA), New Delhi, delivered a keynote address as the Chief Guest, emphasizing the significance of open source tools in academia. Prof. Geetanjali Dash, Hon'ble Vice Chancellor of Berhampur University, Berhampur, offered her insights and visions for integrating open-source software in educational institutions. The ceremony was concluded with a vote of thanks by Dr. Jyotshna Sahoo, the Programme Convener, expressing gratitude to the participants and speakers.

During the first day of the ATP, Professor Ashish Khosla from Shoolani University presented a comprehensive exploration of the effective utilization of AI tools to transform pedagogy and research. The second session of the 1st day was taken by Professor Parthasarathi Mukhopadhyay from Kalyani University, WB, who delved into the concept of the Four Quadrants, namely e-content, e-tutorials, web resources, and assessments within the virtual learning environment. Prof. Mukhopadhyay extensively elaborated on implementing open-source Moodle software across each quadrant. He provided a practical demonstration using the Gnomio Moodle cloud website, showcasing its potential as a teaching platform.

On day two, Prof. Manas Ranjan Patra, former Professor Department of Computer Science, at Berhampur University discussed the application of various open-source software for teaching and research. He provided hands-on training on Weka, a collection of machine-learning algorithms for data mining tasks. Dr. Biswanath Dutta of Documentation Research and

Training Centre (DRTC), ISI, Bangalore, discussed the learning management system during the second half of the second day.

On the third day, Dr. Biswanath Dutta conducted an extended session and offered hands-on training for installing XAMPP and Moodle software, emphasizing the integration of Moodle into teaching and learning. Dr. Deepjyoti Kalita, from the Department of Library & Information Science at Cotton University, provided practical training on Mendeley and Zotero reference management software during the second half of the third day.

Dr. Samir Kumar Jalal, from IIT Kharagpur, dedicated the fourth day to exploring the theoretical underpinnings of Bibliometrics and its various indicators. The attendees also received hands-on training on utilizing open-source Bibliometrics R for quantifying research data.

On the fifth day Dr. R. Gowtham from Amrita University, Coimbatore, extensively discussed the applications of Artificial Intelligence (AI) in teaching and research, highlighting many AI tools that can significantly enhance these domains. In the same day, the second session was taken by Mr. Gauri Shankar Sahoo from IIM, Kolkata, who conducted a practical session on the use of Latex for producing professional-looking documents with precise formatting, high-quality typography, and excellent support for mathematical equations, symbols, and scientific notation. He provided a structured approach for the creation of custom document classes, style files, and templates with unique layouts and designs.

On the sixth day, Dr. Aditya K Panda from Berhampur University provided an in-depth session on the theoretical foundations and the intricacies of Meta-Analysis. Following this, Dr. Manoj Kumar Dash from IITM, Gwalior, led a practical session on installing the Meta-Analysis software, Jamovi and its application using real-world datasets.

The program concluded with a valedictory function that marked the successful completion of the ATP. Dr. M. Swain, the Programme Convener and the Nodal Officer of AIU-AADC at Berhampur University welcomed attendees and stressed the importance of incorporating open-source software in education and research. Dr. Jyotshna Sahoo, Head of the Dept of Library and Information Science and the Program Convener introduced the esteemed guests and shared insights on the program's journey. She emphasized the role of open-source software in advancing pedagogy and research.

Dr. Raj Kishor Kampa, Programme Coordinator, provided a comprehensive overview of the various sessions conducted during the programme. He highlighted the diverse topics covered and the hands-on training participants received on leveraging open-source software effectively.

Dr. Amarendra Pani, Joint Director and head of the Research Division at the Association of Indian Universities, New Delhi, graced the occasion as the Guest of Honour. In his address, he applauded the participants' dedication and encouraged them to apply the knowledge gained to elevate the quality of education and research.

The event's Chief Guest, Prof. C R Karisiddappa, a retired Professor of Library and Information Science from Karnatak University, Dharwad, shared his insights on the evolving landscape of technology in academia. He emphasized the need for continuous learning and adaptation to stay relevant in the modern educational scenario.

Prof. Geetanjali Dash, the Honorable Vice Chancellor of Berhampur University, delivered a motivating address wherein she highlighted the university's commitment to fostering technological advancements in education and research. She praised the collaborative efforts of all stakeholders in making the training successful.

Many participants shared their experiences of their participation in FDP. Most of them expressed their gratitude for participating in such a fruitful training program that has enriched their skills. Some of them expressed that the diversity of resource persons from reputed institutions like IIM Kolkata, IIT Kharagpur, IITM Gwalior, ISI Bangalore, Soolani University, etc shared their knowledge and expertise with many hands-on sessions. The recordings shared with the participants were very helpful in their learning. The sessions were well-planned and well organized maintaining a good flow of knowledge to the participants.

The event concluded with a vote of thanks by Dr. S.S. Mahapatra, Assistant Coordinator of AIU-AADC at Berhampur University. He expressed gratitude to the guests, participants, and organizing committee for their dedication and contribution to the program's success.