

NEWS LETTER

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DR SAQUIB SHAKIL

PRINCIPAL

I am going to complete one full year as principal in this prestigious college. I joined here with palpitating heart, completely unaware of the environment of this institution, this town. However, my experience here has been far more encouraging than what I expected. Under the guidance of our Director Sir and Deputy Director Sir, the college is going from strength to strength. And it won't be out of place to mention here that I have been getting invaluable suggestions from our Registrar Sir, our Dean Sir. Also, what I am trying to do for taking the college to a higher level can't be done without the able support from the faculty members and the other staff members of the college. And last but not least, the sense of purpose of our students seems to be on the rise. But much more remains to be done on their part!

ACADEMIC ACHIEVEMENT AWARD FUNCTION



The first ever Academic Achievement Award, was organised under the aegis of Millia Institute of Technology, Rambagh, Purnea, one of the units of Purnea University, Purnea on February 5, 2023. The Pro-Vice Chancellor of Purnea University Prof. Pawan Kumar Jha graced the occasion as the chief guest. Dr. Ghanshyam Roy, the Registrar of the University attended the function as the special guest. The Pro-Vice Chancellor and the Registrar talked about the purpose behind awarding the Achievement Award to the meritorious students by our college. According to them, such activities instil confidence in the students and encourage the promising ones to try to achieve greater success in life. Among other dignitaries who overwhelmed the invited guests and students present with their thought provoking speech were Dr. Parasnath, the principal of Bhola Paswan Shastri Agricultural College, Purnea and our Director Sir Dr. Asad Imam. Our Principal Dr. Saquib Shakil Sir spoke about his plans that he envisaged to take the institution to greater heights in times to come. Dr. Shabbir Hussain Sir took to the dias from the very beginning enthralled both the invited guests as well as the students. He was well supported by Prof. Rabia Asharfi and Prof. Smriti. Mr. Quisar Imam, the Legal Advisor of the institution took the time off his busy schedule to encourage the faculty members and the students by his valuable comments. Besides the students who received the awards, the faculty members of the college, its students, Dr. Arvind Kumar, the Principal and the faculty members of the Polytechnic remained present throughout the function.

SPORTS MEET



The opening day of the five day sports meet was inaugurated by Mr. M.H.Rahman, Secretary, Purnea District Athletics Union on February 28 on MIT campus. Deputy Director of the Institution Er. Adil Imam also graced the occasion. The meet was organised jointly by MIT, Rambagh and Millia Polytechnic. Others who were present on the occasion was Dr. Saquib Shakeel, the Principal of MIT Purnea, Dr. Arvind Kumar, the Principal of Millia Polytechnic Purnea, the faculty members of both the institutions and the staff members and hundreds of students. The five day sports championship organised jointly by MIT and MilliaPolytechnic came to an end on MIT Purnea campus on Saturday, March 4,2023.The chief guest Mr.M.H.Rahman, Deputy Director Sir of the Institution Er. Adil Imam, the Principal of MIT, Sir Dr. Saquib Shakeel,the Principal of Millia Polytechnic Dr Arvind Kumar, the Registrar of MIT Prof. Arvind Anand, the faculty members of both the institution and hundreds of students were present on the occasion. Mr Rahman in his short speech highlighted the role of sports in the life of the students and praised such an initiative by both the institutions. He added further that only those with healthy bodies excel in education. Whereas outdoor games lead to a healthy body,indoor sports boosts up their mental capabilities. Chess : Amir Haque of MIT was the winner of the boys'category. Sahil Kumarof Millia Polytechnic was the runner up. Prianka Kumari Arya of MIT was the winner in the girls'category. SoniKumari of Millia Polytechnic was the runner up. Carrom : The pair of Rakeshand Vikas of Millia Polytechnic wasthe winner in the boys' category. Mayank and Avinash of MIT were the runnersup. In the girls'category,Naaz and Khushi of Millia Polytechnic trounced Nisha and Komal in the final.Badminton: Rajan of Millia Polytechnic defeated Rishi Raj of MIT in the boys final.In the girls'category, Priyanka Kumari, Arya of MIT overpowered Naaz of Millia Polytechnic. Javelin Throw: In the boys'final Sumit Kumar of Millia Polytechnic in the finals. 100-metre sprint : Ankesh of MIT was declared the winner and Sumit of Polytechnic was declared the runner up. In the girls' category Sandhya Kumari of MIT defeated Yukti Kumari of MIT in the final. 200 hundredmetres sprint: Randhir of MIT and Ankesh of MIT were declared winners and runnerup. In the girls category, Sandhya of MIT and Pinki of MIT were winner and runner up Cricket: The MIT team trounced the Millia Polytechnic team by 99 runs. However the situation was exactly opposite when the Millia Polytechnic teachers thrashed the MIT faculties by 150 run.

FAREWELL PROGRAMME

A farewell programme was organised by the third year students of CSE Department to the final year students of all the departments of MIT. The function organised in the conference Hall was attended by our Principal Sir, Dean Sir, Registrar Sir, all the faculty members and the technical staff members. Cake was cut by the Principal Sir, Dean Sir and the Registrar Sir. Later they gave speech to the students present there to motivate them to learn from the past and put in hard work to achieve great success. Some of the senior students also expressed their feelings thanking their juniors for the loving gesture that they showed. Of nearly fifty students present, Shubham kumar, Sarthak Kumar, Rupesh Kumar, Abhinav Anand, Manish Kumar, Sandhya Kumari, Pintush Kumar, Nirbhay Kumar and Amarjeet Pandey took active participation.



ZIGBEE TECHNOLOGY

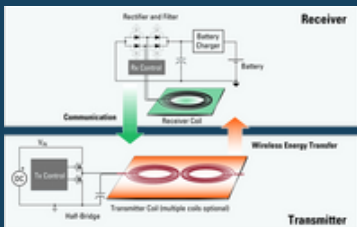


ZigBee technology is a new standard developed by the ZigBee Alliance for personal-area networks (PANs). It consists of more than 270 companies (including free scale, Ember, Mitsubishi, Philips, Honeywell, and Texas Instruments), the ZigBee Alliance is a consortium that promotes the ZigBee standard for a low-rate/low-power wireless sensor and control network. The ZigBee protocol stack is built upon top of IEEE 802.15.4, which defines the Media Access Control (MAC) and physical layers for low-rate wireless personal-area network (LR-WPAN). The ZigBee standard offers a stack profile that defines the network, security, and application layers. Developers are responsible for creating their own application profiles or integrating with the public profiles that were developed by the ZigBee Alliance. The ZigBee specification is an open standard that allows manufacturers to develop their own specific applications that require low cost and low power.



Priyanshu Shekhar HoD Department of Electronics & Communication Engineering M.I.T. Rambagh, Purnea

WIRELESS CHARGING



One area of technology that holds particular promise for expanding the electric vehicle market is wireless charging. Wireless charging has some current applications for personal devices like laptops, smartphones and earbuds, and it will likely eventually become standard for electric vehicles as well. An electric car owner will be able to park on a charging spot without the hassle of plugging in the car. Wireless charging docks will also be smaller, so they'll likely become easier and more cost-effective to build.



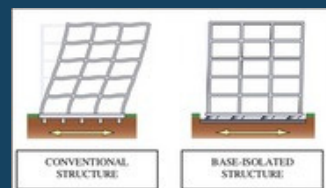
Md Ajaz Alam (HOD, Department of Electrical Engineering)



Obaidur Rahman Assistant Professor Department of Mechanical Engineering

DIGITAL MANUFACTURING

Nowadays many automated tools in the manufacturing industry, it is the duty of the industry to make a prototype model, simulate and analyze the machines, input materials, and tooling. As the name indicates, the digital manufacturing is controlled by means of numbers or numerical in the digital form which is NC Program G codes and M codes that can be operated through central computer. In order to meet will be a need for a large number of goods for the consumers. Making a few things or goods does not sustain the environment, therefore there is the need for Digital Manufacturing. With the rise in the quality and quantity of computer systems in manufacturing plants, the transition to digital manufacturing has become popular.



Aamir Rahi, Assistant Professor, Department of Civil Engineering
Base Isolation Technique in Civil Engineering Structures



Base Isolation system is the technique of seismic protection where the super-structure is separated from sub-structure. By separating the structure from base, the amount of energy is transferred to super-structure during earthquake is reduced significantly. By installation of base isolation system, we can increase the natural period of structure due to their flexibility compared to structural system without base isolation. The typical period of isolated structures (building) is generally kept as 2.0 seconds, therefore the significant benefits obtained from the base isolations are in structures for which the fundamental period of vibrations without base isolation is short (less than 1.0 sec). To conclude, by installing of base isolation in structures, we can reduce the seismic demand of structures, therefore reducing the cost of structures.

BLOCKCHAIN TECHNOLOGY IN EDUCATIONAL SECTOR



Blockchain technology is an advanced database mechanism that allows transparent information sharing within a network. A blockchain database stores data in blocks that are linked together in a chain. It helps educational institutions to secure the data of their students. They are able to take ownership of their credentials, awards, certificates, and academic identity. It builds trust and transparency between educators, management, and learners. There are a lot of case studies



Rabia Ashrafi HoD , CSE
M.I.T. Rambagh, Purnea

MCA

Today's world is digital; every epoch of second, we are generating a huge amount of data. The era of big data and big data analysis is here. Unlike previous decades, data analysis doesn't comprise the tabular and structured database; instead, data contain a heterogeneous and unstructured form. This includes very complex data like images, voice sequences, videos and textual data. Traditional machine learning algorithms are incapable of producing the desired results on such complex data sets. Many researchers have designed a specific learning model for respective data sets to understand and extract meaningful information from such voluminous data. Deep learning is one of the sub-fields in machine learning that has shown promising result in concluding knowledge from large data set. With automated feature engineering, deep learning has achieved a milestone in image, text and speech pattern classification. Empirical results have shown that with the availability of a huge amount of data and deep complex network architecture, deep learning algorithms have outperformed human capabilities in some specific areas. Generalization of a model is an ability to perform on previously unseen data. The generalization error of deep learning is low. The success of a deep learning network depends on various factor. A significant number of research have been done in the field but why deep learning generalizes well is still an open problem. It is still very unclear about what makes deep learning algorithms to reduce generalization error. So, the generalization ability of deep



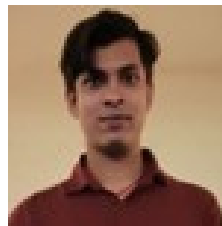
Srishti HoD, MCA

MBA

Revolution. It is important that the future generation of leaders should have adequate appreciation of technology. The future businesses are mostly technology enabled or built around emerging technologies. To handle the challenges of an ambitious global career, MBA professionals need self-confidence, strong character and a multi-dimensional personality. Our department has evolved itself with such a pedagogy that enables the students to be future ready with all the required skill set. We follow a comprehensive teaching, learning pedagogy including case based teaching, project based learning, business games, simulation exercise, experiential learning, expert talks from industry and academia, various certificate courses like: AI for business, Logistics and supply chain Management, grooming modules, Finance Lab, etc. Our aim is to chisel the best out of budding managers and business leaders to make them ready for the challenging business environment. On our part, we can assure you of our wholehearted support whenever and whatever desired. Together we have a great future. I welcome you all to the Department of Management Studies at Millia Institute of Technology. The disruptive power of technology is very much evident with the ushering in fourth industrial



Jayant Kr. Singh HOD,
MBA



ARTIFICIAL INTELLIGENCE

In today's world, technology is growing very fast, and we are getting in touch with different new technologies day by day. It is the booming technologies of computer science is Artificial Intelligence which is ready to create a new revolution in the world by making intelligent machines. The Artificial Intelligence is now all around us. It is currently working with a variety of subfields, ranging from general to specific, such as self-driving cars, playing chess, proving theorems, playing music, Painting, etc. AI is one of the fascinating and universal fields of Computer science which has a great scope in future. AI holds a tendency to cause a machine to work as a human.

LI-FI TECHNOLOGY

A Li-Fi (light fidelity) is a bidirectional wireless system that transmits data via LED or infrared light. It was first unveiled in 2011 and, unlike Wi-Fi, which uses radio frequency, Li-Fi technology only needs a light source with a chip to transmit an internet signal through light waves. This is an extraordinary advance over today's wireless networks. Li-Fi multiplies the speed and bandwidth of Wi-Fi, 3G and 4G. The latter have a limited capacity and become saturated when the number of users surfing increases, causing them to crash, reducing speeds and even interrupting the connection. With Li-Fi, however, its band frequency of 200,000 GHz, versus the maximum 5 GHz of the Wi-Fi, is 100 times faster and can transmit much more information per second. A 2017 study by the University of Eindhoven obtained a download rate of 42.8 Gbit/s with infrared light with a radius of 2.5 meters, when the best Wi-Fi would barely reach 300 Mbit/s.

CYBERCRIME:

Cybercrime is criminal activity that either targets or uses a computer, a computer network or a networked device. Most cybercrime is committed by cybercriminals or hackers who want to make money. However, occasionally cybercrime aims to damage computers or networks for reasons other than profit. These could be political or personal. Cybercrime can be carried out by individuals or organizations. Some cybercriminals are organized, use advanced techniques and are highly technically skilled. Others are novice hackers.

MILLIA INSTITUTE OF TECHNOLOGY RAMBAGH, PURNEA