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IN THIS ISSUE

PREPARATION FOR NBA IN BAJAJ POLYTECHNIC CHANDRAPUR

The National Board of Accreditation (NBA) was established in the year 1994 under Section 10 (u) of AICTE Act in order to assess the qualitative competence of programs offered by Technical Institutions from Diploma to Post graduate level in Engineering & Technology, Management, Pharmacy & Architecture, etc. Our college has also started full preparation for NBA accreditation. All the students are increasing their capabilities and working in a positive direction.

ARTICLE BY: PARTH KOTTAWAR

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SEMINAR ON 3D MODELING IN MECHANICAL DEPARTMENT

"3D modeling Presentation“ Mechanical Department had organized a seminar Presentation on 3D modeling and cad course curriculum gap for second year and Third year mechanical students 23/24 By Mr. Salman Naim Sayyed who is also the centre head of Cadd centre, chandrapur on 2/9/23 in AV hall in bajaj chandrapur polytechnic, chandrapur, from timing of 11am to 1 noon.

The seminar had helped all the students of mechanical department to better understand 3D modeling and understand the scope of carrier in designing.

ARTICLE BY : MADHUSUDAN SINGH

SEMINAR ON LEARNING/SOFTSKILL BY UNICEF

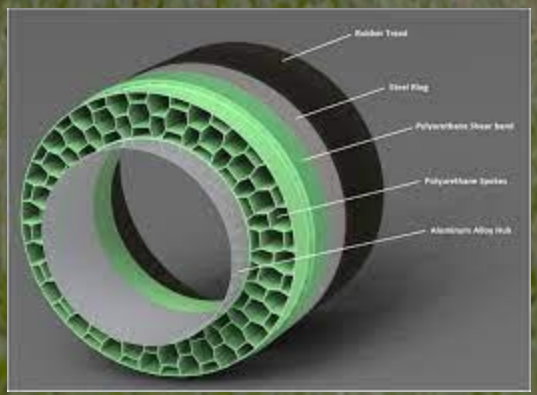
A program on learning/ softskill was be conducted by UNISEF for students of III and V semester on 11/09/2023 at 12.30 pm, in Multipurpose hall. This seminar was for all the students irrespective of their branches.

The seminar had helped all the students of our institute to better understand computers and basic computing skills. The seminar was taken in an interactive way and by using our phones.

ARTICLE BY : SHONAK KUMARWAR

NON-PNEUMATIC TYRE RESEARCH

Non-pneumatic tyre technology can overcome the safety problems of traditional pneumatic tyres. Hence, it is expected to improve driving safety significantly. Accordingly, in recent years, this technology has received extensive attention. This paper reviews the status of research of non-pneumatic tyres and discusses their development trends. Initially, the fundamental concept of non-pneumatic tyres is introduced, and their structural characteristics are described in detail. Subsequently, the research progress on the material properties of non-pneumatic tyre components is summarised.



NON-PNEUMATIC TYRE RESEARCH

The research results on the mechanical properties of non-pneumatic tyres are recapitulated in terms of vertical mechanical, longitudinal mechanical, lateral mechanical, grounding, vibration, and fatigue characteristics. Moreover, the advantages and disadvantages of non-pneumatic tyres are analysed. Three prevailing forming technologies and tyre performance tests are discussed. The application of intelligent materials and structures to non-pneumatic tyres is proposed for these tyres to be lightweight, functional, and intelligent. Finally, the technical problems that must be resolved in the study of non-pneumatic tyres and the anticipated development trends are presented in this paper.

ARTICLE BY : MADHUSUDAN SINGH

SOLAR COOLING

Solar cooling is a system that converts heat from the sun into cooling that can be used for refrigeration and air conditioning. A solar cooling system collects solar power and uses it in a thermally driven cooling process which is in turn used to decrease and control the temperature for purposes like generating chilled water or conditioning air for a building.
There are many different cooling cycle techniques using various different principals to function.

Three of the most popular techniques include:

- absorption cycles
- desiccant cycles
- solar mechanical cycles

SOLAR COOLING

Regardless of the technique being used, a solar cooling system typically includes three core components:

- A solar collector, such as a solar panel, which is used to convert solar radiation into heat or mechanical work.
- A refrigeration or air conditioning plant that is used to produce the cooling.
- A heat sink that collects any rejected heat and radiates it away from the system.

While techniques used to achieve solar cooling vary, the end goal remains the same: utilize an external heat source, like a solar panel, to collect ambient temperature and then use that heat with a refrigerant to create pressure within a closed loop of refrigerant, thus enabling the solar cooling system to work.

ARTICLE BY: MADHUSUDAN SINGH

Key Outcomes of the 2023 G20 Summit Held in India

The 18th G20 Summit of 2023 recently concluded in New Delhi, India, marking the first-ever G20 summit hosted by the country. The summit's theme, "Vasudhaiva Kutumbakam" or "One Earth, One Family, One Future" is rooted in ancient Sanskrit texts and the goal of sustainable development.

India was successfully able to achieve consensus around the New Delhi Declaration early on in the G20 Summit, which saw a dilution in the position taken by the U.S. and EU on Russia, besides focus on UN Sustainable Development Goals, climate action and green development initiatives, multilateral financing, digital public infrastructure, artificial intelligence (AI), and international taxation, among others.

Key Outcomes of the 2023 G20 Summit Held in India

Key outcomes of the G20 Summit 2023

Prime Minister Narendra Modi's diplomatic coup: PM Modi views this summit as India's diplomatic milestone, with its G20 presidency serving as a platform to amplify the Global South's concerns.

G20 New Delhi Declaration: All 83 paragraphs of the 2023 G20 New Delhi Leaders' Declaration were unanimously approved.

African Union accepted as part of the G20: Prior to this, the only African member of the G20 was South Africa. At the Delhi Summit of the G20, the African Union, which represents the 55 countries in the African continent, was given full membership, like how the EU is represented.

India – Middle East – Europe Economic Corridor (IMEC): During the G20 Summit in New Delhi, a Memorandum of Understanding (MoU) was signed among the governments of India, the U.S., Saudi Arabia, the European Union, the UAE, France, Germany, and Italy to establish the India – Middle East – Europe Economic Corridor.

ARTICLE BY : MADHUSUDAN SINGH

TOP 4 LATEST TRENDS SHAPING THE INDIAN AUTOMOTIVE INDUSTRY

1. ADAS

In recent years, car manufacturers in India have started to offer advanced driver assistance systems (ADAS) on their vehicles. While a select few cars offered it until recently, in the past month itself, we have seen cars like the updated Honda City and Tata Harrier and Safari Red Dark Edition get it. The soon to be launched next generation Hyundai Verna will come with ADAs features too.

2. IoT

Internet of Things (IoT) technology allows vehicles to be connected to the internet and exchange data with other devices, enabling a range of features such as remote vehicle monitoring, predictive maintenance, and real-time traffic updates.

TOP 5 LATEST TRENDS SHAPING THE INDIAN AUTOMOTIVE INDUSTRY

3. Safety

From April 1, 2023, less than two weeks from now, India will roll out Bharat NCAP. Indian consumers are becoming more aware of the importance of safety and are demanding safer vehicles, leading to manufacturers prioritising safety features such as airbags, anti-lock braking systems, and electronic stability control.

4. Electrification

The Indian government has set a target of achieving 30% EV penetration by 2030, which has prompted car manufacturers to invest in EV technology. The availability of government subsidies and incentives for EVs has also encouraged the development and production of electric cars in India.

ARTICLE BY : MADHUSUDAN SINGH

INSTITUTE - INDUSTRY CONNECT PROGRAMME

On 11th october, 2023 in Board room of Bajaj chandrapur polytechnic, Institute – Industry connect Programme was organized. In this Bajaj, chiet guest shri Madhusudan Rungta and principal Shri Thombrey attended the meeting. In all 18 Industrialists were in the meeting. During the meeting our chief guest shri Madhusudan Rungta explained the role and importance of local industries and emphasized on the development of Industrial fields. Hon. CEO shri Bharat Bajaj provided the Valuable information about institute – Industry relationship in Feedback from various prominent industry persons were obtained which were favourable for diploma students

INSTITUTE - INDUSTRY CONNECT PROGRAMME

Principal shri Thombrey explained about the Students' inplant training in various industries and its important to develop institute – industry understanding.

Prof. V. Koyal convinced the industrial Persons about the importance of NBA and their role in NBA preparation.

The programme was conducted succesfully ander the guidance of coordinators shri Sharma, shri Zade and Mrs. Nagarkar.

ARTICLE BY : SAHIL LAKDE

BEST OF WASTE MISSION STARTED IN COLLEGE

On 5th october 2023, In college premises, Inaugural programme was successfully held in the presence of Hon. president Madam sau. Nilomani Bajaj.A very creative decision is taken by our Hon, CEO shri Bharat Bajaj for the collection of waste plastic products and to prevent pollution of environment thereby recycling of plastics.

All staff members including principal shri Thombrey sir joined event with enthusiasm and assured to continue the activity.

ARTICLE BY : SHONAK KUMARWAR

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