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Dr. C. Phani Ramesh  
Director cum Associate Professor, Department of Computer Science Engineering, PRIST University, Manamai, Chennai Campus, India

Dr. Rachna Goswami  
Associate Professor, Department of Faculty in Bio-Science, Rajiv Gandhi University of Knowledge Technologies (RGUKT) District-Krishna, Andhra Pradesh, India

Dr. Sudhakar Singh  
Assoc. Prof. & Head, Department of Physics and Computer Science, Sardar Patel College of Technology, Balaghat (M.P.), India

Dr. Xiaolin Qin  
Associate Professor & Assistant Director of Laboratory for Automated Reasoning and Programming, Chengdu Institute of Computer Applications, Chinese Academy of Sciences, China

Dr. Maddila Lakshmi Chaitanya  
Assoc. Prof. Department of Mechanical, Pragati Engineering College 1-378, ADB Road, Surampalem, Near Peddapuram, East Godavari District, A.P., India

Dr. Jyoti Anand  
Assistant Professor, Department of Mathematics, Dronacharya College of Engineering, Gurgaon, Haryana, India

Dr. Nasser Fegh-hi Farahmand  
Assoc. Professor, Department of Industrial Management, College of Management, Economy and Accounting, Tabriz Branch, Islamic Azad University, Tabriz, Iran

Dr. Ravindra Jilte  
Assist. Prof. & Head, Department of Mechanical Engineering, VCET Vasai, University of Mumbai, Thane, Maharashtra 401202, India

Dr. Sarita Gajbhiye Meshram  
Research Scholar, Department of Water Resources Development & Management Indian Institute of Technology, Roorkee, India

Dr. G. Komarasamy  
Associate Professor, Senior Grade, Department of Computer Science & Engineering, Bannari Amman Institute of Technology, Sathyamangalam, Tamil Nadu, India

Dr. P. Raman  
Professor, Department of Management Studies, Panimalar Engineering College Chennai, India

Dr. M. Anto Bennet  
Professor, Department of Electronics & Communication Engineering, Veltech Engineering College, Chennai, India

Dr. P. Keerthika  
Associate Professor, Department of Computer Science & Engineering, Kongu Engineering College Perundurai, Tamilnadu, India

Dr. Santosh Kumar Behera  
Associate Professor, Department of Education, Sidho-Kanho-Birsha University, Ranchi Road, P.O. Sainik School, Dist-Purulia, West Bengal, India

Dr. Suresh  
Associate Professor, Department of Information Technology, Kongu Engineering College Perundurai, Tamilnadu, India

Dr. Santosh Shivajirao Lomte  
Associate Professor, Department of Computer Science and Information Technology, Radhai Mahavidyalaya, N-2 J sector, opp. Aurangabad Gymkhana, Jalna Road Aurangabad, India

Dr. Altaf Ali Siyal  
Professor, Department of Land and Water Management, Sindh Agriculture University Tandojam, Pakistan

Dr. Mohammad Valipour  
Associate Professor, Sari Agricultural Sciences and Natural Resources University, Sari, Iran

Dr. Prakash H. Patil  
Professor and Head, Department of Electronics and Tele Communication, Indira College of Engineering and Management Pune, India

Dr. Smolarek Małgorzata  
Associate Professor, Department of Institute of Management and Economics, High School of Humanitas in Sosnowiec, Wyższa Szkoła Humanitas Instytut Zarządzania i Ekonomii ul. Kilińskiego Sosnowiec Poland, India
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<td>Authors: Sagar Vairagar, Shubhangi Vairagar, Shyam Sunder Gupta</td>
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<td>Paper Title: Efficient Peer to Peer Content Sharing using Wi-Fi</td>
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<td>Abstract: As mobile environment is becoming popular; it becomes very effective and quick way of sharing user contents between users. This content sharing using Peer to peer scheme is limited due to the lesser distance factor and continuous availability of communication medium. Whenever large file size transfer is required, it requires more time and limitation on radius. Additionally content sharing is in plain format without any security considerations. Peer-to-peer networks offer several advantages over traditional client-server networking models like lack of connectivity to reliable hosts or servers and the use of inexpensive communication channel. Peer-to-peer network model has become popular in the wired broadband environment but not yet been effectively adopted to the mobile network environment. Many researchers are currently proposing and developing new P2P schemes for mobile environments with different wireless communication protocols. They are significantly adapted into applications such as the sharing of large files like multimedia and DB files between mobile devices. The peer-to-peer model based on mobile environment having several challenges like the limited on device processing power, limited memory, wireless data bandwidth, and available battery energy. With the proposed a peer-to-peer protocol, these specific constraints are addressed. This system also investigates the feasibility of a practical implementation of a peer-to-peer file sharing model of android smart phones using Wi-Fi technology. This includes an analysis of impacted performance by various variables that can be dynamically controlled in the protocol. Proposed work is done on leading Android platforms and found various optimal strategies which include minimizing the upload and download ratio to conserve battery life effectively, using flexible file segments to increase throughput, and decrease memory overhead.</td>
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<td>Keywords: Bluetooth, Wi-Fi, Peer-to-peer communication, wireless communication.</td>
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<td>Authors: Yogesh Ramdas Mahulkar, C. M. Sedani</td>
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<td>Paper Title: Performance of Heat Pipes under Different Inclinations and Working Fluids</td>
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<td>Abstract: For various applications of heat pipes are widely used according to heat conductivity capacity of working fluid. Based on the heat pipe capacity, heat pipes used in cooling electronic industry for controlling temperature of electronic parts. Some applications need to apply heat pipes at various inclinations for cooling purpose. So need to study heat pipes at various inclinations for best results in working condition. Here we study different heat pipes at various inclinations using different working fluids for heat pipe. Among various fluids, methanol as working fluid establishes best result at high and low inclination. The configuration of evaporator section heated with hot water provided inside evaporator jacket and condenser section cooled with liquid at atmospheric passed inside condenser jacket.</td>
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Abstract: The heat pipes are widely used in many applications especially for cooling of electronic part industry and heat transfer industry. The need to study the capacity of heat pipe which changes according to applications and for better identification of the heat pipe for special application. Here we study the unlike heat pipes using dissimilar diameter, wire mesh layer and adiabatic section for diverse application of heat pipe. The heat pipe identified for use in special application with respect to its capability and limitation of heat pipe. Some heat pipe results in use for high capacity, low and high inclination, also according to limitations of heat pipe such as capillary limit, entrainment limit. The result detect the double wrapped screen wire mesh affords better result for each pipe diameter and adiabatic section. Also some modify in size of heat pipe diameter and adiabatic section have better than other heat pipe as changes observed in capillary limit and entrainment limit.

Keywords: heat pipe, capillary limit, entrainment limit, wrapped screen mesh, adiabatic section

References:

Keywords: connected component, extremal region, single-text, Tesseract

References:

Authors: Siti Norasmah Surip, Siti Ayuni Hamka

Paper Title: Hybrid-Biodegradable Film Made From Polylactic Acid

Abstract: In this experimental study, the biodegradability of PLA/EFB film with two different mixings; with and without lemongrass fibers (LG) were investigated by the landfill degradation. PLA/EFB film without the presence of lemongrass fibers showed the most significance of weight loss compared to the samples with the presence of lemongrass fibers. The highest weight loss percentage recorded in PLA:EFB:LG was in ratio 3 which is 8.42%. Meanwhile, in PLA:EFB, the highest weight loss percentage was recorded in ratio 3 (32.05%) and the lowest was in ratio 4 (19.22%). Ratio 1 acted as the comparison parameter in both composites mixing. Four different ratio of PLA/EFB showed significance improvement in Young’s modulus with ratio 4 had the highest reading (1492.2 MPa) and ratio 2 with the lowest reading (1021.1 MPa). In MOR, ratio 2 exhibited the highest reading (30.14 MPa) while ratio 4 with the lowest reading (9.49 MPa).

Keywords: Bio-composites, Lemon grass, Anti-microbial, Empty fruit bunches, Poly lactic acid.

References:

Authors: A. Akilan, M. Boojith, R. G. Sree Krishna, V. Vijayanand

Paper Title: Productivity Improvement by Lean Techniques in a Small Scale Industry

Abstract: In our project, “Productivity Improvement by Lean Techniques,” undertaken in Unirols Airtex (P) Ltd., Coimbatore, the core objective is to improve the production capacity of the industry. In order to meet the demand one of the lean manufacturing tools 5S (Sort, Set in order, Shine, Standardize and Sustain) has been implemented successfully to ensure that the workspace is tidy, ergonomically efficient and capable of repeatable, quality output to achieve better efficiency. In addition to this technique, we also analyzed and optimized the layout of the industry using the software VIP-PLANOPT 2006 resulting in the improvement of overall productivity which helps the industry in meeting the demand.

Keywords: Lean tools, 5S, layout optimization, productivity.

References:

Authors: Juan Ochoa Aldéan, José Cuenca Granda, Byron Solórzano Castillo, Julio Romero Sigcho

Paper Title: Implementation of A Long Distance Radio Link using Low-Costhardware

Abstract: The long distance links with low-cost hardware have been used to interconnect rural populations in places where incumbents fail, and it is a global initiative for developing countries. This initiative has been promoted by various agencies: TIER, ICTP, ESLARED Foundation. This article describes the implementation of a radio link between the Villonaco Hill and the National University of Loja, using the experience gained by various agencies in the development of WiFi-based Long Distancetechniques. WiLD network with links as long as 50-100 km have the potencial to provide connectivity at substantially lower costs than traditional approaches. However, real-world deployments of such networks yield very poor end-to-end performance. First, the current 802.11 MAC protocol has fundamental shortcomings when used over long distances. Second, WiLD networks can exhibit high and variable loss characteristics, thereby severely limiting end-to-end throughput. In the implementation was used thewell-known Linksys WRT54G routers, where the factory firmware was replacedfor DD-WRT firmware. We also
present the feasibility of the radio link through Radio Mobile Software, and the results using the PING command.

**Keywords:** WiLD, IEEE 802.11, DD-WRT, Radio Mobile.

**References:**