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This is certified that Number of books and chapters in edited volumes/books published and papers published in national/ international conference proceedings per teacher during last five year.

Year	2022	2021	2020	2019	2018
Number of proceedings	84	18	32	29	13
Total					176

Certified Document from page No.1 to 23

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3.3.2 Number of books and chapters in edited volumes/books published and papers published in national/ international conference proceedings per teacher during last five year.

For Year 2018				
Sr. No	**Name of the Teacher**	**Title of the paper**	**Title of the book/chapters published/ Title of the proceedings of the conference**	**ISBN No.**
1	Dr. Archana Chaudhari, Dr. R.A. Nandanwar, Dr. A.C. Haldar	Thermo catalytic degradation of Industrial waste lignin to prepare activated carbon	Thermo catalytic degradation of Industrial waste lignin to prepare activated carbon	2104-010001
2	Dr. Archana Chaudhari, Dr. A.R.Golhar, Prof. U.V. Gaikwad	Structural characterization techniques of materials	Structural characterization techniques of materials	2104-010001
3	Dr. A. R. Golhar	A Review of Morphological, structural behavior and technological applications of Ferrites	A Review of Morphological, structural behavior and technological applications of Ferrites	2104-010001
4	Prof. S. A. Bhande,A P Thakare,D M Kate, P V Gawande	Design of high potency carry choose adder victimization SQRT technique	Design of high potency carry choose adder victimization SQRT technique	2104-010001
5	Dr. R.N.Patil	Optimization study of defluoridation from water using seashell powder	Optimization study of defluoridation from water using seashell powder	978-0-7354-1836-3
6	Ms. K. M. Neware	Impact of Nagpur Metro on Other Transportation Modes In Terms of Fuel Consumption Parameter	Impact of Nagpur Metro on Other Transportation Modes In Terms of Fuel Consumption Parameter	2456-3463
7	K. V.	Experimental	Experimental investigation of	2395-4396

	Madurwar	investigation of expansiveness soil by using fly ash and polypropylene fibre	expansiveness soil by using fly ash and polypropylene fibre	
8	Mrs N R Gautam	Experimental Study investigation of rice husk ash on concrete	Experimental Study investigation of rice husk ash on concrete	978-0-7354-1836-3
9	M S Chaudhari	Data Visualization as a preprocessing step in designing of data mining tools time sereis pattern of rainfall data	Data Visualization as a preprocessing step in designing of data mining tools time sereis pattern of rainfall data	9781538663684
10	Mr.M.R.Moroliya	Fluid Mechanics		978-81-938411-8-1
11	Prof. Rahul Bhoyar	Adjustable height belt conveyor for small scale food processing unit	Adjustable height belt conveyor for small scale food processing unit	2249-8958
12	Ms. Shrunkhala S. Wankhede	Electronic Shopping Trolley For Shopping Mall Using Android Application	Electronic Shopping Trolley For Shopping Mall Using Android Application	978-1-5386-4765-3
13	Ms. Shrunkhala S. Wankhede	Skin Cancer Prediction Using Deep Learning	Skin Cancer Prediction Using Deep Learning	2348-1269

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RESEARCH ARTICLE | MAY 07 2019

Thermocatalytic degradation of industrial waste lignin to prepare activated carbon

R. A. Nandanwar ✉; A. R. Chaudhari; J. D. Ekhe; A. C. Haldar

+ Author & Article Information

AIP Conference Proceedings 2104, 020025 (2019)

https://doi.org/10.1063/1.5100393

Activated carbons were prepared from industrial waste lignin by thermocatalytic degradation using various activating agents. The degradation was carried out in presence of chemical activating reagents such as $ZnCl_2$, K_2CO_3, Na_2CO_3, KOH and NaOH. All the degradations were carried out at the temperature 500°C and the impregnation ratio of lignin and activating reagent was maintained as 1:1. The maximum yield of activated carbon was obtained with $ZnCl_2$ activation which is 58% of the lignin charged. The proximate and elemental analysis of all the activated carbons showed high carbon content of activated carbon as compared to lignin. The comparative study of FTIR showed almost flattening of maximum peaks in activated carbon. The SEM analysis reveals that the lignin particles has been softened, melted and diffused into the mass of matrix with number of pores on its surface after thermal degradation. The maximum BET surface area 819.82 m^2/g was achieved by the activated carbon prepared by $ZnCl_2$ activation which is comparable to commercially available activated carbon. $ZnCl_2$ works as effective dehydration reagent and restricted the formation of tar and promoted the charring and aromatization of carbon upto carbonization temperature 500°C.

Topics

Industrial wastes, Elemental analysis, Polymers, Carbon

RESEARCH ARTICLE | MAY 07 2019

Structural characterization techniques of materials

Uma V. Gaikwad ; A. R. Golhar; N. K. Choudhari; A.R. Chaudhari

+ Author & Article Information

AIP Conference Proceedings 2104, 020027 (2019)

https://doi.org/10.1063/1.5100395

After twentieth century there was a lot of study in the understanding of the microstructure of materials, and it was only possible through the discovery of new techniques for characterization of materials. Today there are number of techniques to characterize samples such as x-ray diffraction, atomic absorption, thermal analysis, electron microscopy. This article presents scientific processes to characterize materials using modern technologies like such as: (I) thermogravimetry (TG/DTG), (ii) differential scanning calorimetry (DSC), (iii) differential thermal analysis (DTA), (iv) termomechanical analysis (TMA), (v)Non Destructive Techniques(NDT) and So on.

Topics

History of science, Differential thermal analysis, Electron microscopy, Differential scanning calorimetry, Thermogravimetric analysis, X-ray diffraction

RESEARCH ARTICLE | MAY 07 2019

A review of morphological, structural behaviour and technological applications of ferrites

Smita C. Tolani ; A. R. Golhar; K. G. Rewatkar

+ Author & Article Information

AIP Conference Proceedings 2104, 030032 (2019)
https://doi.org/10.1063/1.5100459

The ferrites are the magnetic materials exhibiting properties which are commercially used for magnetic storage, microwave absorption and permanent magnets. The different types of ferrites include spinel type, garnet type and hexagonal ferrites. Ferrites have electrical and magnetic unique characteristics which are useful for wide range of applications. In this review we will explore the types, properties and the structure of various ferrites. The crystallography, electrical and magnetic properties of ferrites depend upon the chemical composition as well as on the various heat treatments during the course of preparation. These properties are also influenced obviously by their method of preparation. Ferrites have importance in engineering and technology because they possess spontaneous magnetic moment below the Curie temperature just as iron, cobalt, nickel. The various applications of ferrites are briefly summarized.

Topics

Crystallography, Ferromagnetic materials, Magnetic materials, Phase transitions, Electromagnetism, Data storage and retrieval, Microwave absorptions, Minerals, Transition metals

RESEARCH ARTICLE | MAY 07 2019

Design of high potency carry choose adder victimization SQRT technique

A. P. Thakare; D. M. Kate; P. V. Gawande; S. A. Bhande

+ Author & Article Information

AIP Conference Proceedings 2104, 020050 (2019)
https://doi.org/10.1063/1.5100418

High potency Carry choose Adder victimization SQRT Technique presents several opportunities for increasing the speed and reducing the world of any information processing system. Only Carry choose Adder (CSLA) is that the quickest adders that area unit employed in several data-processing processors to perform quick mathematical operation. From the structure of the CSLA, it's clear that there's scope for reducing the world and delay within the CSLA.we've got enforced a carry choose adder for the procedure method, these modules area unit programmed in VHDL Carry choose Adder (CSLA) is that the quickest adder inall other adder. This work uses terribly easy and economical gate-level modification to cut back the world and delay of the CSLA. Based on this modification 8-, 16-, 32-bit square- root CSLA (SQRT CSLA) design are developed and it's compared with the regular SQRT CSLA design. The planned style has reduced space and delay as compared with the regular SQRT CSLA with solely a small reducing the delay. This work evaluates the performance of the planned styles in parameters that's delay, area, and their merchandise with logical effort. This paper describes the results analysis which shows the planned CSLA structure is healthier than the regular SQRT CSLA.

Topics

Digital circuits, **Information technology**, **Data processing**

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RESEARCH ARTICLE | MAY 07 2019

Optimization study of defluoridation from water using seashell powder

B. J. Godboley ; R. N. Patil; P. B. Nagarnaik

+ Author & Article Information

AIP Conference Proceedings 2104, 030046 (2019)

https://doi.org/10.1063/1.5100473

World wide it has been observed that higher fluoride concentration in water can lead endemic diseases. In many parts of rural area, the ground water is the main source of drinking water. In the present study main objective of is to check feasibility of removal of fluoride from groundwater by solid waste adsorbents Seashell powder (SSP). The raw material were collected and physicochemical characterization of the adsorbent has been done by using standard methods e.g. sieving, proximate analysis, pHpzc, SEM, XRD. Different dose of adsorbent were used ranging from 0.5 to 5.5 gm/L of fluoride aqueous solution. Equilibrium sorption studies were conducted at room temperature (i.e 30°C) with varying fluoride concentrations (2 to 16 mg/L). Sorption experiments were also carried out at various pH (2-14) to understand the effect of pH on removal was studied for 15-1440 minute. The temperature range for the study was taken from 293K to 313K. All the batch study was performed at the orbital shaking incubator. The optimum dose & equilibrium time was found 4mg/L & 480 min respectively. Various kinetic models and equilibrium study is done have been study for the present work to investigate the adsorption process of fluoride onto SSP. The value of thermodynamic parameter ΔH indicated an exothermic adsorption process and the negative value of ΔG show the feasibility and spontaneity of material-anion interaction.

Topics

Inorganic compounds

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www.ijies.net

Impact of Nagpur Metro on Other Transportation Modes In Terms of Fuel Consumption Parameter

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Abstract- *Introduction of metro rail in Nagpur City will result in passenger ridership from road based transport to metro rail. In order to estimate the fuel consumption , the number of vehicles of proposed area after the introduction of Nagpur metro will be estimated by using different methods which are already proposed in different research papers. This paper includes a review of analysis of fuel consumption of or emission from road based vehicles which is effected by other transportation services especially metro rail services of other different cities or countries.*

1. Introduction

Transportation is a critical connection amongst creation and consumption, supporting social and financial exercises The vehicle division devours innumerable essential and auxiliary vitality sources like coal, gas, diesel, fuel oil, petroleum product, warmth, and power. steady with 2008 information ordered by the International Energy Agency (IEA), the vitality consumption of the world transport segment represented 29.6% of aggregate vitality consumption predictable with the IEA, oil consumption inside the vehicle division represents five hundredth of the world's aggregate oil consumption. On the contrary hand, high vitality consumption inside the transportation part implies that high contamination and outflows (Lin and Xie, 2014). reliable with the IEA, the transportation part represents about tierce of the world's carbon emanation caused by vitality consumption, and this can surpass five hundredth by 2030 essentially from Asian nations like Republic of India and China, wherever transportation enterprises square measure expanding. around 40 % of fuel consumption in mammoth urban areas is said to transportation. a justifiable amount of fuel is squandered owing to congested driving conditions in crest hours. Transportation organizers investigate for approaches to downsize blockage to abstain from squandering fuel and increment vitality power.

To predict mode share of people among various travel modes, many authors studied public travel choice pattern, metro transit service received cornerstone from people and policy makers for its huge capacity,

EXPERIMENTAL INVESTIGATION OF EXPANSIVENESS SOIL BY USING FLY ASH AND POLYPROPYLENE FIBRE

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Prof. S. N. *Shinde, Priyadarshini Bhagwati College of Engineering,Nagpur*
Prof. N. B. *Thikare, Priyadarshini Bhagwati College of Engineering,Nagpur*
Prof. A. M. *Sorte, Priyadarshini Bhagwati College of Engineering,Nagpur*

Abstract

In Indian economy the infrastructure is the major sector in which overall development is going on. the expensive soil are causing number of damages to the structures as compare to other natural hazards. Thus, worldwide these soils are considered to be problematic soil so, as to utilized these soil in effective way, proper treatment to the soil is required, with the same intention, an attempt is made to modify engineering properties of black cotton soil by using fly ash and various percentage of polypropylene fibres. The Atterdberg's limit, California Bearing Ratio (C.B.R.), Unconfined Compressive Strength (U.C.S.) tests were carried out on the samples of soil with fly ash and polypropylene fibre and the samples are tested after 3days, 7 days and 14 days. Fly ash added to the soil in dry state in constant percentage (by weight) 15% and polypropylene fibres in 0%, 0.5%, 1.0%, 1.5 %. Comparisons of these admixtures are done on the basis of test results obtained.

Keywords :- *Plasticity Index, Unconfined Compressive Strength, California Bearing Ratio, polypropylene fibres, fly ash*

Introduction :

Expansive black cotton soils occur in climatic zones characterize by alternate wet and dry seasons. The expansive soils have a properties of swelling and shrinkage during the alternate wet and dry seasons. Such cyclic swell shrink movements of the ground cause considerable damage to the structures founded on them. The increased optimum water content, shrinkage limit and strength and reduced the swelling potential, liquid limit, plasticity index and maximum dry density of the soil by addition of lime. But the further additions can increase swelling in soils with high sulfate contents, decrease in plasticity of soils and excessive lime treatment contribute to brittle failure characteristics of soils that lead to rapid and great loss in strength when failure occurs. The previous studies have shown that addition of fibre reinforcement caused significant improvement in the strength and decreased the stiffness of the soil. More importantly, fibre reinforced soil exhibits greater toughness and ductility and smaller loss of post peak strength, as compared to soil alone. One of the main advantages of randomly distributed fibres is the maintenance of strength isotropy and the absence of potential planes of weakness that can develop parallel to oriented reinforcement. For the modification and improvement in the engineering properties of soil the discrete fibre can be considered as good earth reinforcement material.

MATERIALS AND PROPERTIES

Soil

For this study the soil Black cotton soil is selected which is taken from village Lihigaon Kampti, Nagpur, Maharashtra. Owing to high initial moisture content, the soil was air dried first and then broken into pieces in the laboratory. The properties of soil are determined by standard test procedures and tabulated in Table1.

RESEARCH ARTICLE | MAY 07 2019

Experimental study investigation of rice husk ash on concrete

N. R. Gautam ; R. N. Patil; P. D. Dhawad

+ Author & Article Information

AIP Conference Proceedings 2104, 030049 (2019)

https://doi.org/10.1063/1.5100476

The research investigation, effect of Rice Husk Ash on Concrete performed on laboratory scale, in which the (OPC) cement has been replaced by RHA with in terms of percentage by weight such as 12.5% and 25% of cement for 0.45 water/cement ratio. The laboratory analysis proved the compressive strength at 12.5% replacement of cement with RHA. This is the minimum content of RHA gives the better results in this study. Many of the analysis tests were performed such as, Standard consistency test, setting time test, soundness test, workability test and compressive strength test. This test proves the similarity of results obtained with the same laboratory conditions with OPC. The results were compared to controlled sample and the viability of adding RHA to concrete was verified. The minimum RHA content has been used as a pozzolanic material in cement and concrete. RHA provides several advantages, such as strength and durability properties, and environmental benefits related to the disposal of waste materials and to reduced carbon dioxide emissions. The use of RHA cement concrete improved stability reduced the heat generation and shrinkage. It strengthens transition zone i.e modifying the pore structure in the hydrated cement paste.

Topics

Cement, Chemical compounds, Educational assessment

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College of Computing Sciences & Information Technology, Teerthanker Mahaveer University, Moradabad, India

Data Visualization as a Preprocessing Step in Designing of Data Mining Tools Visualizing Time Series Pattern of Rainfall Data

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Abstract—**Data visualization as a preprocessing step is important step in the designing of data mining tools. Visualization is necessary to perform analysis and visualize patterns, cycles, trends in the dataset. This paper discusses visualization of Rainfall dataset and study is presented on analyzing the time series dataset of Monthly Rainfall dataset of India and Maharashtra. The ARIMA Model is applied to visually analyze patterns in the dataset and suitable model is developed for further use in forecasting.**

Keywords: Preprocessing, Time Series, Visualization, ARIMA

I. Introduction

The finding of patterns in huge data and discovery/ extraction of new knowledge are the tasks of data mining tools. In data mining, visualization is used to assess the quality of data being used for the mining process and helps in understanding the patterns in the data. Data visualization is the main step in preprocessing as well as post processing in designing of Data Mining Tools to visually analyze and interpreting the environmental data specially rainfall data in this paper.

Different data visualization techniques like histogram, barplot, boxplot, time series techniques are available. Data visualization should be understandable enough to analyze the patterns by maintaining the accuracy of the forecasting. [1].

Data visualization is used for detection of outliers, finding missing values, errors and unusual behavior at initial stage. It becomes more complex and challenging analysis when data size is very large like rainfall data which is distributed at many locations, collected at different time zones resulting in multivariate time series data having many dimensions.[2]

There are many types of visualization methods for data mining like Distributional plots, three, four and five dimensional plots, using transformed variables, for example log scales, rotatable frames, animation with time[3]. Data Visualization can be divided into an automatic part that uses data-mining algorithms and another part requires visualization techniques. The present work exclusively deals with visualization of a time series forecasting model, in particularly ARIMA (autoregressive integrated moving average) model described by Box and Jenkins (1970).

In this paper the data visualization techniques are applied on rainfall data set of India and Maharashtra. The ARIMA model is built and data is visualized and analyzed by plotting time series graph and suitable model is developed for the same. The following section briefly outlined the work carried out by using ARIMA model for visualizing time series data.

II. Related Work

Reference [4] discussed the *mvtsplot()* function to visualize and analyze the patterns in multivariate time series data for daily ozone layer data of five counties of USA and hypothetical stock data. This plot is used for the exploratory analysis for formal model fitting.

An Auto regressive Moving Average (ARMA) model is built in [5] for the annual rainfall data for a period of 47 years (1960–2006). The time series was decomposed into its basic components using dynamic series model. The ARMA (1,1) model with Pearson Correlation Coefficient (R2) of 0.969 and residual ACF and PACF indicating no pattern was finally selected. The model developed was exact for the forecast of annual rainfall in the catchment of Kaduna River.

[6] has presented the visualization and analysis of Rainfall data in Pakistan from 1951 to 2015 using Sliced Functional Time Series (SFTS). The paper compared the forecasted values using ARIMA model, ETS (Exponential Smoothing State Space) model and Sliced FTS model and obtained average rainfall prediction forecasts about 80% prediction intervals.

[7] Investigated time series visualization for improving user experience using various techniques like Visual encoding, Coordinate systems etc. Highlighting and tooltips interaction techniques were examined on the time series visualization and performance effect of visualization is compared using position, color and area as encoding techniques. The experiment was conducted to check the impact of coordinate systems on time series visualization

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FLUID MECHANICS

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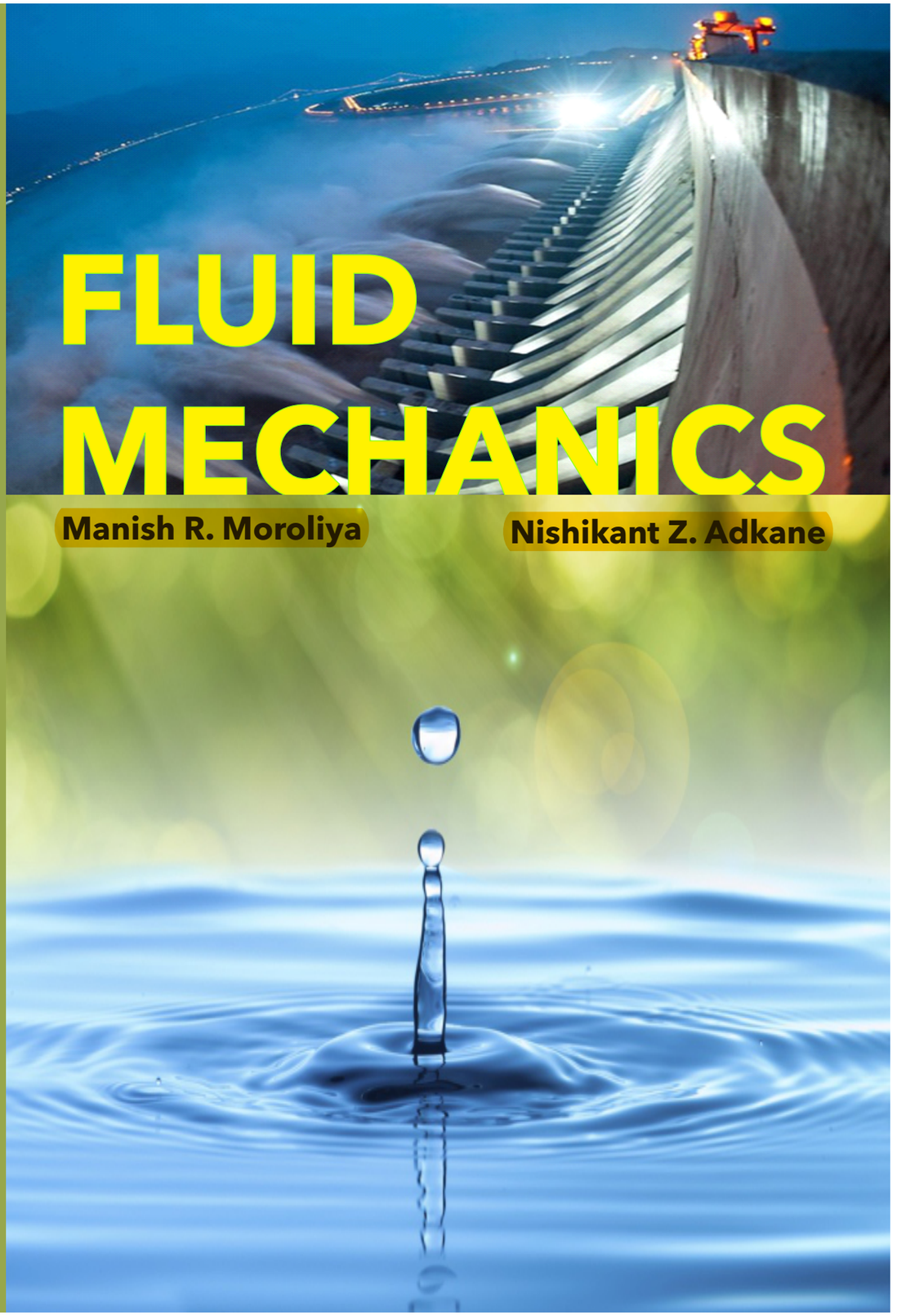

FLUID MECHANICS

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CONTENTS

Pressure gauges - Bourdon gauge

6. Buoyancy - principles

7. Units and Dimensions

8. Similitude and model studies:

Kinematic and dynamic similarities
Dimensional Analysis:
Rayleigh's method
Buckingham pi method
Important Dimensionless Numbers

Chapter -2
Fluid flow **40**

1. Stream line
Stream tube
Steady & Uniform flows
One-dimensional & multidimensional flow
Equation of continuity
Energy equation - Bernoulli's equation

Tank training problem
Momentum equation
Toricellie equation
Trajectory of a liquid-jet issued upwards in the atmosphere
Trajectory of a jet issued from an orifice at the side of a tank
Water Hammer
Laminar and Turbulent flow

2. Boundary layer concepts:

Introduction
Development of boundary layer for flow over a flat plate
Development of boundary layer for flow through circular pipe
Entry length
Fully developed flow
Boundary layer separation

3. Flow of incompressible fluid in pipes:

Laminar flow
Hagen Poiseuille equation
Friction factor
Pressure drop in turbulent flow
Velocity Distribution for turbulent flow
Surface roughness
Flow through non-circular pipes
Flow through curved pipes
Expansion losses
Contraction losses
Losses for flow through fittings
Equivalent length of pipe fittings

4. Types of flow problems

5. Compressible fluid flow:

Equations of compressible flow
Velocity of sound in fluid
Mach number
Nozzles & diffusers
Maximum velocity

6. Two dimensional flow:

Velocity potential
Potential function
Irrotational flow

Chapter -3
Closed channel flow measurement: **57**

1. Venturi meter
Orifice meter
Venturi - Orifice Comparison
Pitot tube
Rotameter
Flow measurement based on Doppler effect
Hot wire and hot film anemometer
Magnetic flow meter

2. Open channel flow measurement:

Elementary theory of weirs and notches
Rectangular notch
V-notch
Suppressed and contracted weirs
Submerged weirs
Trapezoidal notch

Chapter -4
Flow past immersed bodies **71**

1. Form drag
Wall drag
Drag coefficients

2. Friction in flow through bed of solids:

Blake-Kozeny Equation
Burke-Plummer Equation
Ergun equation

3. Packed Towers:

Applications
Various types of packing
Requirements for a good packing
Loading and Flooding

4. Fluidization:

Minimum fluidizing velocity
Pressure Drop in Fluidized bed
Fluidization Types

5. Motion of particle through fluid

6. Terminal settling velocity

7. Operating ranges of fluidization

8. Applications of fluidization

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Adjustable Height Belt Conveyor for Small-Scale Food Processing Unit

Rahul. K. Bhoyar, Sandeep.M. Pimpalgaonkar, Swapnil.J. Bhadang

Abstract- ***In Small-scale Food processing units, material handling is taken by manually due to high capital required for an advanced material handling system. These small units are looking a conveyor system which will reduce manpower, space, money, and time for production. In many materials handling equipment's, belt conveyors are popular. This paper describes a new design and development of adjustable height belt conveyorsystem which works satisfactorily to meet design point of view. It is reliable, compact, adjustable, saves working man-hours and increasing profitability of small units engaged in material handling. These transports are versatile and it tends to be adjusted by the activity and its needA legitimate structuring of the adjustable height belt conveyor will influence its productivity, working, and life expectancyOur current attempt is towards fabricating an economical adjustable belt conveyor material unloaded by adopting the existing simple design procedure.***

Keywords: Adjustable height, belt conveyor, food processing, Funnel shape hopper.

I. INTRODUCTION

In a mechanical procedure, the makes item being going through different stages and it should be exchanged starting with one place then onto the next place, the raw material is transport to the machines and after that moved starting with one station then onto the next station lastly to the store or distribution center. In substantial scale enterprises, where the generation rates are high and the item to be taken care of is with the end goal that manual transportation is beyond the realm of imagination, advanced material handling system would be required. Material handling system does not contribute specifically to the item esteem, but rather it adds to the expense of the item and is subsequently some of the time is alluded to as an important shrewdness.

R.K. Bhoyar, C.C. Handa [1-2] design a conveyor system to fulfill the requirement of feeding two different raw materials to their respective processing machines, this work is going to be used by a small-scale species unit in Nagpur. Work is to be manipulate with the requirement of Single belt conveyor with adjustable to tilting angle and turning from common loading point to transfer material to different machines.A.M. Guthrie, J.R. Pilcher [3] contingent upon the state of the sugar and the amounts to be taken care of, a wide range of strategies are utilized for transporting sugar in mass. It is afascination tomany applications due to the modest count of wearing parts, due to this the cost reduces; and a nonappearance of a relative improvement between the sugar and transport segments which results in insignificant item corruption.A.W. Roberts [4]

Revised Manuscript Received on 22 December 2018.

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concentrate on the structure necessities for the most part utilized feed conveyor involving a gravity stream container, feeder and chute. The explicit capacity of these three segments is quickly sketched out and the requirement for the container and feeder to be planned as an essential unit is focused.G. M. Mir, Sheikh Idrees and Nadeem Bashir [5] presents a portable low cost high efficient expanding pitch sort grader as an elective for the expansive mechanical grader to establish their processing unit in small space. A. MEl-Gindy, M. A Baiomy, M. M Abdelhamed, and Sahar, A Mosa [6]design, fabricate and evaluate the mechanical system of threshing and handling rice straw directly to the baler. A conveyor belt was designed to transport the rice straw from threshing machine to the baler. Choices of all heading of the mechanical framework were done concurring to the stack carrying capacity. Martin Bohner, Isabel Barfuss, Albert Heindl, Joachim Muller [7]the author focus on the incomplete drying of products belt size in belt dryers is a result of insufficient air dispersion prompting diminished throughput and high vitality necessities. To accomplish conveyor improvement, computational liquid stream recreations were directed.I. A. Daniyan *, A. O. Adeodu and O. M. Dada [8] talks about the plan estimations and contemplation of belt transport system for limestone the different parameters are to be taken care of and additionally its most extreme stacking limit all together guarantee quick, consistent and proficient development of pounded limestone while maintaining a strategic distance from an end or fatalities amid stacking and emptying. Lu Hong-Sheng [9] built up another model as per the traditional hypothesis of shells, the creator has inferred a gathering of diagnostic articulations for the removal, stretch and worries in the shells of the drive pulleys of a transport line framework. Tobias Heidrich, Aria Alimi, Leon Grothues, Jens Hesselbach, Olaf Wünsch [10] a local cooling idea for transport lines in the bundling area of chocolate generation is portrayed, completely dissected and assessed regarding its appropriateness for a utilization case. S. S. Vanamane, P.A. Mane, K. H. Inamdar [11]plan the transport framework utilized for cooling of mould, which incorporates speed, engine choice, belt determination, shaft breadth, pulley, idler separating, gear box choice, with the assistance of standard practice and these outcomes are checked with the belt computer programming software.A. Ramesh, P. Karunaker and L. Ramesh [12] locate belt conveyors in industries, stockyards and general transport. It helps us to move bins and the managing of large materials. Factory people often have to tour from task to challenge before contemporary automation strategies come in, but due to the conveyor system it is handy to transport.

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Electronic Shopping Trolley For Shopping Mall Using Android Application

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***Abstract*—Now a days Shopping have become daily activity in cities. People buys product from shopping mall for their regular use. To get their products scanned using barcode scanner and to get it billed, the customers have to stay in long queues. To get relieve of this, a new 'Electronic Shopping Trolley' is proposed. In this paper we are developing android application where the customer has to scan product barcode which they wish to purchase. The scanned product is automatically dropped into the shopping card of customer and then the customer can make payment online or at the billing counter. We have proposed a technique which means to decrease and perhaps wipe out the aggregate holding up time of client, bring down the aggregate labor prerequisite from charging counter and increment effectiveness by and large.**

Keywords —Barcode scanner, Android Application, Credit card payment

I. INTRODUCTION

Buying and shopping at malls is becoming everyday movement. We can see enormous surge at these malls on occasions and ends of the week. A shopping trolley is a required tool for shopping in supermarkets or grocery stores. Individuals buy different assortments of things and place them in a trolley, after finishing of shopping, one have to go charging counter for installment. At charging counter, clerk produces the bill using barcode reader, which is very time-consuming process and results in long line at billing counter.[1]

As of now, shopping centers clients find different troubles. Those troubles are said underneath. 33% of real customers purchase staple goods on their financial plan. A large portion of the occasions, it is just toward the finish of procurement customers come to realize that the general buy add up to is more prominent than their financial plan. At that point they invest much energy in hunting down their coveted items lastly in general shopping process turns out to be additional tedious as well. Because of this, few times customers couldn't purchase all their coveted items and pass up a great opportunity couple of things. Another real issue looked by clients is that they need to sit tight in long lines for charging. In this manner, the proposed framework beats every one of these downsides looked by customers in shopping centers.[2]

In this paper, "Electronic Shopping Trolley For Shopping Mall Using Android Application" being created to help a man in ordinary shopping as far as lessened time spent while obtaining. At the point when the client need to buy a thing then client needs to check standardized tag. A short time later, the relating information with respect to item will be shown on client advanced mobile phone screen. As we check the item, cost will get add to the aggregate bill. Accordingly, the charging will be produced in application itself. At that point client can make installment on the web or at the charging counter. With online installment, it isn't required for the payer to be in a long line as installment is made in only a tick.

The items in the shopping center will have standardized tag i.e. barcode to recover/get to data about it. At the point when a client puts an item in the shrewd trolley, the client examine the standardized identification and read the Item ID and the data identified with it will be put away.

II. LITERATURE SURVEY

[3] "RFID Based Intelligent Trolley System using Zigbee" Aniket Wani, Krutika Thakur, Nikhil Vaze, Meeta Vadhel, Rupali Advirkar.

The RFID peruser examines every one of the things as and when they are put in the trolley. The rundown of the things purchased is put away in the smaller scale controller memory alongside their individual expenses and in addition the aggregate consumption. This data will be appeared on a LCD screen(Electronic Display) which will likewise be set on the

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Skin Cancer Prediction Using Deep Learning

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Abstract: Skin cancer is a frightening trouble for humanity. The demand of early opinion of the skin cancer have been increased because of the fast growth rate of Melanoma skin cancer, its high treatment expenses, and death rate. This cancer cells are detected manually and it takes time to heal in utmost of the cases. This paper proposed an artificial skin cancer discovery system using machine learning system. The features of the affected skin cells are wrested after the segmentation of the dermoscopic images using attribute extraction technique. A deep learning grounded system convolutional neural network classifier is used for the position of the extracted features.

Keyword: Deep Learning, CNN, Melanoma, Feature Extraction, Classification, Skin Cancer Detection.

I. INTRODUCTION

According to the WHOś statistics, the number of people will affected by the skin cancer will upraise up to nearly13.1 million by 2030(12). Skin cancer is a condition in which there's an abnormal growth of melanocytic cells in the skin. Malignant melanoma stratum of skin cancer is naturally caused from the pigment- bearing cells known as melanocytes. Melanoma is introduce among on-Hispanic white males and females, and results in roughly 75 of deaths associated with skin cancer. According to the world cancer report the primitive reason of carcinoma is ultra-violate light exposure in those people who have low position of skin color.

The UV ray can be from the sun or any other sources and roughly 25 of malignant can be from moles. Neural Network algorithm is employed to determine the benign and malignant. This frame is grounded on learning the images that are captured with dermatoscopic device to find out whether it's benign or nasty. Convolutional Neural Network (CNN) is a type of neural network which is used in signal and image processing. Convolutional Neural Network is also used in Recommender System. CNN is chosen because it gives high delicacy in image processing.

CNN has four working norms. The primary layer fills in as input layer where dermatologists give every one of the information they attained. The input layer at that point forms the information and shoot it to the coming layers which is also shoot to the pooling layer. The pooling subcaste pools the information structure by performing maximum pool or min pool. The pooling subcaste sends that information for smoothing to unbend subcaste which changes over the information to one dimensional vector. At that point the information gets into the thick layer to get changed over to the class they want which is for the situation benign or nasty. This paper represents an automatic skin cancer discovery approach grounded on convolutional neural network to classify the cancer images into either nasty or benign melanoma

II. RELATED WORK

Trained a large, deep convolutional neural network to classify the1.3 million high- resolution images in the LSVRC- 2010 Image Net training set into the 1000 different classes. On the test data, we achieved top- 1 and top- 5 error rates of39.7 and18.9 which is vastly better than the former state- of- the- art results. The neural network, which has 60 million parameters and 500,000 neurons, consists of five convolutional layers, some of which are followed by maximum- pooling layers, and two encyclopedically connected layers with a final 1000- way softmax. To make training briskly, we usednon-saturating neurons and a veritably effective GPU perpetration of convolutional nets. To reduce over fitting in the encyclopedically connected layers we employed a new regularization system that proved to be veritably effective.