

DEPARTMENT OF CIVIL ENGINEERING

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TECHNICAL MAGZINE-2015-16

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ADITYA

Institute of Technology and Management

(An autonomous institution)

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ADITYA

Institute of Technology and Management (An autonomous institution) Department of Civil Engineering

Vision and Mission of the Institute

Vision

To evolve into a premier engineering institute in the country by continuously enhancing the range of our competencies, expanding the gamut of our activities and extending the frontiers of our operations.

Mission

Synergizing knowledge, technology and human resource, we impart the best quality education in Technology and Management. In the process, we make education more objective so that efficiency for employability increases on a continued basis.

Vision and Mission of the Department

Vision

To become a pioneer in the field of civil engineering by providing high quality education and research to serve the public consistently with competitive spirit professional ethics.

Mission

•Provide quality knowledge and advance skills to the students in order to expertise theoretically and practically in the areas of civil engineering.

•Improve the professional potentiality of the students and staff through educational programs to expand the knowledge in the field of civil engineering

•Inculcate healthy competitive spirit towards the higher education and successful career in the field of civil engineering to serve the nation ethically.

•Provide students and faculty with opportunities to create, disseminate and apply knowledge by maintaining a state of the art research.

Chairman's Message

At AITAM, we are committed to excellence in everything we do. We strive to mould the students in balancing intellectual and practical skills to become leaders in all the fields of Technical know-how and Management. We have created the finest facilities for the students to make the most of their scholastic pursuits. We are closely aligned with the corporate world which ensures exchange of ideas and experiences that keep our curricula focused on current developments and challenges in the field of engineering. We are firmly committed to research and consulting activities to contribute to the development of the discipline of



engineering. Our vitality lies in our spirit of innovation. Our strength lies in our pragmatic approach. Our success lies in our will to do.

Dr. K. Someswara Rao CHAIRMAN

Secretary's Message

Aditya Institute of Technology and Management is founded to meet the increasing demand for competent engineering graduates. Within a short span of its inception, AITAM has grown to be a premier engineering college of its kind and has won laurels and kudos from the industry. The faculty and staff in AITAM are dedicated to providing first-class education that instills strong and potent basic knowledge for sound practice in science and engineering for the well-being of the society. The Institute offers curricula that nurtures creative thinking and prepares



students for productive and rewarding careers. The Institute offers programmes that deepen learning experiences of our students and prepare them for successful careers as engineers.

Sri L.L. Naidu SECRETARY

Director's Message

Engineering education at AITAM is indeed a rewarding intellectual experience. The Institute prepares the engineering professionals of tomorrow imbued with insight, imagination and ingenuity to flourish as successful engineers. Our programs are attuned to the needs of the changing times. The classrooms are ultra-modern; the library and labs are cutting-edge; and all the members of the faculty are workaholic professionals and masters in their fields. Not surprisingly, our students are recruited by such renowned organizations as HCL, Satyam,



WIPRO, INFOSYS, TCS, Visual Soft, Innova-Solutions and InfoTech. The exceptional dedication of our students, faculty and staff, and our collaborations with Industry and other institutions ensure that the Institute is well-poised to create a unique niche in the horizons of engineering education.

Prof. V.V. Nageswara Rao DIRECTOR

Principal's Message

It is only through knowledge that man attains immortality. Knowledge has to expand or grow to remain as knowledge. The road to excellence is toughest, roughest and steepest in the Universe. The world requires and honors only excellence. Available information has to be directed by wisdom and intelligence to create new knowledge. Promotion of creativity is the new role of education. It is only through creative thinking that the present and future problems can be addressed to find dynamic solutions. Technology should be used to help remove poverty from the world. In fact forty per cent of the world's poor are in India. Confidence leads to



capacity. It is faith in oneself that produces miracles. Education at AITAM helps build character, strengthen the mind, expand the intellect and establish a culture of looking at problems in a new perspective. The student is put through rigorous training so that he can stand on his own feet after leaving the portals of the Institute.

Dr. K.B. Madhu Sahu PRINCIPAL

HOD's Message

Welcome to the Department of Civil Engineering at AITAM, Tekkali. Our journey started in the year 2011. Over the past 5 years we have grown our competency and expertise in core Civil Engineering curriculum and research. Vision of the department is to become a pioneer in the field of civil engineering by providing high quality education and research to serve the public consistently with competitive spirit and professional ethics.



The primary focus of our curriculum is to impart technical know-how to students, improve their problem skills combined with innovative thoughts. The department is well equipped with state

of the art laboratories for academics and research purpose. With funding from Technical Education Quality Improvement Program (TEQIP) and AICTE, special purpose lab equipment and software have been procured to support the research activities. Faculty members have excellent academic credentials possessing Doctorates and experienced staff from academics, research and core industry.

Dr.Ch. Kannam Naidu

HOD CIVIL DEPARTMRNT

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ABSTRACTS OF SPOSERED RESEARCH PROJECTS

Mapping, Monitoring and conservation of Srikakulam Coastal Wetland ecosystem using GPS, RS & GIS (DST Funding Major Research Project)

Dr. Murali & Dr. B. Visweswara Reddy

ABSTRACT

India, by virtue of its geographical extent, varied terrain and climatic conditions, supports a rich diversity of inland and coastal wetland ecosystems. The wetlands in India are distributed in various ecological regions. Although the significance of wetlands has been known for a long time, their role in maintaining ecological balance is less understood. Coastal wetland ecosystems are integrated by the water that flows through them, which connects the wetlands immediately along the ocean or lakes with those of the rivers and floodplains upstream. Coastal wetland types are as diverse as salt marshes, bottomland hardwood swamps, fresh marshes, mangrove swamps, and shrub depressions. Coastal wetlands can be described as all wetlands below the head of tide in watersheds that drain to the ocean. Coastal wetlands, like inland wetlands, are among the most productive ecosystems on Earth. Remote sensing techniques /GIS tools, together with ground truth, are widely used to collect information on the qualitative and quantitative status of natural resources in protracted areas. The proposed study is aimed at the generation of a database in terms of land use/land cover, extent of water spread and its seasonal variation, aquatic vegetation status, using multidate satellite data. Water samples will be collected at selected sampling points in the study area and will be analyzed in the laboratory for parameters like TDS, TH, etc. to assess the quality of water in the study area. An attempt will be made to identify the threats of the coastal wetland ecosystem and adequate measures for its conservation and management will be suggested based on findings of the study which could be useful for policy makers to take necessary remedial measures.

Sl. No.	Name of the guide	Name of the Student		Project Title
		12A51A0123	G.SEKHAR REDDY	CTDENCTU AND DUDADU ITY
		11A51A0150	UMMIDI NAVEEN	STUDY OF FLY ASH AND
1 CI	CH. V. HANUMANTHA RAO	12A51A0106	B KRISHNA TEJA	CEMENT STABILIZED RED
		12A51A0148	P BHARAT KUMAR	
		12A51A0157	U NAVEEN KUMAR	
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B.TECH PROJECT ABSTRACTS

Abstract: Rapid development of industrialization and urbanization leads to serious Environmental pollution. Due to adequate disposal of several waste products that are produced from industries and other structures such as Restaurants, Houses, etc. This situation demanding the pollution free constructions and materials to minimize the health hazards of human being. In order to overcome this problem all industrial waste products are to be treated and used in other areas .In this present study an attempt as been made to use Red Mud in Flexible Pavements as one of the component layer. Red Mud is a waste product disposed from aluminum plants. A detailed experimental investigation was carried out to determine the basic Geotechnical properties of Red Mud such as Specific Gravity, Atterberg limits, OMC (Optimum Moisture Content) & MDD (Maximum Dry Density), Grain Size Distribution, Free Swell Index, UCS (Unconfined Compressive Strength), CBR (California Bearing Ratio) were determined. Later on Red Mud mixed with Fly Ash in various proportions such as 10, 20, 25 and 30 percentages (% by weight) and UCS was performed for all these proportions of mixes at various curing periods such as 3, 7 and 28 days. After that cement was added in various dosages of 2, 5, 8 and 10 percentages (% by weight). The Dosage of 25% Fly Ash with Red Mud was decided as optimum mix among Fly Ash stabilized mixes. Among all these mixes the addition of 25% Fly Ash with 8% cement to Red Mud shows optimum characteristics so that it was decided as best mix among all the mixes. All proportions of mixes have shown maximum compressive strengths at 28 days curing period so that it was considered as optimum curing period. The maximum compressive strength of 34.039(kg/cm²) and CBR of 32 (%) obtained for best mix of 25% Fly Ash with 8% cement. Eventually this study facilitates an economical, tough and durable construction material for various Geotechnical Constructions such as embankments, Earthen Dams and Reinforced Earth Walls.

Sl. No	Name of the guide	Name of the Student		Project Title
2	MR.S.LAKSHMI GANESH	12A51A0162 12A51A0146 12A51A0153	ANIL KUMAR SAH P SRAVANI S JAGADEESH	DESIGN AIDS FOR REINFORCED CEMENT CONCRETE BOX
		12A51A0121 12A51A0125 12A51A0151	CH RAMBABU G ROHITH S. PRAVEE N	CULVERT

Abstract: Culverts are required to be provided under earth embankment for crossing of water course like streams, Nallas across the embankment as road embankment cannot be allowed to obstruct the natural water way. The culverts are also required to balance the flood water on both sides of earth embankment to reduce flood level on one side of road thereby decreasing the water head consequently reducing the flood menace. Culverts can be of different shapes such as arch, slab and box. These can be constructed with different material such as masonry (brick, stone etc) or reinforced cement concrete. Since culvert pass through the earthen embankment, these are subjected to same traffic loads as the road carries and therefore, required to be designed for such loads. This Paper deals with box culverts made of RCC, without cushion. The size, invert level, layout etc. are decided by hydraulic considerations and site conditions.

Sl. No.	Name of the guide	Name of the Student		Project Title
		12A51A0112	B RAJYALAKSHMI	
3	MD D ESWADA	12A51A0111	B RAJA	IMPROVEMENT OF EAXPANSIVE
	RAO	13A55A0108	P CHANDINI	ASH
	1010	13A55A0103	CH NARASINGA RAO	

Abstract: The growing cost of traditional stabilizing agents and the need for the economical utilization of industrial and agriculture waste for beneficial engineering purposes has prompted an investigation into the stabilizing potential of cashew nut shell ash in highly expansive clay soil .index properties of the natural soil showed that it belongs to CL in the AASTHO classification system respectively .soils under these group of poor engineering benefit .the stabilization of black cotton soil with cashew ash is thus unattainable. however, cashew ash shows progressive strength development with longer observations of un confined compressive strength of specimens .the safe disposal of industrial and agricultural waste products demands urgent and cost effective solutions because of the debilitating effect of these materials on the environment and to the health hazards that these wastes constitute the possible use of agricultural waste considerably reduce the cost of construction and as well as reduce or eliminate the environmental hazards caused by such waste.In this project cashew nut shall ash is used to improve the development of strength of weak expansive soil which is available near the NH-16 and found that CBR value determined from the treated expansive soil with an optimum value of Cashew nut shall ash is adequate for design of subgrade of flexible pavement.

Sl. No.	Name of the guide	Name of the Student	Project Title
4	MR.J.SEKHAR RAJU	13A55A0110 V BALAKRISHNA 12A51A0102 A VAMSI 12A51A0110 B MOHAN 12A51A0140 P AKHIL 12A51A0144 P JHANSI RANI	EXPERIMENTAL STUDY ON PARTIAL REPLACEMENT OF FINE AGGREGATE WITH DIFFERENT SOLID WASTES

Abstract: An experimental study presents the use of major solid wastes (like Tire Rubber, Plastic and quarry dust) as a fine aggregate in a concrete. Due to increase in automobile sectors, usage of plastic 95% has been sending to dumping yards and sea. Nearly 8millions of tones plastic waste and 3billions of waste tire rubber was disposed into landfills and sea. This becomes major problem in globalization. Aggregate takes major role in concrete in constructions. This project shows the major solid wastes substitute the sand in concrete by decreasing the problem related disposal of solid waste (plastic waste, rubber tire, quarry dust).

Sl. No.	Name of the guide	Name of the Student		Project Title
		12A51A0103	A.YOGESWARA RAO	
		12A51A0145	P.LOKESWARA REDDY	ANALYSIS AND DESIGN OF
5	MR.GDR NAIDU	12A51A0163	PAWAN KUMAR YADAV	MULTI STORED BULDING (COMPARISION BETWEEN
		13A55A0104	G.DURGAPRASAD	MANUL AND STAAD
		12A51A0152	S.HEMASUNDRA RAO	ANALYIS)

Abstract: The principle objective of this project "Analysis and Design of multi storied building (comparison between manual and STAAD analysis) "is we can carried out analysis and design of G+5 storied building manually. For the same building we can execute in STAAD also. The structural analysis software plays an important role to carry out the various loads calculation for the infrastructures. In this modern period of time, where computer has reached every phase of life, using the traditional book system for analytical development of the students, which is no doubt necessary, is no longer sufficient. Moreover, construction and design has become so much competitive in this world that using computers became mandatory. So, we are using STAAD PRO v8i for analysis and design of our project. Finally we can compare the area of steel workout from the manual design and STAAD. We can consider wind load along with south direction for our considered building . Along with this we can give complete drawings of every element using AUTOCAD and give the detailed estimation for the considered building.

Sl. No.	Name of the guide	Name of the Student]	Project 7	litle	
6		12A51A0108 12A51A0133	B MOUNIKA L MOHAN				
6	MR.S.RAMLAL 12A 12A 12A	12A51A0159 12A51A0165 12A51A0113	Y DIVYA V SANTHOSH BABU B KUMARA SWAMY	ANALYSIS RESIDENTIA	AND AL BUIL	DESIGN DING (G+5)	OF

Abstract: A civil engineer is responsible for planning and designing a project, constructing the project to the required scale, and maintenance of the product. A civil engineer requires not only a high standard of engineering knowledge but also supervisory and administrative skills. The planning part of their work involves site investigation, feasibility studies, creating solutions to complications that may occur and the actual designing of structures. They have to work with the guidelines of the local government authority and get plans approved by the relevant authority. They may prepare cost estimates and set construction schedules. Construction work involves dealing with clients, architects, government officials, contactors and the supervision of work according to standards. Their work also involves the maintenance and repair of the project. The major specializations within civil engineering are structural, water resources, environmental, construction, transportation, geo-technical engineering etc. On most projects, civil engineers work in teams or in coordination with many other engineers. They can find work as a supervisor of a construction site or a managerial position or in design, research as well as teaching in government services or private concerns. They can also work as independent consultants.

Sl. No.	Name of the guide	Name of the Student		Pro	ject Title	
		12A51A0138	N PERCY KUMAR			
		12A51A0137	N SWATHI			
-	MR.G.GOWRISHANKARA RAO	13A55A0107	M JANAKI	ANALYSIS, DESIGN DETAILING OF AI AUDITORIUM USING AUTO AND STAAD-PRO	DESIGN AND	AND
/		12A51A0161	PRAKRITI NEUPANE		AITAM	
		12A51A0127	K LOKESH		JTOCAD	
		12A51A0147	P KIRAN			

Abstract: An auditorium is a large building or hall used for public gatherings for some events either entertainment or educational, where room being built to enable an audience to hear and watch performances at venues such as theatres. Auditorium is necessary as the climatic conditions can affect the programme. So, auditoriums are being constructed to have an effective speech or any other event and to play some indoor games, and to conduct workshops. In our design of auditorium, the seating arrangements are being arranged for 1000 people. It has ground floor as well as balcony. Which accommodates 1000 students; 250 on balcony and 750 on main floor. It occupies (920 sq. mt floor area). Which includes seating area (in ground floor and balcony), stage, dressing rooms, lobby, gang ways and rest rooms. Architectural drawing is planned or designed by the AutoCAD (2013). Where we decided the plan of the particular positioning of the particular rooms such as seating area, stage, dressing rooms, rest rooms, office room lobby and gang ways. Thus, on the basis of requirements the position of columns are fixed. Thereafter, the loads are calculated and analysed its reaction by the help of STAAD V8i Loads such as dead loads, the live loads, wind loads which is according to the IS875 and we followed other codes like IS2526-1963 Code of Practice for Acoustical Design of Auditoriums and Conference Halls and National Building Code of India 2005 for fire and life safety, Lighting and Ventilation.

A civil engineer requires not only a high standard of engineering knowledge but also supervisory and administrative skills. The planning part of their work involves site investigation, feasibility studies, creating solutions to complications that may occur and the actual designing of structures. They have to work with the guidelines of the local government authority and get plans approved by the relevant authority. They may prepare cost estimates and set construction schedules. Construction work involves dealing with clients, architects, government officials, contactors and the supervision of work according to standards.

Sl. No.	Name of the guide	Name of the Student		Project Title
8	MR.K.RAJASEKHARAM	12A51A0158 13A55A0106 12A51A0115 12A51A0142 12A51A0139 12A51A0155	N VIJAYA CHANDRA K NARAYANA RAO B ANISHA P CHANDRA SEKHAR P MANMADHA RAO T HEMALATHA	COMPRESSION OF COMPRESSIVE, STRENGTH OF M25, M30 GRADES OF CONCRETE BY APARTIALLY REPLACEMENT OF FLY ASH WITH NORMAL AND ACCELRATED CURING

Abstract: Cement is a hydraulic binder, a substance that sets and hardens and can bind other materials together. The word "cement" can be traced back to the Roman term *opus caementicium, used* to describe masonry resembling modern concrete that was made from crushed rock with burnt lime as binder.

Sl. No.	Name of the guide	Name of the Student		Projec	t Title
				DELINEATION	OF
		12A51A0105	A V RAHUL	GROUNDWATER	POTENTIAL
		12A51A0118	B RAMASAGAR	ZONES USING	ELECTRICAL
9	MR.CH.KANNAM	12A51A0154	S JAGADEESH	RESISTIVITY ME	TER SURVEY: A
	NAIDU	12A51A0107	B AMRUTHA VARSHIN	ICASE STUDY	OF SARADA
		12 4 51 4 01 20	R DAIESH	GADDA S	JB-WATERSHED
		12A31A0120	DINAJESII	RAJAM	
		12A51A0135	M PRASANTH		

Abstract: In this Project, Groundwater potential zones have been delineated using the Electrical Resistivity Meter survey for the region of Sarada Gedda Sub-watershed located in Rajam, Srikakulam district, Andhra Pradesh. In the Sub-watershed the Vertical Electrical Soundings have been taken at the nine locations. The VES data has been collected using Schlumberger array. The VES data has been analyzed using inverse slope method. The analysis has been revealed that the sub-surface lithology contains top soil, weathered rock, fractured rock and hard rock. The apparent resistivity of top soil is varies from 4 to 325 ohm-m, weathered rock is varies from 17 to 57 ohm-m, fractured rock is varies from 0 to 547 ohm-m and hard rock has 9999 ohm-m. The thickness of top soil is varies from 0.7 to 3.6 m, weathered rock is varies from 2.9 to 20 m, fractured rock is varies from 0 to 40.2 m and hard rock varies from 6 to 42.3 m. The depth to bedrock from top of weathered rock varies from 2.9 to 50.8 m. The groundwater prospects of the Sarada Gedda sub-watershed vary from poor to good. Finally, the Groundwater potential zones generated by ERM survey are validated with the Groundwater potential zones generated by Weighted Index Overlay Analysis.

Sl. No.	Name of the guide	Name of the Student		Project Title	
		13A55A0111	V NAVEEN		
10		12A51A0136	M JYOTHSNA DEVI	DESING AND	
	MR.G.GOWRISHANKARA RAO	12A51A0109	B V DINESH CHOWDARY	ANALYSIS OF	
		12A51A0164	NITISH KUMAR CHAURASH	HAONVENTIONAL	
		12A51A0166	ARAVIND RAJ YADAV	AND PRECAST	
		12A51A0122	D NAGARJUNA	BUILDING USING	
1		12A51A0141	P GUNASEKHAR	SOLI MAKES	

Abstract: Urbanization is the rapid influx of people migrating to cities. The UN has predicted that by 2050, 64.1% and 85.9% of the developing and developed world respectively will be urbanized. With limited resources of labour, time and finance, slums around the world continue to grow in size in uninhabitable conditions for humans. Prefabrication of houses, an innovation that has potential to address environmental and sustainability concerns at a rapid pace, mechanizes the construction process, enabling mass manufacture of affordable houses. This project work deals with the simple design and analysis of houses for low income people and given some standard prefabrication techniques for residential building using a system of Precast units for columns, beams, roof and walls. Precast R.C.C. planks and partially Precast R.C. joists are considered for flooring / roofing system in this paper and special types of Precast wall panels are recommended. Prefabricated columns with a specific configuration, beams and staircase units are considered in this paper. Special emphasis has been made with respect to the various joints and connections and the details of these are discussed. A comparison of Precast system with that of a conventional construction unit has also been made. Finally, identified that large scale adopting of such a Precast systems will eventually result in considerable cost reduction with the added advantages of execution speed.

Sl. No.	Name of the guide	Name of the Student		Project Title
		12A51A0160	PRASANTH KUMAR ISHAR	ANALYSIS OF SELF SUPPORTED
	Mr.G.NARASIMHA	12A51A0132	L V PRASANTHI	STEEL CHIMNEY USING STAAD-
11	MURTHY	12A51A0168	SUMITH KUMAR SAH	PRO V8I
		12A51A0117	BORA HAREESH	
		12A51A0131	K MANMADHA RAO	

Abstract: Scientific discoveries have lead to the establishment of various types of industries. These industries supply smoke and harmful gases into the atmosphere. Due to rapid industrialization and installation of high capacity power plants together with the growing consciousness about pollution has led to the construction of tall chimneys. Here in this study, an attempt has been made to analyse the industrial steel chimney for the prevailing wind force considering self-supported steel chimney at various heights 70m, 80m & 90m at various wind speeds of 33m/s, 44m/s & 50m/s respectively. Thus maximum lateral displacements and maximum stresses are computed by using software package STADD Pro. V8i for the above considered heights and wind speeds. The wind pressure acting on chimney at various heights were calculated manually using IS-875:1987 Part-III.

Sl. No.	Name of the guide	Name of the Student	Project Title
12	DR.B.VISWESWARA REDDY	 12A51A0150 S SIMHACHALAM 13A55A0109 T CHAKRADHAR SAHU 12A51A0126 J GAYATRI 12A51A0156 T SAIKIRAN 12A51A0167 SAILENDRA KUMAR YADAV 	DECIPHERING GROUND WATER PROSPECT ZONES USING GEOSPATIAL TECHNOLOGY: A CASE STUDY OF SARADA GEDDA SUB-WATERSHED

Abstract: Groundwater that occurs below the surface of Earth, where it occupies all or part of the void spaces in soils or geologic strata. It is also called subsurface water to distinguish it from surface water, which is found in large bodies like the oceans or lakes or which flows overland in streams. It is one of the prime sources of fresh water and plays a vital role for the survival of mankind in this world. Due to the rapid growth of population, urbanization and industrialization, the deciphering groundwater prospect zones is of vital importance to augment groundwater resources. The present work accentuated the expediency of Remote Sensing and Geographical Information System (GIS) applications in groundwater studies especially in the identification of groundwater prospect zones in Sarada Gedda sub watershed, Srikakulam district of North coastal Andhra Pradesh, India. Remote sensing is an excellent tool for hydrologists and geologists in understanding the "perplexing" problems of groundwater exploration. In recent years, Satellite remote sensing data has been widely used in locating groundwater prospect zones. Satellite remote sensing data is not only cost-effective, reliable and timely but also meets the essential requirements of data in the Geographical Information System (GIS) domain, which are "current, sufficiently accurate, comprehensive and available to a uniform standard". GIS technique is used in this study to demarcate the different groundwater prospect zones, various thematic maps such as land use / land cover, geomorphology, geology, soil, drainage density, lineament density, lineament frequency and lineament intersection and finally all thematic layers were integrated in ArcGIS environment and the Weighted Index Overlay Method has been used in the present study. During the Weighted Index Overlay Analysis, the ranking has been given for each individual parameter of each thematic map and weights were assigned to the influence of each theme on supporting groundwater prospects. The derived groundwater prospect map was overlaid with the groundwater levels for validation. The map prepared will help in systematic and proper development of groundwater resources in this area to meet the growing water requirements of the study area.

SI. N	o. Name of the gu	ide	Name of the Student	Project Title
13	MR.S.RAMLAL	12A51A0129 12A51A0116 13A55A0105 12A51A0119 12A51A0134	K PRASANTHI B MANJUSHA K TULASI B MOULI M SURYA	DESIGN AND ANALYSIS OF RESIDENTIAL BUILDING (G+3) (CINOARUSUIB VETWEEB NABYAK ABD CINOYTERUZED TOOL RESULT)

Abstract: The primary requisites for mankind are food, clothing and shelter. A well ventilated shelter with good greenery around keeps the occupant healthy. With the growing urbanization there is a lot of demand for framed structures irrespective of residential or commercial buildings. Now a days there is a great demand for modern civil engineers who can efficiently use computer aided methods for designing such as multi-storied framed structure in addition to manual designing methods. The primary objects of our project are to analyze and design a 3D multi-storied RCC framed building. This involves the design of a individual components of the building namely footings, columns, beams and slabs. Design will be carried out based on the Indian standards code of practice IS:456. In the first stage, analysis of the structure will be done using the conventional manual method like substitute frame method or moment distribution method for calculating the fixed end moments. In the second stage, the STAAD Pro analysis is carried out. Similarly design will be done with manual calculations and computer based approach.

Sl. No.	Name of the guide	Name	of the Student	Project Title
		13A55A0101	B SRAVANI	
		13A55A0112	V HARISHKUMAR RAJI	J
14	MS. V. DIVYASRI	12A51A0124	G VINEEL REDDY	A PROJECT REPORT ON DESIGN OF MOORING DOLPHIN USING STAAD-
		12A51A0130	K CHINNI KRISHNA	PRO
		12A51A0101	A SURESH	

Abstract: The main aim of the project is to design the mooring dolphin which is a offshore structure using STAAD .Pro. In the design of mooring dolphin structure the forces like wave force, live load, dead load, and current forces had been incorporated. The forces had been incorporated based on weight of the ship and bollard pull. Bollard should normally be fixed at the seaward end of transverse beams of pile bents, which are then designed to resist the mooring loads applied over a range of directions horizontally and vertically.

When the ship is berthed to the mooring dolphin and is moored to the bollard of the structure then a horizontal pull is applied on the bollard. According to the code I.S. 4651, based on the weight of the ship the bollard pull is taken into consideration. The whole structure is designed as a concrete structure. STAAD.Pro is used to analyse the internal forces in members that will influence the design of mooring dolphin.

ABSTRACTS OF JOURNALS/CONFERENCES ABSTRACT (students and faculty)

Feasibility of Lime Stabilized Black Cotton Soil in Flexible Pavements

K.Rajasekharam & Ch.V. Hanumantha Rao

Department of Civil engineering, Aditya Institute of Technology and Management (AITAM) Andhra Pradesh, India

ABSTRACT

This study aims at understanding the strength of sub-grade in terms of CBR values subjected to different days of soaking and the corresponding variation in moisture content. Initially all basic Geotechnical properties like Specific Gravity, Liquid Limit, Plastic Limit, Plasticity Index, Shrinkage Limit, Free Swell index, Grain Size Distribution of Black Cotton Soil were determined. In the later stage CBR tests were performed on various proportions of lime stabilized soil mixes such as 2, 5, 8 and 10 (% by weight) percentages. Maximum strengths were obtained at 28 days curing period for all proportions of mixes so that this period is decided as optimum curing period. Eventually this research facilitates an economical, strong and durable construction material for the construction of Flexible Pavements.

Improvement of Safe Bearing Capacity of Moorum using Cement as Admixture

G.Gowri Shankara Rao G.Durga Rama Naidu

Ch.V. Hanumantha Rao

Department of Civil engineering, Aditya Institute of Technology and Management (AITAM) Andhra Pradesh, India

ABSTRACT

In recent years the growth in the infrastructure is at a faster rate in India. The construction of high rise buildings and Multi Storeyed structures is playing a prominent role in the development of infrastructure. All these structures require Durable and Tough foundation material to ensure the safety of the structure. Safe Bearing Capacity is the essential parameter which is a deciding factor for selecting type of foundation. In the present study an attempt has been made to enhance the SBC of Moorum using cement as admixture. Initially all basic Geotechnical parameters such as Specific Gravity, Grain Size Distribution, Liquid Limit, Plasticity Index, OMC (Optimum Moisture Content), MDD (Maximum Dry Density) were determined. In the later stages Moorum mixed with various proportions of cement i.e 2, 5, 8 and 10. After that these mixes were tested under Direct Shear Apparatus to find out the shear parameters like Cohesion and Angle of Shearing Resistance. 8% addition of cement has shown optimum results which was considered for the calculation of SBC. Eventually this research provides a tough and durable foundation material for sustaining heavy loads and it can facility the construction of high rise buildings.

Some preliminary studies on the removal of chromium from electroplating industry waste using plant material and activated Charcoal

Dr.M.Murali

Department of Civil engineering, Aditya Institute of Technology and Management (AITAM) Andhra Pradesh, India

ABSTRACT

Several methods of treatment have been suggested for removal of chromium from waste waters which include chemical precipitation, reverse osmosis, ion exchange, foam formation etc. The main disadvantages of the above processes are they produce large amounts of sludge and there are no possibilities of metal recovery and are very costly also. The use of plants and other plant materials for the removal of the heavy metals have already been reported in the literature as the non-conventional adsorbents. In the present work, an attempt has been made to compare the efficiency of removal of Chromium using conventional and non-conventional adsorbents. Effluent from an electroplating industry was collected and analyzed for pH value, acidity, suspended soils, dissolved solids and chromium. Batch experiments were conducted using the diluted effluent to facilitate the comparison of the results with control sample. Hibiscus Mutabulis(commonly known as hibiscus plant) leaves were collected locally and these leaves were dried, powdered and sieved through standard sieve(I.S. no. 0.075mm). The first stage of batch experiments were carried out using this sieved leaf powder. The second stages of experiments were carried out using this sieved leaf powder. The second stages of experiments were carried out using commercially available activated charcoal. Variation of chromium removal with contact period and dosage of adsorbent is studied using Freundlich plots.

Delineation of Groundwater Potential Zones using Remote Sensing and GIS Techniques: A Case Study of Sarada Gedda Sub Watershed

Ch. Kannam Naidu Dr. B. Visweswara Reddy

Ch. Chandra Mouli

Department of Civil engineering, Aditya Institute of Technology and Management (AITAM) Andhra Pradesh, India

ABSTRACT

In present days many researchers have delineated groundwater potential zones using Remote Sensing and GIS techniques by the Weighted Index Overlay Analysis (WIOA) for various geographic regions of the world. Many of the researchers have not been given weightage calcualtions for the thematic layers they considered in their research. But in this research, a detailed approach have been given for weightage calcultions for various thematic layers considered. In this research the following thematic layers have been taken which include Land use/Land cover, Geomorphology, Geology, Soil, Drainage density, Lineament density, Lineament frequency and Lineament Intersection. All the thematic layers have been extracted from the existing data, KOMPSAT and LANDSAT ETM+ satellite data. For the extraction of thematic

layers and analysis, the ArcGIS 9.3,1 and ERDAS Imagine 9.1 softwares have been used for delineating the groundwater potential zones. The delineated groundwater potential zones have been validated with the open wells in the study area.

Geo-Spatial Approach for the Assessment of Spatial Distribution of A Groundwater Quality Parameter (Ph) - A Case Study on Vajrapukotturu Mandal, Srikakulam District of North Coastal Andhra Pradesh, India

Dr. B. Visweswara Reddy

Department of Civil engineering, Aditya Institute of Technology and Management (AITAM) Andhra Pradesh, India

ABSTRACT

Geospatial technologies are one of the most advanced techniques for analysis of the groundwater quality. In this study, 28 groundwater samples were collected from different field stations and locations of the sampling stations were obtained using hand-held GPS receiver. The data were collected and analyzed for four different seasons from Dec-13 to Nov-14. The water samples were examined for Physico-chemical parameters like pH, TDS, TH, TA, Chloride, Fluoride and WQI using standard techniques. From that we considered only pH values of the study area and discussed in the present paper. Also, Geographic Information System (GIS) -based groundwater quality i.e., pH mapping in the form of spatial distribution map was generated using ArcGIS-version 9.3.1 software to delineate spatial distribution of groundwater pH quality samples in the study area. The final integrated map shows different priority classes such as Good and Poor groundwater quality of pH zones of the study area.

A Laboratory Study on the Behaviour of the Lime on Pond Ash Treated Marine Clay

Mr. B. Eswara Rao & Mr. Ch.V. Hanumantha Rao

Department of Civil engineering, Aditya Institute of Technology and Management (AITAM) Andhra Pradesh, India

ABSTRACT

Stabilizing the locally available weak soils is of paramount importance in contemporary practices in construction industry. This paper presents results of laboratory investigation made on strength behaviour of a weak soil blended with pond ash and lime. The soil found in the ocean bed is classified as marine soil. It can even be located onshore as well. The properties of marine soil depend significantly on its initial conditions. The properties of saturated marine soil differ significantly from moist soil and dry soil. Marine clay is microcrystalline in nature and clay minerals like chlorite, kaolinite and illinite and non-clay minerals like quartz and feldspar are present in the soil. The soils have higher proportion of organic matters that acts as a cementing agent.

Clay is an impermeable soil, meaning it holds water, as opposed to permeable soil that allows water to rapidly drain, like a gravel or sand. It is also an expansive soil, such as the marine clay which predominates in almost all countries of the world, which when shrinking or expanding, can damage foundations and structures. The shrink and swell movements are due to changes in soil moisture. Providing uniform soil moisture next to and under your foundation is the only best thing to reduce or minimize the damaging effects of expansive soil. Accumulation of various waste materials is now becoming a major concern to the environmentalists. Marine clay is blended with pond ash, a solid-waste from the thermal power stations. Lime is added to soil and pond ash mix as binding material. Pond Ash by itself has little cementitious value but in the presence of moisture it reacts chemically and forms cementitious compounds and attributes to the improvement of strength and compressibility characteristics of soils. So in order to achieve both the need of improving the properties of marine clays and also to make use of the industrial wastes, the present experimental study has been taken up. In this paper the effect of Pond ash and Lime on strength properties of marine clay has been studied.

Editorial Board

STAFF:

SRI. G. GOWRI SANKARA RAO

DR. B. VISWESWARA REDDY

STUDENTS:

BEVARA SIVA YAMINI

PADHI SRUTHI

SASANAPURI SRILEKHA



ADITYA

Institute of Technology and Management

(An autonomous institution)

Tekkali-532 201, Srikakulam Dist., AP <u>Tel: 0845-245666</u>, 245266, 92466 57908 Email: <u>info@adityatekkali.edu.in</u>

DEPARTMENT OF CIVIL ENGINEERING

A HALF-YEARLY NEWSLETTER

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Email: info@adityatekkali.edu.in

ADITYA

Institute of Technology and Management (An autonomous institution) Department of Civil Engineering

Vision and Mission of the Institute

Vision

To evolve into a premier engineering institute in the country by continuously enhancing the range of our competencies, expanding the gamut of our activities and extending the frontiers of our operations.

Mission

Synergizing knowledge, technology and human resource, we impart the best quality education in Technology and Management. In the process, we make education more objective so that efficiency for employability increases on a continued basis.

Vision and Mission of the Department

Vision

To become a pioneer in the field of civil engineering by providing high quality education and research to serve the public consistently with competitive spirit professional ethics.

Mission

•Provide quality knowledge and advance skills to the students in order to expertise theoretically and practically in the areas of civil engineering.

•Improve the professional potentiality of the students and staff through educational programs to expand the knowledge in the field of civil engineering

•Inculcate healthy competitive spirit towards the higher education and successful career in the field of civil engineering to serve the nation ethically.

•Provide students and faculty with opportunities to create, disseminate and apply knowledge by maintaining a state of the art research.

Chairman's Message

At AITAM, we are committed to excellence in everything we do. We strive to mould the students in balancing intellectual and practical skills to become leaders in all the fields of Technical know-how and Management. We have created the finest facilities for the students to make the most of their scholastic pursuits. We are closely aligned with the corporate world which ensures exchange of ideas and experiences that keep our curricula focused on current developments and challenges in the field of engineering. We are firmly committed to research and consulting activities to contribute to the development of the discipline of



engineering. Our vitality lies in our spirit of innovation. Our strength lies in our pragmatic approach. Our success lies in our will to do.

Dr. K. Someswara Rao CHAIRMAN

Secretary's Message

Aditya Institute of Technology and Management is founded to meet the increasing demand for competent engineering graduates. Within a short span of its inception, AITAM has grown to be a premier engineering college of its kind and has won laurels and kudos from the industry. The faculty and staff in AITAM are dedicated to providing first-class education that instills strong and potent basic knowledge for sound practice in science and engineering for the well-being of the society. The Institute offers curricula that nurtures creative thinking and prepares



students for productive and rewarding careers. The Institute offers programmes that deepen learning experiences of our students and prepare them for successful careers as engineers.

Sri L.L. Naidu SECRETARY

Director's Message

Engineering education at AITAM is indeed a rewarding intellectual experience. The Institute prepares the engineering professionals of tomorrow imbued with insight, imagination and ingenuity to flourish as successful engineers. Our programs are attuned to the needs of the changing times. The classrooms are ultra-modern; the library and labs are cutting-edge; and all the members of the faculty are workaholic professionals and masters in their fields. Not surprisingly, our students are recruited by such renowned organizations as HCL, Satyam,



WIPRO, INFOSYS, TCS, Visual Soft, Innova-Solutions and InfoTech. The exceptional dedication of our students, faculty and staff, and our collaborations with Industry and other institutions ensure that the Institute is well-poised to create a unique niche in the horizons of engineering education.

Prof. V.V. Nageswara Rao DIRECTOR

Principal's Message

It is only through knowledge that man attains immortality. Knowledge has to expand or grow to remain as knowledge. The road to excellence is toughest, roughest and steepest in the Universe. The world requires and honors only excellence. Available information has to be directed by wisdom and intelligence to create new knowledge. Promotion of creativity is the new role of education. It is only through creative thinking that the present and future problems can be addressed to find dynamic solutions. Technology should be used to help remove poverty from the world. In fact forty per cent of the world's poor are in India. Confidence leads to



capacity. It is faith in oneself that produces miracles. Education at AITAM helps build character, strengthen the mind, expand the intellect and establish a culture of looking at problems in a new perspective. The student is put through rigorous training so that he can stand on his own feet after leaving the portals of the Institute.

Dr. K.B. Madhu Sahu PRINCIPAL

HOD's Message

Welcome to the Department of Civil Engineering at AITAM, Tekkali. Our journey started in the year 2011. Over the past 4 years we have grown our competency and expertise in core Civil Engineering curriculum and research. Vision of the department is to become a pioneer in the field of civil engineering by providing high quality education and research to serve the public consistently with competitive spirit and professional ethics.



The primary focus of our curriculum is to impart technical know-how to students, improve

their problem skills combined with innovative thoughts. The department is well equipped with state of the art laboratories for academics and research purpose. With funding from Technical Education Quality Improvement Program (TEQIP) and AICTE, special purpose lab equipment and software have been procured to support the research activities. Faculty members have excellent academic credentials possessing Doctorates and experienced staff from academics, research and core industry.

Mr. Ch. Kannam naidu

HOD CIVIL DEPARTMRNT

Contents of Newsletter

News Letter (JANUARY -JUNE)

- 1. Vision & Mission of the Institution
- 2. Vision & Mission of Dept
- 3. Chairman's message
- 4. Secretary's message
- 5. Director's message
- 6. Principal's message
- 7. HOD's message
- 8. Faculty Publications (14)
- 9. Faculty Workshops attended / organized (lorg & 6 Attented)
- 10. Foreign countries visited (Nil)
- 11. Funding projects received by faculty
- 12. Student achievements
- 13. Student paper presentations
- 14. Industrial tours
- 15. Guest lectures

FACULTY PUBLICATIONS

- K. Rajasekharam, Assistant Professor, Published a paper titled *Feasibility of Lime Stabilized Black Cotton Soil in Flexible Pavements* in IJAR- Sucharitha Publications, Volume- 2, Issue-3(1), Sep, 2015, ISSN 2348-7666
- G. Gowri Sankara Rao, Associate Professor, Published a paper titled *Improvement of Safe Bearing Capacity of Moorum using Cement as Admixture* in IJAR- Sucharitha Publications, Volume- 2, Issue-3(1), Oct, 2015, ISSN 2348-7666
- 3. G. Durga Rama Naidu, Assistant Professor, Published a paper titled *Improvement of Safe Bearing Capacity of Moorum using Cement as Admixture* in IJAR- Sucharitha Publications, Volume- 2, Issue-3(1), Oct, 2015, ISSN 2348-7666
- 4. Ch. V. Hanumantha Rao Assistant Professor, Published a paper titled *Feasibility of Lime Stabilized Black Cotton Soil in Flexible Pavements* in IJAR- Sucharitha Publications, Volume- 2, Issue-3(1), Sep, 2015, ISSN 2348-7666
- Ch. V. Hanumantha Rao Assistant Professor, Published a paper titled *Improvement of Safe Bearing Capacity of Moorum using Cement as Admixture* in IJAR- Sucharitha Publications, Volume- 2, Issue-3(1), Oct, 2015, ISSN 2348-7666
- 6. Dr. Murali, Professor, Published a paper titled *Some preliminary studies on the removal of chromium from electroplating industry waste using plant material and activated Charcoal* in IJEP, Volume- 35, Issue-10, Oct, 2015, ISSN 0253-7141
- 7. Ch. Kannam Naidu, Associate Professor, Published a paper titled *Delineation of Groundwater Potential Zones using Remote Sensing and GIS Techniques: A Case Study of Sarada Gedda Sub Watershed* in IJERT, Volume- 4, Issue-11, Nov, 2015, ISSN 2278-0181
- 8. Dr. B. Visweswara Reddy, Assistant Professor Published a paper titled *Delineation of Groundwater Potential Zones using Remote Sensing and GIS Techniques: A Case Study of Sarada Gedda Sub Watershed* in IJERT, Volume- 4, Issue-11, Nov, 2015, ISSN 2278-0181
- 9. Ch. Chandra Mouli, Sr. Assistant Professor Published a paper titled *Delineation of Groundwater Potential Zones using Remote Sensing and GIS Techniques: A Case Study of Sarada Gedda Sub Watershed* in IJERT, Volume- 4, Issue-11, Nov, 2015, ISSN 2278-0181
- 10. B. Eswara Rao, Assistant Professor, published a paper titled A Laboratory Study on the Behaviour of the Line on Pond Ash Treated Marine Clay in International Journal of Multidisciplinary Research Center, Volume-1, Issue-7, Dec, 2015, ISSN 2454-3861
- 11. Ch. Hanumantha Rao, Assistant Professor, published a paper titled **A Laboratory Study on the Behaviour of the Lime on Pond Ash Treated Marine Clay** in International Journal of Multidisciplinary Research Center, Volume-1, Issue-7, Dec, 2015, ISSN 2454-3861

12. Dr. B. Visweswara Reddy, Assistant Professor Published a paper titled Geo-Spatial Approach for the Assessment of Spatial Distribution of A Groundwater Quality Parameter (Ph) - A Case Study on Vajrapukotturu Mandal, Srikakulam District of North Coastal Andhra Pradesh, India in Journal of Applied Hydrology, Volume- XXVIII, Issue-3 & 4, July, 2015, ISSN 2278-0181

FACULTY DEVELOPMENT PROGRAMME/WORKSHOPS/CONFERENCES ATTENDED

S. N o.	Name of The Faculty	Dates	Name of The Programme	Host Institution
1	G. Gwri Snkara Rao	26-07- 2015	One Day Faculty Development Workshop on Intellectual Property Rights	AITAM, Tekkali
2	Dr. M. Murali	26-07- 2015	One Day Faculty Development Workshop on Intellectual Property Rights	AITAM, Tekkali
3	Ch. Kannam Naidu	26-07- 2015	One Day Faculty Development Workshop on Intellectual Property Rights	AITAM, Tekkali
4	S.Ramlal	26-07- 2015	One Day Faculty Development Workshop on Intellectual Property Rights	AITAM, Tekkali
5	Dr. B. Visweswara Reddy	26-07- 2015	One Day Faculty Development Workshop on Intellectual Property Rights	AITAM, Tekkali
6	G. Saranya	26-07- 2015	One Day Faculty Development Workshop on Intellectual Property Rights	AITAM, Tekkali
7	Ch. Hanumantha Rao	26-07- 2015	One Day Faculty Development Workshop on Intellectual Property Rights	AITAM, Tekkali
8	J. Skhara Raju	26-07- 2015	One Day Faculty Development Workshop on Intellectual Property Rights	AITAM, Tekkali

9	B. Jyotshna	26-07- 2015	One Day Faculty Development Workshop on Intellectual Property Rights	AITAM, Tekkali
10	K.	26-07-	One Day Faculty Development Workshop	AITAM,
	Rajasekharam	2015	on Intellectual Property Rights	Tekkali
11	M. Chandini	26-07- 2015	One Day Faculty Development Workshop on Intellectual Property Rights	AITAM, Tekkali
12	V. Divya Sri	26-07- 2015	One Day Faculty Development Workshop on Intellectual Property Rights	AITAM, Tekkali
13	G. Narsimha	26-07-	One Day Faculty Development Workshop	AITAM,
	Murthy	2015	on Intellectual Property Rights	Tekkali
14	GDR Naidu	26-07- 2015	One Day Faculty Development Workshop on Intellectual Property Rights	AITAM, Tekkali
15	U Sravan	26-07-	One Day Faculty Development Workshop	AITAM,
	Kumar	2015	on Intellectual Property Rights	Tekkali
16	Ch. Chandra	26-07-	One Day Faculty Development Workshop	AITAM,
	Mouli	2015	on Intellectual Property Rights	Tekkali
17	G. Anil	26-07-	One Day Faculty Development Workshop	AITAM,
	Kumar	2015	on Intellectual Property Rights	Tekkali
18	B. Eswara	26-07-	One Day Faculty Development Workshop	AITAM,
	Rao	2015	on Intellectual Property Rights	Tekkali
19	N. Lakshmi	26-07-	One Day Faculty Development Workshop	AITAM,
	Pravllika	2015	on Intellectual Property Rights	Tekkali

20	P. Manoj Kumar	26-07- 2015	One Day Faculty Development Workshop on Intellectual Property Rights	AITAM, Tekkali
21	Ch. Chandra Mouli	03-08- 2015 to07-08- 2015	International work shop on REIMAGINE STEM (Reviving Education by Implementing Active &Guided Inquiry Experiences in Science,Technology,Engineering,Math& Management)	AITAM, Tekkali
22	S. Ramlal	03-08- 2015 to07-08- 2015	International work shop on REIMAGINE STEM (Reviving Education by Implementing Active &Guided Inquiry Experiences in Science,Technology,Engineering,Math& Management)	AITAM, Tekkali
23	S. Ramlal	07-09- 2015 to13-09- 2015	FDP on Academic excellence programme	IIM-RAIPUR
24	Dr. B. Visweswara Reddy	08-12- 2015 to 12-12- 2015	TEQIP Course on 'GPS and GIS Technology'	IIT, Roorkee

STUDENT ACHIEVEMENTS

Publications and awards in inter-institute events by students of the programme of study Events Organized under ISTE student chapter and Leadership Student Chapter

S. No	Event	Date	Fac Coord 2015-2	ulty linator 16	Student coordinator	A	chievements	5
I	Publications and av	wards in inter-ins	titute ev	rents by s	students of the	progra	amme of stu	ldy
S. No	Name of activity	Student name & Reg.no	Class	Name o	of event and ve	nue	Date(s)	Awards
		Ac	ademic	Year 2	2015-16			
1	PPT	K. Santhosh Kumar 13A51A0156	Ш	DYI Venkates & '	NAMEC-2015, Sri swara College of E Tech, Srikakulam	ngg.	8 th 9 th .10.2015	1st
2	PPT	Dandu Bharathi 13A51A0135	Ш	DYI Venkates & '	NAMEC-2015, Sri swara College of E Tech, Srikakulam	ngg.	8 th 9 th .10.2015	1st
3	Model Presentation	Gedala Meena 13A51A0140	III	DYI Venkates & '	NAMEC-2015, Sri swara College of E Tech, Srikakulam	ngg.	8 th 9 th .10.2015	1st

PROFESSIONAL ACTIVITIES

(a) Events Organized under ISTE student chapter

S. No	Event	Date	Faculty Coordinator	Student coordinator
01	Engineers Day celebrations	15.09.2015	Dr. G. Nageswara Rao G. Gowri Sankara Rao	Gudla Pavan Kumar
02	Seminar on the Art of Enterpreneurship Development	22.12.2015	Dr. G. Nageswara Rao	Gudla Pavan Kumar

(b) Events Organozed By Iste Chapter Aitam

S. No	EVENT	Dates	Faculty coordinators
1			
			Dr. G. Nageswara Rao
			Sri. P. Sai Vijay
	Engineersday Calabrations Ouiz		Dr. B. RamaRao
1	Competation	15.09.2015	Sri. D. Lokanadham
	Competentia		Sri. T. Prabhakar Rao
			Mr. G. Gowri Sankara Rao
			Sr. M. Chaitanya Kumar
			Dr. G. Nageswara Rao
	National Education Day	11.11.2015	Dr.K. B Madhusahu
			Dr. D. Vishnu Murthy
			Dr. G. Nageswara Rao
3	Seminar on Art of Descende Depar		Sri. P. Sai Vijay
	Writing	02.12.2015	Dr. B. RamaRao
	Writing		Sri. D. Lokanadham

STUDENTS PLACEMENTS

S. No	Roll No.	Name of the Student	Branc h	Name of the Company/Organi zation	Package
1	12A51A0118	Borra Ramasagar	CE	ABACUS INFRASTRUCTURE S PVT.LTD	1.20
2	13A55A0110	Vajja Balakrishna	CE	ABACUS INFRASTRUCTURE	1.20

				S PVT.LTD	
3	12A51A0105	Arja Venkata Rahul	CE	GOOD THROUGH	2.40
4	12A51A0161	Prakriti Neupane	CE	GOOD THROUGH	2.40
5	13A55A0101	Byri Sravani	CE	GOOD THROUGH	2.40
6	13A55A0105	Karukola Tulasi	CE	GOOD THROUGH	2.40
7	13A55A0108	Pyla Chandini	CE	GOOD THROUGH	2.40
8	12A51A0116	Bonela Manjusha	CE	GOOD THROUGH	2.40
9	12A51A0122	Duvvada Nagarjuna	CE	GVPR ENGINEERING LTD	1.20
10	12A51A0150	Sadu Simhachalam	CE	GVPR ENGINEERING LTD	1.20
11	12A51A0158	Nadupuru Vijay Chandra	CE	GVPR ENGINEERING LTD	1.20
12	13A55A0103	Chinthalapoodi Narasinga Rao	CE	GVPR ENGINEERING LTD	1.20
13	12A51A0111	Balla Raja	CE	INAC TECHNOLOGIES	1.20
14	12A51A0129	Korada Prasanth	CE	INAC TECHNOLOGIES	1.20
15	12A51A0146	Pinniinti Sarvani	CE	INAC TECHNOLOGIES	1.20
16	12A51A0152	Saina Hema Sundara Rao	CE	INAC TECHNOLOGIES	1.20
17	13A55A0104	Guntamukkala Durga Prasad	CE	INAC TECHNOLOGIES	1.20
18	13A55A0111	Vasanabhi Naveen	CE	INAC TECHNOLOGIES	1.20
19	12A51A0110	Balaga Mohan	CE	MAHA ELECTRONICS	1.20
20	12A51A0115	Bompada Haneesha	CE	MAHA ELECTRONICS	1.20
21	12A51A0119	Budumuru Mouli	CE	MAHA ELECTRONICS	1.20

22	12A51A0127	Kangati Lokesh	CE	MAHA ELECTRONICS	1.20
23	12A51A0136	Menda Jyothsna Devi	CE	MAHA ELECTRONICS	1.20
24	12A51A0159	Yarra Divya	CE	MAHA ELECTRONICS	1.20
25	12A51A0166	Arbinda Raj Yadav	CE	MAHA ELECTRONICS	1.20
26	13A55A0107	Miriyappalli Janaki	CE	MAHA ELECTRONICS	1.20
27	12A51A0109	Bagadi Venkat Dinesh Chowdary	CE	TRIBRO	1.80
28	12A51A0112	Basavala Rajya Lakshmi	CE	TRIBRO	1.80
29	12A51A0117	Bora Hareesh	CE	TRIBRO	1.80
30	12A51A0121	Cheedi Rambabu	CE	TRIBRO	1.80
31	12A51A0133	Laveti Mohanarao	CE	TRIBRO	1.80
32	12A51A0137	Nalla Swathi	CE	TRIBRO	1.80
33	12A51A0147	Pudi Kiran	CE	TRIBRO	1.80
34	12A51A0148	Puthi Bharath Kumar	CE	TRIBRO	1.80
35	12A51A0155	Tamminana Hemalatha	CE	TRIBRO	1.80
36	12A51A0160	Prashant Kumar Ishar	CE	TRIBRO	1.80
37	12A51A0123	Ganta Sekhar Reddy	CE	VISWANADH PROJECTS LTD	1.20
38	12A51A0126	Jammana Gayatri	CE	VISWANADH PROJECTS LTD	1.20
39	12A51A0142	Pativada Chandrasekhar		VISWANADH PROJECTS LTD	1.20
40	13A55A0109	Telukala Chakradhara Sahu		VISWANADH PROJECTS LTD	1.20

STUDENTS INDUSTRIAL VISITS

S.no	Date of visit	Batch	Year-seM, section	Industry visited
1	26/09/2015	2012-2016	IV-I-A	Shriram Properties Vishakapatanam
2	25/09/2015	2013-2017	III-I-B	Steel Plant RINL Vishakapatnam

Year- seM, section	Industry visited	
3-1 B	Steel Plant, RINLVisakh a atnam	

GUEST LECTURES

S. No.	delivered a guest lecture	Action taken	Date- Month- Year	Resource Person with designation

Editorial Board

STAFF:

SRI. G. GOWRI SANKARA RAO

DR. B. VISWESWARA REDDY

STUDENTS:

BEVARA SIVA YAMINI

PADHI SRUTHI

SASANAPURI SRILEKHA



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DEPARTMENT OF CIVIL ENGINEERING

A HALF-YEARLY NEWSLETTER

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Email: <u>info@adityatekkali.edu.in</u>

ADITYA

Institute of Technology and Management (An autonomous institution) Department of Civil Engineering

Vision and Mission of the Institute

Vision

To evolve into a premier engineering institute in the country by continuously enhancing the range of our competencies, expanding the gamut of our activities and extending the frontiers of our operations.

Mission

Synergizing knowledge, technology and human resource, we impart the best quality education in Technology and Management. In the process, we make education more objective so that efficiency for employability increases on a continued basis.

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•Improve the professional potentiality of the students and staff through educational programs to expand the knowledge in the field of civil engineering

•Inculcate healthy competitive spirit towards the higher education and successful career in the field of civil engineering to serve the nation ethically.

•Provide students and faculty with opportunities to create, disseminate and apply knowledge by maintaining a state of the art research.

Chairman's Message

At AITAM, we are committed to excellence in everything we do. We strive to mould the students in balancing intellectual and practical skills to become leaders in all the fields of Technical know-how and Management. We have created the finest facilities for the students to make the most of their scholastic pursuits. We are closely aligned with the corporate world which ensures exchange of ideas and experiences that keep our curricula focused on current developments and challenges in the field of engineering. We are firmly committed to research and consulting activities to contribute to the development of the discipline of



engineering. Our vitality lies in our spirit of innovation. Our strength lies in our pragmatic approach. Our success lies in our will to do.

Dr. K. Someswara Rao CHAIRMAN

Secretary's Message

Aditya Institute of Technology and Management is founded to meet the increasing demand for competent engineering graduates. Within a short span of its inception, AITAM has grown to be a premier engineering college of its kind and has won laurels and kudos from the industry. The faculty and staff in AITAM are dedicated to providing first-class education that instills strong and potent basic knowledge for sound practice in science and engineering for the well-being of the society. The Institute offers curricula that nurtures creative thinking and prepares



students for productive and rewarding careers. The Institute offers programmes that deepen learning experiences of our students and prepare them for successful careers as engineers.

Sri L.L. Naidu SECRETARY

Director's Message

Engineering education at AITAM is indeed a rewarding intellectual experience. The Institute prepares the engineering professionals of tomorrow imbued with insight, imagination and ingenuity to flourish as successful engineers. Our programs are attuned to the needs of the changing times. The classrooms are ultra-modern; the library and labs are cutting-edge; and all the members of the faculty are workaholic professionals and masters in their fields. Not surprisingly, our students are recruited by such renowned organizations as HCL, Satyam,



WIPRO, INFOSYS, TCS, Visual Soft, Innova-Solutions and InfoTech. The exceptional dedication of our students, faculty and staff, and our collaborations with Industry and other institutions ensure that the Institute is well-poised to create a unique niche in the horizons of engineering education.

Prof. V.V. Nageswara Rao DIRECTOR

Principal's Message

It is only through knowledge that man attains immortality. Knowledge has to expand or grow to remain as knowledge. The road to excellence is toughest, roughest and steepest in the Universe. The world requires and honors only excellence. Available information has to be directed by wisdom and intelligence to create new knowledge. Promotion of creativity is the new role of education. It is only through creative thinking that the present and future problems can be addressed to find dynamic solutions. Technology should be used to help remove poverty from the world. In fact forty per cent of the world's poor are in India. Confidence leads to



capacity. It is faith in oneself that produces miracles. Education at AITAM helps build character, strengthen the mind, expand the intellect and establish a culture of looking at problems in a new perspective. The student is put through rigorous training so that he can stand on his own feet after leaving the portals of the Institute.

Dr. K.B. Madhu Sahu PRINCIPAL

HOD's Message

Welcome to the Department of Civil Engineering at AITAM, Tekkali. Our journey started in the year 2011. Over the past 4 years we have grown our competency and expertise in core Civil Engineering curriculum and research. Vision of the department is to become a pioneer in the field of civil engineering by providing high quality education and research to serve the public consistently with competitive spirit and professional ethics.



The primary focus of our curriculum is to impart technical know-how to students, improve

their problem skills combined with innovative thoughts. The department is well equipped with state of the art laboratories for academics and research purpose. With funding from Technical Education Quality Improvement Program (TEQIP) and AICTE, special purpose lab equipment and software have been procured to support the research activities. Faculty members have excellent academic credentials possessing Doctorates and experienced staff from academics, research and core industry.

Mr. Ch. Kannam naidu

HOD CIVIL DEPARTMRNT

Contents of Newsletter

News Letter (JANUARY -JUNE)

- 1. Vision & Mission of the Institution
- 2. Vision & Mission of Dept
- 3. Chairman's message
- 4. Secretary's message
- 5. Director's message
- 6. Principal's message
- 7. HOD's message
- 8. Faculty Publications (Two)
- 9. Faculty Workshops attended / organized (lorg & 6 Attented)
- 10. Foreign countries visited (Nil)
- 11. Funding projects received by faculty (Nil)
- 12. Student achievements
- 13. Student paper presentations
- 14. Industrial tours
- 15. Guest lectures

FACULTY PUBLICATIONS

- 1. Ch. Hanumantha Rao, Assistant Professor, published a paper titled An *Experimental investigation on Performance of ternary concrete in Strength and Durability Aspects* in International Journal of Academic Research, Volume-2, Issue-1(4), March, 2015, ISSN 2348-7666
- 2. Ch. Hanumantha Rao, Assistant Professor, published a paper titled *Enhancement of Fiber Concrete Strength by Using GGBS And RHA* in International Journal of Academic Research, Volume-2, Issue-2(5), June, 2015, ISSN 2348-7666

FACULTY DEVELOPMENT PROGRAMME/WORKSHOPS/CONFERENCES ATTENDED/ORGANIZED

S.	Name of			TT (T (1)
Ν	The	Dates	Name of The Programme	Host Institution
0.	Faculty			
1	Dr. M. Murali	15-02- 2015 to16- 02-2015	Organized A Two Day National Workshop on "GIS Applications for Public Health Protection" (Convener)	AITAM, Tekkali
2	Mr. Ch. Kannam Naidu	15-02- 2015 to16- 02-2015	Organized A Two Day National Workshop on "GIS Applications for Public Health Protection" (Co- Convener)	AITAM
3	Dr.B. Visweswara Reddy	07-03- 2015 to08- 03-2015	A Two Day National Workshop on "GIS applications for Public Health Protection"	AITAM, Tekkali
4	G. Gowri Sankara Rao	07-03- 2015 to08- 03-2015	A Two Day National Workshop on "GIS applications for Public Health Protection"	AITAM, Tekkali
5	G. Saranya	G. Saranya 07-03- 2015 A Two Day National Workshop on "GIS applications for Public Health Protection" 03-2015		AITAM, Tekkali
6	M. Vasudeva Naidu	07-03- 2015 to08- 03-2015	A Two Day National Workshop on "GIS applications for Public Health Protection"	AITAM, Tekkali
7	Ch. Hanumanth a Rao	07-03- 2015 to08- 03-2015	A Two Day National Workshop on "GIS applications for Public Health Protection"	AITAM, Tekkali

8	J. Sekhara Raju	07-03- 2015 to08- 03-2015	A Two Day National Workshop on "GIS applications for Public Health Protection"	AITAM, Tekkali
9	B. Jyotshna	07-03- 2015 to08- 03-2015	A Two Day National Workshop on "GIS applications for Public Health Protection"	AITAM, Tekkali
10	K. Rajasekhara m	07-03- 2015 to08- 03-2015	A Two Day National Workshop on "GIS applications for Public Health Protection"	AITAM, Tekkali
11	M. Chandini	07-03- 2015 to08- 03-2015	A Two Day National Workshop on "GIS applications for Public Health Protection"	AITAM, Tekkali
12	V. Diya Sri	07-03- 2015 to08- 03-2015	A Two Day National Workshop on "GIS applications for Public Health Protection"	AITAM, Tekkali
13	G. Narasimha Murthy	07-03- 2015 to08- 03-2015	A Two Day National Workshop on "GIS applications for Public Health Protection"	AITAM, Tekkali
14	GDR Naidu	07-03- 2015 to08- 03-2015	A Two Day National Workshop on "GIS applications for Public Health Protection"	AITAM, Tekkali
15	U. Sravan Kumar	07-03- 2015 to08- 03-2015	A Two Day National Workshop on "GIS applications for Public Health Protection"	AITAM, Tekkali
16	G. Gowri Sankara Rao	09-03- 2015	A One Day Workshop On Outcome Based Education	AITAM, Tekkali
17	Dr.B. Visweswara Reddy	22-04- 2015	National Workshop on "Geospatial Technologies for Resources Evaluation and Disaster Management"	Andhra University

FOREIGN COUNTRIES VISITED

FUNDING PROJECTS RECEIVED BY FACULTY

STUDENT ACHIEVEMENTS

Publications and awards in inter-institute events by students of the programme of study Events Organized under ISTE student chapter and Leadership Student Chapter

S. No	Event	Date	Faculty Coordinator	Student coordinator	Achievements		
	2015-16						

Publications and awards in inter-institute events by students of the programme of study

S. No	Name of activity	Student name & Reg.no	Class Name of event and venue		Date(s)	Awards	
		Acad	emic Y	ear 2015-16			
1	Tama Mind	V. Balakrishna	IV.	SOUDHA 2K15, JNTUK,	21 st	2^{nd}	
1	Terra Mind	&13A55A0110	IV	University College ofFebruaryEngineering2015			
		V Neveen		SOUDHA 2K15, JNTUK,	21 st		
2	Terra Mind	8.12 A 55 A 0111	IV	University College of	February	2^{nd}	
		&ISASSA0111		Engineering	2015		
		B Sravani &		SOUDHA 2K15, JNTUK,	21 st		
3	Terra Mind	12A55A0101	IV	University College of	February	2^{nd}	
		13A33A0101		Engineering 2015			
		P. Paivo Lakshmi		SOUDHA 2K15, JNTUK,	21 st		
4	Terra Mind	Mind B. Rajya Lakshim	IV	University College of	February	2^{nd}	
		& 12A51A0112		Engineering	2015		
5	PPT on Intelligent	V. Naveen	IV	SOUDHA 2K15, JNTUK, University College of	21 st February	1 st	
	Transportation System	&13A55A0111		Engineering	2015		

PROFESSIONAL ACTIVITIES

(a) Events Organized under ISTE student chapter

S. No	Event	Date	Faculty Coordinator	Student coordinator

(b) Events Organozed By Iste Chapter Aitam

S. No	EVENT	Dates	Faculty coordinators

STUDENTS PLACEMENTS

S. No	Roll No.	Name of the Student	Branc h	Name of the Company/Organi zation	Package

STUDENTS INDUSTRIAL VISITS

S.no	Date of visit	Batch	Year-seM, section	Industry visited
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GUEST LECTURES

S. No.	delivered a guest lecture	Action taken	Date- Month- Year	Resource Person with designation

Editorial Board

STAFF:

SRI. G. GOWRI SANKARA RAO

DR. B. VISWESWARA REDDY

STUDENTS:

BEVARA SIVA YAMINI

PADHI SRUTHI

SASANAPURI SRILEKHA



ADITYA

Institute of Technology and Management

(An autonomous institution)

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