

2017-18

NEWSLETTER
Department
of
Civil Engineering



S.V.S.M.D's

Kai. Kalyanrao (Balasaheb) Ingale
Polytechnic, Akkalkot



Civil Engineering Department

Welcome



It gives me great pleasure to give my best wishes to Newsletter of department for the academic year 2017-18. The students and faculties of department are always proactive in taking initiatives in technical, cultural and social events, industrial visits and expert lectures etc. I hope this newsletter will serve the purpose of reflecting all activities of department and it will inspire others to do their best.

I wish good luck to the entire team and look forward for your kind patronage to newsletter.

Mr. D.A. Janngonda
Head of Department

Vision

- To strive for making Vibrant Civil Engineers for rural community development.

Mission

M1 - To mould Responsible Engineers with Good Discipline Knowledge.

M2- To transform the Rural Potential into Technical Excellence with The help of Knowledge & Technology.

M3- To motivate the Students for Becoming Entrepreneur.

Program Educational Objectives (PEOs)

1. To equip the students with sufficient knowledge to become leaders in industry.
2. Ability to tackle the problems individually and as a team by communicating effectively in the professional world.
3. To pursue higher education.

Program Outcomes (POs)

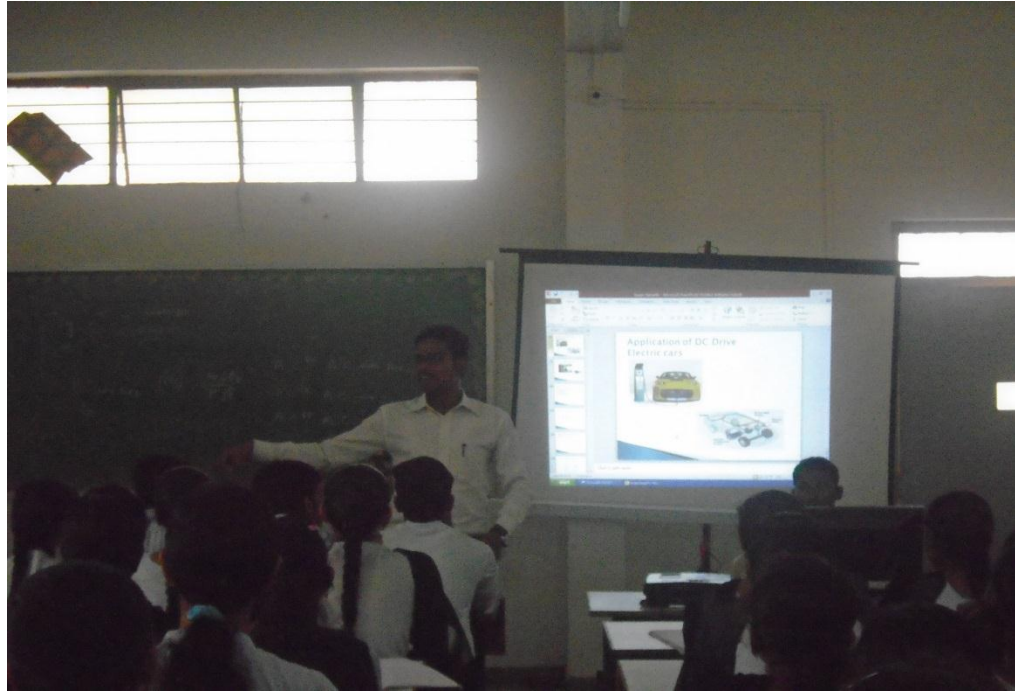
PO1	Basic and discipline specific knowledge: Apply the knowledge of basic mathematics, science and engineering fundamental and engineering specialization to solve the engineering problems
PO2	Problem analysis: Identify and analyze well-defined engineering problems using codified standard methods.
PO3	Design / Development of Solution: Design solutions for well-defined technical problems and assist with the design of system components or process to meet specified needs.
PO4	Engineering Tools, Experimentation and Testing: Apply the modern engineering tools and appropriate technique to conduct standard tests and measurements.
PO5	Engineering Practices for Society, Sustainability and Environment: Apply appropriate technology in context of society, sustainability, environment and ethical practices.
PO6	Project Management: Use engineering management principals individually, as a team member or a leader to manage projects and effectively communicate about well-defined engineering activities.
PO7	Life-long learning: Ability to analyse individual needs and engage in updating in context of technological changes.

Expert Talks

1. **“Skill Development Workshop & Basics of Cement, masonry work & Plastering by Mr. Balkrushna Kulkarni (Ultra Tech Cement, Solapur).**
2. **Building bylaws by Mr. Peerzade S.K.(Builder & Contractor,Akkalkot).**
3. **Interview Skill for Final Year Students by Mr. Dev Goski (Head of Skill Development).**
4. **Aqua-guard Unit & Water softener by Mr. Aktar Sir (Boiler in charge, Solapur).**
5. **Safety at construction Site by Prof. Ghatge S.A. (SVSMDS KKIPolytechnic College,Akkalkot).**
6. **Construction of Flyovers by Prof. Kulkarni S.R.(N.K.Orchid College of Engg., Solapur).**



Building bylaws by Mr. Peerzade S.K.(Builder & Contractor,Akkalkot).



Aqua-guard Unit & Water softener by Mr. Aktar Sir (Boilerincharge, Solapur).



Construction of Flyovers by Prof. Kulkarni S.R.(N.K.Orchid College of Engg., Solapur).



Safety at construction Site by Prof. Ghatge S.A. (SVSMDS KKI,Polytechnic College, Akkalkot).

Site Visits:

1. **Bonds in Brickwork AndPlastering at Peerzade Builders.**
2. **Water Treatment at Water Treatment Plant,Pakni.**
3. **Treatment process, functions and working of various units at Municipal Corporation, MIDC.**
4. **Treatment of solid waste ; Vermi Composting (Agri Supervisor)**
5. **Industrial solid waste and management;Matoshree Laxmi Sugar Cooperation Pvt ltd.**
6. **Construction of multy-storiedbuilding ; Disha Developers.**
7. **Road under Construction ; Awtade Construction Pvt. Ltd,Solapur.**
8. **Valuation of building ; Ashok Mahindrakar (Govt. valuator)**



PEERJADE BUILDERS



**WATER
TREATMENT
PLANT ,
PAKANI**



CONSTRUCTION OF MULTISTORIED BUILDING



Valuation of building

PAPERS PUBLISHED :

ECO-BRICK TECHNOLOGY

Submitted by;

- 1) Naikwadi W.M. (Enrollment no. 1612050143)
- 2) Tolnure S.S. (Enrollment no. 1512050036)
- 3) Ingale A.D. (Enrollment no. 1312050022)
- 4) Ruhi A.R. (Enrollment no. 1512050017)
- 5) Kamble P.S. (Enrollment no. 1512050005)
- 6) Pawar P.R. (Enrollment no. 1512050039)

Under the guidance of;

Prof. Gurav S.K.

[Lecturer in Civil Engineering Department
S.V.S.M.D's K.K.I. Polytechnic, Akkalkot]

Department of Civil Engineering

ABSTRACT

In building construction brick is one of the major ingredients in the material used for construction. In the process of brick making, it has to be burn in kiln which introduced to evolve the CO₂ gas in major quantity. This CO₂ gas pollutes the environment. So the solution on this disadvantage of the burnt clay bricks is replacing the bricks with another material i.e. bricks made from waste plastic bottles. Today we need cost effective and environment friendly material which not pollute the environment. Therefore We can use the waste plastic bottles for making

an affordable house. This project report consist of use of plastic waste bottle in construction as a brick which the bottles are filled with mixture of sand and soil with proportion of 40%-60% in three layers and tamp each layer with tamping rod by 25 blows and use as a brick in construction. Therefore, there were two types of experiments were used to evaluate the properties plastic bottle filled with sand and soil which are Compression test, temperature test in indoor and outdoor and humidity. The compression test conducts on 1000 ml, 600ml and 300 ml bottle. As a result all the bottles are achieving the strength over the permissible limit required for burn clay brick. The comparison of indoor and outdoor wall temperature, air Humidity between the plastic bottle green house and normal brick house has indicate that plastic bottle has recorded highest reading for outdoor wall temperature with 36°C and indoor temperature is 27°C . From these result it can be concluded that plastic bottle house have a potential to us this material in construction. As per the study on PET plastic bottle and its lifespan and various ratios of mixes use for construction is to be carried out.

USE OF FERRO-CEMENT IN CONSTRUCTION

Submitted by;

- 1) Mr.Survase S.A. (Enrollment No.1512050019)
- 2) Mr.Durlekar P.S. (Enrollment No. 1512050027)
- 3) Mr.Shivsharan A.R. (Enrollment No. 1412050051)
- 4) Mr.Birajdar M.P. (Enrollment No. 1612050148)
- 5) Mr.Pujari M.C. (Enrollment No. 1612050158)
- 6) Mr.Rathod A.S. (Enrollment No. 1412050203)

Under the guidance of;

Prof. Gram N.A.

[Lecturer in Civil Engineering Department
S.V.S.M.D's K.K.I. Polytechnic, Akkalkot]

Department of Civil Engineering

ABSTRACT

– Ferro cement is a composite material made up of cement mortar and reinforcement in the form of layer of mesh. A composite material is a formed that behaves differently from reinforced concrete. There is some similarity between the reinforced concrete and ferrocement materials; differences are there, indicating that ferrocement requires a separate study to establish its structural performances. Ferro cement, a thin element, is used as a building construction as well as a repair material. This review from the past experience present the results of experimental and analytical studies on ferrocement members and bring out the salient features of construction, material properties and the special techniques of applying cement mortar on to the reinforcing mesh. This study brings out the importance of using ferrocement in swimming pools and water tanks, silos, corrugated roofs, slab panels, shell and dome structures by using available mechanized production methods and proper choice of reinforcements.

Hospital Waste Disposal

Submitted by;

1. Nimbalkar Girajaram Swami Rao (Enrollment no.1312050007)
2. Chavan Rdhul Tulashiram (Enrollment no.1412050209)
3. Pedasangi Sachin Chandrakant (Enrollment no.1312050029)
4. Nadageri Shrishail Gurunath (Enrollment no.1212050020)
5. Dhute Shivanand Jagannath (Enrollment no. 1412050206)
6. Nadaf Hajimlang Vajeer (Enrollment no.1412050198)

Under the guidance of;

Lect. Mr. Ghatage S.A.

[Lecturer in Civil Engg. Department
S.V.S.M.D's K.K.I. Polytechnic, Akkalkot]

Department of CIVIL Engineering

ABSTRACT

Hospital wastes pose a significant impact on health and environment. From this study it can be said that there is an urgent need for raising awareness and education on medical waste issues. Proper waste management strategy is needed to ensure health and environmental safety. For further study, it is needed to collect more information on impacts, disposal and management to draw clear conclusion. Biomedical waste management is one of the biggest challenges of the present day times because it has a direct impact on the health of human beings. Since it is hazardous in nature its safe and proper disposal is extremely important. For proper disposal management of biomedical waste the Ministry of Environment and Forests has published the Bio-Medical Waste Rules, 1998. This review explains the hospital waste management and the environmental problem in India. This study also focused on the problems associated with Biomedical waste. In the past, medical waste was often mixed with municipal solid waste and disposed in nearby

landfills. In recent years, many efforts have been made by environmental regulatory agencies to better manage the biomedical waste. Need to collect information and examples from developed country or the country, which has sound medical waste management system. Find alternatives and appropriate technologies for developing countries. Need extensive study on this medical waste and its management aspects as well. All over the world, there is an exodus of people from villages to cities, partly for education and employment and partly because agriculture has become less and less profitable. It is estimated that 65% of the world's population will live in cities by 2030. The infrastructure required for this lop-sided growth of the cities is resulting in mountains of garbage collecting in the unplanned extensions in larger cities, because of poor conservancy services and lack of civic amenities. It is estimated that the domestic garbage produced per day in Mumbai is of size of an eight stored building complex. The quality of air in the surroundings of the cities is so poor that it is estimated about two million children under five die each year from respiratory infections. Falling in line with the general situation, we find certain public places like hospitals, vegetable, fish and other market places, Railway stations, Bus stands, Parks and Cinema halls are maintained unhygienically contributing to the spread of infectious diseases. It is wonder how the elite like doctors and higher officials who work in such public places and spend major part of their day time in these places are callous to the environment. Particularly, hospitals generate an enormous amount of dangerous waste. The amount of solid waste generated by hospitals has been increasing rapidly in developing countries like India and its management can no longer be ignored. Increasing concern for community health standards and pollution control requirements demand that the huge mass of infectious waste be rendered as harmless as possible before it is disposed. Against this background, an attempt is made in this paper to discuss the problem of disposal of wastes in Indian hospitals and various legislations relating to environmental protection in general and Bio-medical waste (Management and Handling) rules, 1998 (amended in 2000) based on the environmental (protection) Act, 1986 in particular. This Paper also suggests a few measures for the effective management of waste disposal. The objectives

of this study were: (i) to assess the waste handling and treatment system of hospital bio-medical solid waste and its mandatory compliance with Regulatory Notifications for Bio-medical Waste (Management and Handling) Rules, 1998, under the Environment (Protection Act 1986), Ministry of Environment and Forestry, Govt. of India, at the chosen KLE Society's J. N. Hospital and Medical Research Center, Belgaum, India and (ii) to quantitatively estimate the amount of non-infectious and infectious waste generated in different wards/sections.

FDP/ STTP:

Sr. No.	FDP/STTP Organized/Conducted	From	To	No. of Days
1	FDP on Soft skills & Industries Awareness	02/09/2017	03/09/17	2
2	FDP on Teaching Pedagogy in Technical Institute	18/02/2018	19/02/2018	2

DEPARTMENTAL

EVENT:

Sr.No.	NAME OF EVENT	DATE ORGANIZED
1	WORKSHOP	27/1/2019 TO 29/1/2019

Co-Curricular activity:

Sr. No	Type of activity & Details (Paper presentation/Project /Quiz/Etc.)	Date	Name of participating student	Organizing Body & Organizing Institute.	Awards (Winner/Participation)	Level (State /National /etc.)
1	Inter collegiate competition(Poster Presentation)	20/01/2018	1.Mr.Thamb KedarMallinath 2.Gavandi prasadsunil	Sangmeshwar college , solapur	Participation	State
2	G K Competition	24/09/2017	Mrchavan S S	Sangmeshwar college , solapur	Participation	Distric
3	Poster Presentation	01/03/2018	Miss kamble P.S	Singhad inst. solapur	Winner 1	National
4	Poster Presentation	01/03/2018	Miss Pawar P R	Singhad inst. solapur	Winner 1	National
5	Auto CAD	01/03/2018	Mrkarajagi S L	Singhad inst. solapur	Participation	National
6	Poster Presentation	01/03/2018	MrSupnar G S	Singhad inst. solapur	Participation	National
7	Poster Presentation	01/03/2018	MR . SURVASE. S .A	Singhad inst. solapur	Participation	National
8	Auto CAD	01/03/2018	MR. BHARMA S.S.	Singhad inst. solapur	Participation	National
9	Auto CAD	01/03/2018	MR.ACHAGOND .L.V	Singhad inst. solapur	Participation	National
10	Auto CAD	01/03/2018	MR.SABASAGI. S.I	Singhad inst. solapur	Participation	National
11	Auto CAD	01/03/2018	MrBiradar .M.P	Singhad inst. solapur	Participation	National
12	Auto CAD	01/03/2018	Mr.Hotkar S.I	Singhad inst. solapur	Participation	National
13	CAD MANIA	09/03/2018	Mr.Birajdar M.P	nkocoet, solapur	Participation	National




14	CAD MANIA	09/03/2018	Mr.Kamble .A.R	nkocoet, solapur	Participation	National
15	Poster Presentation	01/03/2018	MrPujari.B.S(TYCE)	Singhad inst. solapur	Participation	National
16	Poster Presentation	01/03/2018	MrPujari.M.C(TYCE)	Singhad inst. solapur	Participation	National
17	CAD MANIA	09/03/2018	MrPujari.B.S(TYCE)	nkocoet, solapur	Participation	National
18	CAD MANIA	09/03/2018	Mr.Durlekar P.S(TYCE)	nkocoet, solapur	Participation	National
19	CAD MANIA	09/03/2018	MrNaikwadi W.M(TYCE)	nkocoet, solapur	Participation	National
20	Quiz competition	03/03/2018	Kamble A R(TYCE)	skn sinhgad , pandharpur	Participation	National
21	Quiz competition	03/03/2018	Mr. Birajdar M .P (TYCE)	skn sinhgad , pandharpur	Participation	National
22	Quiz competition	03/03/2018	MrPujari .M.C	skn sinhgad , pandharpur	Participation	National
23	Quiz competition	03/03/2018	Mr.Durlekar.P.S	skn sinhgad , pandharpur	Participation	National
24	Quiz competition	03/03/2018	MrNaikwadi W.M(TYCE)	skn sinhgad , pandharpur	Participation	National
25	Mega Structure	09/03/2018	Mr.Ruhi A.R (TY)	nkocoet, solapur	Participation	National
26	Mega Structure	09/03/2018	MrGogalgave S.C (TY)	nkocoet, solapur	Participation	National
27	Power presentation	03/03/2018	Mr.Pujari B.S	agpit, solapur	WINNER 1	National
28	CUBE CRUSHING	01/03/2018	Miss .Tolnure S S	Singhad inst. solapur	WINNER 1	National
29	CUBE CRUSHING	01/03/2018	MrNaikwadi W.M(TYCE)	Singhad inst. solapur	WINNER 1	National
30	Super surveyor	03/03/2018	Belle S D (SY)	Singhad inst. solapur	Second Prize	National
31	Super surveyor	03/03/2018	MrKamble A.P	Singhad inst. solapur	Second Prize	National




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EXTRA CURRICULAR ACTIVITY:




Sr. No	Type of activity & Details (SPORTS/DRAMA /SOCIAL/NSS Etc.)	Date	Name of participating student	Organizing Body &Organizing Institute.	Awards (Winner/Participation)	Level (State /National /etc.)
1	Foundation Day	06/08/2017	CIVIL DEPT.	INSTITUTE	PARTICIPATION	INSTITUTE
2	Teacher Day	05/09/2017	CIVIL DEPT.	INSTITUTE	PARTICIPATION	INSTITUTE
3	Engineering Day	15/09/2017	CIVIL DEPT.	INSTITUTE	PARTICIPATION	INSTITUTE
4	Well-Come Function	05/09/2017	CIVIL DEPT.	INSTITUTE	PARTICIPATION	INSTITUTE
5	Tree Plantation	15/08/2017	CIVIL DEPT.	INSTITUTE	PARTICIPATION	INSTITUTE

Academic Performance:

THIRD YEAR				
SR.NO.	NAME OF THE STUDENT	RESULT IN %	PHOTO	RANK
1	HOTKAR SACHIN YALLAPPA	80.15		1
2	SURVASE SACHIN ASHOK	81.23		2
3	SUPNAR UKESH SHIVAJI	79.56		3

SECOND YEAR				
SR.NO.	NAME OF THE STUDENT	RESULT IN %	PHOTO	RANK
1	KHAJURGIKAR SUSHMA SHANKARLING	84.22		1
2	BHOSALE SAMARTH SHIVAJI	77.84		2
3	THAMB KEDAR MALLINATH	75.49		3

FIRST YEAR

SR.NO.	NAME OF THE STUDENT	RESULT IN %	PHOTO	RANK
1	BANGI ARIFA KHALIL AHMED	89.92		1
2	MANJULKAR BHIMASHA HULLEPPA	82.10		2
3	SINNUR SIDDHARAM GANGAPPA	81.49		3



S.V.S.M.D's

Kai. Kalyanrao (Balasaheb) Ingale Polytechnic, Akkalkot

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Approved by: All India Council for Technical Education (AICTE), New Delhi

Recognized by: Government of Maharashtra

Approved by: Directorate of Technical Education (DTE), Mumbai

**Affiliated to: Maharashtra State Board of Technical Education (MSBTE),
Mumbai**

COURSES OFFERED IN DIPLOMA ENGINEERING

Discipline	Intake Capacity	Duration of Course
Civil Engineering	60	3 Years
Electronics and Telecom. Engineering	30	3 Years
Mechanical Engineering	60	3 Years
Computer Engineering	30	3 Years
Total Intake	180	