

CONSTRO

AN ANNUAL PUBLISHED NEWSLETTER

ISSUE 2

JUNE 2017 - MAY 2018

DEPARTMENT OF
CIVIL ENGINEERING



K. E. Society's

**Rajarambapu Institute of Technology,
Rajaramnagar.**

(An Autonomous Institute)

(Diploma 2nd Shift)

Islampur, Dist. Sangli,

Maharashtra, India - 415414.

Tel : +91 - 2342 - 220329 ,

9970700700.

<http://www.ritindia.edu>

**MAHARASHTRA STATE
BOARD OF TECHNICAL
EDUCATION , MUMBAI
HAD AWARDED**



**REMARK TO DEPARTMENT OF
CIVIL ENGINEERING, RIT,
RAJARAMNAGAR
(DIPLOMA 2ND SHIFT) FOR
THEIR PERFORMANCE IN
A.Y. 2017-18**

Chief Patron

**Hon. Dr. Mrs. S. S. Kulkarni
(Director, RIT, Rajaramnagar)**

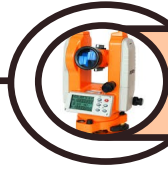
**Hon. Dr. H. S. Jadhav
(Dean Diploma, RIT, Rajaramnagar)**

Chief Editor

**Mr. S. S. Ingale
(HOD, CIVIL Engg.)
(Diploma 2nd Shift)**

Editorial Members

**Mr. A. P. Mehendale (Lect. Civil
Engg. Department)
Miss. Amruta Walvekar (T.Y. Civil)
Mr. Shankar Salunkhe (S.Y. Civil)**



Department of Civil Engineering

Vision

Create competitive CIVIL technician to work successfully in the fields of design, production and maintenance of CIVILs with social and moral values.

Mission

To offer technical education and training at diploma level to achieve excellence in domain knowledge in CIVIL Engineering, co-curricular and extra-curricular activities with special emphasis on personality development.

NALANDA- Quality Circle Activity

Quality Circles is group formed in institute of each department to increase effectiveness, improve quality, boost of student and staff morale and serves as a human resource development tool. This year quality circle work explores how the use of model making assignments in a Civil Engineering module encourages deeper learning of a particular topic compared to traditional lecture style teaching using 2D drawings, PPTs and videos. It also helps to investigate how student engagement can be improved as a result of creating model. The assessment tool, which involved students building a model of a new building components or elements of building in best practice such as reflection and development of written communication skills which are important graduate of students. Such kind of models are also helpful to improve team work ability of student.



Training / Workshop attained by Faculty

Sr. No	Faculty Name	Organization Name	Period
1	Mr.D.V.Patil Mr.V.T.Hulwane	Foundation program in ICT for Education Stadd Sponsored by IIT,Bombay	1 Month 4 Days
	Mr.R. D.Patil	Induction Training Program Phase –I Sponsored by MSBTE	05/06/17 to 16/06/17
	Mr.D.V.Patil	Technology Development in plumbing and Allied services Sponsored by MSBTE	17/12/2017 to 21/12/2017
2	Mr.A.P.Mehendale	Outcome Based Education- Delivery, Learning & Evaluation Sponsored by MSBTE	17/12/2017 to 21/12/2017
3	Mr. K.P.Mali	Civil Engineering practices in construction industries Sponsored by Construction Industries	16/08/2017 to 18/08/2017

Programs Organized by the Department

A number of programs like Guest Lectures, Industrial visits and training workshop from various Institutional, Organization and Industrial Experts in the field were organized by department for in-depth understanding of the subjects. Table shows the list of some interesting all programs organized by departments.

Sr. No	Module Description	Any other contributory Inst./ Industry	Developed / organized by	Period	Resource Persons
1.	Entrepreneurship Awareness Camp	RIT, Rajaramnagar and N.Y.A.D.C, Pune	Mr. A. B. Hangande	3 Days	N.Y.A.D.C, Pune
3.	Aesthetics view to building by using -3D Max	RIT, Rajaramnagar and Nice computers, Karad	Mr. K.P.Mali	6 Months	Nice computers, Karad
4.	Workshop on "Stadd proModelling, Analysis & Design of R.C.C. Structure".	Rajarambapu Institute of Technology, Rajaramnagar	Mr. R. D.Patil Mr. D.V.Patil	3 Days	R.I.T., Rajaramnagar



EXPERT TALKS

Sr. No	Date	Topic	Resource Person	Subject Name	Semester / Class
1.	01/02/2018	Study of minerology, Petrology & Structural Geology	Mr. D.B.Ghag	Geotechnical Engg.	CE4G
2.	31/01/2018	Tendering Process & Document	Mr. K.D.Pawar	Contract and Account	CE6G
3.	29/01/2018	Environmental Science	Mr. R.R.Lohar	Environmental Studies PPT	CE4G
4.	09/09/2017	Quality In Construction	Mr. D. A. Abadagire	Building Construction	CE3G
5.	11/08/2017	Building Bye-Laws	Mr. A.P.Pawar	Building Drawing	CE3G
6.	29/07/2017	Safety In Construction	Mr. G.D.Khedkar	Professional Practices	CE5G
7.	22/07/2017	Personality Development and English Communication	Mr. I.J.Patil	Professional Practices	CE3G

INDUSTRIAL VISITS

The department of CIVIL Engineering takes immense effort to take the students to the industries in order to provide them an opportunity to understand the practical aspects of the theoretical knowledge they acquire in the classrooms. Table shows the list of the industrial visits recently made by the students of various disciplines.

Sr. No	Date	Name of Industry	Adress	Subject Name	Semester / Class
1.	03/03/2018	Jyoti Construction, Sangli	Kolhapur Road ,Sangli	HEN	cE6G
2.	19/01/2018	Kankavli Railway Station, Rock Garden	Kankavli, Sindhudurg	TEN, GTE	CE4G
3.	10/01/2018	Bio-Gas Plant	Boys Hostel, RIT, Rajaramnagar	SWM	CE6G
4.	07/09/2017	WTP & STP	KOLHAPUR	PHE	CE5G
5.	05/09/2017	Ninad Construction	Miraj	PPO, BCO	CE3G
6.	26/08/2017	Aggregate Crushing plant	Karad	PPO	CE3G



List of Toppers

SECOND YEAR

Rank	Name of student	Percentage
1	ANKITA RAJENDRA PAWAR	77.44 %
2	PATIL PRASAD ANKUSH	74.67 %
3	PATIL AISHWARYA YOGESH	74.00 %

THIRD YEAR

Rank	Name of student	Percentage
1	SHELKE MOHINI VIJAY	84.50 %
2	JADHAV AMRUTA ASHOK	84.38 %
3	JANGID MANOJ GANESHLAL	83.50 %

Training and Placement Cell



- Training and Placement Cell (Diploma 2nd Shift) had organized a training program for 2nd year Diploma Engineering Students On “Communication Skills and Grooming” From 07th December 2017 to 17th February 2018 in association with Kaushalya Finishing School, Kolhapur. 78 students participated in this training program.
- Our students were referred to 05 placement drives conducted at different colleges and 01 drives conducted at our college. 05 students were selected in various placement drives.

TECHNICAL VIEW

A fast and precise look into fiber-reinforced composites

Researchers at the Paul Scherrer Institute PSI have improved a method for small angle X-ray scattering (SAXS) to such an extent that it can now be used in the development or quality control of novel fibre-reinforced composites. This means that in the future, such materials can be investigated not only with X-rays from especially powerful sources such as the Swiss Light Source SLS, but also with those from conventional X-ray tubes. The researchers have published their results in the journal Nature Communications.

Novel fibre-reinforced composites are becoming increasingly important as stable and lightweight materials. One example of this type of composite is carbon fibre reinforced polymers (CFRP), which are used in aircraft construction or in the construction of Formula 1 racing cars and sports bicycles. The properties of these materials depend to a large extent on how the tiny fibres are aligned and how they are arranged and embedded in the surrounding material, influencing the mechanical, optical, or electromagnetic behaviour of the composites. Researchers at the Paul Scherrer Institute PSI and ETH Zurich, together with colleagues from EPF Lausanne and the Danish spin-off company Xnovo Technology, have now succeeded in further developing the technology for practical applications. "The decisive factor was that we installed an array of X-ray lenses behind the sample. This makes it possible to detect multiple local scattering patterns that reflect the spatial inner structure of a sample with only one X-ray shot, enabling us to take a large number of consecutive images," says Matias Kagias, the inventor of the method and a postdoctoral researcher in the PSI X-ray tomography group headed by Marco Stampanoni. As a proof of principle, the researchers used the new method to display fibres' orientation in a carbon fibre ribbon during the knotting process. They acquired time-resolved X-ray projections at a rate of 25 images per second over a period of 11 seconds.

Mr. AMIT PUJARI (S. Y. Civil)

New material points toward highly efficient solar cells

A new type of material for next-generation solar cells eliminates the need to use lead, which has been a major roadblock for this technology.

Solar cells, incorporating the mineral perovskite, have been the focus of attention since the material was first shown to work in 2009. Solar cells that are built using this material are more efficient than current solar panels. Current solar panels capture 15% to 18% of the solar energy on average, while perovskite solar cells have been found to be as much as 28% efficient.

But there are major obstacles to using these materials commercially: The materials are not stable, and they contain water-soluble lead, which is a health hazard.

Now a team of scientists and engineers led by Letian Dou, assistant professor of chemical engineering at Purdue University, have developed a sandwich-like material incorporating organic and inorganic materials to form a hybrid structure that doesn't use lead and has much improved stability.

In a paper published in the Journal of the American Chemical Society in September, the scientists had incorporated the material into an essential component of many electronic devices, a field effect transistor.

Yao Gao, lead author of both research papers and a postdoctoral fellow in Dou's research group, said the new organic-inorganic hybrid perovskite materials are cheaper and perform better than a traditional inorganic semiconductor. Also, Gao said, the new material's design strategy could serve as a blueprint for many other functional hybrid materials.

"Solar cells, as many people have demonstrated, can be highly efficient," he said. "With our new technology, we can make the hybrid perovskite materials intrinsically more stable. By replacing the toxic lead, these new materials are better for the environment and can also be safely used for bioelectronics sensors on the body."

Mr. SARANG PATIL (T. Y. Civil)