

Special points of interest:

- Δ TVET, Manila
- Δ 10th Energy Conservation Award
- Δ 8th India Power Award
- Δ Women's Day
- Δ Singapore B. Tech (NSU) students in IOPE
- Δ Yoga Day
- Δ The man who knew infinity

Inside this issue:

- Women's Day 2
- Awards 2
- Yoga Day 3
- Apps 3
- Ramanujan 4
- Expert Talk 5
- Congrats 5
- Workshop 5
- Industrial Visit 6

Foreword...

I feel proud and happy to present first issue of E-magazine of Institute. E-media is easy to reach out all the students and give wide recognitions, Institute decided to bring out E-magazine of institute every year. Institute is having 8 departments. Each department is organizing various events which includes expert talks, visiting lectures, industrial visits, parent meets and technical events. Teachers and staff members of the

Institute participate in National and State level technical events for presenting their research contributions. Likewise, students participate in various state level competitions. The main endeavor of this E-magazine is to keep students, alumni, industry and parents informed about the Institute's efforts in improving the quality of education and nurturing the students as a better human being and a good technocrat. This is the first attempt, I am sure the



upcoming magazine will be more informative. I Congratulate the editorial board and wish the best for forthcoming issues of E-Magazine.

DR. MADHUKAR DABHADE

Master-stroke

- ◆ Represented INDIA by Dr. N. S. Lingayat (Head, Electrical dept.) presented, "Training of the Deprived Rural Youth and Adivasi Women of Raigad District of Maharashtra State (India) for Self and Wage Employment", in International Conference on TVET Skills Development for Poverty Alleviation, Entrepreneurship,



Dr. N. S. Lingayat at Manila

and Employability, Manila, Philippines.

- ◆ IOPE's electricity consumption is reduced by Rs. 5.9 Lacs/annum for 2015-16 under Energy Efficient project of MEDA by Dr. N. S. Lingayat and team.
- ◆ Academic MOU is signed between Instrumentation department of IOPE and Instrumentation department MPCOE, Velneshwar
- ◆ Mr. Santosh Mhatre (Electrical, Alumni'99) awarded with POSCO's Employee of the year-2015.
- ◆ Mr. Abhijit Pathak (Electrical, Alumni'99) presented " " paper in PPAM 2016.

- ◆ Six students of Electrical dept. secured First prize in "Energy Conservation Project Competition-2015" during energy at DTPS, Reliance Infrastructure Ltd., Dahanu.
- ◆ Prof. S. S. Gandhi (Lecturer, IT dept.) received Gold Medal in M. Tech (Computer Engg) from DBATU, Lonere.



Glimpse during MOU signing

World Women's Day



**Mrs. Nisha Jadhav
(PI, Goregaon)
welcomed by
Dr. Madhukar Dabhade
(Principal)**

IOPE celebrated Women's day with Chief Guest Mrs. Nisha Jadhav, Police Inspector, Goregaon. During her speech she gave insights on women security and women rights in the today's world. She also raised concern about cyber crimes and their causes. She specially mentioned about the disadvantages of using mobile phones. Madam concluded her speech by encouraging and guiding the

students for appearing competitive examinations. At end with the interactive session madam summed up the program on high note.

The program was graced by Hon'ble Dr. Vilas Gaikar (Vice Chancellor, DBATU) and Dr. Vikas Sargade, (Registrar, DBATU). The IOPE auditorium was fully occupied with girls, staff and faculty members of the University.



On this very occasion Mrs. Sampada Kharade (CDTP Instructor) awarded for her outstanding work in empowering tribal women's by conducting courses such as garment making, best from waste, etc.

-08th MARCH 2016

Awards

- * Dr. N. S. Lingayat (Head, Electrical dept.) received 8th India Power Award from Council of Power Utilities, New Delhi
- * Dr. N. S. Lingayat (Head, Electrical dept.) received 10th Energy Conservation Award from MEDA, Pune



**Dr. N. S. Lingayat receiving 10th
Energy Conservation Award**

- * Dr. D. G. Jadhav (Head, E&TC dept.) completed Ph. D on "*Soft Computing in Biomedical Signals*" from Panjab University, Chandigarh.

- * Dr. D. S. Karanjkar (Head, Instrumentation dept.) completed Ph. D on "*Solar Photovoltaic MPPT controller*" from Panjab University, Chandigarh.



**Dr. D. S. Karanjkar receiving
Doctor of Philosophy at
Panjab Univ., Chandigarh**

- * Dr. B. C. Kharbas (Lecturer, Electrical dept.) received POSOCO's Power System Award-2016 for presenting his Ph.D work at PGCIL, New Delhi.
- * Mr. M. N. Kulkarni (Computer Programmer, Computer dept.) and Prof. Ms. S. S. Umbarkar (Lecturer, IT dept.) completed M.E. from SPPU, Pune
- * Prof. P. M. Hanpude and Prof. G. P. Lad

(Lecturer, IT dept.) received M.Tech. in Computer Engg. from DBATU, Lonere

- * Mr. Sourabh Khamgaonkar (Instrumentation dept.) received First prize in 125th Birth Anniversary of Dr. Babasaheb Ambedkar District level Essay competition



Dr. Dabhade (Principal) and Dr. Karanjkar (Head) praising Mr. Sourabh Khamgaonkar

- * Mr. Akshay Waghe, Mr. Harshad Karkare and Mr. Vikas Mane (Instrumentation dept.) secured First Prize in "*Structura-Cynosure*" 2K16, at DBATU

World Yog-DiwaS



YOGA in harmony

The University celebrated International Yoga Day at IOPE's auditorium. With presence of Hon'ble Dr. Vilas Gaikar (VC, DBATU), Dr. Vikas Sargade, (Registrar, DBATU),

Dr. Madhukar Dabhade (Principal, IOPE) along with staff members actively participated in programme.

Dr. P K Bramhankar (Head, Mechanical Engg. DBATU) has enlightened the gathering by giving importance and benefits of Yoga in our day to day life for better physical & mental

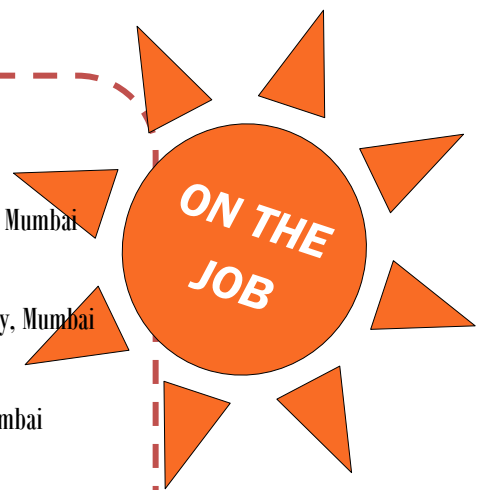
health and social harmony too. Then the gathering participated in YOGA with the help of instructor and the Audio Visual CD of YOGA .

The programme was coordinated by Capt. Prof. Milind Bhagat (NCC co-ordinator and Lecturer E&TC dept, IOPE) along with NCC unit and NSS students of University.

- 21st JUNE 2016

!! CONGRATULATIONS !!

Instrumentation	Sandesh Bhadavkar, Harshal Davate, Roshan Jadhav	Godrej and Boyce, Mumbai
ADWQM	Amit Dabhane, Sonal Dhondge, Nitesh Dighe, Akshada Halde, Rajkumar Patil, Subhod Shipai	Clear Water Company, Mumbai
ADWQM	Jui Bhilare, Swapnali Dalvi, Supriya Gavaskar, Adil Kondvilkar, Manali Potaddar	Aguapuro, Mumbai
ADWQM	Siddhesh Gharat, Niket Hatakar, Upendra Patil, Shital Pawar, Supriya Tembe, Sunil Yadav	Wipro Waters, Mumbai
ADWQM	Vivek Kalekar, Ashwini Kharade, Priyanka Kharade, Pranali Palkar	PBS Water systems, Mumbai
ADWQM	Priyanka Bakkam	R.C.F. , Chembur
ADWQM	Nikita Ade	Rushh Water, Kalmboli
ADWQM	Siddharth Phalaskar	Hydropure, Mumbai
CHEMICAL	03	Gharda Chemicals Ltd., Chiplun
CHEMICAL	03	Privi Organics, Mahad,
CHEMICAL	02	Pidilite ind, Mahad
CHEMICAL	04	Deepak Nitrite Ltd., Lote MIDC
CHEMICAL	02	Sandoz India Pvt Ltd., Mahad



PRINCIPAL

Srinivasa Ramanujan Iyenger

“The Man Who Knows Infinity”

A boy from Kumbakonam temple town of Tamilnadu with iconic mathematical capability becomes a great mathematician of our country in early 19th century. During his high school studies he came across G. S. Carr’s book which influenced him to glory.



Robert Kanigel’s (Author of *The Man Who Knew Infinity*, 1991) provide records of Ramanujan’s early life. In the class Ramanujan used to challenge his teachers even as a class III student. One day math’s teacher pointed out that any number divided by itself was one: e.g. divide three fruits among three people, each one would get one. So Ramanujan piped up: but zero divided by zero is also one? If no fruits are divided among no one, will each still get one??

After his Matriculation, he left Kumbakonam for Madras to get intermediate education. In this failed to pass the examination as he concentrated only on mathematics. For his livelihood, Ramanujan joined Madras Port trust as a clerk. His room was a workshop of theorems and equations. He was too poor to afford notebooks and papers; so he worked out his theorems on a large slate and erases them with his elbow. With the help of Prof. Sheshu Aiyar, Professor at Presidency College Madras, who suggested to write Prof. G. H. Hardy, a fellow of the Royal Society and Professor at Cambridge University. His first letter, dated January 16, 1913, had

about 120 theorems, when he got no response to this letter, Ramanujan wrote again. He said “*I am already a half starving man. To preserve my brains, I want food*” and this is now my first consideration. Any sympathetic letter from you will be helpful to me here to get a scholarship either from Madras University or the Government”.

So on Hardy’s recommendations Ramanujan was considered for a scholarship at the Madras University. But since he did not clear intermediate and bachelor’s degree, University denied it initially. After to many efforts University approved scholarship of Rs. 75/ month along with permission to access University Library. Thus, his journey as a mathematician began.

In 1914 Prof. Hardy invited Ramanujan to England where he had a formal mathe-

matics education under. Two years later, he was awarded the equivalent of a Ph.D. for his work –a mere formality by Cambridge University. The mock theta function introduced by Ramanujan in his last days is especially significant to string theory. He also carried out major investigations in the areas of gamma functions, modular forms, divergent series, hyper geometric series and prime number theory. Among his other achievements, Ramanujan identified several efficient and rapidly converging infi-

nite series for the calculation of the value of π .

1729 is called the *Hardy- Ramanujan number*, after a famous encounter between the British mathematician and Ramanujan in 1918. This was a taxi cab number which British mathematician felt a dull number. Ramanujan said it is not dull but very interesting number, the smallest number expressible as a sum of two cubes in two different ways. $\{1729 = 1^3 + 12^3 ; 1729 = 9^3 + 10^3\}$. It is also a product of three prime number $\{1729 = 7 * 13 * 19\}$. England (1919), he was bent with illness, fighting malnourishment and suspected tuberculosis. He died in 1920. He is having 3900 theorems and formulae to his credit.

In 2012, Dr. Manmohan Singh (Prime Minister, INDIA) the Ramanujan’s birth anniversary 22nd December declared as “*National Mathematics Day*”. The RAMANUJAN is an International Journal published by Indian American mathematician Krishnaswami Alladi, at the University of Florida.

In April’2016 Matthew Brown produced a film “**The Man who Knew Infinity**” for an account of the unlikely friendship between two mathematicians Prof. Hardy and Ramanujan.

$$f(a, b) = \sum_{n=-\infty}^{\infty} a^{\frac{n(n+1)}{2}} b^{\frac{n(n-1)}{2}}$$

Apps

∞ Dr. R. K. Jadhav (Lecturer, Mathematics dept.) launched "MathRK 3-4" android app is on Amazon app store.

BOOKS

∞ Dr. R. K. Jadhav (Lecturer, Mathematics dept.) published a book on "R.K's Most Likely Question Paper Solution",

PAPERS

∞ Mr. M. N. Kulkarni (Computer Programmer, Computer dept.) published "A Review on Privacy Preserving Public Auditing for Storage Cloud" in IJARC

∞ Prof. Ms. Ankita Amurle (Lecturer, Computer dept.) presented "Digital

Watermarking Scheme using Video Watermark Techniques" in IJAIR.

∞ Prof. Ms. Chaitali Jadhav (Lecturer, Computer dept.) presented a "Signify User Image Search Goal" in Intl conference at KBJCOE, Chandvad, Nashik.

∞ Mr. M. N. Kulkarni (Computer Programmer, Computer dept.) published "An Improved Privacy Preserving Public Auditing for Secure Cloud Storage" in SocProS-2015.

∞ Prof. A. M. Kulkarni (Lecturer, E&TC dept.) presented "Performance Analysis of DFT-OFDM and Wavelet based OFDM system" at 2nd National conference organized at FAMT, Ratnagiri.

∞ Prof. H. H. Patil (Lecturer, E&TC dept.) presented "Design of H-Fractal Antenna for multiband applications" at 2nd National conference at FAMT, Ratnagiri.

∞ Prof. R. A. Pardeshi presented "Natural fiber Composite : A review" at 2nd National conference at FAMT, Ratnagiri.

∞ Mr. M. N. Kulkarni (Computer Programmer, Computer dept.) presented "Secure Segregation for Privacy Preserving in Cloud Computing" at cPGCON 2015, METBKC, Nashik.



Prof. J. B. Modak, Head, Plastic Engg. Dept. GP, Nashik welcomes Prof. S. A. Dawale (Lecturer, Polymer Dept.) during curriculum revision meeting.



Mr. Sumit Jadhav during interaction with students

Mr Girish Jambekar & Mr. Kishore Patil (ADWQM Alumni) delivered chief guests address on water day.

Mr. Keshav Jahagirdar, (MD, ACE Automation, Pune) on "Industrial Automation" in Instrumentation dept.

π Mr. Uzair Deshmukh, (Sr. Service Engg. Honeywell, UAE) on "Microcontrollers" in Instrumentation dept.

π Mr. Amey Kathe, (Emerson Process Management, Mumbai) on "Distributed Control System" in Instrumentation dept.

Mr. Kiran Patil (Automation Engineer, Tetrapak(I) Ltd. Pune) on "Automation" in Electrical Dept.

π Mr. A. Y. Mehandale (Enrich Consultants, Pune) on "Energy Auditing tool to

Wisdom - कट्टा

increase Energy Efficiency" in Electrical Dept.

π Mr. on "Sewage Treatment/waste Management" for Chemical & Petrochemical Dept.

π Mr. Shivaji Mande, (EMBio, Mahad) on "MDC Controller" in Electrical Dept.

π Mr. Sachin Kadam, (MD, Pune) on "Industrial Automation" for Instrumentation and E&TC Dept.

π Mr. Prasad Salagare, (Project Engg., Rockwell Automation, Pune) on "Automation & Safety" in Instrumentation Dept.

π Mr. Akshay Mahapadi (TCS, Mumbai) on the topic "Project Management Life Cycle" in Computer Dept.

π Mr. Amey Manjrekar (Cybage, Pune) on "HADOOP & BIGDATA" in Computer Dept.

π Mr. Amit Salagare on "Industrial Safety" in Chemical Engg.

π Shri Nitin Mhatre, (RCF, Chembur) on "" in Chemical Engg.

π Prof. Gorshetty, (Asst. Professor, Dr. BAMU, Aurangabad) on "Heat & Mass Transfer" in Chemical Engg.

π Mr Sumit Jadhav, (Jr.Executive, Deepak Fertilizers) on "Outlines of Chemical Processes & Operations" in Chemical Engg.

π Swades Foundation (NGO) "Employability Skills development program conducted" for third year

Tech अनंत

- Ω Computer dept. has organized an institute level “*Hardware Cum Technical Exhibition*”
- Ω Swades Foundation, Lonere conducted a three day workshop on “*Employability skill Development*” in IOPE.
- Ω Mr. Prathmesh Pawar (Electrical, Alumni'10) conducted one day workshop on “*PCB drawing and etching*” in Electrical dept.
- Ω Dr. D. S. Karanjkar (Head, Instrumentation dept.) conducted a state level one day workshop on “*Programmable Logic Controllers*” in IOPE.
- Ω Prof. S. G. Hingmire (Lecturer, Instrumentation dept.) conducted a state level one day workshop on “*Distributed Control System.*”
- Ω Prof. S. A. Dawale (Lecturer, Polymer dept.) and Prof. L. D. Narote (Lecturer, E&TC dept.) conducted one day workshop on “*Enhancing Quality of Instructional System Using Digital Media*” for Polymer and E&TC dept.
- Ω Mr. Amit Chougule, Ms. Sayali Yewale and Mr. Girish Mane (Foslipy Technologies, Mumbai) conducted one day workshop on “*Android*” in Computer dept.
- Ω Mr. Sadik Shaikh (Arizona Infotech, Pune) conducted two day workshop on “*Ethical Hacking*” in Computer dept.

World Water Day

- 22nd March 2016

The Advanced Diploma in Water Quality Management and Chemical dept. cordially celebrated World Water day in the institute.

A rally was organized in university campus and nearby villages for the awareness of Water conservation. Around 90 students and faculty members actively participated in this rally with various posters and banners depicting methods to save water.

Earlier in the day a Competition for the students such as poster and paper presentation were organized regarding

shortage of water. Later in afternoon a exhibition and expert talk was arranged for the students. Mr. Girish Jambekar & Mr. Kishore Patil (both ADWQM Alumni) were the chief guests for the event. They encouraged students for actively participate in conserving water and appreciated them for organizing such events.

Dr. M. A. Dahbhade, Principal of the institute guided gathering with state of art technologies in water conservation and



Students during Water day rally

National University of Singapore Visits IOPE



Dr. Ranjeeth Bhalerao along with B.Tech students of NUS

- 21st June 2016

Lim Chia Yuan and Madeline Chia B. Tech. students from Department of Civil and Environmental Engineering, National University of Singapore (NUS) visited our Institute. They are on their internship pro-

gramme in association with an NGO Swades Foundation, Mumbai, INDIA.

The purpose of their visit was to work on water technology and waste water treatment which is in line with IOPE's Advanced Diploma in Water Quality programme. Firstly Dr. Madhukar Dabhde (Principal) briefed about proper water sampling methods, water quality parameters and their importance in designing water treatment plant.

In Laboratory session Dr. Ranjeeth Bhalerao (Lecturer, Chemistry dept.) demonstrated actual water analysis methods by using different analytical instruments such as conductivity meter, turbidity meter, pH meter, Lovibond comparator, DR-890 Calorimeter etc and both the students also tried some methods too.

With the special thanks expressed by the students towards IOPE visit ended.

त्र Excursion

- ◆ Third year class of Instrumentation class visited Walawalkar Hospital
- ◆ Third year class of Electrical dept visited at Jawaharlal Nehru Port Trust, Uran.



JNPT, Uran

- ◆ Third year class of IT dept. visited to Airtel BPO Swadesh foundation Lonere.
- ◆ Third year class of Electrical dept. students visited Dahanu Thermal Power Station, Dahanu.
- ◆ Second year class of E&TC

dept. visited All India Radio, Ratnagiri.

- ◆ Second year class of Instrumentation



Dahanu Thermal Power Station, Dahanu

tation dept. visited Privi Organics, Mahad.

- ◆ Second year class of Electrical dept. students visited ITI Nandavi

- ◆ ADWQM students visited RASHTRIYA CHEMICAL FERTILIZERS, Thal, Alibag



ITI, Nandvi

- ◆ Third year class of chemical dept. visited Privi Organics Ltd., MIDC, Mahad



Privi Organics Ltd., MIDC, Mahad

INSTITUTE OF PETROCHEMICAL ENGINEERING

Vidyavihar, Lonere
Raigad

Phone:02140-275103

Fax:02140-275103

E-mail: iopelonere@rediffmail.com



**CHEMICAL
ENGINEERING**



**COMPUTER
ENGINEERING**



**ELECTRICAL
ENGINEERING**



**ELECTRONICS & TELE.COMM.
ENGINEERING**

**गोपटकर
2016**



**INSTRUMENTATION
ENGINEERING**



**INFORMATION
TECHNOLOGY**



**PETROCHEMICAL
ENGINEERING**



**PLASTIC AND POLYMER
ENGINEERING**