



Director's Message

The Institute wishes all its family members a **Very Happy and Prosperous New Year.**

The Institute is going through a major process of upgrading its academic infrastructure which is likely to complete this year and shall benefit us by enhancing our research potential and result in modernisation of laboratories.

As a part of continuous up gradation of teaching learning process a host of Seminars and Workshops, nearly in every department are organized through the funding available from TEQIP and other government bodies. These are intended to update faculty and students alike.

The institute has recently completed one round of placement process whereby some 200 students [passing out in June 2015] have been placed in companies namely Infosys, Tech Mahindra, Persistent and Wipro.

It is time for the students to start persevering to achieve success through their hard earned endeavours. This turn of the semester represents a new phase in their careers. The passing of winter will mark the close of the session and materialisation of their efforts.

I hope that every member of the Institute family will contribute his very best as it is their effort that is going to elevate the status of the Institute so as to be at par with the world's elite educational institutes.

I again take this opportunity to extend greetings to all members of MITS family and wish them success in their ventures.



VISION

To create a centre of excellence for imparting technical education enveloping latest technologies in its curriculum and conducting research to keep pace with the challenges of technological development.

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Team Newsletter

Dr. Sanjeev Jain

ACHIEVEMENTS

By Faculty

Prof. Shishir Dixit of Electrical Engg. Deptt. has been awarded Ph. D. by MANIT Bhopal. Thesis is entitled “Soft Computing Techniques for Optimal Placement and Sizing of Facts Devices”. **Heartily Congratulations.**

Prof. R.P.Narwaria of Electronics Deptt. has coordinated two weeks ISTE main workshop on ‘Control System’ during 2/12/14 - 12/12/14 organized under National Mission on Education through Information and Communication Technology, IIT Kharagpur.

Dr. Manjaree Pandit, Professor in Electrical Engg. is nominated as Technical Programme Committee Member of IEEE Sponsored International Conference on ‘Energy Economics and Environment ICEEEE-2015 to be held from March 27-28, 2015 at Greater Noida, India.

ACHIEVEMENTS & ACTIVITIES OF STUDENTS

Architecture Deptt.

Zonal Nasa 2014:

- 2nd Runner-up in Main Design
- Special Mention in Photography
- Special Mention in Graffiti

Transparence 2014(Design Problem-Metro Station Complex):

- Shelly Vaish, Nityam Chourasiya, Deepak Patel.(Special Mention)

Junk Morphia (Design Mafia) 2014(Design Problem-Shelter):

- Joseph Victor and Kajal Goyal (Jury Recommendation)
- Rachit Pamnani and Thoudam Sudha (Jury Recommendation)
- Jagrati Jain and Anand Chourasiya (Jury Recommendation)

COA Best Architectural Thesis Award 2014

- Tapas Upadhyay (Topic- Hybrid Solid Waste Management). (Special Mention)

VNIT NAGPUR 2014 (Design Problem-Sabji Mandi at Nagpur)

- 1st prize – Ashish Choudhary

Cultural Activity

- Singing -1st position in College level – Shivam Sagar Gupta

CSE/IT Deptt.

Following activities were conducted :

- D’ Advent held on 9th Sept. 2014.
- Gaming championship was held on 12&13 Sept. 2014.
- Online contest **ASPIRATION 2020** under INFOSYS campus connect program held during 23-24 Sept. 2014.
- Rubiks Cube Workshop was held on 27 & 28 Sept. 2014
- “**MITS Quizzing Championship**”, a Pure General Knowledge Quiz was held on 29th Sept. 2014.
- Ethical Hacking Workshop was held on 8 & 9 Oct. 2014.

CONFERENCE / WORKSHOP ORGANISED

Civil Engg. Deptt. has organized one day Workshop on “**Use of Local Waste Material in Rural Road**”. It was sponsored by NRRDA, New Delhi and organized in association with CRRI, New Delhi on 11th Sept. 2014.

The department has also organized a one day National Conference on “**Alternative & Innovative Construction Material & Techniques (AICMT)**” on 27th Sep. 2014 under TEQIP – II scheme. It was attended by Faculty, Field Engineers & Students. Thirty papers were presented in the conference by the participants.



ISTE CORNER

Madhav Institute of Technology & Science ISTE Student's Chapter organized a college level workshop on 'Auto Cad' on 27 Sept. 2014. The workshop was conducted by Mr. Akash Sood, Cad Trainee, Gwalior. The workshop aimed to provide the basic knowledge of two dimensional drafting and drawing on Auto Cad software. Students of mechanical, civil, architecture and electrical branches were mainly benefitted by the workshop. A competition was also held at the end of the workshop in which students had to implement the knowledge they acquired during the workshop. The winners of the competition were:

Shashank – Civil Third Year,

Monika Rai – Mechanical, Final Year

Shubham Nema – Architecture, Second Year.

Congrats.



ISTE MITS Student Chapter is awarded as the **BEST CHAPTER** in Madhya Pradesh & Chhattisgarh section. The award was given by considering the overall performance and quantum of activities conducted. The award was declared at the 17th ISTE Annual Students National Convention held at V.V.P. Engineering College, Rajkot (Gujrat) during 10th & 11th October, 2014. The theme of the convention was "Sustainable Developments through Innovative Technologies".

Heartily Congratulations.



**ISTE BEST STUDENT CHAPTER AWARD
FOR MADHYA PRADESH & CG SECTION**

2014

Awarded to

**Madhav Institute of Technology and Science
Gwalior**

considering their overall leadership and quantum of activities
during the year amongst the Students Chapters in *Madhya Pradesh & CG Section*.

During 17th ISTE Students National Annual Convention



Dr. R. Murugesan
President, ISTE



Dr. S. Basil Ganapappa
Executive Secretary, ISTE

PROGRAM ATTENDED BY FACULTY

Vijay Bhuria, Rakesh Narvey, Himmat Singh Ahirwar, Sulochana Wadhvani and Ashis Patra, faculty of Electrical Engg. Deptt. has attended two weeks ISTE Main Workshop on 'Control System', conducted by IIT Kharagpur from 2nd Dec.-12th Dec., 2014 at MITS Remote Center.

It was also attended by the faculty of Electronics Deptt., namely **Vandana Vikas Thakare, Laxmi Shrivastava, Karuna Markam, Shishir Maheshwari, Dheeraj Singh, Rajput, Pooja Sahoo, Namrata Agarwal and Kapil Dev Sharma.**

SPORTS ARENA

Institute teams have come out with flying colours in different sports in **RGPV Inter-collegiate Tournament** at Gwalior Nodal level:

1. Winner in Athletic Meet 2014-15.
2. Winner in Badminton (Girls) Tournament 2014-15.
3. Winner in Cricket Tournament 2014-15.
4. Winner in Football Tournament 2014-15.
5. Winner in Table Tennis Tournament 2014-15.
6. Runner's up in Chess Tournament 2014-15.

S. No.	Name of the Student	Sport
1.	<u>Shri Ram Yadav</u>	Cross Country
2.	<u>Martand Pratap Singh</u>	Cross Country
3.	<u>Rahul Uikey</u>	Cricket
4.	<u>Sanjay Adhikari</u>	Cricket
5.	<u>Nilesh Karram</u>	Cricket
6.	<u>Akansha Verma</u>	Badminton
7.	<u>Avantika</u> Nigam	Badminton
8.	<u>Sparsh Johari</u>	Table Tennis
9.	<u>Rohan Bansal</u>	Table Tennis
10.	<u>Amit Kumar Sharma</u>	Table Tennis

11.	<u>Yoshita Goyal</u>	Table Tennis
12.	<u>Sonal Bagga</u>	Table Tennis
13.	<u>Shikha Patel</u>	Table Tennis
14.	<u>Pushpendra Patel</u>	Swimming
15.	<u>Harsh Jaria</u>	Chess
16.	<u>Inder Singh Yadav</u>	Kabaddi
17.	<u>Prashant Yadav</u>	Kho-kho
18.	<u>Sanjay Adhikari</u>	Football
19.	<u>Pranay Gaurang</u>	Football
20.	<u>Moameru Lonehar</u>	Football
21.	<u>R. Latan Puia</u>	Football
22.	<u>Rohan Ahuja</u>	Football
23.	<u>Sangdup Tamang</u>	Football
24.	<u>Shancho Odyo</u>	Football
25.	<u>Sajan Chettri</u>	Football
26.	<u>Abhinay Bhandari</u>	Football
27.	<u>Abhishek Bajpai</u>	Tennis
28.	<u>Sanjay Adhikari</u>	Athletics
29.	<u>Haider Ali</u>	Athletics
30.	<u>Martand Pratap Singh</u>	Athletics
31.	<u>Inder Singh</u>	Athletics
32.	<u>Surya Pratap Singh</u>	Athletics
33.	<u>Abhishek Sharma</u>	Athletics
34.	<u>Ms. Phalit Patel</u>	Athletics
35.	<u>Ms. Pooja Kirar</u>	Athletics

Phalit Patel from Arch. Deptt. has won Gold in Shot-put&100 m. race in nodal level competitions and Silver in Shot-put at state level.
Congratulations.

RESEARCH PUBLICATIONS

Architecture Deptt.

- Arihant Jainand **Pandit.R.K.**, “Attributes of Sustainability”, Journal of Advanced Research in Civil and Environmental Engineering, ISSN: 2393-8307,Vol. 1, No. 1, Page 31-41, Sept. 2014.
- Choudhary. A, Maheshwari. Sand **Pandit. R.K.**, “Smart Parking System: For Narrow Spaces”, Journal of Construction Engineering Technology and Management, E-ISSN: 2249-4723, P-ISSN: 2347-7253.
- Choudhary. A, Dogne. N and **Pandit. R.K.**, “Super-performing Construction Materials”, Journal of Advanced Research in Construction Architectural Engineering, ISSN: 2393-8307 Vol. 2, Nov. 2014.
- Choudhary. A, Dogne. N, “Smart Construction Material”, National Conference on “Alternative & Innovative Construction Material and Techniques” organized by Civil Engineering Department MITS under TEQIP phase II on 27th Sept.2014.
- Choudhary. A, Dogne.N and Thakur M. S. , “Solar Passive Architecture”, National Conference on “

- Alternative & Innovative Construction Material and Techniques”, organized by Civil Engineering Department MITS under TEQIP phase II on 27th Sept.2014.
- **Pandit.R.K.**, “Futuristic Management Information System”, Journal of Advanced Research in Civil and Environmental Engineering,ISSN: 2393-8307,Vol. 1, No. 1, pp.1-8, 2014.
- Soma A. Mishra & **Pandit.R.K.**, “Space Syntax Approach for Analyzing Crime Preventive Urban Design: Concept Review”, Journal of Advanced Research in Construction and Architectural Engineering,Vol. 1, No. 1, pp. 18-24, 2014.
- Soma A.Mishra, Prakool Soni & **Pandit.R.K.**, “Water Proofing Systems in Building Construction”, International Journal of Combined Research & Development (IJCRD) e-ISSN:2321-225X;p-ISSN:2321-2241, Vol. 3, Issue: 1,pp.54-66, July2014.

Civil Engg. Deptt.

- Aditya Singh Rawat and **R. Kansal**, “Pet Bottles as Sustainable Building Material: A Step towards Green Building Construction”, JCEET, Vol. 1 No.6, Aug. 2014.
- Prakash Dwivedi and **Archana Tiwari**, “Characteristics of Concrete Made With Partial Replacement of Natural Aggregate by Aggregate Recovered From Waste Concrete”, IJERT,Vol. 3, Issue 09,Sept.14.
- Vaishant Gupta and **R. Kansal**, “Improvement of Construction Labor Productivity in Chambal Region”,IJERT,Vol. 3, Issue 10, Oct.14.
- Avadhesh Singh Gurjar and **M.K. Trivedi**,” Quality Function Development Applied on PVC Plumbing and Cast Iron Plumbing”, IOSR Journal of Mechanical and Civil Engineering, Vol. II, Issue 2, 2014.
- Pradeep Sahu, **A.K.Saxena** and **M.K. Trivedi**, “Use of Canal Lining Available Materials and Its Comparative Study”, Journal of Mechanical and Civil Engineering, Volume II, Issue 3, 2014.
- Following papers were presented during **National Conference on “Alternative & Innovative Construction Material and Techniques (AICMT)”**, organized by Civil Engg. Deptt. , MITS Gwalior (under TEQIP – II) on 27th Sept. 2014 :
 - Archana Katroliya and Apeksha Kannoja, “Comparison of Cost Effectiveness of Low Cost Housing”.
 - AslamHussain,ArchanaKatroliya and **M.K.Trivedi**, “Analysing The Economic Benefits of Rigid Pavements”.

- Aslam Hussain and **R. Kansal**, “EIFS – Changing The Face of Construction Business”.
- C.P. Bastani and **R. Kansal**, “Artificial Sand-An Alternative Material”.
- Manoj Katiyar and **Archana Tiwari**, “Construction and Demolition Waste- Potential, Barriers & Efforts”.
- Pradeep Sahu, **M.K. Trivedi** and **A.K. Saxena**, “Efficiency of Canals & Lining Preference”.
- Prakash Dwivedi and **Archana Tiwari**, “Sustainable Concrete Using Waste Concrete Aggregate”.
- Prashant Kumar and **Archana Tiwari**, “Prefabricated and Pre-Engineering Construction for Sustainable Development in India”.
- Raj Kumar Induria and **Archana Tiwari**, “Manufacturing of Paver Block Using Waste & Eco Friendly Material”.
- Sapan Namdev, **M.K. Trivedi** and **R. Kansal**, “Optimization Techniques in Time –Cost Analysis of Civil Construction”.
- Shikha Mittal, “Use of Passive Building Material & Techniques”.
- Sparsh Johri, “Use of Efficient Tools for Tying of Rebar”.
- Subhash Saxena and Sudhir Srivastav, “Green concrete: Eco-friendly & Efficient Construction Materials”.
- Vinod Gautam and **Archana Tiwari**, “Experimental Investigation Mortar Using Stone Crush Dust, Fly Ash & RHA”.

CSE & IT Deptt.

- Ankita Chaturvedi, **Sanjiv Sharma** “A New Technique for Preventing Black Hole Attack in Mobile Ad-hoc Networks” International Journal of Advances in Computer Science and Technology Vol. 3, No.10, ISSN 2320 – 2602, pp. 446-451, Oct. 2014.
- Rishi Parsediya, **Sanjiv Sharma** “A Study on Data Dissemination in Wireless Sensor Network” International Journal of Advance Research in Science and Engineering, Vol.3 Issue-1, ISSN: 2319-8354(E), pp. 480-493, Sept. 2014.
- Saurabh Agarwal, **Punit Johri** “A Novel Approach to Develop a New Hybrid Technique for Trademark Image Retrieval” International Journal of Information Theory, Vol.3, No.4, Oct. 2014.
- Siddharth Saxena, Rajeev Kumar Singh “A Novel Approach of Image Registration Based on Segmentation and Fuzzy Clustering” International Journal of Signal Image Processing and Pattern Recognition. Vol. 7, No. 4, pp. 167-176, ISSN:2005-4254, 2014.

- Siddharth Saxena, Rajeev Kumar Singh “A Survey of Recent and Classical Image Registration Method”, International Journal of Signal Image Processing and Pattern Recognition, Vol. 7, No. 4, pp.255-264, ISSN:2005-4254, 2014.
- Sweety Sexena, **Vikas Sejwar** “Sybil Attack Detection through TDOA-Based Localisation Method in Wireless Sensor Network” International Journal of Emerging Technologies in Computational and Applied Science, ISSN: 2279-0047, Sept. 2014.
- Sweety Sexena, **Vikas Sejwar** “Sybil Attack Detection and Analysis of Energy Consumption in Cluster Based Sensor Network”, International Journal of Grid Distribution Computing, Vol.7, Issue-5, ISSN: 2005-4262, pp. 15-20, Nov. 2014.
- Vartika Shah, **Sanjiv Sharma** “Evaluation of Encryption Method of SNEP for Implementing Security in Wireless Sensor Network using SPINS Framework” International Journal of Grid Distribution Computing, Vol.7, No.5, pp.43-52, Nov. 2014.

Electrical Engg. Deptt.

- Aayush Shrivastava, Akanksha Bhatt, **Manjaree Pandit**, **Hari Mohan Dubey**, “Optimal Dispatch of Energy/Reserve in Restructured Electricity Market with Demand Variations”, International Journal of Communication Systems and Networks Technologies Vol. 3, No.1, 2014, pp. 34-46.
- Akanksha Bhatt, “Optimal Dynamic Dispatch of Wind Integrated Thermal Generators with Compressed Air Energy Storage”, International Journal of Renewable Energy Research , Vol. 4, No. 3, 2014, pp. 689-697. (Scopus listed).
- Archana Pathak, Yogendra Kumar, **Manjaree Pandit**, “Dynamic Economic Emission Dispatch with Loss & Heat Optimization for a Micro-Grid”, presented in 6th IEEE POWER INDIA International Conference (PIICON_2014) held at New Delhi, 5-7, Dec. 2014.
- Archana Pathak, Yogendra Kumar, **Manjaree Pandit**, “Multi-attribute decision making using fuzzy ranking and Time Varying DE for optimal dispatch of MicroGrid”, presented in 3rd International Conference on Eco-friendly Computing and Communication Systems (ICECCS 2014) to be held during December 18 - 21, 2014 at NITK Surathkal, Mangalore, India
- Deepak Sharma, **Vijay Bhuria** “Simulation of high voltage pulse supply for Electric Vehicles using Full-Bridge DC-DC”, International Journal of Science, Engineering and Technology Research, Vol.3, Issue 8, 2143-2147.
- Deepak Sharma, **Vijay Bhuria** “Simulation and Using Full-bridge DC-DC Converter Generate

High Voltage Pulse Supply for Electric Vehicles”, International Journal of Science and Research (IJSR) Vol.3, Issue 9, 612-616.

- Devendra Kumar Tiwari, **Laxmi Srivastava** and **Shishir Dixit** “Static Available Transfer Capability determination in deregulated Power market using AC distribution factors” in International Journal of Scientific & Engineering Research Vol.2, Issue 9, Sept. 2014, ISSN 2229-5518.
- Gajendra Sahu and **Kuldeep Swarnkar**, “Economic Load Dispatch by Genetic Algorithm in Power System”, International Journal of Research in Advent Technology, vol.2, no.9, pp.131-136, Sept. 2014.
- Gajendra Sahu, and **Kuldeep Swarnkar**, “Optimization of Economic Load Dispatch Problem using Genetic Algorithm”, International Journal of Science, Engineering and Technology Research, vol. 3, no. 10, pp. 2673-2679, Oct. 2014. Hari Mohan Dubey, **Manjaree Pandit** and B.K. Panigrahi, “Cuckoo search algorithm for short term hydrothermal scheduling” (Book Title: Power Electronics and Renewable Energy Systems, Chapter No :57 ,pp.573-589.) Lecture Notes of Electrical Engineering 326, Springer _ 2015, DOI 10.1007/978-81-322-2119-7_57.
- Peeyoosh Gupta, **Manjaree Pandit**, D.P. Kothari, “A Review on Optimal Sizing and Siting of Distributed Generation System”, presented in 6th IEEE POWER INDIA International Conference (PIICON_2014) held at New Delhi, 5-7, Dec. 2014.
- Sachin Kumar Mishra, **Kuldeep Swarnkar**, “Tuning of Controller for Electro-Hydraulic System Using Particle Swarm Optimization (PSO)”, International Journal of Research in Advance Technology, pp. 160-164, Vol. 2, No.10, Oct.2014.
- Sonal Shakya and **A.K. Wadhvani**, “Mitigation of Voltage Sag & Swell without Compensator using PWM Converter”, International Journal of scientific Engineering and Technology Research (IJSETR), ISSN 2319-8885, Vol.03, Issue.26 Sept. 2014.
- **Shishir Dixit**, **Laxmi Srivastava**, Ganga Agnihotri, “Optimal Allocation of SVC for Minimization of Power Loss and Voltage Deviation using NSGA-II “International Journal of Advanced Science and Technology, Vol. 71, pp. 1-14, Sept.2014. (Indexed Journal).
- **Shishir Dixit**, Ganga Agnihotri, **Laxmi Srivastava**, Ankita Singh, “An Overview of Placement of TCSC For Enhancement of Power System Stability”, IEEE International Conference on “Computational Intelligence and Communication Networks” Nov. 2014, Bhopal.

Electronics Deptt.

- Ajeet Maheshwari and **Karuna Markam**, “Design A Barlett Window Based Digital Filter Using GRNN”, International Journal of Innovative Research in Science, Engineering and Technology, ISSN 2319-8753, Vol.3, Issue7, pp.14433-14440, 2014.
- Parag Sahani, **Vandana Vikas Thakare**, “Bandwidth Enhancement Of Microstrip Patch Antenna Using Single Layer And Multilayer Substrate”, Corona Journal of Science and Technology, ISSN : 2319-6327, Vol.3 ,No. 3 ,pp. 29-30, Aug. 2014.
- Robert Mark, **Vandana Vikas Thakare**, “Analysis of Microstrip Finger on Bandwidth of Interdigital Band Pass Filter Using Artificial Neural Network”, International Journal for Research in Emerging Science and Technology (IJREST) ,E- ISSN : 2349-7610, Vol. 1 ,Issue3, pp 1-5 ,Aug. 2014.
- Robert Mark, **Vandana Vikas Thakare**, “Bandwidth Analysis By Introducing Slot In Interdigital Band Pass Filter Using ANN”, International Journal for Emerging Technology and Advance Engineering (IJETA), ISSN : 2250-2459 vol.4 ,Issue – 8, pp. 130-133 ,Aug. 2014.
- Robert Mark, **Vandana Vikas Thakare**, “Bandwidth estimation of Microstrip Interdigital Band Pass Filter Using Artificial Neural Network”, International Journal for Emerging research and Technology (IJRET) , ISSN : 2278-0181 vol.3 ,Issue 5, 2014.
- Sudhir Singh, **Vandana Vikas Thakare**, “Design and Analysis of triple band Hairpin Band pass Filter using Artificial Neural Network”, International Journal Advance and Innovative Research (IJAIR), ISSN : 2278-7844, vol. 3 ,Issue 7, PP. 130-133, Aug. 2014.
- Sudhir Singh, **Vandana Vikas Thakare**, “Bandwidth Analysis of Slotted Hair PIN Band pass Filter using Neural Networks”, International Journal for Emerging Technology and Advance Engineering (IJETA), ISSN : 2250-2459 vol. 4 , Issue 8, pp. 130-133 ,Aug. 2014.

TEAM NEWSLETTER

Chairman - Dr. Rajeev Kansal

Members- Dr. Alok Sharma, Dr. Sanjeev Khanna,
Dr. Sulochana Wadhvani,
Dr. M.K. Gour, Dr. Sunita Sharma,
Dr. Anshu Chaturvedi, Prof. Jaimala Jha,
Prof. Laxmi Shrivastava,
Dr. Shourabh Bhattacharya
Prof. Vandana Sakhre

Composed by Devendra Singh