



**G.H.Rasoni Institute of Engineering and Technology
for Women, Nagpur**



Research and Development Cell



ANNUAL REPORT 2011-2012

Inspiration



Hon'ble Late Shri. Gyanchandji Raisonji

Knowledge is the product of an educational institution .Excellence in teaching and emphasis on values including dignity of labor enrich this product. A skilled person with such a potential shall not only be an expert, but will also be a good citizen. Let the endeavor of this institution be to bring out such a product!

Why R & D ?

Our Resources must Lead us to a STRONGER INDIA with cleaner and better living



RESEARCH AND DEVELOPMENT CELL



Foreword.....



Technical Education Institutes are presently suffering from lack of innovations. Many of these Institutes do not have research activities. I have a firm belief that a teacher cannot teach recent developments in the field of his specialization, if he is not exposed to the latest developments. Therefore, an educational institution must have a strong research base.

The prime objective of the faculty is to teach. Teaching and Research are two sides of the same coin. Hence the faculty should increasingly involve itself in research. Potential-Research-Activities that will be useful to the society will have to be undertaken collaboratively. We, therefore have established research promotion programme through the support of eminent personalities from outstanding research organizations, to enhance research culture and attitude. Research has to be an inseparable part of teacher` activities for effective teaching.

I am happy to mention that, recently, we have established Research and development Cell in our institute, involving ourselves actively in modern aspects of concerned ones. Research work and Publications by the teachers have been given due weightage while judging their overall performance. To build research infrastructure, sufficient financial support is provided. The research facilities and expertise will be made accessible to industry and commerce, so that better collaboration with them is achieved.

Sunil Raison

Chairman, Raison Group of Institutions

Messages.....



I believe it is critically important that we give greater priority to new and better research and development (R&D) investments, to help ensure our country's future competitiveness and to pave the way for clean energy innovation. R&D is one category of spending that develops and drives these new technologies.

-Dr.V.K.Chandrakar

Principal

For survival in highly competitive technical education, an upper hand in the research and development can be the only saving grace. An engineer with only bookish knowledge is of no value. He or she must be able to provide engineering solution to many of the existing problems through research and development.

- Dr.S P Hingway

Dean, R & D Cell

Introduction

Research & Development Cell at G.H.Raisoni Institute of Engineering and Technology for Women, Nagpur gives strong support to research and consulting activities. This cell was established in 2011-2012 with adequate financial support and necessary infrastructure provided by the management.

Research provides an important bridge linking industry and academia. Applied research is concerned with the creation of faith and opportunities for stronger tie-up with industries for better products/ production-processes.

Strong Industry-Institute partnership is fundamental in meeting goals in economic competitiveness. The R & D Cell of the college is spending large share of money to promote technological innovations through our creative teachers and students. Basic aim of R & D cell is to propagate the philosophy and methods of inquisitiveness in the minds of the teachers and students.

Of late, it has become a priority to enhance research in the field of electronics and Telecommunication, Computer Sciences and other disciplines of Engineering and technology, for the benefit of Industry and researchers.

The objectives of the R & D cell are enlisted below :

- To develop excellence in teaching under graduate and post graduate students and pursue research.
- To create intellectual property.
- To promote industry based research in Engineering disciplines for the benefit of industry, with in-house as well as adjunct scholars.
- To develop infrastructural facilities and research culture among the teachers and researchers.

The activities of this cell will be guided and supervised by Advisory board formed as given below:

Research Advisory Board

A) Authorities from the College

- | | |
|----------------------------------|---|
| 1. Chairperson Principal | Dr. V.K Chandrakar |
| 2. Dean Research and Development | Dr. S.P Hingway |
| 3. Heads of Department | Dr.U.M.Gokhale(HOD,ETC/ETRX) Prof. M.J Katira (HOD,Electrical) Prof. P.S Mohod (HOD,CSE/IT) Mrs.M.H.Aware (First year Co-ordinator) |

B) Expert from other Organization

- | | |
|-----------------------|---|
| 1. Dr. D.P. Kothari | Ex. Director General, RGI |
| 2. Dr K. K. Dhote | Executive Director , RGI |
| 3. Dr. K.M Bhurchandi | Prof in Electronics Engg. VNIT, Nagpur |
| 4. Dr. R.M Moharil | Prof & Head , Electrical Engg., YCCE, Nagpur |
| 5. Dr. J.B Helonde | Principal, ITM, Nagpur |
| 6. Dr Anjali Mahajan | Prof & Head, Computer Science and Engg. , PIET, Nagpur |
| 7. Dr S V Moharil | Prof & Head , P G Dept. of Physics, RTMNU, Nagpur |
| 8. Dr B N Berad | Prof in Organic Chemistry , RTMNU, Nagpur |

Research & Development Policies



The Research & Development of G H Raisoni Institute of Engineering & Technology for Women, Nagpur aims to nurture research culture in the institute by promoting research in newly emerging and challenging areas of science and engineering. It encourages the Undergraduate, Post graduate and Doctoral degree candidates to undertake research in newly emerging frontier areas of science and engineering including multidisciplinary fields. This will enhance the general research capability of budding technocrats by way of participating in conferences, seminars, workshops, project competition, etc.

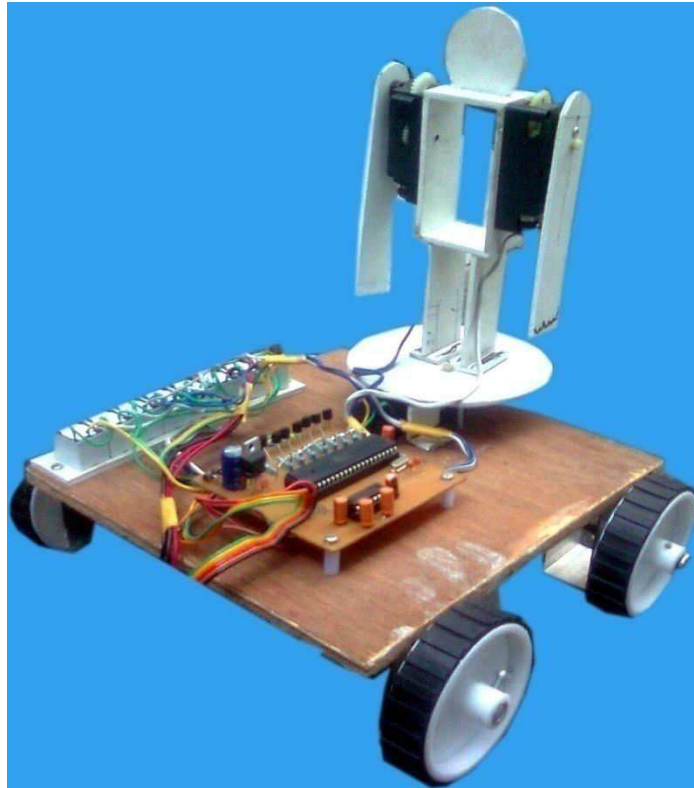
- ✚ To encourage faculty to bring funded projects to Institute
- ✚ To promote faculty to undertake research activities
- ✚ To ensure students participation in research activities
- ✚ For overall development of a teacher in the area of pedagogy research & development
- ✚ To improve quality of research & publication
- ✚ Academic flexibility
- ✚ To promote faculty to undertake research and file patents.
- ✚ To bridge the gap in between the existing curriculum & industry needs
- ✚ To expose the students with emerging areas of latest technology
- ✚ Enhancement of R & D Culture

Index

- **Research Facilities in Department**
- **Activities of R & D Cell**
 - **Workshops Organized**
 - **Guest Lecture by eminent speakers**
 - **Progress Seminar Organized for ME/MTech Students**
 - **PhD Supervisors**
 - **PhD / ME / MTech Pursuing Faculties**
- **AQIS Proposals**
 - **Research Promotion Schemes**
- **Patents Filed**
- **Books / Chapter Published**
- **Technical Paper Published in International / National Journal / Conference by Faculty / Students**
- **Technical Awards by faculty / Students**

DEPARTMENT OF COMPUTER SCIENCE and ENGINEERING

Present Research Activities:

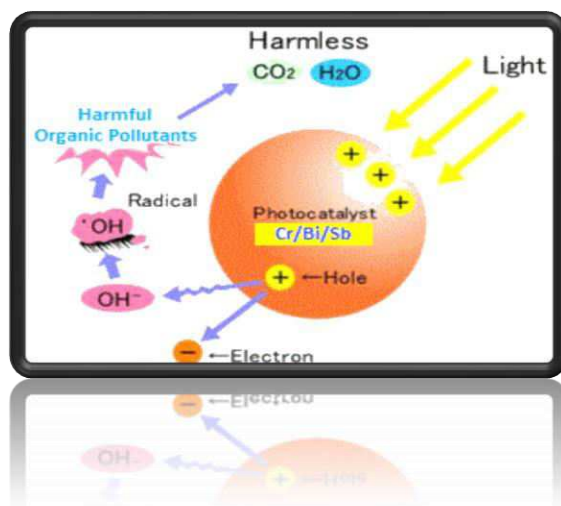


Project by Ms. Ranjana Shende

The hardware model is used for demonstrating hardware movement using hand and head gesture. Four wheels are used in this for proper balancing. The movement of wheels is controlled by D.C. motors which are attached to the hardware. Only two motors are located on the backside wheels. One backside wheel located on left side of the hardware is controlled by one motor and the wheel on the right side is controlled by the second motor. The other circuitry built into the hardware includes the microcontroller and other devices.

Present Research Activities

Research Topic:- Synthesis and characterization of visible light driven Photocatalysis for degradation of organic pollutants in aqueous Media

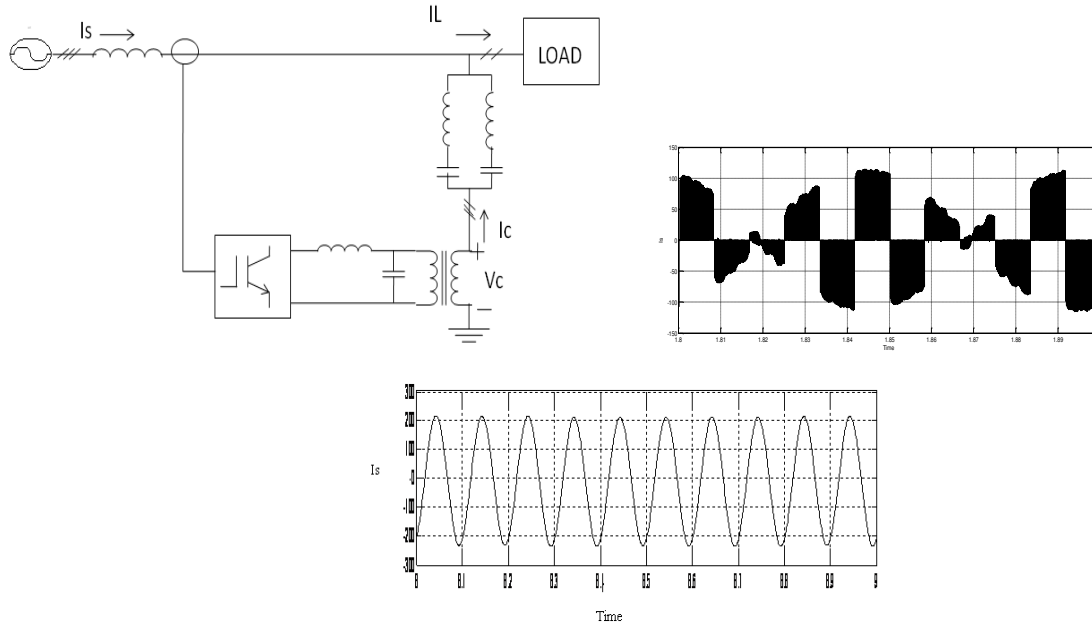


Research Project by Mr.S.R.Patil

The research work embodies an account of the synthesis of visible light active photocatalysts mainly chromate, bismathate and antimonate prepared by different methods under mild conditions. The different preparation methods are sol-gel, ultrasonic, salvo-combustion and solid state methods. The resulting prepared photocatalysts has been characterized on the basis of XRD, diffuse reflectance study, SEM Raman study. The x-ray diffraction patterns of the material under the present investigation have been carried out to know the stiochiometry and three dimensional structures. SEM analysis is use to know morphological features of the prepared visible light active photocatalysts. Methylene blue has been selected a refractory model compound in this oxidation process. The photocatalytic degradation of methylene blue with different concentration of dye as well as photocatalyst has been studied. The results are interesting in view of their degradation. Further it is reported that Microstructure is an important factor that influences properties. Hence different preparation methods and characterization were adopted for comparative study and for better catalytic performance.

Present Research Activities

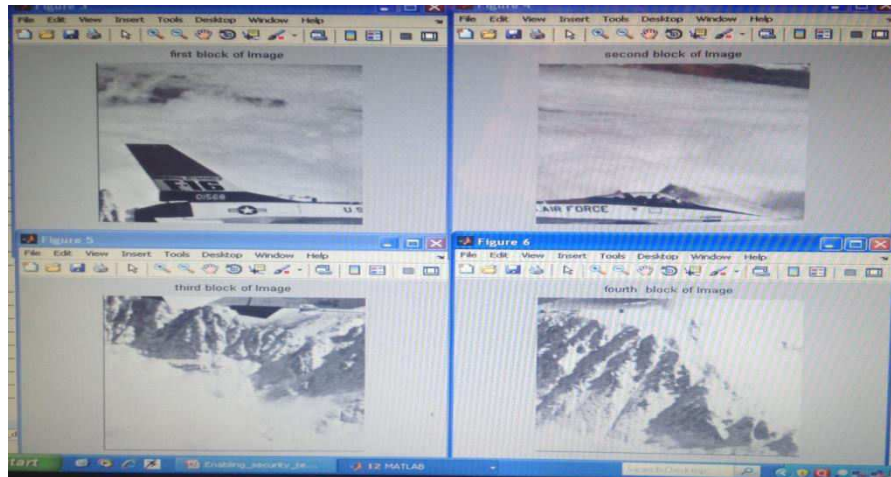
Research Topic: Power Quality Improvement In Matrix Converter Using Hybrid Filter



Research Project by Ms.Rashmi Phasate

This project proposes a hybrid filter to minimize the power quality impact instead of using passive or active filter of the matrix converters. Matrix converters inject significant harmonics and nonstandard frequency components into power systems. The proposed filter eliminates the total line current harmonics efficiently. The smaller Total Harmonic distortion the harmonic pollution in the power system will be reduced and the power quality will be increased. A hybrid filter constructed of a shunt active filter and distributed passive filters used for power quality improvement. The proposed approach has been tested and validated on the matrix converter using Matlab/Simulink. The comparison of Simulation results for passive and active filter separately used with matrix converter with the result of matrix converter with hybrid filter is shown to demonstrate the advantages of the proposed scheme.

Present Research Activities :



Research Project by Mr.U.M.Gokhale

For strict authentication we present a method based on Integer Wavelet transform, the proposed algorithm can detect malevolent manipulations but is not robust to noise or other attacks. Any modification made to the original image is reflected in the watermark. Hence tampering in the image can be detected easily and accurately. The other method presented is based on reversible watermarking. In the existing reversible watermarking algorithms there is always a tradeoff between higher data embedding capacity and degree of perceptibility. The proposed algorithm achieves both high embedding capacity and imperceptibility.

WORKSHOP ON RESEARCH METHODOLOGY



A three day workshop on “Research Methodology” was conducted from 7th December 2011 to 9th December 2011 at G.H.Raisoni Institute of Engineering & Technology for Women, for the teaching faculty and M.Tech Students of GHRIETW. Large number of subjects such as choice of subject for the research, how to carry out literature survey, research methods, data collection and analysis, presentation of results, thesis and technical paper writing, evaluation of research and patent registration were covered. The workshop was inaugurated in presence of Dr.P.R.Bajaj, Director, G.H.RaisoniCollege of Engineering, Dr.V.K.Chandrakar, Principal, G.H.Raisoni Institute of Engineering & Technology for Women, and Dr.D.J.Tidke. Dr.S.B.Jaju, Professor GHRCE and Mrs S.P.Hingway, Professor Raisoni Institute of engineering & technology for Women were the coordinators for the workshop.

A team from GHRCE worked hard to make this workshop a success. Dr.P.R.Bajaj,Dr.D.J.Tidke,Dr.L.G.Malik,Dr.A.Y.Deshmukh, Dr.R.M.Deshpande,Dr.P.B.nagarnaik,Dr.S.B.Jaju,Dr.B.V.Khode,Dr.U.S.Wank hede,Prof.S.D.Giripunje,Dr.S.S.Dorle and Prof.Prashant Sharma addressed the gathering on various topics.

TECHNICAL PAPERS PUBLISHED

Technical Papers Published in Journals

First Year Engineering

| Sr. No | Name of faculty | Name of Published Paper | Name of Journals/Vol.No./Issue No./Pg.No./ISBN/ISSN/I.P. |
|--------|-------------------|---|---|
| 1 | Dr. V.R. Kinhikar | “Removal of Nickel (II) from Aqueous Solutions by Adsorption with Granular Activated Carbon(GAC)” | International Journal of Chemical Science. Vol. 2(6),6-11,June (2012). (ISSN No. 2231-606X) |
| 2 | Dr. V.R. Kinhikar | “Nickel Adsorption From Aqueous Solution By F-200 GAC By Adsorption Technology.” | International Journal of Advances in Technology and Engineering Sciences. Vol I, Issue 7(V) April 2012. (ISSN No.2249-7455 |
| 3 | Dr. V.R. Kinhikar | Granular Activated carbon - A good adsorbent for removing metal ions from aqueous solution.” | National Seminar on Technology innovations with environmental integrity”.Amaravati,28th Feb 2012. (ISBN No.978-81-922256-5-4.) |
| 4 | S.V.Ganorkar | Review of various gripping mechanisms for a prosthetic hand | Int.J.of Multidispl. Research and Advcs.in Engg.(IJMRAE), Vol. 4,III(JULY 2012),pp. 91-98 ISSN 0975-7074, |

Department of Electrical Engineering

| Sr. No. | Name of Faculty | Title of Paper | Name of Journal/ Vol. No. / Issue No. / Year/ Page No./ ISSN No./ ISBN No./ Impact Factor |
|----------------|------------------------|--|---|
| 1 | Dr .V. K. Chandrakar | Influence of electric field on the chaotic behavior of gas solid suspension that is fluidized bed based on pressure fluctuations | International Journal of Engineering Research and Technology, Vol- 5 (Jan-Jun 2012), ISSN No. 2278-0181;I. F.-1.76 |
| 2 | Dr .V. K. Chandrakar | Effect of electric field on the hydrodynamics of gas –solid fluidized bed | International journal of Chemical Engineering Vol -5, (Jan-Jun 2012),ISSN No.1687-8078; |
| 3 | Dr .V. K. Chandrakar | Experimental study of Thyristor controlled reactor (TCR) and GTO controlled series capacitor (GCSC) | International Journal of Engineering Science and Technology, Issue 6, Vol. 3, June 2011, pp 4824-4832, ISSN No. 2277-5293 |
| 4 | Rashmi S. Phasate | Power quality improvement in matrix converter using hybrid filter. | IJSAA (International Journal of Systems, Algorithms & Applications), Vol. 2; 31st May,12, Issue-5; pp 47-51; ISSN No.178-93-81693-50-6 |
| 5 | M.A Bodkhe | Design & Implementation of single stage PFC Micro Controller Based Drive For PMBLDC motor | IJEEE-2012 (International Journal in Electrical and Electronics Engineering), Vol. 1; 2012, Issue 3; pp118-122; ISSN No. 2231-5284; |

Department of Electronics/Electronics and Telecommunication

| Sr. No. | Name of Faculty | Title of Paper | Name of Journal/ Vol. No. / Issue No. / Year/ Page No./ ISSN No./ ISBN No./ Impact Factor |
|----------------|------------------------|--|--|
| 1. | Dr.U.M.Gokhale | A semi fragile Watermarking Algorithm based on SVD-IWT for Image Authentication | International Journal of Advanced Research in Computer and Communication Engineering/ vol. 1, Issue 4, June 2012, pp.213-218. |
| 2. | Dr.U.M.Gokhale | Integer Wavelet Transform based Digital Signature Scheme for Image Authentication | International Journal of Engineering Research and Industrial Applications/(IJERIA) Vol. 4 No.III/ISSN 0974-1518/(August 2011), pp.231-242. |
| 3. | Dr.U.M.Gokhale | A Fragile Watermarking Algorithm for Strict Image Authentication in the Wavelet Domain | CIIT International Journal of Digital Image Processing/ Vol. 3,No 10, June2011,pp. 595-599. |
| 4. | Dr.U.M.Gokhale | Reversible Data Hiding Using Increased Peak Histogram and Block Division | International Journal of Multidisciplinary Research and Advances in Engineering (IJMRAE)/ Vol.3 No. I January2011, pp.389-398./Impact Factor-0.2015/ISSN 0975-7074 |
| 5. | Dr S P Hingway | Two Simple Shock Graph Structures for Object Recognition using Euler String | CiiT International Journal for Digital Image Processing, India./ Vol 4, No 7 April 2012 |
| 6. | Dr S P Hingway | An Improved Shock Graph for an Improved Object Recognition | Cyber Journal of Selected Areas in Software Engineering, Canada, May 2011. |
| 7. | Mrunalini Moon | Image processing and pattern generation | IJERA (International journal of engineering research & application)/ 17/ISSN:2248-9622 vol.2 Issue-5 PP-1888-1893 2012 |
| 8. | Darshan P . Pendhari | Design of mobile robot for indoor monitoring system using SLAM technique | TIJCSA(International journal of computer science & application)/ ISSN :2278-1080 Vol-01-No-02 Apr-12 |
| 9. | Mamata Mahajan | Design of least mean square algorithm for adaptive noise canceller | International journal of advanced engineering & technologies (IJAEST)/ Vol .No 5 Issue No 2, 2011, pp 172-176, ISSN :2230-7818 |
| 10. | Dinesh Rotake | A Design approach for traffic volume monitoring and intelligent signal control system | The International Journal of Computer Science & Applications /TIJCSA/ ISSN - 2278-1080 Vol .1 No .2 April -2012 |
| 11. | Dinesh Rotake | Intelligent traffic signal control system using embedded system. | International institute for science & education(IISTE)/ ISSE -2222-1727 ISSN -2222-2871 online vol.3 No .5 2012 |
| 12. | Sheeja S.Suresh | Design of conveyor monitoring controller with wireless system. | International journal on advanced electronics engineering/ IJAEE/UACEE-ICACCN 2011 |
| 13. | Sheeja S.Suresh | Design of conveyor monitoring | SEEK Digital library of UACEE/ |

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| | | controller with wireless system. | June 2011 / ISBN : 978-981-07-8859-9. |
| 14. | Pranjali Awachat | A design approach for noise cancellation in adaptive LMS predictor using MATLAB | IJERA (International journal of engineering research & application) Vol2, Issue 4, Jul 2012 PP 2348-2391 1.17 |

Department of Computer Science & Engineering/ Information Technology

| Sr. No. | Name of Faculty | Title of Paper | Name of Journal/Volume Number/ Issue Number/Year /ISBN/ISSN/Impact Factor |
|----------------|------------------------|---|--|
| 1. | Prof.P.S. Mohod | Hybrid color frequency feature with kernel fisher analysis for face recognition | International journal of Computer Applications/ 2011 /ISBN No 978-93-80866-59-0/Impact factor 0.821 |
| 2. | Prof.P.S. Mohod | Face Recognition using PCA | International journal of Artificial Intelligence and Knowledge Discovery/Vol No 1/ Issue No 1/January 2011/ ISBN:978-981-08-7932-7 |
| 3. | Ms.Pratibha Mishra | Human Gait Recognition Using Bezier Curves | International Journal of Computer Science and Engineering/ Vol No 3/ Issue No 2 /February 2011/ ISSN: 0975-3397 |
| 4. | Ms.Pratibha Mishra | Human Gait Recognition using Local Binary Pattern Variance | International Journal of Advanced Engineering Science and Technology/ Vol No. 7/Issue No. 2/ Year 2011/ ISSN: 2230-7818 |
| 5. | Ms.Pratibha Mishra | Human Gait Recognition Using Gaussian Membership Function | International Journal of Advanced Engineering Science and Technology/ Vol No. 3/Issue No. 1/020 – 023/Year – 2011/ ISSN: 2230-7818 |
| 6. | Ms.Ranjana Shende | Cellular Automata Image Extraction Algorithm for Gestures Recognition | International Journal of Computer Science and technology/ Vol No 2/Issue No 2/ June 2011/ ISSN:2229-4333 |
| 7. | Ms.Ranjana Shende | Connected Component Algorithm for Gestures Recognition | International journal of Computer and Communication Technology 2011 |
| 8. | Ms. Priyanka Fulare | False Data Detection in Wireless Sensor Network with Secure communication | International Journal of Smart Sensors and Ad Hoc Networks (IJSSAN) Volume-1, Issue-1, 2011 |
| 9. | Ms.Amruta Moon | Impact of Kernel Fisher Analysis Method on Face Recognition | International Journal of Engineering Advanced Technology/ Vol No 2/ Issue No 3/ February 2013/ ISSN:2249–8958 |
| 10. | Ms.Amruta Moon | Kernel Fisher Analysis Method for Face Recognition | International Journal of Emerging Technology and Advanced Engineering/ Vol 2, Issue 1, January 2012/ ISSN 2250-2459 |
| 11. | Ms.Minal Kamble | Detecting Image Spam Using Principal Component Analysis & SVM Classifier | International Journal of Computer Science and Information Technology & Security/ Vol. 2, No. 6, December 2012/ ISSN: 2249-9555 |
| 12. | Ms.Minal Kamble | Detecting Image Spam Based on Image Features using Maximum Likelihood Technique | International Journal of Computer Science and Technology/ Vol. 3, Issue 1/ March 2012/ ISSN: 0976-8491 |

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|-----|---------------------------|--|--|
| 13. | Ms.Pranali Suryawanshi | Digital Image Encryption Using Inter-Pixel Displacement of RGB Attribute | International Journal of Advanced Studies in Computer Science & Engg. Vol. 1/ Issue 4/ 2012/ ISSN 2278-7917 |
| 14. | Ms.Snehal Kathale | Human Gait Recognition By Opencv | International Journal of Computational Biology/ Vol. 3, Issue 1, 2012/ ISSN:2229-6700 |
| 15. | Ms.Priti Saktel | An Improved Approach for Word Ambiguity Removal | International Journal of Human Computer Interaction/Vol No 3/Issue No 3/ 2012/ ISSN 2180-1347 |
| 16. | Ms. Gunjan Lonarkar | Embedded Extended Visual Cryptography Schemes For Different Patterns | International Journal of computer Science/ Vol 2, Issue 1, 2012, pp.- 14-17/ ISSN:2249-7013 |

Technical Papers Published in Conference

First Year Engineering

| Sr. No | Name of faculty | Paper Name | Name of Conference/ Impact factor / ISBN No/ISSN No. |
|--------|--|--|---|
| 1 | Dr. V.R. Kinhikar | Granular Activated carbon-A good adsorption for removing metal ions from aqueous solution | Technological Innovation with Environmental Integrity 28th Feb 2012 Organized by Shree H V P Mandal's college of engg, and Technology Amravati. |
| 2 | Dr. V.R. Kinhikar | (Poster presentation) Topic :- Comparative Studies on the Removal of Nickel (II) from Aqueous Solution by Using Different Grades of Granular Activated Carbon. | “International conference on Environmental impact and Integrated Approach for carbon management solutions Technology Development and pollution Abatement.” (RDEIM-IACM 2012) NEERI, Nagpur on 28-30 March 2012. |
| 3 | Dr. V.R. Kinhikar | (Poster presentation) Topic:-Nickel Adsorption From Aqueous Solution By F-200 GAC By Adsorption Technology. | “International conference on Interdisciplinary Research and Development in management, Engineering and Technology and Social Sciences.” (ICMETSS -2012)Tuli Imperial, Nagpur on 28-29 April 2012. |
| 4 | Dr. V.R. Kinhikar | (Poster presentation) Topic – Adsorption of metal ion on granular activated carbon & their subsequent recovery. | “Chemistry for Mankind: Innovative Ideas in Life Sciences - ICCM-2011” Organized by RTM University ,Nagpur on 9th to 11th Feb 2011. |
| 5 | Dr. V.R. Kinhikar | (ORAL presentation)Topic:- “Removal of Nickel (II) from Aqueous Solutions by Adsorption with Granular Activated carbon | “International Science Congress Association- ISCA-2011.” Organized by Maharaja Ranjit Singh professional college, Indore on 24th & 25th Dec 2011. |
| 6 | Dr. V.R. Kinhikar | (poster presentation) “REMOVAL OF METAL IONS FROM WASTEWATER BY ADSORPTION TECHNOLOGY.” | U.G.C. Sponsored National conference on “Materials: Atom to Molecule” Organized by Shri Shivaji science education society Amaravati's science college, congress nagar, Nagpur on 16th Dec. 2011. |
| 7 | Mrs. Manjusha R. Ugale (Mrs. M.H. Aware) | (Poster presentation) Topic – Adsorption of metal ion & their subsequent recovery. | “Chemistry for Mankind: Innovative Ideas in Life Sciences - ICCM-2011” Organized by RTM University ,Nagpur on 9th to 11th Feb 2011. |
| 8 | Ms. S.S. Khekare | ‘An epidemic model with non – monotonic incidence rate’ | International conference on mathematical sciences 28-31dec– 2012, Nagpur |
| 9 | Ms. Anisa Ahmad | “Axially symmetric cosmological model in seas – Ballester theory of gravitation” | “present development & Future trends in mathematical science 28-29thjanuary2012,Nagpur |
| 10 | Ms. M.K. Tote | “Axially symmetric cosmology model in seaz – ballester theory of gravitation” | “present development & Future trends in mathematical science 28-29thjanuary2012,Nagpur |

Department of Electrical Engineering

| Sr. No. | Name of Faculty | Title of Paper | Name of Journal/ Vol. No. / Issue No. / Year/ Page No./ ISSN No./ ISBN No./ Impact Factor |
|----------------|------------------------|--|---|
| 1 | Dr .V. K. Chandrakar | Influence of electric field on the chaotic behavior of gas solid suspension that is fluidized bed based on pressure fluctuations | International Journal of Engineering Research and Technology, Vol- 5 (Jan-Jun 2012), ISSN No. 2278-0181;I. F.- 1.76 |
| 2 | Dr .V. K. Chandrakar | Effect of electric field on the hydrodynamics of gas –solid fluidized bed | International journal of Chemical Engineering Vol -5, (Jan-Jun 2012),ISSN No.1687-8078; |
| 3 | Dr .V. K. Chandrakar | Experimental study of Thyristor controlled reactor (TCR) and GTO controlled series capacitor (GCSC) | International Journal of Engineering Science and Technology, Issue 6, Vol. 3, June 2011, pp 4824-4832, ISSN No. 2277-5293 |
| 4 | Rashmi S. Phasate | Power quality improvement in matrix converter using hybrid filter. | IJSAA (International Journal of Systems, Algorithms & Applications), Vol. 2; 31st May,12, Issue-5; pp 47-51; ISSN No.178-93-81693-50-6 |
| 5 | M.A Bodkhe | Design & Implementation of single stage PFC Micro Controller Based Drive For PMLDC motor | IJEEE-2012 (International Journal in Electrical and Electronics Engineering), Vol. 1; 2012, Issue 3; pp118-122; ISSN No. 2231-5284; |

Department of Electronics/ Electronics and Telecommunication

| Sr. No. | Name of Faculty | Paper Name | Name of Conference/Venue/ Date |
|----------------|-------------------------|---|--|
| 1. | Dr.U.M.Gokhale | A new Watermarking algorithm based on Image Scrambling and SVD in the Wavelet Domain” | Second International Conference On Advances In Computer Engineering – ACE 2011, Held On 25 -26 Aug 2011 At Trivandrum, Kerala, INDIA |
| 2. | Dr. S.P. Hingway | Novel architecture of wireless e-health monitoring. | International Conference On Electrical Engineering And Computer Sciences (ICAE ECS-2012) |
| 3. | Mr. Darshan D. Pendhari | Design of Autonomous navigation Systems using SLAM Technique for Environment monitoring | International Conference On Recent Trends Of Computer Technology In Academic (CSI) 2012 |
| 4. | Mr. Nishant Pandey | Fuzzy logic control in digital signal processors. | National Conference On Advances In Electronics And Communication Engineering NCAECE-11,SVSS ,Nagpur 20-21 Oct 2011 |
| 5. | Ms. S.K. Thakur | Comparison between VHDL & MATLAB for FFT & IFFT block | International Conference On Latest Trends In Nanoscience And Nanotechnology On 28th And 29th March 2011 |
| 6. | Ms. S.P. Suryawanshi | Differentiator using PFG (Pseudo Floating Gate) | International Conference On Computer Application (ICCA,2012) |
| 7. | Ms. S.P. Suryawanshi | Design of analog circuits using PFG(Pseudo Floating Gate) | International Conference On Electrical Engineering And Computer Science(ICEECS 2012)Held At GOA |
| 8. | Mrs. P.T. Kene | Bluetooth Communication using Android | National Conference On Advance Technology NCOAT-NIRMITI 2011NCOAT-NIRMITI March 08-09 2011 |
| 9. | Mrs. P.T. Kene | Autodetecting Mobile Lost Status | National Conference On Advance Technology NCOAT-NIRMITI 2011NCOAT-NIRMITI March 08-09/ 2011 |
| 10. | Mrs. Sheeja S. Suresh | Design of conveyors Monitoring Controller with Wireless Systems | International Conference On Advance Computing ,Communication And Networks (ICACCN-2011) Held At Chandigarh |
| 11. | Mrs. Sheeja S. Suresh | Design of conveyors Monitoring Controller with Wireless Systems | National Conference On Advance Technology NCOAT-NIRMITI 2011NCOAT-NIRMITI March 08-09 2011 |
| 12. | Mr. Prasad R. Sangare | A Comparison of Fuzzy Clustering Techniques for Image Segmentation | International Conference On Computer Application (ICCA,2012) |
| 13. | Mr. Prasad R. Sangare | Fuzzy clustering methods For image segmentation: A Survey | National Conference On Advances In Electronics And Communication Engineering NCAECE-11, SVSS, Nagpur 20-21 Oct 2011 |
| 14. | Kshama Dawile | Implementation of DSSS based CDMA transmitter & receiver using Gold code for FPGA | International Conference On Electronics And Communication Engineering (ICECE-2012) |
| 15. | Kshama Dawile | Implementation of DS-SS based CDMA transmitter & receiver using | International Conference On Computer Application (ICCA,2012) |

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|-----|-------------|---|--|
| | | Gold code for FPGA | |
| 16. | P.M.Awachat | Speaker identification using neural network | International Conference On Electronics And Communication Engineering 25-27JAN(ICECE-2011) |

Department of Computer Science and Engineering/ Information Technology

| Sr. No. | Name of Faculty | Title of Paper | Name of Conference |
|----------------|------------------------|--|--|
| 1. | Ms.Pranali Suryawanshi | Comparative Study of Digital Image Encryption Techniques | National Conference on Innovative Research Trends in Computer Science Egg. & Technology on 3rd-4th Dec,2012 organized by G.H.Raisoni College of Engineering,Nagpur,India |
| 2. | Mr.Ravindra Kale | Text Data Encryption and Compression for High-speed and Secure Data Transmission in Wireless Network: A Survey | National Conference on Innovative Research Trends in Computer Science Egg. & Technology,2012 ISBN 978-93-5087-879-8 organized by G.H.Raisoni College of Engineering, Nagpur,India |
| 3. | Mr.Ravindra Kale | Implementation of an Efficient Data Security and Compression algorithm in Wireless network | International Conference on Interdisciplinary Research & development in Management, Engineering Technology and Social Sciences on 28th-29th April 2012 organized by Choice Institute of Management Studies & Research,Pune,india |
| 4. | Mr.Ravindra Kale | Data Reduction by Huffman Coding and Encryption by DES in Wireless Network | International Conference on Electronics & Communication Engineering on 16th April 2012 organized by InterScience Research Network,Pune,India |
| 5. | Mr.Ravindra Kale | Survey of Secure Compression in Wireless Network | National Conference on Current Trends in Engineering & Technology on 15th Dec 2011 organized by Central India College of Engineering & Technology,Lonara,Nagpur,India |
| 6. | Ms.Priti Saktel | Context Based Domain Identification for Resolving Ambiguity | International Conference on Computing Communication and Networking Technology on 26th-28th July 2012 organized by SNS College of Engineering, Coimbatore, India |
| 7. | Ms.Priti Saktel | Context Based Meaning Extraction for HCI Using WSD Algorithm: A Review | IEEE-International Conference On Advances In Engineering, Science And Management on March 30th – 31st , 2012 organized by E.G.S.Pillay Engineering College,Nagapattinam,Chennai |
| 8. | Ms.Minal Kamble | Image Spam Detection : A Review | International Conference on Advances in Computer Science and Electronics Engineering ISBN: 978-981-07-1403-1 on 2nd -3rd Feb 2012 organized by Universal Association of Computer and Electronics Engineers New Delhi, India |

Total number of Technical Papers Published/Presented up-to-date.

| International Publications | National Publications | Total Publications |
|-----------------------------------|------------------------------|---------------------------|
| 58 | 11 | 69 |

PHD SUPERVISORS

| Sr.No | Name of Supervisor | Branch | Area of Specialization |
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| 2 | Dr.V.R.Kinhikar | Organic Chemistry | Adsorption Technology |
| 3 | Dr.R.J.Dhokne | Applied Physics | Polymer Composite and Polymer Biodegradation |

LIST OF PHD PURSUING FACULTIES

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| 2 | Mr.U.M.Gokhale | Electronics | Image Processing and VLSI |
| 3 | Mr.S.R.Patil | Applied Chemistry | Photo Catalysis |

List of MTECH Pursuing Faculties

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| 2 | Ms.Amruta Moon | Computer Science & Engineering |
| 3 | Ms.Sarah Ahmed | Computer Science & Engineering |
| 4 | Ms.Kanchan Mankar | VLSI |
| 5 | Ms.Sheeja Suresh | VLSI |
| 6 | Ms.Shweta Thakur | VLSI |
| 7 | Ms.R.Phasate | Electrical |

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