

**Volume 2 Issue 7, June 2014**

**International Journal of Inventive**

**Engineering and Sciences**

**ISSN : 2319-9598**

**website: [www.ijies.org](http://www.ijies.org)**



**Blue Eyes Intelligence Engineering & Sciences Publication Pvt. Ltd.**  
**Exploring Innovation: A Key for Dedicated Services**

**Address:**

# 22, First Floor, ShivLoka Phase-IV,  
Khajuri Kala, BHEL-Piplani, Bhopal (M.P.)-462021, India

**Website:** [www.blueeyesintelligence.org](http://www.blueeyesintelligence.org)

**Email:** [director@blueeyesintelligence.org](mailto:director@blueeyesintelligence.org), [blueeyes@gmail.com](mailto:blueeyes@gmail.com)

**Cell #:** +91-9669981618, **WhatsApp #:** +91-9669981618, **Viber #:** +91-9669981618

**Skype #:** beiesp, **Twitter #:** beiesp

## **Editor In Chief**

### **Dr. Shiv K Sahu**

Ph.D. (CSE), M.Tech. (IT, Honors), B.Tech. (IT)

Director, Blue Eyes Intelligence Engineering & Sciences Publication Pvt. Ltd., Bhopal(M.P.), India

### **Dr. Shachi Sahu**

Ph.D. (Chemistry), M.Sc. (Organic Chemistry)

Additional Director, Blue Eyes Intelligence Engineering & Sciences Publication Pvt. Ltd., Bhopal(M.P.), India

## **Vice Editor In Chief**

### **Dr. Himani Sharma**

Professor & Dean, Department of Electronics & Communication Engineering, MLR Institute of Technology, Laxman Reddy Avenue, Dundigal, Hyderabad, India

### **Prof.(Dr.) Anuranjan Misra**

Professor & Head, Computer Science & Engineering and Information Technology & Engineering, Noida International University, Noida (U.P.), India

## **Chief Advisory Board**

### **Prof. (Dr.) Hamid Saremi**

Vice Chancellor of Islamic Azad University of Iran, Quchan Branch, Quchan-Iran

### **Dr. Uma Shanker**

Professor & Head, Department of Mathematics, CEC, Bilaspur(C.G.), India

### **Dr. Rama Shanker**

Professor & Head, Department of Statistics, Eritrea Institute of Technology, Asmara, Eritrea

### **Dr. Vinita Kumari**

Blue Eyes Intelligence Engineering & Sciences Publication Pvt. Ltd., India

### **Dr. Kapil Kumar Bansal**

Head (Research and Publication), SRM University, Gaziabad (U.P.), India

### **Dr. Deepak Garg**

Professor, Department of Computer Science and Engineering, Thapar University, Patiala (Punjab), India, Senior Member of IEEE, Secretary of IEEE Computer Society (Delhi Section), Life Member of Computer Society of India (CSI), Indian Society of Technical Education (ISTE), Indian Science Congress Association Kolkata.

### **Dr. Vijay Anant Athavale**

Director of SVS Group of Institutions, Mawana, Meerut (U.P.) India/ U.P. Technical University, India

### **Dr. T.C. Manjunath**

Principal & Professor, HKBK College of Engg, Nagawara, Arabic College Road, Bengaluru-560045, Karnataka, India

### **Dr. Kosta Yogeshwar Prasad**

Director, Technical Campus, Marwadi Education Foundation's Group of Institutions, Rajkot-Morbi Highway, Gauridad, Rajkot, Gujarat, India

### **Dr. Dinesh Varshney**

Director of College Development Counseling, Devi Ahilya University, Indore (M.P.), Professor, School of Physics, Devi Ahilya University, Indore (M.P.), and Regional Director, Madhya Pradesh Bhoj (Open) University, Indore (M.P.), India

### **Dr. P. Dananjayan**

Professor, Department of Department of ECE, Pondicherry Engineering College, Pondicherry, India

### **Dr. Sadhana Vishwakarma**

Associate Professor, Department of Engineering Chemistry, Technocrat Institute of Technology, Bhopal(M.P.), India

### **Dr. Kamal Mehta**

Associate Professor, Deptment of Computer Engineering, Institute of Technology, NIRMA University, Ahmedabad (Gujarat), India

### **Dr. CheeFai Tan**

Faculty of Mechanical Engineering, University Technical, Malaysia Melaka, Malaysia

### **Dr. Suresh Babu Perli**

Professor & Head, Department of Electrical and Electronic Engineering, Narasaraopeta Engineering College, Guntur, A.P., INDIA



**Dr. Binod Kumar**

Associate Professor, School of Engineering and Computer Technology, Faculty of Integrative Sciences and Technology, Quest International University, Ipoh, Perak, Malaysia

**Dr. Chiladze George**

Professor, Faculty of Law, Akhaltsikhe State University, Tbilisi University, Georgia

**Dr. Kavita Khare**

Professor, Department of Electronics & Communication Engineering., MANIT, Bhopal (M.P.), INDIA

**Dr. C. Saravanan**

Associate Professor (System Manager) & Head, Computer Center, NIT, Durgapur, W.B. India

**Dr. S. Saravanan**

Professor, Department of Electrical and Electronics Engineering, Muthayamal Engineering College, Resipuram, Tamilnadu, India

**Dr. Amit Kumar Garg**

Professor & Head, Department of Electronics and Communication Engineering, Maharishi Markandeshwar University, Mullana, Ambala (Haryana), India

**Dr. T.C.Manjunath**

Principal & Professor, HKBK College of Engg, Nagawara, Arabic College Road, Bengaluru-560045, Karnataka, India

**Dr. P. Dananjayan**

Professor, Department of Department of ECE, Pondicherry Engineering College, Pondicherry, India

**Dr. Kamal K Mehta**

Associate Professor, Department of Computer Engineering, Institute of Technology, NIRMA University, Ahmedabad (Gujarat), India

**Dr. Rajiv Srivastava**

Director, Department of Computer Science & Engineering, Sagar Institute of Research & Technology, Bhopal (M.P.), India

**Dr. Chakunta Venkata Guru Rao**

Professor, Department of Computer Science & Engineering, SR Engineering College, Ananthasagar, Warangal, Andhra Pradesh, India

**Dr. Anuranjan Misra**

Professor, Department of Computer Science & Engineering, Bhagwant Institute of Technology, NH-24, Jindal Nagar, Ghaziabad, India

**Dr. Robert Brian Smith**

International Development Assistance Consultant, Department of AEC Consultants Pty Ltd, AEC Consultants Pty Ltd, Macquarie Centre, North Ryde, New South Wales, Australia

**Dr. Saber Mohamed Abd-Allah**

Associate Professor, Department of Biochemistry, Shanghai Institute of Biochemistry and Cell Biology, Yue Yang Road, Shanghai, China

**Dr. Himani Sharma**

Professor & Dean, Department of Electronics & Communication Engineering, MLR Institute of Technology, Laxman Reddy Avenue, Dundigal, Hyderabad, India

**Dr. Sahab Singh**

Associate Professor, Department of Management Studies, Dronacharya Group of Institutions, Knowledge Park-III, Greater Noida, India

**Dr. Umesh Kumar**

Principal: Govt Women Poly, Ranchi, India

**Dr. Syed Zaheer Hasan**

Scientist-G Petroleum Research Wing, Gujarat Energy Research and Management Institute, Energy Building, Pandit Deendayal Petroleum University Campus, Raisan, Gandhinagar-382007, Gujarat, India.

**Dr. Jaswant Singh Bhomrah**

Director, Department of Profit Oriented Technique, 1 – B Crystal Gold, Vijalpore Road, Navsari 396445, Gujarat. India

## Technical Advisory Board

### Dr. Mohd. Husain

Director, MG Institute of Management & Technology, Banthara, Lucknow (U.P.), India

### Dr. T. Jayanthi

Principal, Panimalar Institute of Technology, Chennai (TN), India

### Dr. Umesh A.S.

Director, Technocrats Institute of Technology & Science, Bhopal(M.P.), India

### Dr. B. Kanagasabapathi

Infosys Labs, Infosys Limited, Center for Advance Modeling and Simulation, Infosys Labs, Infosys Limited, Electronics City, Bangalore, India

### Dr. C.B. Gupta

Professor, Department of Mathematics, Birla Institute of Technology & Sciences, Pilani (Rajasthan), India

### Dr. Sunandan Bhunia

Associate Professor & Head,, Dept. of Electronics & Communication Engineering, Haldia Institute of Technology, Haldia, West Bengal, India

### Dr. Jaydeb Bhaumik

Associate Professor, Dept. of Electronics & Communication Engineering, Haldia Institute of Technology, Haldia, West Bengal, India

### Dr. Rajesh Das

Associate Professor, School of Applied Sciences, Haldia Institute of Technology, Haldia, West Bengal, India

### Dr. Mrutyunjaya Panda

Professor & Head, Department of EEE, Gandhi Institute for Technological Development, Bhubaneswar, Odisha, India

### Dr. Mohd. Nazri Ismail

Associate Professor, Department of System and Networking, University of Kuala (UniKL), Kuala Lumpur, Malaysia

### Dr. Haw Su Cheng

Faculty of Information Technology, Multimedia University (MMU), Jalan Multimedia, 63100 Cyberjaya

### Dr. Hossein Rajabalipour Cheshmehgaz

Industrial Modeling and Computing Department, Faculty of Computer Science and Information Systems, Universiti Teknologi Malaysia (UTM) 81310, Skudai, Malaysia

### Dr. Sudhinder Singh Chowhan

Associate Professor, Institute of Management and Computer Science, NIMS University, Jaipur (Rajasthan), India

### Dr. Neeta Sharma

Professor & Head, Department of Communication Skills, Technocrat Institute of Technology, Bhopal(M.P.), India

### Dr. Ashish Rastogi

Associate Professor, Department of CSIT, Guru Ghansi Das University, Bilaspur (C.G.), India

### Dr. Santosh Kumar Nanda

Professor, Department of Computer Science and Engineering, Eastern Academy of Science and Technology (EAST), Khurda (Orisa), India

### Dr. Hai Shanker Hota

Associate Professor, Department of CSIT, Guru Ghansi Das University, Bilaspur (C.G.), India

### Dr. Sunil Kumar Singla

Professor, Department of Electrical and Instrumentation Engineering, Thapar University, Patiala (Punjab), India

### Dr. A. K. Verma

Professor, Department of Computer Science and Engineering, Thapar University, Patiala (Punjab), India

### Dr. Durgesh Mishra

Chairman, IEEE Computer Society Chapter Bombay Section, Chairman IEEE MP Subsection, Professor & Dean (R&D), Acropolis Institute of Technology, Indore (M.P.), India

### Dr. Xiaoguang Yue

Associate Professor, College of Computer and Information, Southwest Forestry University, Kunming (Yunnan), China

**Dr. Veronica Mc Gowan**

Associate Professor, Department of Computer and Business Information Systems, Delaware Valley College, Doylestown, PA, Allman China

**Dr. Mohd. Ali Hussain**

Professor, Department of Computer Science and Engineering, Sri Sai Madhavi Institute of Science & Technology, Rajahmundry (A.P.), India

**Dr. Mohd. Nazri Ismail**

Professor, System and Networking Department, Jalan Sultan Ismail, Kaula Lumpur, MALAYSIA

**Dr. Sunil Mishra**

Associate Professor, Department of Communication Skills (English), Dronacharya College of Engineering, Farrukhnagar, Gurgaon (Haryana), India

**Dr. Labib Francis Gergis Rofaiel**

Associate Professor, Department of Digital Communications and Electronics, Misr Academy for Engineering and Technology, Mansoura City, Egypt

**Dr. Pavol Tanuska**

Associate Professor, Department of Applied Informatics, Automation, and Mathematics, Trnava, Slovakia

**Dr. VS Giridhar Akula**

Professor, Avanthi's Research & Technological Academy, Gunthapally, Hyderabad, Andhra Pradesh, India

**Dr. S. Satyanarayana**

Associate Professor, Department of Computer Science and Engineering, KL University, Guntur, Andhra Pradesh, India

**Dr. Bhupendra Kumar Sharma**

Associate Professor, Department of Mathematics, KL University, BITS, Pilani, India

**Dr. Praveen Agarwal**

Associate Professor & Head, Department of Mathematics, Anand International College of Engineering, Jaipur (Rajasthan), India

**Dr. Manoj Kumar**

Professor, Department of Mathematics, Rashtriya Kishan Post Graduate Degree, College, Shamli, Prabudh Nagar, (U.P.), India

**Dr. Shaikh Abdul Hannan**

Associate Professor, Department of Computer Science, Vivekanand Arts Sardar Dalipsing Arts and Science College, Aurangabad (Maharashtra), India

**Dr. K.M. Pandey**

Professor, Department of Mechanical Engineering, National Institute of Technology, Silchar, India

**Prof. Pranav Parashar**

Technical Advisor, International Journal of Soft Computing and Engineering (IJSCE), Bhopal (M.P.), India

**Dr. Biswajit Chakraborty**

MECON Limited, Research and Development Division (A Govt. of India Enterprise), Ranchi-834002, Jharkhand, India

**Dr. D.V. Ashoka**

Professor & Head, Department of Information Science & Engineering, SJB Institute of Technology, Kengeri, Bangalore, India

**Dr. Sasidhar Babu Suvanam**

Professor & Academic Coordinator, Department of Computer Science & Engineering, Sree Narayana Gurukulam College of Engineering, Kadayiuruppu, Kolenchery, Kerala, India

**Dr. C. Venkatesh**

Professor & Dean, Faculty of Engineering, EBET Group of Institutions, Kangayam, Erode, Caimbatore (Tamil Nadu), India

**Dr. Nilay Khare**

Assoc. Professor & Head, Department of Computer Science, MANIT, Bhopal (M.P.), India

**Dr. Sandra De Iaco**

Professor, Dip.to Di Scienze Dell'Economia-Sez. Matematico-Statistica, Italy

**Dr. Yaduvir Singh**

Associate Professor, Department of Computer Science & Engineering, Ideal Institute of Technology, Govindpuram Ghaziabad, Lucknow (U.P.), India

**Dr. Angela Amphawan**

Head of Optical Technology, School of Computing, School Of Computing, Universiti Utara Malaysia, 06010 Sintok, Kedah, Malaysia

**Dr. Ashwini Kumar Arya**

Associate Professor, Department of Electronics & Communication Engineering, Faculty of Engineering and Technology, Graphic Era University, Dehradun (U.K.), India

**Dr. Yash Pal Singh**

Professor, Department of Electronics & Communication Engg, Director, KLS Institute Of Engg.& Technology, Director, KLSIET, Chandok, Bijnor, (U.P.), India

**Dr. Ashish Jain**

Associate Professor, Department of Computer Science & Engineering, Accurate Institute of Management & Technology, Gr. Noida (U.P.), India

**Dr. Abhay Saxena**

Associate Professor&Head, Department. of Computer Science, Dev Sanskriti University, Haridwar, Utrakhnad, India

**Dr. Judy. M.V**

Associate Professor, Head of the Department CS &IT, Amrita School of Arts and Sciences, Amrita Vishwa Vidyapeetham, Brahmasthanam, Edapally, Cochin, Kerala, India

**Dr. Sangkyun Kim**

Professor, Department of Industrial Engineering, Kangwon National University, Hyoja 2 dong, Chunche0nsi, Gangwondo, Korea

**Dr. Sanjay M. Gulhane**

Professor, Department of Electronics & Telecommunication Engineering, Jawaharlal Darda Institute of Engineering & Technology, Yavatmal, Maharastra, India

**Dr. K.K. Thyagarajan**

Principal & Professor, Department of Informational Technology, RMK College of Engineering & Technology, RSM Nagar, Thiruyallur, Tamil Nadu, India

**Dr. P. Subashini**

Assoc. Professor, Department of Computer Science, Coimbatore, India

**Dr. G. Srinivasrao**

Professor, Department of Mechanical Engineering, RVR & JC, College of Engineering, Chowdavaram, Guntur, India

**Dr. Rajesh Verma**

Professor, Department of Computer Science & Engg. and Deptt. of Information Technology, Kurukshetra Institute of Technology & Management, Bhor Sadian, Pehowa, Kurukshetra (Haryana), India

**Dr. Pawan Kumar Shukla**

Associate Professor, Satya College of Engineering & Technology, Haryana, India

**Dr. U C Srivastava**

Associate Professor, Department of Applied Physics, Amity Institute of Applied Sciences, Amity University, Noida, India

**Dr. Reena Dadhich**

Prof. & Head, Department of Computer Science and Informatics, MBS MArg, Near Kabir Circle, University of Kota, Rajasthan, India

**Dr. Aashis. S. Roy**

Department of Materials Engineering, Indian Institute of Science, Bangalore Karnataka, India

**Dr. Sudhir Nigam**

Professor Department of Civil Engineering, Principal, Lakshmi Narain College of Technology and Science, Raisen, Road, Bhopal, (M.P.), India

**Dr. S. Senthil Kumar**

Doctorate, Department of Center for Advanced Image and Information Technology, Division of Computer Science and Engineering, Graduate School of Electronics and Information Engineering, Chon Buk National University Deok Jin-Dong, Jeonju, Chon Buk, 561-756, South Korea Tamilnadu, India

**Dr. Gufran Ahmad Ansari**

Associate Professor, Department of Information Technology, College of Computer, Qassim University, Al-Qassim, Kingdom of Saudi Arabia (KSA)



**Dr. R. Navaneetha krishnan**

Associate Professor, Department of MCA, Bharathiyar College of Engg & Tech, Karaikal Puducherry, India

**Dr. Hossein Rajabalipour Cheshmejjaz**

Industrial Modeling and Computing Department, Faculty of Computer Science and Information Systems, Universiti Teknologi Skudai, Malaysia

**Dr. Veronica McGowan**

Associate Professor, Department of Computer and Business Information Systems, Delaware Valley College, Doylestown, PA, Allman China

**Dr. Sanjay Sharma**

Associate Professor, Department of Mathematics, Bhilai Institute of Technology, Durg, Chhattisgarh, India

**Dr. Taghreed Hashim Al-Noor**

Professor, Department of Chemistry, Ibn-Al-Haitham Education for pure Science College, University of Baghdad, Iraq

**Dr. Madhumita Dash**

Professor, Department of Electronics & Telecommunication, Orissa Engineering College, Bhubaneswar, Odisha, India

**Dr. Anita Sagadevan Ethiraj**

Associate Professor, Department of Centre for Nanotechnology Research (CNR), School of Electronics Engineering (Sense), Vellore Institute of Technology (VIT) University, Tamilnadu, India

**Dr. Sibasis Acharya**

Project Consultant, Department of Metallurgy & Mineral Processing, Midas Tech International, 30 Mukin Street, Jindalee-4074, Queensland, Australia

**Dr. Neelam Ruhil**

Professor, Department of Electronics & Computer Engineering, Dronacharya College of Engineering, Gurgaon, Haryana, India

**Dr. Faizullah Mahar**

Professor, Department of Electrical Engineering, Balochistan University of Engineering and Technology, Pakistan

**Dr. K. Selvaraju**

Head, PG & Research, Department of Physics, Kandaswami Kandars College (Govt. Aided), Velur (PO), Namakkal DT. Tamil Nadu, India

**Dr. M. K. Bhanarkar**

Associate Professor, Department of Electronics, Shivaji University, Kolhapur, Maharashtra, India

**Dr. Sanjay Hari Sawant**

Professor, Department of Mechanical Engineering, Dr. J. J. Magdum College of Engineering, Jaysingpur, India

**Dr. Arindam Ghosal**

Professor, Department of Mechanical Engineering, Dronacharya Group of Institutions, B-27, Part-III, Knowledge Park, Greater Noida, India

**Dr. M. Chithirai Pon Selvan**

Associate Professor, Department of Mechanical Engineering, School of Engineering & Information Technology Manipal University, Dubai, UAE

**Dr. S. Sambhu Prasad**

Professor & Principal, Department of Mechanical Engineering, Pragati College of Engineering, Andhra Pradesh, India.

**Dr. Muhammad Attique Khan Shahid**

Professor of Physics & Chairman, Department of Physics, Advisor (SAAP) at Government Post Graduate College of Science, Faisalabad.

**Dr. Kuldeep Pareta**

Professor & Head, Department of Remote Sensing/GIS & NRM, B-30 Kailash Colony, New Delhi 110 048, India

**Dr. Th. Kiranbala Devi**

Associate Professor, Department of Civil Engineering, Manipur Institute of Technology, Takyelpat, Imphal, Manipur, India

**Dr. Nirmala Mungamuru**

Associate Professor, Department of Computing, School of Engineering, Adama Science and Technology University, Ethiopia

**Dr. Srilalitha Girija Kumari Sagi**

Associate Professor, Department of Management, Gandhi Institute of Technology and Management, India

**Dr. Vishnu Narayan Mishra**

Associate Professor, Department of Mathematics, Sardar Vallabhbhai National Institute of Technology, Ichchhanath Mahadev Dumas Road, Surat (Gujarat), India

**Dr. Yash Pal Singh**

Director/Principal, Somany (P.G.) Institute of Technology & Management, Garhi Bolni Road, Rewari Haryana, India.

**Dr. Sripada Rama Sree**

Vice Principal, Associate Professor, Department of Computer Science and Engineering, Aditya Engineering College, Surampalem, Andhra Pradesh, India.

**Dr. Rustom Mamlook**

Associate Professor, Department of Electrical and Computer Engineering, Dhofar University, Salalah, Oman. Middle East.

**Managing Editor**

**Mr. Jitendra Kumar Sen**

International Journal of Advanced Engineering and Nano Technology (IJAENT)

**Editorial Board**

**Dr. Vikas Maheshwari**

Associate Professor, Department of Electrical Communication Engineering, Amity University Madhya-Pradesh Gwalior, M.P., India

**Dr. Sudhakara A**

Associate Professor, Department of Chemistry, Jain Institute of Technology Davanagere, Karnataka, India

**Dr. Jammi Ashok**

Associate Professor, Department of Electrical and Computer Engineering, Hawassa University, Hawassa.(East Africa)

**Dr. Mohamed Ashabrawy**

Associate Professor, Department of Computer Science, Salman bin Abdulaziz University Kingdom, Saudi Arabia

**Dr. Omer Muhammad Ayoub**

Associate Professor, Department of Computer Science, Punjab University Affected Center Abdullah Sulayman Road, Al-Fayyaz, Jeddah, KSA Saudi Arabia

**Dr. M. Seenivasan**

Associate Professor, Department of Mathematics, Annamalai University Annamalaiagar, Tamil Nadu, India

**Dr. S.V.G.V.A. Prasad**

Associate Professor, Department of Physics, Ideal College of Arts & Sciences, Kakinada, A.P, India.

**Dr. S. Omkumar**

Associate Professor, Department of Electronics and Communication Engineering, SCSVMV University, Enathur, Kanchipuram – 631 561. Tamilnadu, India.

**Dr. Yousef FARHAOUI**

Associate Professor, Department of Computer Science, Faculty of Sciences and Technic, Moulay Ismail University, B.P 509, Boutalamine, Errachidia, Morocco.

**Dr. Gutta Sridevi**

Associate Professor, Department of Computer Science & Engineering, K L University, Vaddeswaram, Guntur (DT) Andhra Pradesh, India.

**Dr. Debmalya Bhattacharya**

Associate Professor, Department of Electronics & Communication Engineering, University of Technology & Management, Bawri Mansion, Dhankheti, Shillong-793003, Meghalaya, India.

**Dr. K. Harinadha Reddy**

Associate Professor, Department of Electrical and Electronics Engineering, L B R College of Engineering, Mylavaram, Krishna District, Andhra Pradesh State - 5 21 230, India.

**Dr. C. Gajendran**

Associate Professor, Department of Civil Engineering, School of Civil Engineering, Karunya Nagar, Karunya University, Coimbatore – 641114, Tamil Nadu, India.



**Dr. Dibya Prakash Rai**

Assistant Professor, Department of Physics, College of Aizawl, Pachhunga University, Mizoram, India.

**Dr. Sreenivasa Reddy**

Associate Professor, Department of Chemistry, Sri Krishnadevaraya University, Anantapur-515003, A.P., India.

**Dr. P. K. Dhal**

Associate Professor, Department of Electrical and Electronics Engineering, Vel Tech, Dr. RR & Dr. SR Technical University, Chennai, India.

**Dr. M. A. Ashabrawy**

Associate Professor, Department of Computer Science, Atomic Energy Authority, Salman bin Abdulaziz University, Al Kharj Saudi Arabia.

**Dr. K. Meenakshi Sundaram**

Professor & Head, Department of Computer Science, Agnel Institute of Technology and Design, Assagao - Bardez, Goa. India.

**Dr. Persis Voola**

Associate Professor, Department of Computer Science and Engineering, Adikavi Nannaya University, Rajah Narendra Nagar, Rajahmundry-533296 Andhra Pradesh, India.

**Dr. Abhijit Banerjee**

Associate Professor, Department of Electronics and Instrumentation Engineering, Academy of Technology, Hooghly, Grand Trunk Rd, Adisaptagram, Aedconagar, West Bengal, India.

**Dr. D. Amaranatha Reddy**

Associate Professor, Department of Chemistry, Pusan National University, Busan, South Korea.

**Dr. A. Heidari**

Associate Professor, Department of Chemistry, Postdoctoral Research Fellow, California South University (CSU), Irvine, California, USA

**Dr. Ashwani Kumar Aggarwal**

Assistant Professor, Department of Electrical and Instrumentation Engineering, Sant Longowal Institute of Engineering and Technology, Longowal, Punjab, India.

**Dr. P. Srinivas**

Assistant Professor, Department of Electrical Engineering, University College of Engineering Osmania University, Hyderabad-500007, Telangana, India.

**Dr. Sandeep Chettri**

DST-SERB, Young Scientist, Department of Physics, Mizoram University, Tanhril, Aizawl, Mizoram 796004, India.

**Dr. Elsanosy M. Elamin**

Assistant Professor, Department of Electrical and Electronic Engineering, Faculty of Engineering, University of Kordofan B.O.Box: 160 Elobeid, (Sudan). North Africa.

**Dr. Porag Kalita**

Professor & Head, Department of Automobile Engineering, Jorhat, Assam, India.

**Dr. T. A. Ashok Kumar**

Associate Professor, Department of Computer Science, Christ University, Bengaluru, Karnataka, India.

**Dr. Malini M Patil**

Associate Professor, Department of Information Science and Engineering, JSS Academy of Technical Education, JSS Campus, Bangalore-560060, Karnataka, India.

**Dr. V. Selvan**

Associate Professor, Department of Civil Engineering, Sri Ramakrishna Engineering College, Vattamalaipalayam, Coimbatore, Tamil Nadu, India.

**Dr. Syed Umar**

Associate Professor, Department of Computer Science and Engineering, Koneru Lakshmaiah University, Vaddeswaram, Guntur, Andhra Pradesh, India.

S. No		Volume-2 Issue-7, June 2014, ISSN: 2319-9598 (Online) Published By: Blue Eyes Intelligence Engineering & Sciences Publication Pvt. Ltd.		Page No.
1.	Authors:	Majid S. M. Al-Hafidh, Mustafa H. Ibrahim		
	Paper Title:	Zero Energy House in Iraq		
	<p><b>Abstract:</b> The residential load is one of the largest components of the electrical load in the Iraqi power system. We can supply a part of the residential loads by utilizing the renewable energies. Recent research's show that the applications of a hybrid power system is preferable to achieve this goal. For residential loads connected to the grid (on grid) with the possibility of energy exchange (buying and selling) to the grid, the addition of suitable hybrid power system can reduce energy cost to zero (zero energy house). The paper studied the possibility of supplying residential load in the city of Mosul - at north of Iraq by using a hybrid renewable energy system to reach zero energy cost. The paper obtains this optimal hybrid system components for various cases. HOMER software was used to study the system to feeds the residential loads.</p> <p><b>Keywords:</b> Hybrid power system; grid connecting; Residential load; Solar Water Heating; Zero energy building.</p> <p><b>References:</b></p> <ol style="list-style-type: none"><li>1. N. Acharya, P. Mahat, N. Mithulananthan, "An analytical approach for DG allocation in primary distribution network," International Journal of Electrical Power and Energy Systems, Vol. 28, Dec. 2006, pp. 669–678.</li><li>2. J. Wilk, J. O. Gjerde, T. Gjengedal, M. Gustafsson, "Steady state power system issues when planning large wind farms", in Proc. IEEE Power Engineering Society Winter Meeting, 2002, Vol. 1 pp. 199–204.</li><li>3. P. Torcellini, S. Pless, M. Deru and D. Crawley "Zero Energy Buildings: A Critical Look at the Definition", ACEEE Summer Study Pacific Grove, California August 14–18, 2006.</li><li>4. The Atmospheric Science Data Center (ASDC) at NASA Langley Research Center <a href="http://eosweb.larc.nasa.gov/Nurul%20Arina%20bte%20Abdull%20Razak,%20Muhammad%20Murtadha%20bin%20Othman">http://eosweb.larc.nasa.gov/Nurul Arina bte Abdull Razak, Muhammad Murtadha bin Othman</a>,</li><li>5. "Optimal Sizing and Operational Strategy of Hybrid Renewable Energy System Using HOMER", The 4th International Power Engineering and Optimization Conf. (PEOCO2010), Shah Alam, Selangor, MALAYSIA: 23-24 June 2010.</li><li>6. Vuc, Gh., Borlea, I., Barbulescu, C., Prostean, O., Jigoria-Oprea, D., Neaga, L.-Optimal Energy Mix for a Grid Connected Hybrid Wind-Photovoltaic Generation System, in 3th IEEE International Symposium on Exploitation of Renewable Energy Sources – EXPRES 2011, March 11-12, 2011, Subotica, Serbia, pp. 1-6.</li><li>7. Vuc gh , borlea i &amp; others , "Optimal energy storage capacity for a grid connected hybrid wind photovoltaic generation system", journal of sustainable energy Vol. 2, No. 4, December, 2011.</li><li>8. Saip Electric Group is an enterprise specialized in design, production and sales of electric equipments <a href="http://www.saipgroup.com">http://www.saipgroup.com</a>.</li><li>9. <a href="http://www.windtronics.com">http://www.windtronics.com</a></li><li>10. <a href="http://www.bettergeneration.co.uk/">http://www.bettergeneration.co.uk/</a></li><li>11. Dr. Majid S. Al-Hafidh, Dr. Mahmoud U. Al-Refaii, Dr. Mohammad A.Al-Rawi,"Utilization of solar energy to reduce Residential Load" NuRER 2012-III. International Conference on Nuclear &amp; Renewable Energy Resources Istanbul, TURKEY, 20-23 May 2012.</li></ol>			
2.	Authors:	Ghadah Al-Khafaji, Hazeem B. Taher, Nura Anwer Abdulzahara		
	Paper Title:	Increase the Capacity Amount of Data Hiding to Least Significant BIT Method		
	<p><b>Abstract:</b> In this paper a new strategy to increase the number of bits hiding in each image for LSB method is suggested to give more data capacity with high secure stegano image. The technique of hiding a private message within a file in such a manner that third party cannot know the existence of matter or the hidden information. The purpose of Steganography is to create secrete communication between the sender and the receiver by replacing the least significant bits (LSB)of the cover image with the data bits depending on the type of the pixel class if it is edge then exchange two bits else one bit exchanged.</p> <p><b>Keywords:</b> Image steganography, text hiding, Least Significant Bit algorithm.</p> <p><b>References:</b></p> <ol style="list-style-type: none"><li>1. S. Narayana1, G. Prasad, " Two New Approaches for Secured Image Steganography Using Cryptographic Techniques and Type Conversions", Signal &amp; Image Processing : An International Journal(SIPIJ) Vol.1, No.2, December 2010</li><li>2. I. J. Kadhim, " A New Audio Steganography System Based on Auto-Key Generator", AL-Khwarizmi Engineering Journal, Vol.8, No.1, pp27-36, 2012.</li><li>3. Y. Bassil, "Image Steganography based on a Parameterized Canny Edge Detection Algorithm", International Journal of Computer Applications, Vol. 60, 4, December 2012.</li><li>4. N. Jain, S. Meshram, S. Dubey, "Image Steganography Using LSB and Edge – Detection Technique". International Journal of Soft Computing and Engineering (IJSCE) ISSN: 2231-2307, Volume-2, Issue-3, July 2012</li><li>5. V. Saini1, R. Garg, " A Comparative Analysis on Edge Detection Techniques Used in Image Processing",IOSR Journal of Electronics and Communication Engineering (IOSRJECE) ISSN : 2278-2834 Volume 1, Issue 2 (May-June 2012). PP 56-59 <a href="http://www.iosrjournals.org">www.iosrjournals.org</a></li></ol>			