

Volume 2 Issue 6, May 2015

**International Journal of Advanced Engineering
and Nano Technology**



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

Email: director@blueeyesintelligence.org, 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. Vahid Nourani

Professor, Faculty of Civil Engineering, University of Tabriz, Iran

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, Kuala 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, Prabhudh 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, Utrakhand, 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 Giriya 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. Saeed Balochian

Associate Professor, Gonaabad Branch, Islamic Azad University, Gonabad, Iratan

Dr. Mongey Ram

Associate Professor, Department of Mathematics, Graphics Era University, Dehradun, India

Dr. Arupratan Santra

Sr. Project Manager, Infosys Technologies Ltd, Hyderabad (A.P.)-500005, India

Dr. Ashish Jolly

Dean, Department of Computer Applications, Guru Nanak Khalsa Institute & Management Studies, Yamuna Nagar (Haryana), India

Dr. Israel Gonzalez Carrasco

Associate Professor, Department of Computer Science, Universidad Carlos III de Madrid, Leganes, Madrid, Spain

Dr. Guoxiang Liu

Member of IEEE, University of North Dakota, Grand Forks, N.D., USA

Dr. Khushali Menaria

Associate Professor, Department of Bio-Informatics, Maulana Azad National Institute of Technology (MANIT), Bhopal (M.P.), India

Dr. R. Sukumar

Professor, Sethu Institute of Technology, Pulloor, Kariapatti, Virudhunagar, Tamilnadu, India

Dr. Cherouat Abel

Professor, University of Technology of Troyes, France

Dr. Rinkle Aggrawal

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

Dr. Parteek Bhatia

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

Dr. Manish Srivastava

Professor & Head, Computer Science and Engineering, Guru Ghasidas Central University, Bilaspur (C.G.), India



S. No	Volume-2 Issue-6, May 2015, ISSN: 2347-6389 (Online) Published By: Blue Eyes Intelligence Engineering & Sciences Publication Pvt. Ltd.		Page No.
1.	Authors:	Mostafa Mohammadi, Alireza Kashani Nia	
	Paper Title:	Simulation of Voltage Change Effects in Ion Channels in order to Reproduction of Action Potential by MATLAB Software	
	<p>Abstract: In this study, the effects of voltage change in ion channels in order to reproduction of action potential and its simulation by Hodgkin Huxley model have been explored . The simulation has been performed by using the Matlab software . By writing Hodgkin Huxley equations codes and applying the parameters values of it , action potential waveform to obtain. Then by reducing the amount of excitation current, the lowest value that the action potential is placed on the eve of the production will be obtain. The next step is to stabilize the input excitation current to the value obtained and then change the sudiom , potasiom and leakage channels voltage. According to the characteristics of each ion channels and voltage variations on them, action potential will start to reproduce. Thus we have shown, with the decline of the excitation current for reasons such as some illness, we can reproduce the action potential and propagate it inside of axon by changing the ion channels voltage.</p>		1-6
	<p>Keywords: Action potential, Axon, Hodgkin Huxley model, Excitation current, Matlab simulation.</p> <p>References:</p> <ol style="list-style-type: none"> 1. Robert Plonsey , Roger C. Barr “Bioelectricity A Quantitative Approach ”Duke University Durham, North Carolina USA 2. Arthur C. Guyton , John E. Hall “ the text book of Medical Physiology” 3. N. R. Carlson, Foundations of Physiological Psychology, Allyn & Bacon, 2004, pp. 53-55. 4. Mostafa Mohammadi, Alireza Kashani Nia“Design and simulation of an acoustic micro prob made of piezoelectric materials to stimulate nerve tissue and generate action potential ” International Journal of Engineering Research & Technology (IJERT), Vol. 4 Issue 04, April-2015 5. Kenneth Leander Anderson Jr, Jackie Chism, Quarail Hale, Paul Klockenkemper, Chelsi Pinkett, Christopher Smith, and Dr. Dorjsuren Badamdorj“Mathematical Modeling Action Potential in Cell Processes” June 21, 2013 6. S. Alford, "The Hodgkin-Huxley equations."Cell and Molecular Neurobiology. 7. Hodgkin, A.L. and A.F. Huxley, A quantitative description of membrane current and its application to conduction and excitation in nerve. J Physiol, 1952. 117(4): p. 500-44. 8. Vladimir Ruzov “neuro modulation : action potential modeling ” 		
2.	Authors:	Suha I. Al-Nassar	
	Paper Title:	Study the Effect of Molarity on the Synthesis Nanoparticles by Liquid-Phase Laser Ablation Technique	
	<p>Abstract: This work was focused on the studying the effect of molarity on the producing ZnO nanoparticles by Liquid –Phase Pulsed Laser Ablation (LP-PLA) of Zn metal plate in the aqueous environment of cetyl trimethyl ammonium bromide (CTAB) using femtosecond laser (Ti-Sapharie has wavelength= 800 nm, rep. rate= 1K Hz, Pulse duration =130 fs and laser energy pulse 0.5 mJ. The effect of molarity on the optical and structure of ZnO was studied is characterized by UV-visible absorption. UV-visible absorption spectrum has three peaks at 220, 210 ,204 nm for different values of molarity (10⁻², 10⁻³ and 10⁻⁴) respectively, our results show that UV–visible spectra show a blue shift with decrease the molarity of CTAB solution because this leads to decrease the concentration of ZnO NPs and decreases the the aggregate of surfactant molecules dispersed in liquid collide ,and blue shift indicated to get smaller size of nanoparticles. The blue shift in the absorption edge indicates the quantum confinement property of nanoparticles. Also FTIR transmittance spectra of ZnO2 nanoparticles prepared in these states show a characteristic ZnO absorption at 435–455cm⁻¹.</p>		7-10
	<p>Keywords: Ablation time, CTAB solution, pulsed laser ablation technique, Zinc oxide nanoparticles.</p> <p>References:</p> <ol style="list-style-type: none"> 1. V. Piriyaawong, V. Thongpool , P. Asanithi, P. Limsuwan, "Effect of Laser Pulse Energy on the Formation of Alumina Nanoparticles Synthesized by Laser Ablation in Water ", Surf. Sci. Direct , 32 (2012), pp. 1107-1112. 2. Yoshie Ishikawa, Yoshiki Shimizu, Takeshi Sasaki, Naoto Koshizaki, "Preparation of zinc oxide nanorods using pulsed laser ablation in water media at high temperature", J. of Coll. and Interface Sci. 300 (2006), pp. 612–615. 3. S. I. Alnassar , E. Akman, B. G. Oztoprak, E. Kacar, O. Gundogdu, A. Khaleel, and A. Demir, "Study of the fragmentation phenomena of TiO2 nanoparticles produced by femtosecond laser ablation in aqueous media", Opt. & Laser Tech., 51 (2013), pp. 17–23. 4. Adel K. Mahmoud, Zainab Fadhi, Suha Ibrahim Al-nassar, Furat Ibrahim Husein, Erhan Akman and Arif Demir, "Synthesis of Zirconia Nanoparticles in Distilled Water Solution by Laser Ablation Technique", J. of Mat. Sci. & Eng. B 3 (6) (2013), pp. 364-368. 5. R.K. Swarnkar, S.C. Singh and R. Gopal, "Optical Characterizations Of Copper Oxide Nanomaterial" , International Conference on Optics and Photonics, Chandigarh, India, 30 Oct.-1 Nov.(2009) . 6. Z Liu1, Y Yuan, S Khan, A Abdolvand, DWhitehead, M Schmidt and L Li," Generation of Metal-Oxide Nanoparticles using Continuous-Wave Fibre Laser Ablation in Liquid", J. Micromech. Microeng., 19 (2009), pp. 1-7. 7. Sasaki T, Liang C, Nichols W T, Shimizu Y and Koshizaki N, "Fabrication of Oxide Base Nanostructures using Pulsed Laser Ablation in Aqueous Solutions", Appl. Phys., 79 (2004), pp.1489-1492 8. S. Faramarzi, M. R. Jalilian-Nosrati, S. Barcikowski," Fabrication of ZnO nanocomposites by picosecond laser ablation of zinc in tetrahydrofuran solution of thermoplastic polyurethane", J. of Theoretical & Appl. Phys. ,4-1 (2010), pp.9-16. 9. Reza Zamiria , Azmi Zakariaa,1 , Hossein Abbastabar Ahangarb , Majid Darroudic , Ali Khorsand Zakd , Gregor P.C." DrummenAqueous starch as a stabilizer in zinc oxide nanoparticle synthesis via laser ablation", J. of Alloys and Compounds 516 (2012), pp.41– 48 . 10. Q.A., M.A. Gondal, Z.H. Yamani, T.A. Saleh, "Spectroscopic characterization approach to study surfactants effect on ZnO2 nanoparticles synthesis by laser ablation process" ,Appl. Surf. Sci. 256 (2010), pp. 4661–4666. 		

	11. S C SINGH, R K SWARNKAR and R GOPAL, " Zn/ZnO core/shell nanoparticles synthesized by laser ablation in aqueous environment: Optical and structural characterizations", Bull. Mater. Sci., Vol. 33, No. 1, February 2010, pp. 21–26.		
3.	Authors:	Jyoti Sankar Sahoo, Nirmal Kumar Rout	
	Paper Title:	Comparative Study on Low Power Barrel Shifter/Rotator at 45nm Technology	
	<p>Abstract: As technology advances in the field of VLSI; the circuits are upgraded to less power consuming and of high speed. In modern digital signal processing (DSP) and graphics application the shifter is an important module. A Barrel shifter/rotator can be implemented exclusively for shifting and rotating operations individually or both at the same time and can be implemented by 2:1, 4:1, 8:1 etc. multiplexers units. Barrel shifter/rotator implemented using multiplexer unit can use it repeatedly thus reduce the amount of power consumption. In this paper initially the Barrel shifter/rotator circuit using multiplexer is implemented using Complementary Metal Oxide Semiconductor (CMOS) logic then the circuit is implemented by different low power techniques. Finally various designs are compared in terms of power and delay. All the designs are implemented in Cadence Virtuoso Tool at 45nm technology for its validation.</p> <p>Keywords: Barrel shifter, Pass transistor logic, LECTOR technique, Double gate MOSFET, Diode Free Adiabatic Logic, Low power.</p> <p>References:</p> <ol style="list-style-type: none"> [1] S. Das, S. P. Khatri, "A Timing driven approach to synthesize fast Barrel shifters.", IEEE Transactions on Circuit and Systems-II : Express Briefs, Vol.55, No. 1, January 2008. [2] S. Kotiyal, H. Thapliyal and N. Ranganathan, "Design of a reversible bidirectional Barrel shifter," 11th IEEE International Conference on Nanotechnology, 2011, pp 463-468. [3] N. Hanchate and N. Raghunathan, "LECTOR: a technique for leakage reduction in CMOS circuits," IEEE Transactions on VLSI systems, Volume.12, No. 2, Feb 2004. [4] Amara Amara, Oliver Rozeau, Editors, 2009. Planar Double-Gate Transistor from Technology to circuit, Springer. pp. 1-20. [5] M.R. Pillmeier, M.J. Schulte and E. George Walters III, "Design alternatives for Barrel shifters," Proceedings of the SPIE, Volume 4791, pp 436-447, 2002. [6] M. Seckora, \Barrel Shifter or Multiply/Divide IC Structure," U.S. Patent 5,465,222, November 1995. [7] J. Muwafi, G.Fettweis and H.Neff , "Circuit for Rotating , Left shifting or Right shifting Bits," U.S. Patent 5.978,822 Dec 1995. [8] P. Verma and R.A. Mishra,"Leakage Power and Delay analysis of LECTOR based CMOS circuits," 2nd IEEE International Conference on Computer and Communication Technology (ICCCT) , 2011. [9] G. Kumar and Atul S.M. Tripathi, "Design and simulation of CMOS cells using adiabatic technique for low power consumption," International Journal of Engineering and Technical Research ISSN: 2321-0869, Special Issue. [10] A. Tom, V.S. Muley and T. Vigneswaran, "Design of low power Barrel shifter and rotator using two phase clocked adiabatic static CMOS logic," International Journal of Research in Engineering and Technology, eISSN: 2319-1163, pISSN: 2321-7308. [11] R. Kushwah and S. Akashe, "Design and Analysis of Tuneable Analog Circuit using Double Gate MOSFET at 45nm CMOS Technology," 3rd IEEE International Advance Computing Conference (IACC), pp. 1589-1594, 2013. [12] Wong, H.S.P., et.al. 1998. Device design consideration for double gate, ground-plane, single- gated ultrathin. SOI MOSFET at the 25nm channel length generation, in IEDM. pp.407-410. [13] Nowak, E. et.al. 2004. Turning Silicon on its edge, IEEE circuits and Device Magazine. pp.20-31. 		
4.	Authors:	Raviraj Prakash Nagarkar	
	Paper Title:	Dispersion Analysis of Optical Fiber Using MATLAB	
	<p>Abstract: Optical fiber is a dielectric waveguide, cylindrical in shape. It confines electromagnetic energy in the form of light within its surface and guides light by multiple internal reflections, provided the angle of incidence onto the core cladding interface is greater than the critical angle θ_c. Dispersion of the transmitted optical signal causes distortion for both digital and analog transmission along optical fibers. When considering the major implementation of optical fiber transmission which involves some form of digital modulation, then dispersion mechanisms within the fiber cause broadening of the transmitted light pulses as they travel along the channel.</p> <p>Keywords: Dispersion, single mode fiber, multimode fiber.</p> <p>References:</p> <ol style="list-style-type: none"> 1. Gerd Keiser, "Optical Fiber Communication", 3rd edition, McGraw-Hill International Edition. 2. John M. Senior, "Optical Fiber Communications Principles and Practice", 3rd edition, Prentice Hall, Pearson Education Ltd. 3. G.Peterson, A.Carnevale and U.Pack, "An exact numerical solution to Maxwell's equation for light guides", Bell Sys.Tech.J, vol 59,pp-1175-1196, 1980. 4. T.Lenahan, "Calculation of modes in single mode fiber using FEM and ESPACK", Bell Sys.Tech.J, vol62, pp-2663-2694, 1983. 5. B.M.Azizur, j.Brian Devies, "Finite element analysis of optical and microwave waveguide" Transaction on Microwave theory and techniques, vol-mtt32, no-1, pp-20-27, Jan-1984 6. Tuptim Angkaew, Masanori Matsuhara "Finite element analysis of wave guide Modes: A novel approach that eliminates spurious modes", Transaction on Microwave theory and techniques. Vol-mtt35, no-2, pp-117-123. Feb-1987. 7. M.R.Shenoy, K.Thygarajan and A.K.Ghatak, "Numerical Analysis of Optical Fibers using Matrix Approach" IEEE J.Lightwave Techn., vol-8, pp-1285-1291, 1988. 8. Istvan Bardi, Oszkar Biro "Efficient finite-element formulation without spurious modes for anisotropic wave guides" Transaction on Microwave theory and techniques. vol-mtt39, no-7, pp-1133, June-1991. 9. Q.Li, "Propagation characteristics of single mode optical fibers with arbitrary refractive index profile: The finite quadratic element approach", IEEE J.Lightwave Techn., vol-9, no-1, pp-22-26, 1991. 10. B.M.Azizur, j.Brian Devies "Review of Finite Element Methods for Microwave and optical Waveguides", Proceedings of 		

the IEEE., vol-9, no-10, pp-1442-1447, Oct-1991.

11. Masanori Koshiba, And Kazuhiro Inoue, "Simple and Efficient Finite-Element Analysis Of Microwave And Optical Waveguides", IEEE Transactions On Microwave Theory And Techniques. Vol. 40. No. 2. February 1992.
12. J.N.Reddy, "An Introduction to Finite Element Method", McGraw Hill, second edition, 1993.
13. B.M. Rahman, "Finite element analysis of optical waveguides", Progress in electromagnetic research, PIER 10,187-216,1995.
14. Ronato C.Mesquita, Renato P.Souza "Object oriented platform for finite element preprocessor programming and design techniques". Transaction on Magnetic, vol-34, no-5, pp-3407, Sept-98.
15. S. P. Survaiya, R. K. Shevgaonkar, "Dispersion Characteristics of an Optical Fiber Having Linear Chirp Refractive Index Profile", Journal Of Lightwave Technology, Vol. 17, No. 10, October 1999.
16. Uday S. Dixit,"Finite Element Method: An Introduction", Department Of Mechanical Engineering, Indian Institute Of Technology Guwahati-781 039, India.
17. Yasuhide Tsujii,masanori Koshiba "Curvilinear Hybrid edge/nodal elements with triangular shape for guided wave problems" J. of Light wave technology, vol-18, no-5, pp-737, May-2000.
18. Yasuhide Tsujii,masanori Koshiba "Finite element method using port truncation by perfectly matched layer boundary conditions for optical wave guide discontinuity problems" Journal of Light wave technology, vol-20, no-2, pp-463, Mar-2002.

Authors: Shashank Shastri

Paper Title: Study of Geosynthetic Clay Liner Reinforced Mud Blocks

Abstract: In the present investigation attempt has been made to improve the strength of the black cotton soil mud bricks mixed with different content of lime by reinforcing the geogrid. The soil is collected from Naragund area of Bagalkot District. The circular (100mm diameter and 200mm depth; 150mm and 100mm depth) and rectangular (200mm x 100mm x 100mm) mud bricks are prepared with soil treated with 10, 12, 14 and 16 percent lime with the geogrid reinforcement at the middle depth of the brick. The compressive strength of the mud bricks is obtained by laboratory compression test apparatus. Considerable improvement in the compressive strength is observed in rectangular mud bricks with 14% and 16% of lime content reinforced with geogrid and for circular mud bricks, the maximum compressive strength is observed at 12% lime content with geogrid reinforcement.

Keywords: Black Cotton Soil, Lime, Geo-grid, Compressive strength, Rectangular blocks.

References:

1. Robert M.Koerner "Bearing capacity of Hydrated Geosynthetic Clay liners" Journal on Geotechnical Engineering 121:82-85.1995
2. P.J.Fox "Bearing Capacity of Geosynthetic Clay Liners for Cover Soils of Varying Particle Size" International Journal on Geosynthetics Vol.3,No.4.1996
3. Mark D.Lagatta "Geo synthetic clay liners subjected to differential settlement" Journal of Geotechnical and Geoenvironmental Engineering May, 1997
4. Isaac Olufemi "Use of cement-sand admixture in laterite brick production for low cost housing". Leonardo Electronic Journal of Practices and Technologies ISSN 1583-1078 2008
5. T.S.Umesh "Control of dispersivity of soil using lime and cement" international journal of geology Issue 1, Volume 3, 2009
6. K.Lange "The potential role of geo synthetic clay liners in mine water treatment system" Journal on Geo- Engineering centre at Queen's-RMC, Queen's University, Kingston, CAK7L 3N6, Canada 1 october 2009.
7. PrakashParasivamurthy "Study of crumb rubber waste in cement stabilized soil blocks". Professor C.M.R.T.U, R.V. Vidyankatan, R.V.C.E, Bangalore.2010.
8. Dr S. M. Ali Jawaid "Rice Husk Ash - Lime Blended Building Bricks" International Journal of Earth Sciences and Engineering ISSN 0974-5904, Vol. 03, No. 02, April 2010, pp. 302-309 2010.
9. Hamed Niroumand Khairul Anuar Kassim "Comparison of compressive strength in mud bricks with shred tires and concrete particle as sustainable materials" University Technology Malaysia (UTM), Skudai, Johor, Malaysia 2010
10. Purbi Sen, Mukesh and Mahabir Dixit "Evaluation of Strength Characteristics of Clayey Soil by Adding Soil Stabilizing Additives" International Journal of Earth Sciences and Engineering ISSN 0974-5904, Volume 04, No 06 SPL, October 2011, pp. 1060-1063 2011
11. R.Kerry Rowe "Effect of Geo synthetic clay liner properties on shrinkage when subjected to wet-dry cycles" journal of Geotechnical and Geoenvironmental Engineering, November 2011
12. Nilo Cesar Consoli "Variables Controlling Stiffness and Strength of Lime-Stabilized Soils" journal of geo technical and geo environmental engineering. 137:628-632, 2011.
13. Sujit Kumar Dash "Lime Stabilization of Soils: Reappraisal" journal of materials in civil engineering 24:707-714, 2012.
14. Grytan Sarkar "Fundamental study on materials for lime stabilized adobe: workability, stability and strength". International Journal of Earth Sciences and Engineering ISSN 0974-5904, Vol. 05, No. 05 (01), October 2012.
15. Kabiraj and Mandal.U.K "Experimental investigation and feasibility study on stabilized compacted earth block using local resources". International journal of civil and structural engineering Volume 2, No 3, 2012.
16. Ashish Kumar Prashar and Rinku Parshar "Comparative study of compressive strength of bricks made with various materials to clay bricks". International Journal of Scientific and Research Publications, Volume 2, Issue 7, July 2012
17. N.Vamshi Mohan, Prof.P.V.V Satyanarayana "Performance of rice husk ash bricks". International Journal of Engineering Research and Applications (IJERA) ISSN: 2248-9622 2012
18. Paki Turgut et.al "Manufacturing of building bricks without Portland cement" Journal of Cleaner Production 37 361e367 2012
19. Dr.Jawdat k "Bearing capacity of Eccentrically Loaded Strip Footing on geogrid Reinforced Sand "Tikrit Journal of Engineering Sciences, vol.19, No.1, March 2012
20. D.E.Ewa, Jo.Ukpata "Investigation of compressive strength of commercial sand Crete bricks in calabar Nigeria". International Journal of Engineering and Technology Volume 3 No. 4, April, 2013
21. Sharmistha Chakraborty, Joyantha Pal, Dr. Richi Prasad Sharma. "Comparative study of properties of manual and mechanized bricks and their strength behaviour as masonry". International Journal of Emerging Technology and Advanced Engineering, Volume 3, Issue 4, April 2013
22. Indian Standard - IS:2720 (Part 3/Sec 1) - (1980) Methods of test for soils, determination of specific gravity of soil. New Delhi, India.
23. Indian Standard - IS:2720 (Part 5) - (1985) Methods of test for soils, determination of liquid and plastic limit of soils. New Delhi, India.
24. Indian Standard - IS:2720 (Part 4) - (1985) Methods of test for soils, determination of grain size analysis of soil. New Delhi,

	India. 25. Indian Standard - IS:2720 (Part 7) – (1980) Methods of test for soils, determination of water content and dry density using light compaction. New Delhi, India.	
6.	Authors:	Kosgiker G. M, Guddad S. G, Koli R. R
	Paper Title:	Automation in Tissue Culture Industry
	<p>Abstract: The project is to do automation in tissue culture industries. The main purpose of this project is doing work on polyhouse automation, autoclave automation and making two AC's ON-OFF each after 12hours delay .All automation work is mainly based on 89C51 microcontroller. The requirement is that to maintain the 70% humidity with outsource exhaust fan and water sprinkler. Autoclave machine is used for empty bottle sterilization and also for chemical filled bottle sterilization with 15lbs and 10lbs pressure for time 10 minutes and 20 minutes respectively. Making autoclave automatic with respect to time and pressure on the basis of weight of respective empty and chemically filled bottles.</p> <p>Keywords: Auto clave machine, Microcontroller, humidity, pressure and polyhouse automation.</p> <p>References:</p> <ol style="list-style-type: none"> 1. Stipanicev D, Marasovic J. "Network Embedded Green House Monitoring and Control" Processing of 2013 IEEE Conference on Control Applications, Vol 2 june pp 1350-1355, 2003. 2. SENSORS- The journal of Applied sensing Technology, Advanstar Communications INC. 3. Kenneth M. Chomitz (1998) Baselines for Green House Gas Reduces: Problems, Precedents, Solutions. Development Research group, Carbon oxides unites. 4. Leong Boon Tik, Chan Toong Khuan, Sellappan Palaniappan (2009) "Monitoring of an Aeroponic Green House with a sensor network" International Journal of Computer Science and Network Security Vol 9. 5. Gushing Wu. The principal and Application of new type of Temperature and Humidity Sensor SHT10 pp 53-54, 2009. 	
7.	Authors:	Priya V, Biju V. G.
	Paper Title:	SVM Based Liver Tumor Classification from Computerized Tomography Images
	<p>Abstract: Accurate liver segmentation and tumor detection on computerized tomography (CT) images is a crucial task in the cases where surrounding tissues have intensities similar to that of the liver and lesions reside at the liver edges. In this paper, an automated method to segment liver portion, followed by tumor area from abdominal CT image is proposed. For this, the CT images are pre-processed by median filter to remove noise from the image and liver is segmented using localized region based active contouring algorithm. Tumor is detected from segmented liver using seed region growing algorithm. Using Grey Level Co-occurrence Matrix (GLCM), the texture features of the tumor are extracted. Support Vector machine (SVM) is used to classify the tumor as either benign or malignant based on these texture features. The performances of liver segmentation and tumor detection are evaluated by using Segmentation Matching Factor (SMF), Dice coefficient (DICE COEFF), Root Mean Square Error (RMSE) and Peak Signal to Noise Ratio (PSNR). Experimental results show that the proposed method has a lower error in segmenting the liver and is able to detect and classify all tumors from the liver accurately</p> <p>Keywords: CT image, Localized region based active contours, Region Growing Algorithm, GLCM, SVM.</p> <p>References:</p> <ol style="list-style-type: none"> 1. Soler., H. Delingette, G. Malandain, J. Motagnat, N. Ayache, C. Koehl, O. Dourtheb, B. Malassagne, M. Smith, D. Mutter, J. Marescaux: "Fully automatic anatomical, pathological, and functional segmentation from ct". Proc. SPIE Medical Imaging 3979 (2000) 246–255. 2. H. Lamecker, T. Lange, M. Seebass: "Segmentation of the liver using a 3d statistical shape model". Technical Report ZIB-Report 04-09, Konrad-Zuse-Zentrum fr Informationstechnik Berlin (April 2004). 3. P. Campadelli, E. Casiraghi, G. Lombardi, "Automatic Liver Segmentation from Abdominal CT Scans", 14th International Conference on Image Analysis and Processing-ICIAP 2007, IEEE Computer Society, pp. 731- 736, 2007. 4. T. Okada, R. Shimada, Y. Sato, M. Hori, K. Yokota, M. Nakamoto, Y.W. Chen, H. Nakamura, "Automated Segmentation of the Liver from 3D CT Images Using Probabilistic Atlas and Multi-level Statistical Shape Model," MICCAI 2007, LNCS, vol.4791, pp. 86-93, 2007 5. J A Sethian,.: "Level Set Methods and Fast Marching Methods". Cambridge University Press (1999). 6. T. E. Chan, B. Y. Sandberg, and L. A. Vese, "Active contours without edges for vector-valued images," J. Visual Commun. Image Represent., vol. 11, pp. 130–141, Jun. 2000. [7] Pohle, R., Toennies, K.D.: Segmentation of medical images using adaptive region growing. Proc. SPIE Medical Imaging 4322 (2001) 1337–1346. 7. K.-S. Seo, "Automatic Hepatic Tumor Segmentation Using Composite Hypotheses," in Image Analysis and Recognition, vol. 3656, 2005, pp.922-929. 8. K. K. Dipak, B. Saptarshi, M. Sreeja, M. Sampita, S. Atreyee, S. Souptik, M. Dibya and ArunaChakraborty, "Automatic Detection and Size Measurement of Hepatic Lesions", International Journal of Wisdom Based Computing, Vol. 1 (3), December 2011. 9. H. Nader, M. Mohiy, M. Khalid, "Fully automatic liver tumor segmentation from abdominal CT scans" IEEE 2010. 10. A.G Sajith, S. Hariharan, "Medical Image Segmentation Using CT Scans-A Level Set Approach",International Journal of Innovative Technology and Exploring Engineering (IJITEE) ISSN: 2278-3075, Volume-2, Issue-6, May 2013. 11. S. Lankton and A. Tannenbaum, "Localizing region-based active contours," IEEE Trans. Image Process., vol. 17, no. 11, pp. 2029–2039, Nov. 2008. 12. G. Megha, J. P. Gawande," Automated Segmentation of Liver and Tumourand Feature Extraction from Abdominal Ct Images Using Region Growing Method" Proceedings of 10th Irf International Conference, 01st June-2014, Pune, India, 13. M V Sudhamani, G T Raju," Segmentation and Classification of Tumor in Computed Tomography Liver Images for Detection, Analysis and Preoperative Planning", International Journal of Advanced Computer Research (ISSN (print): 2249-7277 ISSN (online): 2277-7970) Volume-4 Number-1 Issue-14 March-2014. 	

8.	Authors:	Ralesh Ranjan Biswal, Pradipta Dutta		
	Paper Title:	A Comparative Study of Back Gate Misalignment Effects for Nano Scale Symmetric and Asymmetric Double Gate Mosfets		
	<p>Abstract: The technical advancement in the field of device scaling leads to a major concern i.e. short channel effects in conventional single gate (SG) Metal- Oxide-Semiconductor Field-Effect-Transistor (MOSFET). Hence the double gate (DG) MOSFETs become a best option due to its better controllability of gate over the both the front and back channel. Primarily there are two types of DG-MOSFETs, known as Symmetric DG-MOSFET and Asymmetric DG-MOSFET. But the misalignment of top gate and bottom gate is a matter of concern in the fabrication process of the device. This misalignment of both the gates can cause damage to the device characteristics and affect the parameters like threshold voltage, drain current and surface potential. In this paper the back gate misalignment effects are investigated for both symmetric and asymmetric DG-MOSFETs and a comparative study has been made. The misalignment is considered towards both source side and drain side. Quantum mechanical effect and mobility degradation are not incorporated in our work for simplicity purpose.</p> <p>Keywords: DG MOSFET, Gate Misalignment, Threshold voltage roll off, Drain current degradation, Surface potential variation</p> <p>References:</p> <ol style="list-style-type: none"> 1. Mahmoodi, H., Mukhopadhyay, S., Roy, K., 2004. High performance and low power domino logic using independent gate control in double-gate SOI MOSFETs, in Proc. IEEE Int. SOI Conf., 2004, pp. 67–68. 2. Jente, B., Kuang, Keunwoo Kim, Ching-Te Chuang, Hung C. Ngo, Fadi H. Gebara, and Kevin J. Nowka, 2008. Circuit Techniques Utilizing Independent Gate Control in Double-Gate Technologies, IEEE Transactions on Very Large Scale Integration (VLSI) Systems, Vol. 16, No. 12, pp. 1657-1665. 3. Mukhopadhyay, S., Mahmoodiand, H., Roy, K., A Novel High Performance and Robust Sense Amplifier Using Independent Gate Control in Sub-50-nm Double-Gate MOSFET, 2006. IEEE Transactions on Very Large Scale Integration (VLSI) Systems, Vol. 14, No. 2, pp. 183-192. 4. Shen, J., Man, T., Chan, M., 2D Analysis of Bottom Gate Misalignment and Process Tolerant for Sub- 100nm Symmetric Double-Gate MOSFETs, 2003. Electron Devices and Solid-State Circuits. 5. http://en.wikipedia.org/wiki/Multigate_device. 6. Nowak, E., et.al, Turning Silicon on its edge, 2004. IEEE circuits and Device Magazine, pp.20-31. 7. Jin-Woo Han, Chung-Jim Kim, and Yang-Kyu Choi, Universal Potential Model in Tied and Separated Double-Gate MOSFETs with consideration of symmetric and asymmetric structure, 2008. IEEE Transaction on Electron Devices Vol.-55, No.-6, pp. 1472-1479. 8. Shrivastava, A.K., Akashe, S., Design high performance and low power 10T full adder using Double Gate MOSFET at 45nm technology,2013. ICCCCM, pp.1-5. 9. Sarangi, S., Gopi Krishna .S, Santra, A., Shiv Bhushan, and Tiwari, P.K., A Simulation-based Study of Gate Misalignment Effects in Triple-Material Double Gate (TM DG) MOSFETs. 2013. IEEE conference, IMAC4S, pp.4 10. "Integrated Systems Engineering (ISE) TCAD Manuals," Integr.Syst. Eng., Zurich, Switzerland, 2006. Release 10.0. International Technology. entaurus TCAD simulator. 11. Kuo, J.B.; Sun, E.C., "A compact threshold voltage model for gate misalignment effect of DG FD SOI nMOS devices considering fringing electric field effects," Electron Devices, IEEE Transactions on , vol.51, no.4, pp.587,596, April 2004. 		37-42	
9.	Authors:	Surekha Lanka, Sidra Ehsan		
	Paper Title:	Pro-Log Software Design Methodologies In Universities		
	<p>Abstract: This paper shows us reasons for using the ProLog and its features. Present achievement of technologies, selecting of artificial intelligence to ensure to prove the knowledgeable, aware of the character or nature of facts and rules by the visual ProLog. It is a high-status tool in programming, artificial intelligence and used for the development of expert systems. This dissertation is on tutorial to understand visual ProLog for someone who is studying in universities. It also helps in developing different applications in real time to enter a particular profession. And also we will consider general facts and testing with the Visual ProLog software.</p> <p>Keywords: Compound domain, Expert system, IDE, knowledge base, VIP.</p> <p>References:</p> <ol style="list-style-type: none"> 1. http://www.amzi.com/ExpertSystemsInProLog/xsipfrtop.htm 2. http://wiki.visualProLog.com/index.php?title=Symbolic_analysis 3. http://www.visual-ProLog.com/ 4. http://www.aistudy.com/program/ProLog/visual_ProLog/Using%20the%20Environment.htm 5. https://www.spec2000.net/04-expertsystems.htm 6. https://uqu.edu.sa/files2/tiny_mce/plugins/filemanager/files/4290078/deBoer-BeginnersGuide.pdf 7. http://people.scs.carleton.ca/~bertossi/KR11/material/gelfond02.pdf 8. https://www.spec2000.net/04-expertsystems.htm 9. http://en.wikipedia.org/wiki/Expert_system 10. http://file.scirp.org/Html/6-32037_21409.htm 11. http://www.amzi.com/ExpertSystemsInProLog/xsipfrtop.htm 12. http://wiki.visual-ProLog.com/index.php?title=Fundamental_ProLog_Part_2 		43-45	
10.	Authors:	Tejveer Singh Anand, Satinder Singh		
	Paper Title:	Unleashing Nature's Power in Residential Sector- An Another way to Save Energy Resources: An Empirical Study		
	<p>Abstract: Residential sector is one of the prime area where energy saving can be implemented under win-win situation by installing solar street lighting system. Manufacturers, Suppliers, promoters and even Govt. bodies may take a lead part as being undertaken for the Govt. organizations / installations</p>		46-50	

through DGS&D rate contract with subsidized rate for residential sector too. An empirical study has been conducted from ten different housing societies of Ahmadabad urban area those covered under co-operative housing societies and researchers found that there are lots of scope to save energy by just switching over to solar street lighting system with LED lamps from the conventional street lighting that will not only boost towards renewable energy use but saves lots of energy resources whether it is coal or oil as input fuel to thermal power plant.

Keywords: Solar Street Lighting, Solar Cell, LED Lamps, Residential sector

References:

1. Bhaskar News, Gandhinagar(2015) . “VakalpikUrja”. DivyaBhasker, Apr 24, 2015, pg04
2. <http://www.census2011.co.in/census/district/188-ahmedabad.html>. Accessed on Feb26,2015
3. <http://www.brighthubengineering.com/power-plants/72369-compare-the-efficiency-of-different-power-plants/> Accessed on May01, 2015
4. <http://www.eia.gov/tools/faqs/faq.cfm?id=667&t=2>
5. <http://www.indexmundi.com/commodities/?commodity=coal-australian¤cy=INR>
6. <http://powermin.nic.in/Energy-Efficiency> Accessed on 19.04.2015
7. www.iea.org/publications/.../solar_energy_perspectives2011.pdf accessed on 20.04.2015
8. http://www.slideshare.net/BP_plc/bp-energy-outlook-2035-2014-booklet?related=1 Accessed on 19.04.2015
9. http://www.slideshare.net/BP_plc/bp-energy-outlook-2035-2014-booklet?related=1 pg69, accessed on 19.04.2015
10. IEA (2011). “Solar Energy Perspectives”, IEA Publications, Printed In Luxembourg by Imprimerie Centrale, November 2011 (612011251P1) ISBN 978-92-6412-457-8
11. RESCH, R. (2011). “The Real Story on Solar Power and Energy Policy in America” Investor's Business Daily Retrieve from <http://Search.Proquest.Com/Docview/915473876?Accountid=130842>
12. <http://www.gmfb.in/project-detail.php?id=3>