Newsletter

Government Engineering College, Idukki

VOLUME I ISSUE 5　　　**MARCH 2016**

INSIDE THIS ISSUE

Editor & Designer

K R Remesh Babu

Assistant Professor Information Technology
Email: remeshbabu@yahoo.com

Printed and Published by Principal, Government Engineering College, Idukki

Sponsored by

TEQIP Phase—II

From the Editor's Desk

It is a great pleasure to bring you the fifth issue of newsletter after a gap. The current newsletter highlights the activities and achievements of faculty, staff and students for the past one year. It also features visits by eminent scholars from leading institutes to GEC Idukki. The intent of this newsletter is to disseminate information about our Institute, and we hope that the readers find the issues informative and useful. I am thankful to the faculty staff and students of GEC Idukki for their valuable inputs, and welcome suggestions and feedback.

K R Remesh Babu

Vision

To be a center of excellence in technical education with social and ecological commitment in service of the nation.

Mission

To impart quality education with values and equip youth to learn and apply technology in service of humanity

Principal's Message

Warm Greetings to all!

I take this opportunity to inform the readers that I have taken over charge as Principal, Govt. Engineering College, Idukki w.e.f. 17-8-2015. After the initial stock-taking phase, I found that there are several good beginnings made, which need to be diligently pursued to achieve the intended results. Research-oriented academic culture has to be nurtured, with the ambiance created using TEQIP funds. The efficient utilization of which has achieved good academic networking. This must be translated into academic excellence by way of improved pass percentage, placements, and quality research publications.

On the other side, there are several infrastructural projects to be completed. The completion of residential buildings is a priority. On this occasion, I call upon the students, teaching and non-teaching staff of various departments, and the ministerial staff to rededicate themselves to achieve the stated goal of excellence through sustained hard work.

With these few words, let me present to you this edition of the Newsletter. Wish you all the very best!

Dr. P C Reghu Raj

Academic Blocks and Hostels of Government Engineering College Idukki were inaugurated on 14-09-2015 by the Honourable Chief Minister of Kerala Sri. Oommen Chandy. The meeting was presided by the PWD Minister Sri. V K Imbrahim Kunju. The meeting started with a welcome speech by Idukki MLA Sri. Roshi Augustine. Sri. V K Imbrahim Kunju, inaugurated the renovated Central Computing (CCF). Sri Joice George, MP (Idukki), Sri. M T Thomas, District Panchayat President, Sri. Shijo Thadathil, Vazhathoppe Grama Panchayat President, Prof. Vidyasagar, Joint Director (DTE) were present on the occasion.

GECIAN National Conferences 2015

Inauguration of GECIAN 2015 by Dr. K G Samuel

The 2nd GECI Annual National Conference on Technological Trends (GECIAN 2015) was held on 29th and 30th of September 2015. This year we had a total of 178 submitted papers. After the review process, a total of 107 papers were accepted for presentation and publication in the proceedings. The topics this year include items from the various engineering branches such as Information Technology, Computer Science & Engineering, Electrical & Electronics Engineering, Electronics & Communication Engineering, Mechanical Engineering and Civil Engineering. The conference proceedings was published in both print media as well as in CD Media with ISBN 978-93-85477-19-5.

The technical program was organized in 20 parallel sessions based on topics. In addition, we had talks on thermal engineering, signal processing, intelligent control systems, distributed and cloud computing, and cryptography.

The program review was carried out using the standard IEEE procedure with participation from outside institutes. We would like to express our deep gratitude to the reviewers and the associated editors for all of their efforts.

GECIAN 2015 was inaugurated by Dr K G Samuel, former senior Scientist, Kalpakam Atomic Research Centre and HoD (Metallurgy, AJCE, Kanjirappally).

Dr. Vinod Chandra S S, Computer Centre, University of Kerala, delivered a keynote address on "Next Generation Data Centres" during the conference. "The Role of Information Technology in India's Economic Growth" Dr. Philip Samuel, Reader, CUSAT. Thermo Chemical Glasification of Biomass—Renewable Hydrogen Production by Dr. Sreejith C C, Prof & Head, Dept. of Mechanical Engineering, SJCE, Kottayam.

Extension Talks by Faculty

1. Dr. Sangeetha Jose: "Challenges in Security" at GPTC Muttom on 19th February 2016.
2. Dr. Sangeetha Jose: Resource person for FDP on Mathematical challenges in Cyber Security at TKM CE Kollam on 9th January 2016.
3. Dr. Sangeetha Jose: Expert session on Recent Trends in Security on 18th September 2015 at CoE, Kidangoor.
4. Dr. Santhoshkumar S, DIP at LBS Tvm
5. Dr. Santhoshkumar S, real time image processing in openCV at GEC Kozhikode on 23-2-16
6. Dr P.C. Reghu Raj: Invitation to Computational Linguistics in the T Faculty Development Program on Machine Learning and Natural Language Processing, TKM CE, Kollam, Jan 6, 2016.

Faculty & Staff Development Programmes

1. Prof. Philumon Joseph, AP (CSE) & Prof. K R Remesh Babu, AP (IT)": Coordinated "Research Directions in Data & Text Mining", 04/01/2016 to 08/01/2016
2. Prof. Shafeek M: Coordinated " Finite Element Analysis", 23-27 November 2015.
3. Dr. Manu V Thottakad & Prof. Shafeek MCoordinated FDP on " Nanotechnology", 14-18 December 2015
4. Mr. Unnikrishnan S, AA: Coordinated "E-Tendering"; 11/11/2015 to 13/11/2015
5. Dr. Babitha Mathews, AP (PE): Coordinated "Effective Communication in English"; 30/11/2015 to 17/12/2015
6. Mr. Aravindakshan V M, AO: Coordinated, Training on "DDFS"; 03/12/2015 to 04/12/2015
7. Prof. Binumon Joseph: Coordinated "Technical Writing in LaTex", 9-12 Dec 2015

Senior Research Advisor

Dr. Varghese Paul, Reader CUSAT is appointed as new Senior Research Advisor of the college. He is having more than 30 years of experience in teaching, research and industry. He is the author of TDMRC coding system. His interdisciplinary knowledge makes him different from other academicians.

CONGRATULATIONS

Ms. Sangeetha Jose, AP (IT) obtained Ph.D for her thesis entitled "Variants of Blind Signatures in Provable Secure Manner" from the Department of CSE, IIT Madras.

Mr.. Sumesh Divakaran, Prof. (CSE) was awarded Ph.D for this thesis entitled "A Refinement-Based Methodology for Verifying Abstract Data Type Implementations" from Department of CSE, IISc. Bangalore

Sri. Rejimon, Office Attendant got Ph.D for his thesis entitled "Philosophy of Art With special reference to Music" from Department of Philosophy, Kerala University

National Service Scheme

- As part of 7 day special camp 2015-16, 65 NSS volunteers of GEC Idukki, offered a helping hand to Mr. Murukan Kunnumpuram of tribal settlement, Manipara, Karimban who struggled financially in constructing a house even after having a government aid. Volunteers worked hand in hand to transport construction materials to the elevated construction site.
- National Service Scheme unit of GEC Idukki lead the E-literacy program in March 2015 to make the people of Vazhathope Grama panchayath literate in the use of computer and internet. 300 student volunteers of GECI (including 120 NSS volunteers) visited 300 kudumbasree units in all the 14 wards of Panchayath with their laptops in this mission. Approximately 30 people participated in the programme held at each kudumbasree unit.
- The second phase of the e-literacy was completed in the month of October 3rd, 2015 till 17th October, 2015.

iiSN 2016

iiSN Proceedings release by Dr. N Ashok Kumar & Dr. Varghese Paul

The Research Symposium on Intelligent Information Systems & Networks (IISN 2016) is an initiative of Department of Information Technology, GEC, Idukki to encourage the scholars to showcase the core details and highlights of their research initiatives to the academic and industrial communities. Prof. K. R. Remesh Babu was the organizing chair for the symposium. Dr. Sangeetha Jose was the organizing secretary and Prof. Ratheesh T.K. was the organizing convener. This event revealed the emerging trends in technology and pointed out the future requirements and possibilities. The symposium was inaugurated by the Principal-in-charge Dr. N. Ashok Kumar. The proceeding was released by Dr. Varghese Paul, the SRA. The event helped our research scholars as well as students to get an occasion to know the advances and trends in technology, and to identify topics of further research and industrial applications.

Keynote on IoT by Mr. Shahim Baker

42 papers were received out of which 26 papers were accepted for presentation after the review. The accepted papers were presented in three sessions. Dr. Varghese Paul, SRA & Reader (CUSAT) delivered a talk on "Intelligent Information Systems" on the 1st day of the symposium. Another expert talk was on the topic "Internet of Things (IoT)" by Mr. Shahim Baker, Vice Chair, IEEE Kochi sub section. Members of IEEE student chapter actively participated in coordinating various sessions of the symposium.

The conference was financially sponsored by TEQIP Phase II and technically sponsored by IEEE Kochi section.

Keynote on intelligent information system by Dr. Varghese Paul

Visiting Faculty Programmes

- Coding Theory, by Dr. Preetha Mathew, CUCEK (14/11/2015 to 15/11/2015)
- Software Tools for Thesis Preparation, by Dr. R M Sherif & Prof. Asok Kumar A, CET (29/12/2015 to 31/12/2015)
- Advanced Geometric Algorithms, by Dr. Minati De, IISc Bangalore on 31/12/2015

Placements @GECI

This year training and placement cell of our college provided ample opportunities for placements and entrepreneurship by organizing seminars, workshops and training programs for enhancing the personality traits and facilitated the transition of our students from academic to corporate life. The major MNC placement statistics through CGPC is given below.

Sl No	Company	No. of Placements
1	Qburst	5
2	Infosys	9
3	UST Global	13
4	Wipro	10
5	Mind Tree	1
6	Mphasis	1
7	IBS	4
8	SixDee	6

Besides this several students were placed through off campus placements in companies like Syntrio Technologies, EricsLab, etc., in Technopark, Thiruvananthapuram and Inforpark , Kochi. Lot of students are placed in Mid-cap companies, Nationalized Banks, Engineering colleges, etc.

Prof. Ebin M Manuel & Prof. Ratheesh T K were leading the placement & training cell.

IIIC Activities

- Programming with Beagle Bone, Mr. Dhanish Vijayan, Mr. Arun Mohan, Mr. Nithin K Kurian, Elementz Engineers GUILD Pvt Ltd (11/11/2015 to 13/11/2015)
- ELVIS-II Prototype board with Signex and Datex Cards, Mr. Sivakumar S, Starcom Information Technology Ltd., Bangalore (19/08/2015 to 20/08/2015)
- FPGA control for Inverter Drives, Mr. Bernad Jose, Willams K Francis, ENTUPLE Technology Bangalore (23/11/2015 to 25/11/2015)
- Workshop on "Design with FPGA", Mr. Roopak T, Mr. Mubeem Rahiman, AUDREY Technologies (02/02/2016 to 04/02/2016)

Sports

GEC Idukki hosted this year's M G University Inter Collegiate Table Tennis Tournament (Men and Women). Dr. P C Reghu Raj inaugurated the tournament on 15th September 2015.

Collaborative project work

BoG approved the proposal from Dr. Sumesh Divakaran, for a collaborative research with participating institutions as IISc Bangalore, MathWorks India Pvt. Ltd, University of York, IIIT Bangalore and GEC Idukki. A sum of Rs.10.60 lakhs was allocated for the activities under this project.

Research Publications

1. S. Sreeja, Hari Hablani, "Precision Munition Guidance and Estimation of Target Position in 2 D", International Conference of AIAA Guidance, Navigation, and Control, 4– 8 Jan, 2016, San Diego, USA.
2. K R Remesh Babu, Philip Samuel, "Enhanced Bee Colony Algorithm for Efficient Load Balancing and Scheduling in Cloud", Advances in Intelligent Systems and Computing, Springer Verlag, Vol. 424, pp. 67-78.
3. K R Remesh Babu, Saranya S, Philip Samuel, "Secure Cloud Multi-tenant Applications with Cache in PaaS", Advances in Intelligent Systems and Computing, Springer Verlag, Vol. 424, pp. 15-27.
4. S. Santhosh Kumar, "NEC2 Based Optimum Design of Circularly Polarized Axial Mode Helical Antenna with Non -linear Pitch Profile Modeled using Catmull–Rom Spline and Particle Swarm Optimization", Int. J. Engineering and Advanced Technology, Vol. 5 Iss. 2, December 2015.
5. Sumesh Divakaran, Deepak D'Souza, Prahladavaradan Sampath, Anirudh Kushwah, Nigamanth Sridhar and Jim Woodcock, "Refinement-Based Verification of the FreeR-TOS scheduler in VCC", 17th International Conference on Formal Engineering Methods, ICFEM 2015, Paris, November 3-5, 2015, pp 170-186.
6. K R Remesh Babu, Amaya Anna Joy, Philip Samuel, "Load Balancing Of Tasks In Cloud Computing Environment Based On Bee Colony Algorithm", IEEE 5th International Conference on Advances in Computing and Communications (ICACC-2015), 2 - 4 September 2015, pp. 89 - 93.
7. Sangeetha Jose, K R Remesh Babu, Suja G J, Philip Samuel, "Performance Analysis Of Big Data Gathering in Wireless Sensor Network Using An EM Based Clustering Scheme", IEEE 5th International Conference on Advances in Computing and Communications (ICACC-2015), 2 - 4 September 2015, Kochi, pp. 109 – 113.
8. Jalaja M.J, " Delay and Lifetime Performance of Underwater Wireless Sensor Networks with Mobile Element Based Data Collection", Int. J. Distributed Sensor Networks, Vol. 2015.
9. Jalaja M.J, "Application-Oriented On-Demand Data Collection in Sparse Underwater Acoustic Sensor Networks Using Mobile Elements", Int. J. Advances in Networks and Services, Vol. 8, No. 1&2, 2015.
10. K R Remesh Babu, Philip Samuel, "Concept Networks for Personalized Web Search Using Genetic Algorithm", Elsevier Procedia Computer Science 45 (2015), pp. 566 – 573.
11. S. Santhosh Kumar, Anu R. G, "Radiating Flare Design of Tapered Slot Loaded Vivaldi Antenna Using Fourier Series Approach", Int. J. of Engineering and Advanced Technology, Vol-5, Iss-3 February 2016.

MoU With CDAC

An MoU was signed between Government Engineering College, Idukki and Centre for Development of Advanced Computing, Thiruvananthapuram CDAC (T), a Scientific Society under the Ministry of Communications & Information Technology, Govt. of India on 21st January 2016.

Student Publications

1. Sheba Jiju George, "Anywhere at Anytime Internet: Google Loon Balloons", Journal of Network and Information Security, Vol. 3, Issue. 1, pp. 14- 22, June 2015.
2. Lincy M George, "A Virtualisation Approach to Software Defined Networks", International Conference on Recent Advancements and Challenges in Engineering, pp. 60-65,
3. Neethu M R, "A Study on the Security Aspects of Internet of Things", International Conference on Recent Advancements and Challenges in Engineering, pp. 21-24,
4. Maya M, "A DHT Enhanced RBRIDGES: DBRIDGES", International Conference on Recent Advancements and Challenges in Engineering, pp. 73-76.
5. Aswani T S, Premanand B, "Area efficient Floating Point Addition Unit With Error Detection Logic", ICETEST 2015, Thrissur.
6. Kavya R, Santhosh Kumar S, "Window based Input Vector Monitoring Concurrent BIST using SRAM Cells with Diagnostic Data Compression", ICETEST 2015, Thrissur.
7. Aswathi Thomas, Ebin M. Manuel, "Embedment Of Montgomery Algorithm On Elliptic Curve Cryptography Over RSA Public Key Cryptography", ICETEST 2015, Thrissur.
8. Greeshma Haridas, David Solomon George, "Area Efficient Low Power Modified Booth Multiplier for FIR Filter", ICETEST 2015, Thrissur.
9. Ajith Raj Menon A, Ratheesh T K, "A Novel Approach For Reliable File Communication In Spontaneous Wireless Ad Hoc Networks", IEEE sponsored Online International Conference on Green Engineering and Technology (IC-GET 2015), November 2015.
10. Lijo George, Ratheesh T K, "PhishHook: An efficient approach to phishing detection", IEEE Sponsored International Conference on Green Engineering and Tech-nologies, November 2015.
11. Amal Dev Parakkat, Jiju Peethambaran, Philumon Joseph & Ramanathan Muthuganapathy, "A Graph-based Geometric Approach to Contour Extraction from Noisy Binary Images", Journal of Computer-Aided Design and Applications Volume 12, Issue 4, 2015

M. Tech Results

Our M. Tech students achieved excellent results in Final year M.Tech Degree Examinations of Mahatma Gandhi University. M.Tech Network Engineering (IT) & M.Tech Systems & Engineering (CSE) got 100% results in the examinations with 13 Distinctions & 5 First classes each. M.Tech VLSI & Embedded Systems (ECE) got 7 distinctions and 9 First classes and M.Tech Power Electronics (EEE) got 5 Distinctions and 7 First classes.

Achievements

Ms. Roshily Roy, S4 (IT) won 2nd price in the event taekwondo (women), in Mahatma Gandhi University intercollegiate sports meet on February 2016.

The starting point of all achievement is desire