



K.K. Wagh Education Society's  
**K.K. Wagh Institute of Engineering  
Education and Research, Nashik.**

July 2017

Vol. : 9  
Issue : 7

■ **Punyatithi Programme**



Punyatithi Programme was organized in the institute on 22<sup>nd</sup> July 2017. The joint Punyatithi programme of Late Padmashri Kakasaheb Wagh, the social reformer Late Tatyasaheb Boraste and the well-known Philanthropist Kakusheth Udeshi was organized in the institute on 22<sup>nd</sup> July 2017. Hon. Shri. Prahlad Patil Karad (President of Kadwa- Goda Sugar Factory) was president of the function, Chief Speaker was Hon. Shri. Uttamrao Kamble ((Ex. Chief Editor, Sakal News paper Group) and special Guest was Hon. Adv. Bhaskarrao Pawar, Ex. President, Bar Association Nashik and Ex. Trustee of Saptshrungi Gad, Wani). All the Guests appreciated the development of K. K. Wagh Education Society. They recalled the work done in initial days by Late Padmashri Kakasaheb Wagh, Shri. Madhavrao Boraste and Shri. Kakusheth Udesi. All the guests were felicitated at the hands of Hon. Chairman of K. K. Wagh Education Society Shri. Balasaheb D. Wagh. For this function Sau. Shakuntalatai Wagh, Smt. Nilimatai Pawar (Sarchitnis, NDMVP), Trustee Shir. Changdevdada Holkar, Trustee Shri. Ashokbhai Merchant and Trustee Shri. Sameer Wagh were present on the dias. Principals of various institutes of K. K. Wagh Education Society, Heads of departments and staff were present.

■ **Felicitatation of Ms. Priyanka Kumari for Femina Miss INDIA Runner Up Award**



Felicitatation of Ms Priyanka Kumari for achievement Femina Miss India Runner Up by the hands of Hon. President Shri. Balasaheb Wagh



Felicitatation of Ms. Priyanka Kumari for Femina Miss India Runner Up

Ms. Priyanka Kumari, Second Runner up of Femina Ms India Contest visited K. K. Wagh Institute of Engineering Education and Research, Nashik on 3<sup>rd</sup> of July 2017. Ms. Priyanka Kumari is alumni of Mechanical Department of 2014 Batch of our institute. She was felicitated for her achievement by Hon Chairman of K. K. Wagh Education Society, Shri Balasaheb Wagh. For this program Trustee Shri. Ashokbhai Merchant, Principal Dr. K. N. Nandurkar and head of departments were present. On this occasion a tree was also planted in her name in the K. K. Wagh campus.

### Tree Plantation by NSS Group

On 1<sup>st</sup> July 2017, NSS had organized Tree Plantation activity in association with Forest Department at Take-Ghoti Tal. Igatpuri. In this activity 108 NSS volunteers planted 2500 plants.



Tree Plantation Activity Inauguration by the hands of Hon. Shri. Mahesh Zagade, Divisional Commissioner, Nashik

### IPR Drive 2017- Launching

K. K. Wagh Institute of Engineering Education and Research, Nashik in association with Great Mission Group Consultancy launched Patent Drive 2017 on 8<sup>th</sup> July 2017. During the patent drive, filing and registration of Patent, trademark, industrial design & copyright was processed. Some of the faculties and students having innovative ideas and willing to protect their ideas attended the function. Chief Guest Mr. Ganesh Hingmire guided on this occasion. He was felicitated at the hands of Principal Dr. K. N. Nandurkar. The activity was coordinated by Dr. Sunita Ugale.



IPR Drive 2017- Launching

### First Year Orientation Programme

Institute organized One day orientation programme to newly admitted First Year Students on Monday 31<sup>st</sup> July 2017. It was inaugurated by the hands of Principal Dr. K. N. Nandurkar. Principal Dr. K. N. Nandurkar addressed to all the students and parents of first year in four different halls for various branches. Around 800 students and their parents were present in four different programme held in Meeting Hall No. 2, P. C. Ray Hall, I. T. Seminar

Hall and Sir. Visveswaraya Hall. Prof. S. N. Kadlag, Prof. Dr. S. S. Naik, Dr. A. W. H. Ansari, Prof. S. S. Joshi, Prof. C. G. Upasani were present and gave guidance to students. Workshop Superintendent Prof. J. S. Jadhav, Librarian Dr. P. S. Bodke, TPO Dr. P. K. Shahabadkar, College Exam Officer Prof. S. N. Jain, Prof. Piyush Joshi, Prof. Umesh Gaikwad, ISTE Coordinator Prof. Mrs. P. S. Vispute were given guidance to the students. All heads of departments and all speakers gave guidance on how to study for four years, student welfare schemes, student personality development etc. Programme ended with vote of thanks & National Anthem. All staff of Applied science department took efforts for making this programme grand success.



Principal Dr. K. N. Nandurkar addressing to first year students

### Workshop on 'Awareness of PMKVY'

Workshop on 'Awareness of PMKVY' (Prime Minister's Kaushalya Vikas Yojana) was organized in the institute in association with AICTE Western Region on 31<sup>st</sup> July 2017. For inauguration Chief Guests were Dr. Amit Dutta (Director, Western region, AICTE Mumbai office) and Dr. Ramesh Unnikrishnan (Director, Southern Region, AICTE Bangalore Office). Both the Guests were felicitated by the hands of Principal Dr. K. N. Nandurkar. The staff of various institutes in and around Nashik attended the workshop.



Workshop on Awareness of PMKVY on 31<sup>st</sup> July

**Expert Lecture/Seminar/Courses/Worshop Organized:**

- Department of Computer Engineering organized Expert Talk on 'Incubation' by Prof. Dr. R. S. Tiwari, Director, YCMOU Nashik on 7<sup>th</sup> July 2017, an Expert Talk on 'Agile Scrum' by Mr. Pushkar Kale on 15<sup>th</sup> July 2017 and an Expert Talk on 'Microsoft Project Management Tool' by Mr. Mahesh Deosthale on 27<sup>th</sup> July 2017. Same department also organized 'Skype Session on Career, Relevance and Life' by Mr. Manish Verma, Alumnus of 1997 Batch on 28<sup>th</sup> July 2017 and an Expert talk on "Basics of Cache Memory System" by Mr. Radheya Afre, TCS, Pune on 29<sup>th</sup> July 2017.
- Department of Electronics & Telecommunication organized a Seminar on "Radio telescopes" for BE E & TC by Mr. Ashish Mhaske, Research fellow, Radio Physics Lab., IUCAA, Pune on 03/07/2017, an Expert lecture on "Electronics in Agriculture" for BE ELTX by Prof. T. B. Ugale, K. K. Wagh Agriculture College on 05/07/2017, seminar on "Calibration process" for SE E & TC by Mr. Prashant Sawant and Mr. Asimkumar Shah, APLAB, Mumbai on 06/07/2017 and Seminar on "PCB Designing" for TE E & TC and TE ELTX by Mr. Ankit Sharma, Embedded developers, Numerix, Pune on 24/07/2017. Department also organized training session on 'MyExamo' for faculties from all departments by Ms. Heena Dhiman, Director of myExamo, Pune on 27/07/2017 and Expert lecture on 'Basics of Integrated Circuits for Preparation of Interview' for BE E & TC by Prof. S. S. Bhabad on 29/07/2017.
- Chemical Engineering Department has organized Expert Lecture on "Role & Scope for Chemical Engineers in US" by Prof. Dr. Balaji Sitharaman, Associate Professor, Stony Brook University, New York, USA and an Expert Lecture on 'Entrepreneurship Development Skills' by Mr. Ravishankar Sitharaman, Director of BSR Technologies Pvt., Ltd., on 05/07/2017. Same department also organized an expert lecture on 'Role & Scope for Chemical Engineers and Skill Development' by Chandrakant R. Mohikar, Petro-Project Consultant, Nashik on 10/07/2017 and an expert lecture on

'Preparation of GATE' by Rohit Mahale, Alumnus of dept. on 29/07/2017 (2016-17 batch, 2016 GATE Qualified and admitted for M. Tech Chemical at SVNIT Surat)

- Institute had organized on 29<sup>th</sup> July 2017 a workshop for students of our institute by CASI Global, New York about their activities by Sakshi Pahuja and Prof. Sheth from CASI Global

**Seminars/Workshop/Training attended by Staff:**

- Electrical Engineering department staff Prof. S. S. Dhamal, Prof. N. N. Jangle, Prof. S. M. Akolkar, Prof. M. R. Rade, Prof. S. A. Sagare and Prof. P. G. Medhewar have attended two week online training workshop on "Electric Power System" conducted by IIT, Kharagpur at K. K. W. I. E. E. & R, Nashik during 12-15<sup>th</sup> July 2017.

**Industrial Visits Organized For Students:**

Date	Class	Name of Company
07/09/2017	BE E & TC	Industrial visit to GMRT, Narayangaon

**Abstracts of papers presented during July 2017:**

**Identification of Ragas in Hindustani Classical Music Using Aaroha and Avaroha**

Dr. D. M. Chandwadkar & Dr. M. S. Sutaone

(Paper published in International Journals of Advanced Research in Computer Science and Software Engineering, ISSN: 2277-128X (Volume-7, Issue-6, June 2017))

**Abstract:** Hindustani Classical Music is one of the oldest music cultures still being performed actively. Despite of the advancements in the technologies related to music analysis, very little has been tried related to the expressiveness of Hindustani Classical Music. Ragas are the central structure of Hindustani classical music. Raga can be thought of as the sequential arrangement of notes that is capable of invoking the emotion of a song. In this paper we have tried to identify eighteen ragas played by three string instruments: Santoor, Sarod and Sitar using signal processing techniques. A database consisting of recorded Aaroha and Avaroha of these 18 ragas played by three performers is used as input to the system. The notes present in the audio file are obtained using Harmonic Product Spectrum method of pitch detection. Using this technique we could achieve about 85% accuracy. This shows that our approach, though simple, is effective in solving the problem.

continued on page 4

**Keywords :** Hindustani Classical Music, Raga recognition, Aaroha-Avaroha, Swara, Pitch, Harmonic Product Spectrum

■ **Modeling and Performance Analysis of Microgrid Using Fuzzy Logic Controller**

Dr. D. M. Chandwadkar & Tanvi Sonawane

(Paper published in International Journal of Advanced Research in Electrical, Electronics and Instrumentation Engineering (IJAREEIE), July 2017, Vol. 6, Issue 7)

**Abstract:** Fuzzy logic based voltage controller is proposed for hybrid generation scheme. It uses solar and wind energy for isolated applications. Microgrid involves different energy systems or energy sources. Here we are using solar energy system and wind energy system. To improve the generating performance & implementation of power utilization, we are using the hybrid PV-wind system. It gives better result as compare to individual sources. On the contrary side, PV-wind hybrid system has environmental benefits such as reduction of carbon emission due to use of renewable energy resources. Fuzzy logic control based maximum power point tracking(MPPT) approach is used to improve the efficiency and robustness of the solar photovoltaic (PV) power generation and establishes a model of grid connected PV system by Matlab/Simulink environment which reflect the characteristics of the system accurately. We are using battery for energy storage purpose. It gives continuous power, compelling use of renewable energy resources. It enhances life time of battery, minimized utilization of diesel and reduces the emission of CO<sub>2</sub>.

**Keywords :** Maximum power point tracking, Fuzzy Logic Controller

■ **Study and implementation of phase locked loop**

Dr. Sunita Pandit Ugale & Rasika Madhukar Chandramore

(Paper published in International Journal of Advance Research in Science and Engineering Vol. No. 6, Issue no. 07, July 2017 ISSN (O) 2319 - 8354 ISSN (P) 2319 - 8346)

**Abstract:** This paper introduces a design aspects of low power phase locked loop using VLSI technology. The phase locked loop is designed using latest 45nm process technology parameters, which in turn offers high speed performance at low power. The main quality related to the 45nm technology such as the high-k gate oxide, metal-gate and very low-k

interconnect dielectric described.

**Keywords :** Phase locked loop (PLL), voltage control oscillator (VCO), 45nm technology, Very large scale integration (VLSI) technology, low power.

■ **Acid Blue 113 removal from aqueous solution using novel biosorbent based on NaOH treated and surfactant modified fallen leaves of *Prunus Dulcis***

Prof. Jain S N

(Published in Journal of Environmental Chemical Engineering (Elsevier), 5 (2017), pp. 3384-3394)

**Abstract:** In the present work, the fallen leaves of *Prunus Dulcis* (almond) have been used for obtaining biosorbent with activation based on NaOH and surfactant treatment. Characterization of biosorbent was performed using Fourier transform infrared spectroscopy, scanning electron microscopy, elemental analysis and Brunauer-Emmett-Teller analysis techniques. The obtained biosorbent was subsequently applied for removal of azo dye, Acid Blue 113, from aqueous solution. The effects of biosorbent dose, contact time, initial dye concentration, salt concentration and temperature on the extent of adsorption of AB 113 were investigated in batch mode. The optimum conditions obtained for maximum dye removal were biosorbent dose of 10 g L<sup>-1</sup> for NaOH treated biosorbent, 3 g L<sup>-1</sup> for surfactant modified biosorbent, contact time of 2.5 h and temperature of 293 K. Better results were obtained for surfactant modified biosorbent (almost 100% removal) as compared to the NaOH activated biosorbent. The adsorption kinetics data were found to be well described by pseudo-second order equation whereas Langmuir and Temkin isotherm models were observed to be best fitted to the obtained equilibrium data. The adsorption was found to be exothermic and spontaneous in nature. Maximum biosorption capacity obtained for different approaches were 10.87, 25.51 and 97.09 mg g<sup>-1</sup> for conventionally obtained biosorbent, NaOH treated biosorbent and surfactant modified biosorbent respectively. Regeneration studies ensured potential of the biosorbent for dye removal in more than one cycle. The present study conclusively established the potential of surfactant modified biosorbent for effective removal of Acid Blue 113 dye with significantly higher biosorption capacity of 97.09 mg g<sup>-1</sup> in comparison with other commonly used adsorbents.

Prof. Dr. K. N. Nandurkar  
PRINCIPAL

