



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

February 2022

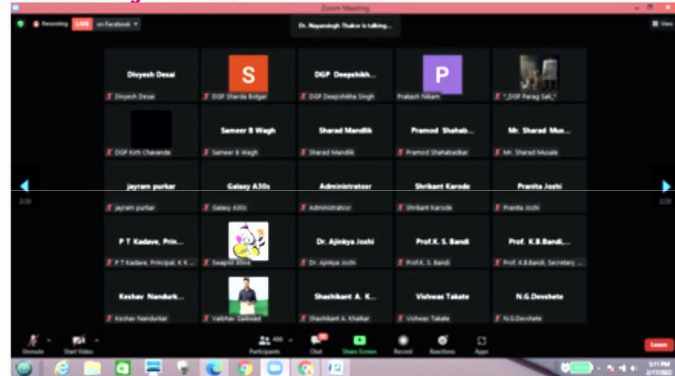
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■ Death of Hon. Shri. Balasaheb D. Wagh



President of K. K. Wagh Education Society Shri. Balasaheb Wagh left for his heavenly abode on 6th February 2022. The funeral was arranged in Engineering College campus ground on 7th February 2022. Advisory committee Chairman Shri. Vivek Sawant, Advisory committee member Dr. D. M. More, Shri. Shekhar Gaikwad, IAS (Sugar Commissioner, Govt. of Maharashtra), Shri. Sudhir Tambe (MLC), Mrs. Seematai Hire (MLA), Shri. Rahul Dhikle (MLA), Mrs. Devyani Pharande (MLA), Dr. Rahul Dhikale (MLA), Trustee Ashokbhai Merchant, Shri. Sameer Wagh, Shri. Chagdevdada Holkar, Shri. Ajinkya Wagh, other leaders of Nashik district, relatives of Wagh family, Secretary Prof. K. S. Bandi, Principal Dr. K. N. Nandurkar, other Principals and heads of department and staff of various Colleges and Schools of K. K. Wagh Education Society were present for the funeral. All of them paid thier homage to Hon. Shri. Balasaheb D. Wagh on this occasion.

■ Online Condolence Meeting on 17th February 2022



Online Condolence meeting of 17th February 2022

K. K. Wagh Education Society has organized an online Condolence meeting in memory of Late Shri Balasaheb Wagh on 17th February 2022 at 3.00pm. During the meeting various dignitaries expressed their views about Late Shri. Balasaheb Wagh which includes Dr. Madhavrao Chitale, Dr. Omprakash Kulkarni, Trustee Shri. Ashokbhai Merchant, Prof. Dnyandev Nathe (Jt. Director, DTE Nashik), Dr. V. D. Barve (Ex Principal), Dr. R. S. Mali (Ex. Vice Chancellor), Dr. D. M. More, Prof. B. M. Naik, Dr. S. A. Kelkar, Prof. M. J. Deodhar (Ex. Principal), Mr. Sudhir Mutalik, Shri. Shridhar Vyavahare, Dr. G. K. Kharate, Dr. Shantaram Magar, Dr. Thakare, Dr. Prakash Turbhatmat, Mr. Sachin Joshi, Dr M. D. Kokate, Dr. P. N. Rasal, Dr. Anil Kale, Mr. Divesh Desai, Mrs. Premlata Mishra, Mrs. Vijayalaxmi Manerikar, and Shri. Rajesh Sawant. For this meeting Trustee Shri. Sameer Wagh, Shri. Ashokbhai Merchant, Secretary Prof. K. S. Bandi, Principal Dr. K. N. Nandurkar, other Principals, Heads of department and staff of various Colleges of K. K. Wagh Education Society were present.

■ Offline Condolence Meeting

An offline condolence meeting in memory of Late Shri Balasaheb Wagh was organized on Tennis court ground at Engineering College

Campus. For this meeting Trustee Shri Sameer Wagh, Shri Ajinkya Wagh, All Trustees of K. K. Wagh Education Society, Secretary Prof. K. S. Bandi and Principal Dr K. N. Nandurkar, Principal P. T. Kadve, other Principals, all heads of department and staff of Engineering, Polytechnic and Pharmacy College were present. On this occasion all Trustee, Principals, Heads of department and staff of these colleges shared their experiences, memories and views about late Shri Balasaheb Wagh.

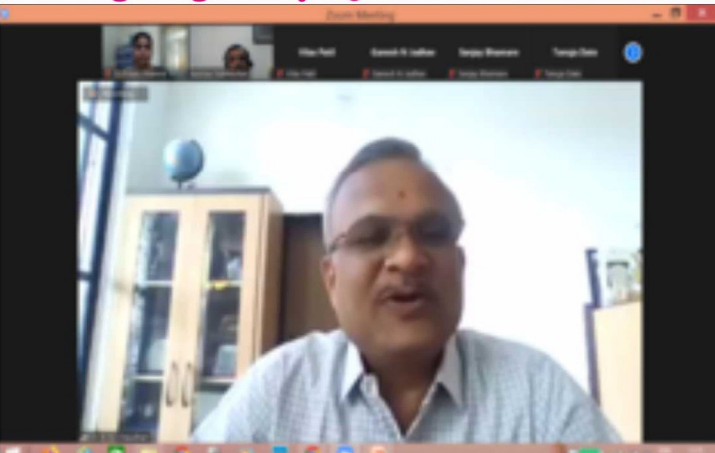


Principal Dr K. N. Nandurkar shared his views in condolence meeting



Member present for condolence meeting

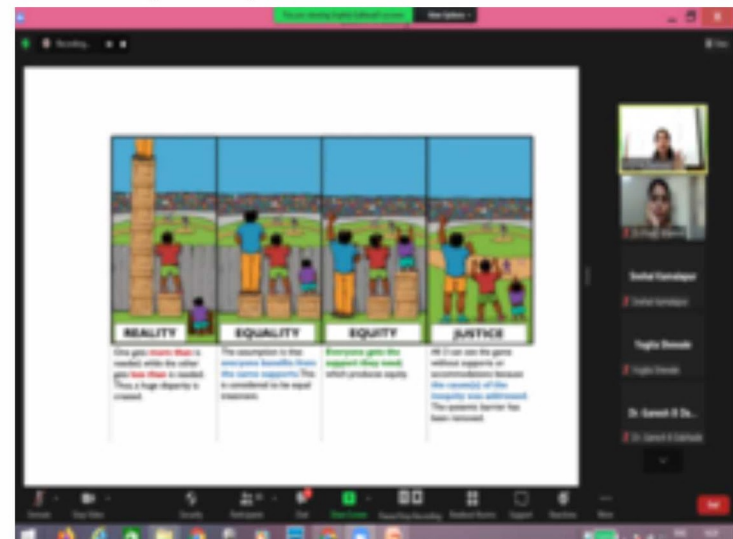
Training Program by IQAC Cell



Teacher Training program on OBE by Prof. Dr. B. N. Chaudhari

IQAC Cell of the institute organized Teacher Training Program. The online session of this training program was conducted on “Curriculum Design in light of OBE”, by Prof. Dr. B. N. Chaudhari, Director, Sardar Patel Institute of

Technology, Mumbai on Monday February 21, 2022 from 11.00am to 12.30pm in which 100 teachers participated. The Second online session of the training program was conducted on “Alternative Assessments” by Dr. Sophia Gaikwad, Head, Symbiosis Teaching Learning Resource, Symbiosis International (Deemed University), on February 25, 2022 at 02:00pm with 101 participants.



Teacher Training program by Dr Sophia Gaikwad

Online Panel Discussion by CII

Online panel discussion on Opportunities for Engineers in IT and Core Industries by CII was organized by Industry Academia Connect panel of CII Maharashtra on 26th February 2022. Principal Dr K. N. Nandurkar who is the Co-Convenor of Industry-Academia Panel initiated the program. Panel members included Mr. Sudhir Mutalik (Chairman, CII Maharashtra State Council & MD, Ppositive Metering Pumps (I) Pvt. Ltd., Nashik), Mr. Ashank Desai (Founder & former Chairman of Mastek Ltd.), Ms. Geetika Kambli (Convenor of Industry-Academia Panel and Managing Partner, Future Factory, Mumbai), Mr. Shekhar Kamble (Regional HR Head, Pune & Goa, TCS Ltd.), Mr. Vivel Kulkarni (Founder, Chairman & Managing Director of Ramkrishna IT Consulting Pvt. Ltd.) and Mr. Yogesh Khatale (HE Head, KSB Ltd., Pune).

Two Days Workshop on “Internet of Things: Scope and Applications”

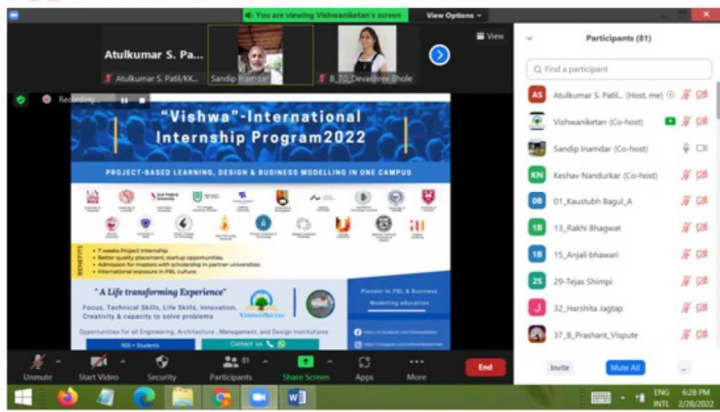
Internet of Things (IoT) Club of KKWIEER, Nashik had organized a Two Days Workshop on “Internet of Things: Scope and Applications” on 26th and 28th Feb. 2022 for FE IT students. 54 students participated in this activity. Prof. Dr. (Mrs.) Preeti D. Bhamre (Dean Quality and Head of IT Department) along with the staff took efforts for organizing this workshop.

continued on page 3



Staff members along with student participants of the workshop

Online Session by Dr. Inamdar on "Internship Opportunities Abroad"



Online Session by Dr S. S. Inamdar

International Facilitation Centre of KKWIEER has conducted an Online Session by Dr S. S. Inamdar (Vice President of Vishwaniketan Group, Khalapur and Steering committee member of the European Commission Project under the Erasmus Mundus Programme). He explained the details of Vishwaniketan's International Internship Program-2022, on Thursday, 10 February 2022.

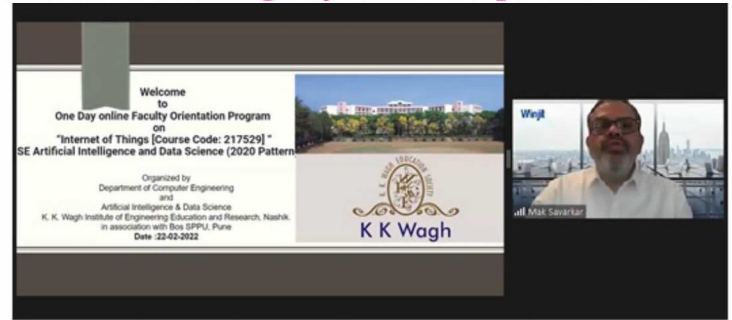
MatruBhasha Din on 21st February 2022



Book talk on 21st February 2022

Kusumagraj Central Library celebrated "World Mother Language Day", on 21st February 2022. On this occasion library has organized "Book Talk". There is total 61 staff & students attend this function. Five participants expressed their opinion on their favourite book.

One day faculty orientation program on internet of things by AI&DS Department



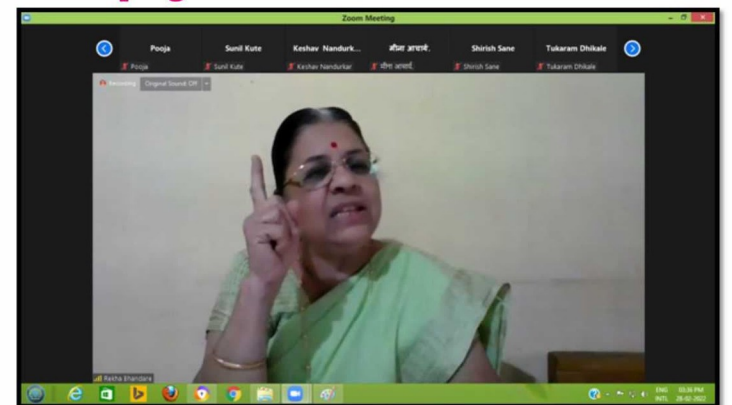
Mr. Makarand Savarkar Inaugurated Faculty Orientation Program

One Day Faculty Orientation Program on Internet of Things was conducted on 22nd February 2022 by department of Computer Engineering and Artificial Intelligence and Data Science in Association with Board of Studies (Computer Engineering), Savitribai Phule Pune University (SPPU), Pune. Mr. Makarand Savarkar, Head Enterprise Solution, Winjit Technology, Nashik E-Inaugurated the One day Faculty Orientation Program. Resource Person were Dr. Mahesh Sanghavi, Head of the Department, Computer Department, SNJB Chandwad, Dr. Prakash N. Kalavadekar Associate Professor, Sanjivani COE, Kopergaon, Mr. Santosh Kumar, Assistant Professor, VIIT, Pune and Mrs. I. Priyadarshini, Assistant Professor, KKWIEER, Nashik. Prof. Dr. S. S. Sane, Head, Department of Computer Engineering and Artificial Intelligence and Data Science, KKWIEER, Nashik, briefed One day Faculty Orientation Program. In total, there were about 46 participants benefited from the Session.

Homage to Swatantraveer Sawarkar in Library on 26th February 2022

Kusumagraj Central Library celebrated "Swatantryaveer Savarkar Jayanti", on 26th February 2022. Principal Dr K. N. Nandurkar, Librarian Dr. P. S. Bodke and staff of the institute were present on this occasion.

Online program- Marathi Bhasha Din



Expert lecture of Mrs. Rekha Bhandare

Kusumagraj Central Library celebrated “Marathi BhashaGaurav Din”, on 28th February 2022. On this occasion library has organized an online (via Zoom Platform) expert lecture of Mrs. Rekha Bhandare, retired teacher, author & reviewer, from Nashik. She gave excellent speech on “Marathi Bhasha: Classical Language”. This function was inaugurated at the hands of Prof. Dr. K. N. Nandurkar, Principal, K. K. Wagh Institute of Engineering Education & Research, Nashik. Total 196 participants attended this function.

■ NSS Special Camp



Inauguration of NSS Special Winter Camp

NSS Special camp for AY 2021-22 was organized by our institute in the adopted village, Mohgaon, Tal.& Dist. Nashik from 27th Feb to 6th March 2022. The inaugural function of camp was organized in Kanifnath temple in village. Mr. Maheshkumar Upasani (Social Worker and Corona Warrior) was the chief guest for inaugural function. Mrs. Bhagyashri Tile (Sarpanch, Mohgaon-Babhaleshwar), Mr. Yogesh Tile (Grampanchayat Member), Mrs. Surekha Tile (Grampanchayat Member), Mr. Dnyaneshwar Bhor (Gramsevak), Prof. Dr. K. N. Nandurkar (Principal, KKWIEER) and villagers were present for this function. Principal Dr. K. N. Nandurkar delivered welcome speech. Mr. Upasani briefed work of Chhatrapati Shivaji Maharaj in societal development. Mr. Bhor briefed about activities and tasks that can be performed for the development of village during camp. Prof. Dr. N. B. Gurule proposed vote of thanks.

The concluding session of this Winter Camp was held on 6th March in presence of Dr. Anesh Pallod. Prof. Dr. S. S. Sane (Head of Computer Department) was also present on the occasion.

■ Signing MoU with Ascender Club

KKWIEER signed an MOU with the Ascender club in February 2022, to promote fitness among students, to organize fitness and health events and meetups, to organize fitness competitions.

The Ascender fitness club is a platform for students who are passionate about fitness. This MoU will be beneficial for students, especially fitness enthusiasts.

■ Expert Lecture/Seminar/Courses/Workshop Conducted:

- Computer Engineering Department has organized One Day Faculty Orientation Program on Web Technology by Prof. Abhijit Jadhav Prof. K. P. Birla and Mr. Tushar Kute on 25th February 2022 and Supervisory Development Program by Prof. (Mrs.) Seema K. Gondhalekar and Prof. I. Priyadarshini on 27/02/2022.
- Electronics and Telecommunication Engineering Department organized Webinar on “Campus To Coporate-A transformation journey” by Mrs. Meenakshi Kulkarni, Founder-Adept Vision on 25/02/2022.
- Production Engineering Department has organized expert lecture on “Machine Learning and Robotics” by Mr. Tushar B. Kute of MITUSkillologies, Pune on 03/02/2022 and expert lecture on “Career Opportunities in CAD/CAM/CAE” by Mr. Amit Joshi of Tyson online Ltd; Nashik on 09/02/2022.
- Civil Engineering Department has organized expert lecture of Er. Devika Kapse, Assistant Town Planner, Nashik on 05/02/2022, Expert lecture of Er. Pravin Daitkar, MPSC (2019 Qualified), Shri Ganesh Academy, Nashik on 28/02/2022 and Expert lecture on 28/02/2022 by Er. Nikhil Chidriwar, IBPS PO Qualified.
- Information Technology Department has organized an online seminar on “Shell Script Technology” by Ms. Priyanka Gaikwad, Netleap IT on 17/02/2022 for IT students.
- Artificial Intelligence & Data Science Department has organized One Day Faculty Orientation Program on “Internet of Things” by Dr. Mahesh Sanghavi, Dr. Prakash N. Kalavadekar, Mr. Santosh Kumar and Mrs. I. Priyadarshini on 22nd February 2022.

■ Expert Lecture/Seminar/Courses/Workshop Attended:

- Computer engineering department staff Prof. A. V. Taware attended Faculty Orientation Program on “Software Engineering” at Anantrao Pawar College of Engineering & Research, Parvati Pune in Association with SPPU on 14th February 2022. Same departmental staffs Y. B. Navale, M. C. Shewale, J. R. Rahatal and S. K. Ahire have

continued on page 5

attended “Virtual Interdisciplinary Employee Development Program” which was for supporting staff at Vishwkarma Institute of Information Technology, Kondhva (Bk) Pune from 8th to 12th February 2022.

- Electronics and Telecommunication Engineering Department staff Dr. S. S. Morade and Mrs. M. P. Joshi have attended Faculty Orientation Workshop on TE(E&TC) revised syllabus (2019 Course) on “Embedded Processors” from 31/01/2022 to 02/02/2022. Mr. R. R. Khinde and Mrs. R. V. Chothe have attended Faculty Orientation Workshop on TE(E&TC) revised syllabus (2019 Course) “Network Security” from 31/01/2022 to 2/2/2022.
- Information Technology Departmental staff Shilpa Mene had successfully completed 5 days AICTE Training and Learning (ATAL) Academy Online Elementary FDP on “Artificial Intelligence” from 21st to 25th February 2022 organized by Central University of Kerala.
- Artificial Intelligence & Data Science Department staff Prof. D. K. Sawant has attended Faculty Orientation Program on “Data structures & Algorithms Lab” at Dr. D. Y. Patil Institute of Engineering, Management & Research, Akurdi, Pune on 16th February 2022. Prof. Dr. D. D. Bage attended Faculty Orientation Program on “Internet of Things” at SNJB's Late Sau. K. B. Jain College of Engineering, Chandwad on 21st February 2022.

■ Training & Placement :

Name of Company	Branch	No.of students selected
R & D Therm India Pvt. Ltd.	Chemical Engg.	01
Adani Group	Civil Engg.	02
Jio, Mumbai	Information Technology	01
Capgemini	Production Engg.	04
Wipro	Production Engg.	01

■ Other Achievements

- Principal Dr. K. N. Nandurkar conducted online session on “Active Learning Techniques” during One week FDP on “Outcome based education” organized by Guru Govind Singh College of Engineering Nashik.
- Principal Dr. K. N. Nandurkar attended the RUSA program which was for Principal, IQAC coordinators at KTHM College Nashik. He also attended inaugural session of Nashik Chapter of Indo- American Chapter of Commerce at Hotel Marriott Nashik. Principal Dr. K. N. Nandurkar

and Dr P. K. Shahababkar also attended the Annual Day function of CII Nashik Zonal Council at Hotel BLVD Nashik on 25th February 2022.

■ Abstracts of papers presented during Feb. 2022 **Flexible Job Shop Scheduling for Press Working Industries with Operation Precedence Constraint**

Dr. P. J. Pawar

(Published paper in an International Journal 'Process Integration and Optimization Systems' by Springer)

Abstract: To remain sustainable, the press working industries must be energy efficient should ensure minimum material waste and should employ solutions for Industry 4.0 using artificial intelligent techniques. In this work, an attempt is therefore made to solve the real-life problem of press working industry which is related to flexible job shop scheduling problem considering sustainability aspect. This is done by minimizing the number of hours required to operate the system for a given lot size and thus making the overall system energy efficient. A mathematical model is developed considering waiting time on machines along with production time and setup time. To solve this model, discrete version of a one of the well-known meta-heuristics namely artificial bee colony algorithm has been employed. The results show that there is a significant saving in total time of 10.71% over that by existing practice of the particular industry. It also means that production machines will run 10.71% less for the given lot size resulting into saving of same amount of energy. Also due to material flow optimization, the energy consumed by material handling devices is also less.

■ Astronomical Image Colorization and up scaling with Generative Adversarial Networks

Mrs. Shreyas Kalvankar, Mr. Hrushikesh Pandit, Mr. Pranav Parwate, Mr. Atharva Patil & Dr. (Mrs.) Snehal Kamalapur

(Presented paper in international conference organized by Cornell University in association with IEEE)

Abstract: Automatic colorization of images without human intervention has been a subject of interest in the machine learning community for a brief period of time. Assigning color to an image is a highly ill-posed problem because of its innate nature of possessing very high degrees of freedom; given an image, there is often no single

continued on page 6



color-combination that is correct. Besides colorization, another problem in reconstruction of images is Single Image Super Resolution, which aims at transforming low resolution images to a higher resolution. This research aims to provide an automated approach for the problem by focusing on a very specific domain of images, namely astronomical images, and process them using Generative Adversarial Networks (GANs). We explore the usage of various models in two different color spaces, RGB and Lab. We use transferred learning owing to a small data set, using pre-trained ResNet-18 as a backbone, i.e. encoder for the U-net and fine-tune it further. The model produces visually appealing images which hallucinate high resolution, colorized data in these results which does not exist in the original image. We present our results by evaluating the GANs quantitatively using distance metrics such as L1 distance and L2 distance in each of the color spaces across all channels to provide a comparative analysis. We use Frechet inception distance (FID) to compare the distribution of the generated images with the distribution of the real image to assess the model's performance.

■ **Strength and toughness prediction of slurry in filtrated fibrous concrete using multi linear**

Mr. Ajay P. Shelorkar & Dr. Pradip D. Jadhao

(Presented paper in International conference on 08th February 2022)

Abstract: This paper aims to adapt Multilinear regression (MLR) to predict the strength and toughness of SIFCON containing various pozzolanic materials. Slurry Infiltrated Fibrous Concrete (SIFCON) is one of the most common terms used in concrete manufacturing, known for its benefits such as high ductility, toughness and high ultimate strength. Assessment of compressive strength (CS.), flexural strength (F.S.), splitting tensile strength (STS), dynamic elasticity modulus (DME) and impact energy (I.E.) using the experimental approach is too costly. It is time-consuming, and a slight error can lead to a repeat of the test and, to solve this, alternative methods are used to predict the strength and toughness properties of SIFCON. In the present study, the experimentally investigated SIFCON data about various mix proportions are used to

predict the strength and toughness properties using regression analysis-multilinear regression (MLR) models. The input parameters used in regression models are cement, fibre, fly ash, Metakaolin, fine aggregate, blast furnace slag, bottom ash, water-cement ratio, and the strength and toughness properties of SIFCON at 28 days is the output parameter. The models are developed and validated using data obtained from the experimental investigation. The investigations were done on 36 SIFCON mixes, and specimens were cast and tested after 28 days of curing. The MLR model yields correlation between predicted and actual values of the compressive strength (C.S.), flexural strength, splitting tensile strength, dynamic modulus of elasticity and impact energy. R-squared values for the relationship between observed and predicted compressive strength are 0.9548, flexural strength 0.9058, split tensile strength 0.9047, dynamic modulus of elasticity 0.8611 for impact energy 0.8366. This examination shows that the MLR model can predict the strength and toughness properties of SIFCON.

■ **Design of Circular Microstrip Antenna Using Python**

Mr. Shivam Gaikwad, Mr. Mandar P. Joshi & Mr. Jayant G. Joshi

(Presented paper in international conference organized by Cornell University in association with IEEE)

Abstract: The uses of artificial intelligence and data sciences are gaining popularity. The applications of artificial intelligent in antenna design are in demand to design futuristic antennas. This paper is an attempt to design and develop circular microstrip antenna using python. In this research work, designs equation of circular microstrip antenna is modeled using python and calculated radius of circular microstrip antenna have been simulated using CAD FEKO and IE3D antenna simulator for validation. Further, a sample of circular microstrip antenna have been fabricated and tested. The results of theoretical, simulated and fabricated antennas are presented and error analyses have been carried out.

Prof. Dr. K. N. Nandurkar
PRINCIPAL

