"MAFFICK 2024"

FECHINICAL NEWS LETTE

The annual social gathering "Maffick 2024" for A.Y.2023-24 of the institute was organized from 27th to 31th January 2024. Principal Dr. K. N. Nandurkar along with all Deans and HODs inaugurated "Maffick 2024" on 27th January 2024. The theme of Inauguration of Maffick 2024 Maffick for this year was



"Youthotsav". Various cultural events and activities were conducted during Maffick 2024. Different competitions like Rangoli, Poster and Sketching were organized on 27th January 2024. An Open Mic event (open stage activity) was organized inside the Institute open space area for all staff and students to showcase their various cultural talents like singing, poetry, mimicry, etc. On the second day, 29th January Group Day was celebrated by students and soft skill competitions like Elocution, Quiz and Debate were also organized. On the same day, lunch was organized for staff and students followed by a musical program of Marathi songs "Nakshatranche Dene" performed by a group of students. Traditional Day was celebrated on 29th January by students. A group of NSS volunteers presented a "Lezim" performance in the Institute campus before starting the culture program. Cultural programs like Singing, Drama, Dance, Fashion Show and Personality Contest were organized in Pendol on 30th and 31th January 2024. Through the Personality contests Miss K.K.Wagh Shrawani Shelke from FY Electrical and Mr. Atharva Jadhav from FY AIDS were declares as winners. Corporate Day / Saree Day were

celebrated by the students on 31th January

2024. The Prize Distribution ceremony of Maffick 2024 was held on 31th January 2024. A student of Computer Engineering, Miss. Sakshi Suresh Pawar was awarded with the Best Outgoing Student of the Institute for A.Y.2023-24. For gracing this ceremony, Mr. Prashant Khanolkar, General Manager (Pharmaceutical & Electronics), Ion Exchange India Ltd. of Chemical Engineering department-2003 batch of the institute was invited as Chief Guest. The officers from Epiroc Company were also present for this prize distribution function. A third-year topper student of Mechanical Engineering department, Ms. Sanika Khanderao Patil was felicitated by Epiroc Company with a prize of Rs.10,000/- and she was offered with job by this company.



Mr. Prashant Khanolkar guiding the students during Maffick-2024



"Nakshatranche Dene" program





Prize distribution of Maffick 2024

Memorial Lecture by Dr. Jagganath Dixit



Lecture by Dr. Jagganath Dixit



Lecture Iby Dr. Jagganath Dixit

Memorial Lecture by Dr. Jagganath Dixit was organized by our institute on 29th January 2024 at Kalidas Kalamandir Nashik. This was the 9th lecture in the series of lectures in memory of Late Balasaheb Wagh. He talked on how to maintain the weight and how to control obesity and how to control the sugar. He focused on to take the meal only two times and meal should be taken within the 55 minutes, otherwise the cholesterol will increase and because of it the diabetic happens. He gets felicitated by the hands of Trustee Smt. Shakuntalatai Wagh. President of this function was famous heart specialist Dr. Atul

Wadgaonkar. On this occasion Mr. Ajinkya Wagh, Principal Dr. K. N. Nandurkar, Principals, Heads of department and staff of various Colleges of K. K. Wagh Education Society and Nashik citizens were present.

NSS Special Winter Camp



Inauguration of NSS Camp

NSS special camp of A.Y. 2023-24 of the institute was organized from 21st January to 27th January 2024 at Mohgaon, Tal. Dist. Nashik. The inaugural function of the camp was organized on 21st January 2024. Mr. Shamrao Mogal (Progressive Farmer from Sukene, Tal. Niphad, Dist. Nashik) was the chief guest for this inaugural function. Mr. Ajiknkya Wagh (Secretary, SMILE and SPINACH), Prof. Dr. K. N. Nandurkar (Principal), Mrs. Surekha Tile (Sarpanch), other gram panchayat members and villagers were present for this inaugural function. Total 125 NSS volunteers participated in this camp. NSS volunteers organized Blood donation camp, Eye checkup camp, New voter registration drive, E-pikpahani drive, Ayushyaman Bharat card drive, ADHAR card camp, Tree plantation and Cleanliness drive during these seven days. They also organized various cultural and sports competitions for children and women of Mohgaon. Volunteers performed a parade and played Lezim on the occasion of republic day function on 26th January 2024 in Mohgaon. The expert talks of Mr. Somnath Tile, Mr. Sachin Giri, Mr. Rohit Jadhav, Mr. Mayur Tile and Dr. Purushottam Puri on various social, environmental and health related topics were organized during these seven days. The valedictory function of the camp was organized on 27thJanuary 2024. Mr. Ramdas Shelke (Senior PI, Nashik Road Police Station) was the chief guest for this valedictory function. This NSS special camp was successfully organized under the guidance of NSS programme officers Prof. Swanand Dongare and Prof. Rohit Bhaskar.

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■ Visit of Mr. Chandresh Mehta

Mr.Chandresh Mehta, Executive at Indo American Chamber of Commerce visited our institute on 6th January 2024. He appreciated the development of K. K. Wagh Education Society. He interacted to the staff of the institute on this occasion. He expressed the desire that K.K. Wagh Institute of Engineering Education and Research should participate of IACC in view of Internationalization of education.

Signing of MOU with MKCL



Signing of MOU

On 11th January 2024, MoU was signed with MKCL MD Ms. Veena Kamath in presence of Hon. Vivek Sawant and Hon. Chairman Shri. Sameer Wagh. On this occasion Principal Dr. K. N. Nandurkar, all Deans, Heads of department and ETT members were present.

Celebration of Republic Day



Flag Hoisting on Republic Day

Republic Day was celebrated on 26th January 2024 with full honor. On this occasion the Flag hoisting was done at the hands of Mr. Pankaj Jerajani, Trustee of Hirabai Haridas Trust. Also an inauguration of staff cricket match on ground was done. Principal Dr. K. N. Nandurkar, other Principals of this campus and staff were

present for the Flag hoisting.

Mr. Pankaj Jerajani expressed great satisfaction on behalf of Hirabai Haridas Trust about the progress made by K. K. Wagh Education Society, Nashik in providing high quality education for the students. After the flag hoisting, members offered garland to the statue of Smt. Hirabai Haridas in the campus.



Inauguration of Staff Cricket Match

Visit by CEO and senior staff of Pravara Rural Education Society, Loni at our Institute

CEO and senior staff of Pravara Rural Education Society, Loni visited our institute to study the implementation of Autonomy at our institute. On this occasion Principal Dr. K. N. Nandurkar felicitated to CEO and senior staff of PRECLoni. Principal Dr. K. N. Nandurkar, Dr. Sunil Kute (Dean, Academic), Dr. D. M. Chandwadkar (Dean, Student Affair) and Dr. Mrs. Preeti Bhamre (Dean Quality) gave their presentation. The Central Library, T&P department and AICTE Idea lab visited after the presentations. Members expressed their gratitude for sharing valuable inputs about autonomy process.

Felicitation Program of Class Owners / Teachers from Nashik

K. K. Wagh Education Society arranged felicitation of Ideal Teachers affiliated to Private Coaching Class Association of Nashik District (PCCDA) on 7th January 2024. Programme was chaired by Smt. Shakuntalatai Wagh, Trustee, K. K. Wagh Education Society, Nashik. The guest of Honour was Prof. Jayant Mule, President. PCCDA Nashik and Advisor Prof. Upadhye of PCCDA. Total 136 teachers from various private coaching classes registered for the program attended the function with their family members and The class owners and teachers associates. appreciated the development of K. K. Wagh Education Society. Hon Trustee Smt. Shakuntalatai Wagh felicitated the office bearers of the PCCDA. On this occasion teachers accepted their felicitation and thanked to the management for the same. Mr.Jayant Mule, President of PCCDA in his speech thanked the management of K. K. Wagh Education Society, Nashik for felicitating the teachers for their outstanding contribution. On behalf of PCCDA Mr. Jayant Mule felicitated Smt. Shakuntalatai Wagh by offering a Lord Vitthal idol along with shawl and bouquet. After the felicitation, members visited Dr. A.P.J. Abdul Kalam Career Development Center and Central Library. They continued on page 4



appreciated the efforts of management for providing the state of art facilities and support given to students so that they can excel in their studies.



Felicitation of Smt. Shakuntalatai Wagh by Prof. Jayant Mule



Teachers present for the programme

Felicitation of Dr. B. E. Kushare



Felicitation of Dr. Bansidhar E. Kushare

Dr. B. E. Kushare was felicitated on 27th January 2024 at the hands of Hon. Chairman Shri. Sameer Wagh on occasion of his leaving the institute after 34 years of service. On this occasion Principal Dr. K. N. Nandurkar, Dr. R. K. Munje, all Deans, Heads of department and staff of the institute were present. Dr. B. E. Kushare has

created long-lasting impact on the teaching fraternity of Savitribai Phule Pune University by serving as Chairman Board of Studies for almost 3 turns and solving problems of industry and society through industrial consultancy. He has guided and mentored numerous students. He has been a role model for many teachers. The institute wishes him a healthy and engaging life in future.

■ Sport Achievements



 Mr.Ameya Satish Khond (TE- Computer B-div) has been selected in Savitribai Phule Pune University(SPPU) 2023-24. He also received Silver Medal in Krida Mahotsav (Ashwamedh) and also participated in West Zone University Tournament held at Indore.

Mr.Ameya Khond



Ms. Vaibhavi Shinde of SY Electrical, has been selected in Savitribai Phule Pune University (SPPU) 2023-24. She also received Silver Medal in KridaMahotsav (Ashwamedh). She also Participation in

West Zone University Tournament held at Bhuvneshwar.

- Ms. Shruti Kolhe (TE- CSD) selected in Inter-University Chess Tournament that was held at Rajkot, Gujarat. She is Winner at West Zone Inter-University Tournament held at Mumbai. She also participated in All India Inter-University Tournament held at Rajkot, Gujarat.
- Ms. Tejaswini Batwal (BE- Civil) selected in All India Inter-University Cricket Tournament that was held at Avadhesh Pratapsingh University, Rewa, Rajasthan.
- Ms. Sadhana Dhondage (SE E &TC) selected in Inter-University Handball Tournament that was held at Rajasthan University on 19th to 23 st January 2023-24.

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■ Expert Lecture/Seminar/Courses/Workshop Organized:

- Dept. of Information Technology had organized a session on "Large Language Model" by Mr. Sanket Kandare, VP, Winjit Technologies, Nashik on 6th January 2024 and a session on "Navigating Your Future" by Miss. Sarika Tulsiani, Founder, C.A.W.S., Nashik on 19th January 2024.
- Department of Chemical Engineering organized an expert talk on "Project cost estimation for Chemical plant" by Mr. Makarand Soman from Nashik on 18th Jan. 2024.
- Visit by Ms. Poonam was organized to our institute for introduction of North Arizona University for aspiring students on 24th January 2024.

■ Congratulations !!

Prof. Anshul Jain (Faculty of Robotics and Automation department) has been awarded a Ph.D. in Mechanical Engineering by VNIT, Nagpur under the guidance of Dr. H. P. Jawale on 12th Jan. 2024. On his achievement, he was felicitated by the hands of Principal Dr. K. N. Nandurkar.



Felicitation of Prof. Anshul Jain

Visit of Alumni of Production Department



Visit by Alumni of Production Department

On 6th January 2024, Alumni of Production Engineering Mr. Devendra Chaudhary, Mr. Mahendra Dighe and Mr. Swapnil Pathak visited the institute. They met Principal Dr. K. N. Nandurkar and Head of Production Engineering department Dr. P. J. Pawar. They appreciated the development of the K. K. Wagh Education Society. Mr. Swapnil Pathak is staying in London and he invited the staff to come to London for conducting Alumni meet in near future.

Other Achievements:

- Principal Dr. K. N. Nandurkar, Prof. Dr Sunil Kute (Dean, Academic), Dr V. K. Patil and Prof. Dr. P. K. Shahabadkar (TPO) attended ICTIEE 2024 conference organized by IUCEE at KLE Tech University, Huballi during 2-4, January 2024.
- Principal Dr. K. N. Nandurkar and Prof. Dr. P. K. Shahabadkar (TPO) attended Nashik Run event at Mahatma Nagar ground organized by Nashik Run Trust in presence of many industrialist in Nashik.
- Principal Dr. K. N. Nandurkar, Prof. P. T. Kadve (Principal, K. K. Wagh Polytechnic) and Mr. Ajinkya Wagh (Director, Public Relation) attended cultural program on occasion of 110th Foundation Day of Town Planning and Valuation Department, Maharashtra State on our College Tennis ground.
- Principal Dr. K. N. Nandurkar, Prof. Dr. Sunil Kute, Dr. D. M. Chandwadkar and Dr. V. S. Mane attended Bhoomipoojan Program of International School Building at Kharghar on 17th January 2024. This is the first school to be established by K. K. Wagh Education Society outside the Nashik district. Main pooja was done by Mrs. & Mr. Sameer Wagh in presence of many dignitaries. All HODs, Senior staff attended the main program of Bhoomipoojan at Kharghar on 18th January 2024 in presence of Hon. Shri. Radhakrishna Vikhe Patil, Minister of Revenue of Maharashtra.
- Around 1000 students of our institute attended inauguration of YuvaMohotsava in presence of Hon. Prime MinisterShri. NarendraModi at Tapovan Ground, Nashik on 12th January 2024.
- Dr. Katale, Principal, St. Xavier's High School, Nashik Road visited our institute for interaction with Students.

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K.K. Wagh Institute of Engineering Education and Research, Nashik.



TECHNICAL NEWS LETTER: January - 2024

Abstracts of papers presented during January 2024 "Occupational Stress and Mental Health: A Longitudinal Study in High-Stress Professions"

Smita C. Pangarkar, SupriyaPaigude, Dr. Satish S Banait, Dr. Samir N. Ajani, Dr. Purva Mange (Published paper in South Eastern European Journal of Public Health (SEEJPH) Vol. No. XXI) Abstract: This long-term study looks at the complicated link between job stress and mental health in people who have high-stress jobs. The study takes a broad method to figure out how movement changes over time because it knows that work demands have a big effect on people's health and happiness. By carefully choosing high-stress fields like law enforcement, emergency services, and healthcare, the study aims to find the link between low-stress factors in these settings and long-lasting effects on mental health. Get both numeric and personal information This method not only finds similar sources of stress, like problems at work, disagreements with others, and difficult emotions like sadness, but it also looks at how people deal with these problems. The data should help us understand how complicatedly work-related stress and mental health are connected, and they might also shed light on possible ways to avoid stress and help people who are experiencing it. The talk will look at what works in high-stress jobs and make suggestions for changes to the workplace and programs to help with mental health. Even though the study has some flaws, it hopes to serve as a starting point for more research that aims to create healthier workplaces in high-stress fields.

Keywords: Occupational Stress, Mental Health, High-Stress Professions, Longitudinal Study.

Experimental Investigation of Heat Transfer and Pressure Drop Performance of a Circular Tube with Coiled Wire Inserts.

Arvind A Kapase, Vinod C. Shewale, Sanjay D. Barahate, Amol B. Kakade, Satish J. Suryawanshi

(Published paper in Engineering, Technology & Applied Science Research, Volume 14, No.1, 2024, 12512-12517)

Abstract: This paper evaluates the thermohydraulic performance of a coiled wire passive insert for internal turbulent flow through a circular copper tube test section in an in-tube

exchanger. Experiments were carried out using water as the working fluid with Reynolds number ranging from 8000 to 32000. The experimental setup was validated for Nusselt number and friction factor with well-established equations for plain tubes. The average Nusselt number ratios (Nua/Nup) and the friction factor ratios (fa/fp) for the augmented tube case over the plain tube case are reported to range from 1.55 to 1.38 and from 1.513 to1.583, respectively. The average performance ratios considering equal pumping power criteria are also reported and found in the range of 0.846 to 0.921. The study concludes that coiled wire inserts are suitable for heat transfer augmentation applications where pumping power is of minor concern.

Keywords: Passive Insert; Average Performance Ratio; Turbulent Flow

Analysis of Clusters with Indian Patent Data Using Different Word Embedding Techniques.

Pankaj Beldar, Mohansingh Pardeshi, Rahul Rakhade, Shilpa Mene

(Published paper in Heritage Research Journal, Volume 71, Issue 12, 2023, ISSN No.: 0474-9030)

Abstract: This study employs advanced Unsupervised Machine Learning (UML) techniques, including K-means and Agglomerative clustering, to analyze descriptive Indian Patent data. Utilizing silhouette score evaluation, elbow method, and dendrogram analysis, optimal cluster numbers are determined. Various word embedding methods like TF-IDF, Word2Vec,and Count vectorizer, combined with rigorous text processing, are explored. Robust testing of categorical and numerical features yields a high silhouette score of 0.8965 for 2 clusters, showcasing Agglomerative clustering's effectiveness. There search emphasizes the crucial role of UML techniques, word embedding methodologies, and comprehensive text processing in revealing complex structures within Indian Patent data. Besides advancing unsupervised learning methodologies, this work aids scholars, practitioners, and policymakers in comprehending the Indian patent landscape, fostering innovation, and technological progress.

Keywords: K-means, Agglomerative clustering, Word embedding, Patents, Silhouette Score

Prof. Dr. K. N. Nandurkar PRINCIPAL



