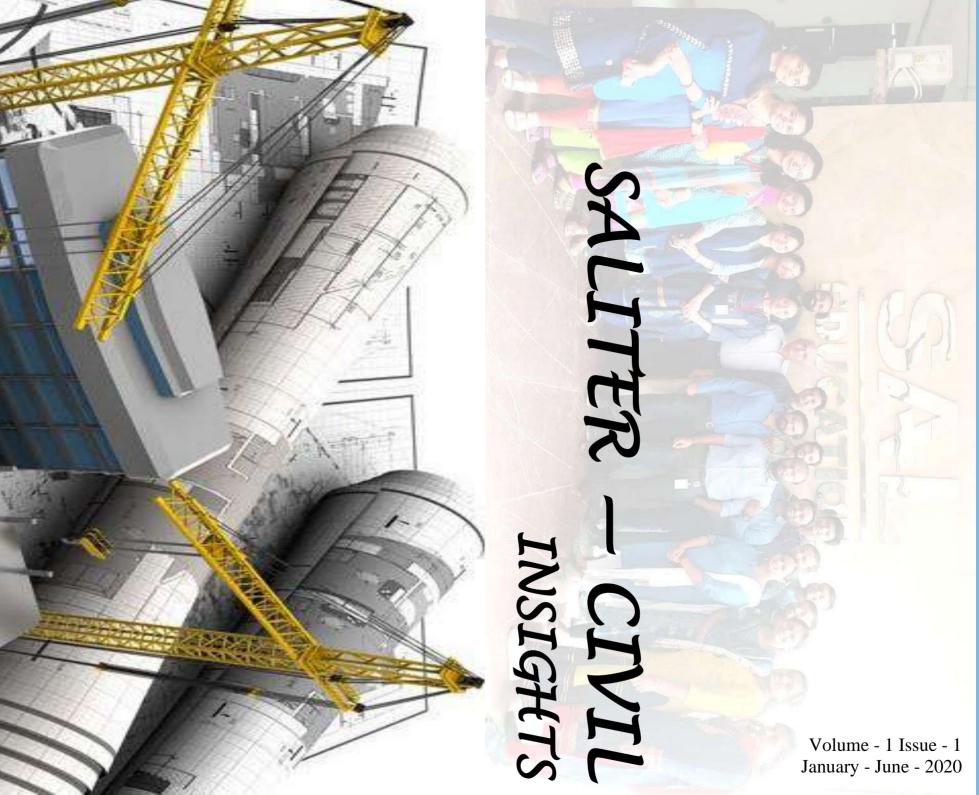
# SAL Institute of Technology & Engineering Research Opp. Science City, Sola Bhadaj Road, Ahmedabad - 380060



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# **Editorial Team**

Prof. V. G. Patel, H.O.D.
Prof. C. N. Patel
Prof. Bibhabasu Mohanty
Dr. Abhijitsinh Parmar

# From Director's Desk



I am pleased to congratulate Civil Department for issuing first issue of Departmental eNewsletter "SALITER-CIVIL INSIGHTS". Huge congrats to the editorial team. A wide number of readers are welcomed by the newsletter "SALITER-CIVIL INSIGHTS" perspectives from the Department of Civil Engineering. The faculty's job is to develop students' talents and skills for their future. Let this be a forum for professors and students to show their creative abilities and revolutionary ideas. The outside world will come to know about the achievements and extraordinary performances of the students and faculties through this online medium. My best wishes will always be with this type of good efforts of the Civil Department.

# Dr. Rupesh P. Vasani

Ph.D. Engg (WRM-Civil Engg), Ph.D. Mgt, Post Doctoral, Diploma in Bus. Entrepreneurship PGDIRPM, MBA

# Message from Head of Department



I hereby very much happy with the first issue of department newsletter "SALITER-CIVIL INSIGHTS" & congratulations indeed to editors team, faculties of Department & Students also. This will act as mirror of department & will provide the platform to appreciate faculties & students both for their extra ordinary achievements. Newsletter really show the talents of newcomers and I hope one enjoy reading about our success to become one of the best team.

Without conventional classroom teaching we are more focusing on lively & more interesting classroom by using models, animations & simulations with the PPT presentations and digital media which ultimately gives us higher university exam results. During the COVID – 19 pandemic time we have taken more than 200 very effective online lectures with live interaction with the students. Also, more focusing on practical teaching & laboratory work provides students sound technical knowhow with deep understanding of concept to built confidence cannot be denied. We are going through this motto to take department on new height with the support of Director Sir & Management as well.

Prof. V. G. Patel

Head, Dept of Civil Engg., SAL Inst. of Technology & Engg. Research

Summary of Departmental Activity (January – June, 2020)	
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# VISION OF CIVIL DEPARTMENT

To achieve *Excellence in Technology, Innovation and Research* in higher education of civil engineering in ethical way to Lead and Serve the Nation with integrity and credibility

# MISION OF CIVIL DEPARTMENT

- Create and develop sustained environment of learning.
- ♣ To produce high caliber and dynamic Civil Engineers with due consideration of Economy, Ecology and Ethical issues of nation.
- ♣ To provide highly competent Civil Engineers to society and construction industry.
- ♣ To assist in developing nation capabilities globally with respect to Science, Technology and Research.

# **PROGRAMME EDUCATIONAL OBJECTIVES**

- ♣ Graduates will able to apply fundamental principles of science, mathematics and engineering using modern tools to solve the societal and environmental problems.
- ♣ Graduates are able to use their practical, field survey, computer and analytic skills to build industry ready engineers to solve multi-disciplinary sustainable projects.
- ♣ Graduate applies innovative ideas to improve the technical competency in engineering decisions, lifelong learning, to equip leadership qualities in diverse teams, promote and practice appropriate ethical moral to become professional engineers.

# **Department Activities**



Prof. Bibhabasu Mohanty and Prof. Kunj Patel have coordinated two days national seminar on "Disasters and sustainable solutions" sponsored by GUJCOST, Govt. of Gujarat on 30<sup>th</sup> & 31<sup>st</sup> January, 2020. In which Prof. Dr. C. S. Sanghvi, Dr. V. M. Patel., Prof. Abhijitsinh Parmar and Dr. Dhruvesh Patel benefited more than 80 participants with their expert session. Prof. V.G. Patel and Chirag Patel were the convener of Seminar.

Prof. Jigar Zala and Dr. Abhijitsinh Parmar have coordinated 2 Days Workshop on the "Analysis & Design of RCC Structure Using Etabs & Safe" sponsored by 'Civil Career' a leading training institute in India for Structure Designing on dated 21st & 22nd February 2020.





Prof. Mittal Shah has organized one day Technical Visit for 6<sup>th</sup> semester students at Water Treatment Plant, Kotarpur on dated 8<sup>th</sup> February, 2020. Total 28 students participated in technical visit.

# **Department Activities**



Prof. Jigar Zala has coordinated one day visit for Seismological lab at Institute of Seismological Research, Gandhinagar on dated 19th February, 2020.

Prof. Jay Panchal, Prof. Deep Patel and Prof. Ankita Kapadia have coordinated three days Tachometry survey at Sardar Patel Social and Economic Research Institute, Thaltej on dated 12th to 14th January, 2020





Department of Civil Engineering, SALITER has organized an expert lecture session on "Illusion to Execution: Role of Civil Engineer insight a site" for the 8<sup>th</sup> Semester students on dated 13<sup>th</sup> February, 2020.

# **Departmental Events**













# Project Fair - 2020









Zeel Patel, Juhi Mehta, Krupa Acharya, Harsh Patel and Dhrasti Patel received 1st Rank in IDP Expo in Zonal Techfest-2020 hosted by SAL Education campus during 27-28 February, 2020.

# **Faculty Achievements**

- ➤ Prof. Abhijitsinh Parmar completed his Ph.D. in the domain of Earthquake Engineering from RK University.
- > Prof. Sejal Desai completed her Ph.D. from the Kadi University, Gandhinagar.
- ➤ Prof. Bibhabasu Mohanty has written reference book "Air Pollution and Control" by Mantech Publication. (ISBN NO. 978-81-941271-1-6) May 2020.
- ➤ Prof. Bibhabasu Mohanty has completed 8 weeks FDP certification course on "Plastic waste management" Jan- March 2020.
- ➤ Prof. Bibhabasu Mohanty, Prof. Hettal Tokle and Prof. Abhijitsinh Parmar were Gujarat Industrial Hackathon 2020 academic mentor by Govt. of Gujarat 27th -28th February 2020.

- ➤ Prof. Bibhabasu Mohanty has became reviewer in Scopus indexed international journal, Advances in Science, Technology and Engineering Systems Journal (ASTESJ) (ISSN: 2415-6698), Reviewer Code: AJR07439 from 24<sup>th</sup> March 2020.
- > Prof. Deep Patel has received "Professional Engineers (PE)" license from Institute of Engineers, India.
- ➤ Dr. Abhijitsinh Parmar has become certified reviewer in Publons Academy to a satisfactory level on the 20th of May 2020.

# Webinar Organized

- ➤ Dr. Abhijitsinh Parmar, Prof. Bibhabasu Mohanty and Prof. Mitul Patel have coordinated and delivered webinar session in one day webinar on "Recent Trends in Civil Engineering" organized by Department of Civil Engineering on date 31<sup>st</sup> May, 2020.
- ➤ Dr. Abhijitsinh Parmar has organized and delivered a session in 1 day webinar on "Basics of Earthquake Engineering" organized by Department of Civil Engineering, Sal Institute of Technology & Engineering Research on 21<sup>st</sup> April, 2020.
- ➤ Dr. Abhijitsinh Parmar has organized and delivered a session in 1 day webinar on "Seismic Hazard Analysis and Mitigation Techniques" organized by Department of Civil Engineering, Sal Institute of Technology & Engineering Research on 6<sup>th</sup> May, 2020.
- ➤ Dr. Abhijitsinh Parmar has organized and delivered a sessions in 3 days webinar on "Repair Strategies for Concrete Structures" organized by Department of Civil Engineering, Sal Institute of Technology & Engineering Research from 13<sup>th</sup> to 15<sup>th</sup> May, 2020.
- ➤ Dr. Abhijitsinh Parmar has organized and delivered a session in 1 day webinar on "R.C.C. Structure Detailing –Do's and Don'ts" organized by Department of Civil Engineering, Sal Institute of Technology & Engineering Research on 6<sup>th</sup> May, 2020.
- ➤ Prof. Bibhabasu Mohanty has organized and delivered a session in webinar "Bio-weapon: Impact on public health and environment" organized by department of civil engineering SAL Institute of Technology & Engineering Research on 10<sup>th</sup> May 2020.
- ➤ Prof. Bibhabasu Mohanty has organized and delivered a session in webinar "Wastewater irrigation and its impact on environment and human health" organized by department of civil engineering SAL Institute of Technology & Engineering Research on 31<sup>st</sup> May, 2020.
- ➤ Prof. Jay M Patel has organized 1 day Webinar on "Expert Session on Common Complaints at site and its remedies" for final and pre final year students by PROF. Himanshu Patel AGM

- of Nuvoco Vistas Corp. Limited, organized by Department of Civil Engineering on dated 16 May, 2020.
- ➤ Prof. Deep Patel has organized one day webinar on "Professional Practice after Civil Engineering" on date 11th April, 2020.
- ➤ Prof. Deep Patel has organized one day webinar on "Challenges in Tunneling & Their Solutions" on date 30th April, 2020.
- ➤ Prof. Deep Patel has organized one day webinar on "Project Dispute Avoidance & Mitigation Through Conciliation & Arbitration" on date 16th May, 2020
- ➤ Prof. Alpesh Adesara has coordinated Expert Talk on "Illusion to Execution: Role of Civil Engineer insight a site " delivered by Prof. Dipla Mehta, Construction Industry Interactive session organized for final 8th Semester Students by Department of Civil Engineering, SALITER on dated 13-Feb-2020.

# **Expert Talk Delivered**

- ➤ Dr. Abhijitsinh Parmar has delivered an expert talk on "Man-made Disasters and their preventive measures" in 2 days national seminar on "Disasters and their sustainable solutions" organized by Dept. of Civil Engg., SAL Institute of Technology and Engineering Research and Sponsored by GUJCOST on 3¹st January, 2020.
- ➤ Dr. Abhijitsinh Parmar has delivered an expert talk (Online) on "Basics of Earthquake Engineering" for Gokul Global University on dated 27<sup>th</sup> May, 2020.
- ➤ Prof. Deep Patel has delivered an expert talk (Online) on "Design of Thin White topping & It's Economic Analysis" for Patel Infrastructure Pvt. Ltd. on dated 22<sup>nd</sup> April, 2020.
- ➤ Prof. Deep Patel has delivered an expert talk (Online) on "Prioritizing Pavement Maintenance Using Rank Order Centroid Method & HDM- IV" for GMD Consultant on dated 28<sup>th</sup> June, 2020
- ➤ Prof. Deep Patel has published paper on "Development of Trip Generation Model for Apple Trips originating in J & K" in Journal of Emerging Technologies and Innovative Research.

# Paper Published/presented

➤ Dr. Abhijitsinh Parmar and Prof. Bibhabasu Mohanty have presented paper on "Effect on Mechanical properties of Geopolymer concrete by using Calcium Nitrate as a curing compound" in 2<sup>nd</sup> International Conference on "Sustainable Materials and Structures for Civil

- Infrastructures" organized by Rajiv Gandhi Proudyogiki Vishwavidyalaya, Bhopal on 22<sup>nd</sup> & 23<sup>rd</sup> June, 2020.
- ➤ Prof. Bibhabasu Mohanty has presented paper "Heavy metals in Soil and in Vegetation due to sewage-farming around Ahmedabad city of Gujarat", International Conference on Environmental, Agricultural, Chemical and Biological Sciences (ICEACBS 2020), January 24-25, 2020, Pondicherry Institute of Agricultural Sciences, and Pondicherry, India.
- ➤ Prof. Bibhabasu Mohanty has paper published "Energy self-sufficient for domestic wastewater treatment by using microbial fuel cell", Science, Technology and Development (STD), Volume IX Issue March 2020 (ISSN: 0950-0707).
- ➤ Prof. Bibhabasu Mohanty has paper published "Removal of color from domestic and industrial treated effluent by using aluminium sulphate as a coagulant and sodium hydrosulphite as reducing agent", Aegaeum Journal, Volume 8, Issue 3, March 2020.
- ➤ Prof. Chirag Patel has published paper on "Analysis and Design of Post Tension Beam using Adapt builder" in Journal of Interdisciplinary Cycle Research, Volume XII, Issue V, May 2020.

# Webinar Attended by Faculties

- ➤ Dr. Abhijitsinh Parmar has attended an International webinar on "Seismic Hazard Assessment" organized by INDIAN SOCIETY OF EARTHQUAKE TECHNOLOGY 27<sup>th</sup> May, 2020.
- ➤ Dr. Abhijitsinh Parmar and Prof. Kunj Patel have attended webinar on "Treated Waste Water Management" organized by L.D. College of Engineering, Ahmedabad on 16<sup>th</sup> May, 2020
- ➤ Dr. Abhijitsinh Parmar and Prof. Kunj Patel have attended webinar on "The Next Steps: Automation and Simulation" organized by L.D. College of Engineering, Ahmedabad on 17<sup>th</sup> May, 2020
- ➤ Dr. Abhijitsinh Parmar has attended webinar on "Construction of Reinforced Earth Structures and Road Safety Audit held" organized by Gujarat Power Engineering and Research Institute on Tuesday, 26 May 2020.
- ➤ Dr. Abhijitsinh Parmar has attended webinar on "Corona virus Lockdowns: Effects on Seismic noise and seismicity" organized by National Council for Science and Technology Communication, DST and GUJCOST on 14<sup>th</sup> May, 2020.

- ➤ Dr. Abhijitsinh Parmar has attended webinar on "Basics of M S Project and its application in construction industry" organized by Civil Engineering Department, Dr. S. & S. S. Ghandhy Government Engineering College, Surat on 28th May 2020.
- ➤ Prof. Bibhabsu Mohanty, Prof. Kunj Patel, Dr. Abhijitsinh Parmar, Prof. Alpesh Adesara, Prof. Jay Patel and Prof. Rinki Mishra have attended 12 days International webinar on 'Indo-China Research Webinar Series in Civil and Environmental Engineering' held during 8-19-May 2020, jointly initiated by faculties from Shantou University, China, Vardhaman College of Engineering, Hyderabad, Indian Geotechnical Society, Surat Chapter, and School of Civil Engineering Qingdao University of Technology, China.
- ➤ Prof. Bibhabsu Mohanty has attended Webinar on "Impact evaluation of road safety audit through benefit—cost analysis" on 6<sup>th</sup> May 2020.
- ➤ Prof. Bibhabsu Mohanty has attended Webinar on "Geosynthetics: An Advantageous Products in Civil Engineering" on 12<sup>th</sup> May 2020.
- ➤ Prof. Bibhabasu Mohanty has attended Webinar on "Science of Global Climate Change" Organized by the Civil Engineering Department, Dr. S. & S. S. Ghandhy Government Engineering College, Surat on 24<sup>th</sup> May 2020.
- ➤ Prof. Bibhabasu Mohanty has attended Webinar on "Webinar on Integarting Sustainbility in Professional Education: A tool for retaining Environmental Co-Benefits of Corona Epidemic" organized by Amity University, New Delhi 22<sup>nd</sup> May 2020.
- ➤ Prof. Bibhabasu Mohanty has attended Webinar on "Scenarios to counter plastics litter in river and marine environment by overcoming barriers and identifying enabling measures" organized by National Productivity Council, New Delhi 2<sup>2nd</sup> May 2020.
- ➤ Prof. Kunj Patel has attended Webinar on "Urban Water supply & sanitation in Indian" organized by L.D. College of Engineering, Ahmedabad on 14<sup>h</sup> May, 2020.
- ➤ Prof. Kunj Patel has attended Webinar on "Intellectual property of new India" on 13th foundation day of GTU on 16<sup>th</sup> May, 2020.
- ➤ Prof. Kunj Patel has attended Webinar on "Remote sensing in reservoir sedimentation through case studies" organized by L.D. College of Engineering, Ahmedabad on 15<sup>h</sup> May, 2020.
- ➤ Prof. Kunj Patel has attended Webinar on "Sustainable transport & safety" organized by L.D. College of Engineering, Ahmedabad on 13<sup>h</sup> May, 2020.
- ➤ Prof. Rinki Mishra has attended 3days webinar on "GIS and safety Remote Sensing" organized by ISTE Chapter,LD college of Engineering Ahmadabad from 13th May to 15th may 2020.

- ➤ Prof. Rinki Mishra has attended 3days webinar on "Sustainable transport and safety Prof" organized by ISTE chapter, LD college of Engineering Ahmedabad from 24th May to 26th may 2020.
- ➤ Prof. Rinki Mishra and Prof. Rekha Patel have attended 3days webinar on "Pavement Design and construction engineering organized by ISTE chapter, LD college of Engineering Ahmadabad from 27th May to 29th may 2020.
- ➤ Prof. Rinki Mishra and Prof. Rekha Patel have attended 3days webinar on "Integrated urban water management and modeling using DHI software organized by ISTE chapter, LD college of Engineering Ahmadabad from 26th May to 28th may 2020.
- ➤ Prof. Rinki Mishra and Prof. Rekha Patel have attended 1 days webinar on "Solid waste management pre/post covid organized by VGEC Ahmadabad from on 28th may 2020.
- ➤ Prof. Rinki Mishra and Prof. Rekha Patel have attended 5days webinar on organized by ISTE chapter, LD college of Engineering Ahmadabad from 22th May to 26th may 2020.
- ➤ Prof. Jay M. Patel has attended 1 day Interactive Webinar on "Basics of M S Project and its application in construction industry" organized by Civil Engineering Department, Dr. S. & S. S. Ghandhy Government Engineering College, Surat on 28th May 2020.
- ➤ Prof. Jay M. Patel and Dr. Abhijitsinh Parmar have attended 1 day Interactive Webinar on "Construction of Reinforced Earth Structures and Road Safety Audit" organized by Gujarat Power Engineering and Research Institute (GPERI) on 26th May 2020.
- ➤ Prof. Bibhabasu Mohanty, Prof. Kunj Patel, Prof. Mitul Patel, Prof. Jay Panhal and Prof. Jay M. Patel have attended 1 day Interactive Webinar on "RCC structure detailing Do's and Don'ts" organized by Department of Civil Engineering, Sal Institute of Technology & Engineering Researchon 24th May 2020.
- ▶ Prof. Jay M. Patel has attended 1 day Interactive Webinar on "One Day WEBINAR on Proposed Revision of IS 456:2000 Plain and Reinforced Concrete and IS 1343:2012 Prestressed Concrete - Codes" organized by members of code drafting group for IS 456 and IS 1343 and SEFI India on 14th May 2020.
- ➤ Prof. Jerome Jose has attended has attended webinar on "Common Complaints at Site and its Remedies" organized by NUVOCO on 16th May, 2020.
- ➤ Prof. Deep Patel has attended one day national webinar on "How to write research proposal & research article" organized by GEC Surat on 25<sup>th</sup> May 2020.
- ➤ Prof. Deep Patel has attended one day national webinar on "Basics of M S Project & its application in construction industry" organized by GEC Surat on 28<sup>th</sup> May 2020.
- ➤ Prof. Deep Patel has attended one day national webinar on "Flood Assessment of semi arid basin using DEM & 1-D Hydrodynamic model" organized by GEC Surat on 29<sup>th</sup> May 2020.

- ➤ Prof. Deep Patel has attended one day national webinar on "Introduction to MATLAB for Engineering Applications" organized by GEC Surat on 30<sup>th</sup> May 2020.
- ➤ Prof. Deep Patel has attended one day national webinar on "Multimodal Integration for Metro" organized by ICI-Nagpur on 8<sup>th</sup> June 2020.
- ➤ Prof. Jerome Jose has attended has attended webinar on "GeoStudio Fundamentals Series: SEEP/W Session 2" organized by GEOSLOPE on 3rd June, 2020
- ➤ Prof. Alpesh Adesara has attended 5 day International eFDP lecture series on "Research Methodology" organized by Rai University, Ahmedabad, from 23rd April to 27th April,2020
- ➤ Prof. Alpesh Adesara has attended 6 day National level eFDP on "Teaching in Uncertain Times :Opportunities and Challenges" organized by Babaria Education Campus, Baroda in association with GTU from 30th April to 5th May, 2020
- ➤ Prof. Alpesh Adesara has successfully attended National Level Quiz on topic "Concrete Technology" organized by Shri Chhatrapati Shivaji Raje College of Engineering, Pune, Mumbai on dated 11th May, 2020
- ➤ Prof. Alpesh Adesara has attended National Level webinar on "Online Learning and its Positive and Negative Impact on Future Generation Education" by ISM, Patna on dated 14th May, 2020
- ➤ Prof. Alpesh Adesara has attended National Webposium on "Traditional Aims of Education and Modern Technology: Paradox or Possibility" by KCMT Campus, Bareilly on 22nd May, 2020.
- ➤ Prof. Alpesh Adesara has successfully attended National Level Quiz on topic "Quantity Survey, Estimation and Valuation" organized by Shivajirao S. Jondhle College of Engineering, Thane, Mumbai from dated 20th May to 26th May, 2020
- ➤ Prof. Alpesh Adesara has attended State Level webinar on "Procurement of Large Infrastructure project" organized by Indus University, Ahmedabad on dated 24th May, 2020
- ➤ Prof. Alpesh Adesara has attended National Level webinar on "Construction of Reinforce Earth and Road Safety Audit" by GPERI, Mehsana on dated 26th May, 2020
- ➤ Prof. Alpesh Adesara has successfully attended National Level Quiz on topic "Design of Steel and RCC structures" organized by AISSMS Polytechnic, Pune, Mumbai on dated 29th May, 2020.
- ➤ Prof. Alpesh Adesara has attended 5 day International eFDP on "Infrastructure Development: Possibility and Challenges" organized by New Horizon Institute of Technology and Mgmt, Thane from 25th May to 29th May, 2020

- ➤ Prof. Alpesh Adesara has attended National Level Webinar on "Case study on Structural Engineering Challenge in a Large Scale Multi-Disciplinary Project" by GMB, Rajula in association with ISTE on dated 30th May, 2020
- ➤ Prof. Alpesh Adesara has attended National Level Webinar on "Master the Art of Dealing with Research Papers and Proposal" by LDCE Ahmedabad in association with ISTE on dated 23rd May, 2020
- ➤ Prof. Alpesh Adesara has attended National Level Webinar on "Grey Water Mgmt in Rural Area" by LDCE Ahmedabad in association with ISTE dated 24th May, 2020
- ➤ Prof. Alpesh Adesara has attended National Level Webinar on "RS,GIS and UAV for Water Resources Mgmt" by LDCE Ahmedabad in association with ISTE on dated 25th May, 2020
- ➤ Prof. Alpesh Adesara has attended National Level Webinar on "Self-Reliant India and IPR" by LDCE Ahmedabad in association with ISTE on dated 26th May, 2020
- ➤ Prof. Alpesh Adesara has attended National Level Webinar on "Basics of MS project and its Applications in Construction Industry" organized by Dr SS and S Ghandhy GEC Surat in association with Student Chapter IEI(I) on dated 28th May, 2020
- ➤ Prof. Alpesh Adesara has attended National Level Webinar on "Different Non-Destructive Techniques for Evaluation of Concrete Structures" organized by Wonder Cement Limited, Ahmedabad on dated 29th May, 2020
- ➤ Prof. Alpesh Adesara has attended National level webinar on topic "National Building with Rehabilitation of bridges and Construction Engineering for Cantilever bridges" organized by Indian Institute of Bridge Engineers on dated 29th May,2020
- ➤ Prof. Alpesh Adesara has attended National Level Webinar on "How to write a good Paper for Highly Effective Indexed International Journal" organized by Dr SS and S Ghandhy GEC Surat in association with Student Chapter IEI(I) on dated 1st June, 2020
- ➤ Prof. Alpesh Adesara has attended National Level Webinar on "Forensic Engineering" organized by PSR Engineering College, Tamilnadu on dated 1st June, 2020
- ➤ Prof. Alpesh Adesara has attended National Level Webinar on "Structural and Geo-Technical requirement for RCC building project" organized by Fatima Michel College of Engineering and Technology, Madurai on dated 3rd June, 2020
- ➤ Prof. Alpesh Adesara has attended state Level webinar on "BIM Applications in Construction Projects" by GMB,Rajul in association with ISTE a on dated 5th June, 2020
- ➤ Prof. Alpesh Adesara has attended National Level Webinar on "Career guidance and Competitive Skills in a Civil Engineering" organized by Dr SS and S Ghandhy GEC Surat in association with GTU on dated 6th June, 2020

- ➤ Prof. Alpesh Adesara has attended National Level Webinar on "Scope of civil Engineering in BIM" organized by Mohamed Sathak ,AJ college of Engineering, Chennai on dated 6th June, 2020
- ➤ Prof. Alpesh Adesara has attended National Level Webinar on "Low Carbon Building Material and Techniques to Optimize Carbon Emission "organized by Tamilnadu College of Engineering, Coimbatore, Tamilnadu, on dated 5th June, 2020
- ➤ Prof. Alpesh Adesara has successfully attended National Level Quiz on topic "Design of Steel Structures" organized by AISSMS Polytechnic, Mumbai on dated 6th June, 2020
- ➤ Prof. Alpesh Adesara has attended National Level Webinar on "Fantastic Mathematical Techniques to crack aptitude Exams" organized by Appejay Institute of Mgmt and Engineering, Jalandhar, Punjab, on dated 6th June, 2020
- ➤ Prof. Alpesh Adesara has successfully attended National Level Quiz on topic "CETQ-20" organized by Mohamad Sathak, AJ College of Engineering , Chennai on dated 8th June, 2020
- ➤ Prof. Alpesh Adesara has successfully attended National Level Quiz on topic "Structural Analysis organized by VKR, VNB, AGK College of Engineering , Andhra Pradesh from 8th June to 10th June, 2020
- ➤ Prof. Alpesh Adesara has successfully attended National Level Quiz on topic "Online Technical Quiz of Civil Engineering" organized by Gojan School of Business and Technology, Chennai on dated 9th June, 2020
- ➤ Prof. Alpesh Adesara has attended National Level Webinar e-talk on "Vastu Shasta in Modern Civil Engineering" jointly organized by ASCE, ACC Cement, ICI(I) Nagpur, KDK College of Engineering ,on dated 10th June, 2020
- ➤ Prof. Alpesh Adesara has attended National Level Webinar on "Recent Trends in Civil Engineering" organized by Raja balvansingh Engineering Technical Campus, Agra on dated 7th June, 2020
- ➤ Prof. Alpesh Adesara has attended National Level Webinar on "Challenges and Opportunities in Civil Engineering" organized by Vagheshwari college of engineering, karimnagar on dated 11th June, 2020
- ➤ Prof. Alpesh Adesara has successfully attended National Level E-Quiz on topic "Structure Analysis I" organized by Alard College of Engineering and Mgmt, Marunji, Pune on dated 11th June, 2020
- ➤ Prof. Alpesh Adesara has attended National Level Webinar on "Emerging Trends and Challenges in Construction projects" organized by Bapatala Engineering College, Andra Pradesh on dated 11th June, 2020

- ➤ Prof. Alpesh Adesara has attended National Level Webinar on "Smartening of Vandalized Structures" organized by SSM Institute of Engineering and Technology, Dindigul in association with Ultratech Cement on dated 12th June, 2020
- ➤ Prof. Alpesh Adesara has attended National Level Webinar on "The Bridges" organized by Mohamed Sathak AJ College of Engineering, Chennai in association with MHRD on dated 13th June, 2020
- ➤ Prof. Alpesh Adesara has attended National Level Webinar on "Concrete Making and Handling at Site- A Practical Approach" organized by St Joseph college of engineering, Chennai in association with ICI on dated 13th June, 2020
- ➤ Prof. Alpesh Adesara has attended National Level Webinar on "Recent Trends in Concrete Technology and Admixtures" organized by RajaLaxmi Engineering College, Chennai, on dated 13th June, 2020
- ➤ Prof. Alpesh Adesara has attended National Level Webinar on "Webinar on Civil Engineering Software" organized by Shri G S institute of Technology and Science, Indore(M.P.) on dated 13th June, 2020
- ➤ Prof. Alpesh Adesara has attended National Level Webinar on "Construction Mgmt Practices" organized by Civil Abhays Online Portal on dated 13th June, 2020
- ➤ Prof. Alpesh Adesara has successfully attended National Level E-Quiz on topic "Building Material and Constructions" organized by Sanjay Ghodavat University, Kolhapur from 14th June 16th June , 2020
- ➤ Prof. Alpesh Adesara has attended National Level Webinar e-talk on "Steel Structures : A limit state approach" jointly organized by ASCE, ACC Cement, ICI(I) Nagpur, KDK College of Engineering ,on dated 17th June, 2020
- ➤ Prof. Alpesh Adesara has successfully attended National Level E-Quiz on topic "Basics of Civil Engineering" organized by Vivekananda Institute of Technology, Jaipur from 11th June to 21st June, 2020
- ➤ Prof. Alpesh Adesara has attended National level webinar on topic "Challenges in Deep Underground Structures" organized by St. Joseph College of Engineering, Chennai on dated 20th June, 2020
- ➤ Prof. Alpesh Adesara has 3-Day National level webinar on topic "Soft Skill Development" organized by Shivajirao S. Jondhle College of Engineering, Thane, Mumbai on dated 13th June to 15th June, 2020
- ➤ Prof. Alpesh Adesara has attended 5 day International eFDP lecture series on "Advances in Civil and Structural Engineering" jointly organized by GET Karad and GEC Nagpur under TEQIP-3 from 15th June 19th June, 2020

- ➤ Prof. Alpesh Adesara has 3-Day online short term training program on topic "LaTeX for Everyone" organized by Ramrao Adik Institute of Technology, Navi Mumbai from dated 18th June to 20th June, 2020
- ➤ Prof. Alpesh Adesara has attended National Level Webinar e-talk on "Leadership for Project Managers in Difficult Times of COVID'19" jointly organized by ASCE, ACC Cement, ICI(I) Nagpur, KDK College of Engineering ,on dated 21th June, 2020
- ➤ Prof. Alpesh Adesara has successfully attended National Level E-Quiz on topic "Design of RCC structures" organized by KS Ramaswamy Collge of Technology, Tamilnadu on dated 24th June 2020
- ➤ Prof. Alpesh Adesara has attended National Level Webinar on "Fundamental of Cement Concrete" organized by PET Engineering College, Tamilnadu on dated 25th June, 2020
- ➤ Prof. Alpesh Adesara has attended International Level Webinar on "ASCE Infrastructure Report Card" organized by ASCE-ISWR in association with KDK College of Engineering, Nagpur on dated 25th June, 2020
- ➤ Prof. Alpesh Adesara has attended National Level Webinar on "IPR and E-Patent Filing" organized by Nagarjuna College of Engineering and Technology, Bengluru in association with Indian Concrete Institute dated 26th June, 2020
- ➤ Prof. Alpesh Adesara has attended National Level Webinar on "Urban Planning for smart cities: Smart tools and Measures" organized by GMR Institute of Technology, Andra Pradesh on dated 29th June, 2020
- ➤ Prof. Alpesh Adesara has attended National Level Webinar on "Techniques of Acquiring API Score and Submitting PBAS for University and College Teachers" organized by Lokmanya Mahavidhyalaya, Maharashtra on dated 24th June, 2020
- ➤ Prof. Hettal M. Tokle has attended 2 days National Seminar "Disaster Management and their sustainable solutions" sponsored by GUJCOST organized by Department of Civil Engineering on dated 30<sup>th</sup> & 31<sup>st</sup> January, 2020.
- ➤ Prof. Hettal Mahendrakumar Tokle has participated in the Webinar of 5-Days Webinar Series on "SUSTAINABLE TRANSPORT AND SAFETY" jointly organized by ISTE Chapter, LDCE & Civil Engineering Department, LDCE Ahmedabad on 13<sup>th</sup> May 2020.
- ➤ Prof. Hettal Mahendrakumar Tokle has participated in the Webinar of 5-Days Webinar Series on "URBAN WATER SUPPLY AND SANITATION IN INDIA:THE WAY FORWARD" jointly organized by ISTE Chapter, LDCE & Civil Engineering Department, LDCE Ahmedabad on 14<sup>th</sup> May 2020.
- ➤ Prof. Hettal Mahendrakumar Tokle has participated in the Webinar of 5-Days Webinar Series on "Remote Sensing in Reservoir Sedimentation through Case Studies" jointly

- organized by ISTE Chapter, LDCE & Civil Engineering Department, LDCE Ahmedabad on 15<sup>th</sup> May 2020.
- ➤ Prof. Hettal Mahendrakumar Tokle has participated in the Webinar of 5-Days Webinar Series on "The Next Steps: Automation and Simulation" jointly organized by ISTE Chapter, LDCE & Civil Engineering Department, LDCE Ahmedabad on 16<sup>th</sup> May 2020.
- ➤ Prof. Hettal Mahendrakumar Tokle has participated in the Webinar of 5-Days Webinar Series on "Treated Waste Water Management" jointly organized by ISTE Chapter, LDCE & Civil Engineering Department, LDCE Ahmedabad on 17<sup>th</sup> May 2020.
- ➤ Prof. Hettal Mahendrakumar Tokle has participated in the Webinar of the 5-Days Webinar Series on "Tune Your Brain" jointly organized by ISTE Chapter, LDCE & Civil Engineering Department, LDCE Ahmedabad on 22<sup>th</sup> May 2020.
- ➤ Prof. Hettal Mahendrakumar Tokle has participated in the Webinar of the 5-Days Webinar Series on "Master the Art of Dealing with Research Papers and Proposals" jointly organized by ISTE Chapter, LDCE & Civil Engineering Department, LDCE Ahmedabad on 23<sup>th</sup> May 2020.
- ➤ Prof. Hettal Mahendrakumar Tokle has participated in the Webinar of the 5-Days Webinar Series on "Grey Water Management in Rural Areas" jointly organized by ISTE Chapter, LDCE & Civil Engineering Department, LDCE Ahmedabad on 24<sup>th</sup> May 2020.
- ➤ Prof. Hettal Mahendrakumar Tokle has participated in the Webinar of the 5-Days Webinar Series on "Application of RS, GIS, and UAV for Water Resources Management" jointly organized by ISTE Chapter, LDCE & Civil Engineering Department, LDCE Ahmedabad on 25<sup>th</sup> May 2020.
- ➤ Prof. Hettal Mahendrakumar Tokle has participated in the Webinar of the 5-Days Webinar Series on "Self-Reliant India and IPR" jointly organized by ISTE Chapter, LDCE & Civil Engineering Department, LDCE Ahmedabad on 26<sup>th</sup> May 2020.
- ➤ Prof. Hettal Mahendrakumar Tokle has participated in the Webinar of Three Days National Webinar Series on "Pavement Design and Construction Engineering" on "Specifications for Flexible Pavement Construction as per Ministry of Road Transport and Highways (MoRTH)" jointly organized by ISTE Chapter, LDCE & PG-Transportation Engg., Civil Engineering Department, LDCE, Ahmedabad on 28<sup>th</sup> may, 2020.
- ➤ Prof. Hettal Mahendrakumar Tokle has participated in the Webinar of Three Days National Webinar Series on "Pavement Design and Construction Engineering" on "BITUMINOUS MIX DESIGN" jointly organized by ISTE Chapter, LDCE & PG-Transportation Engg., Civil Engineering Department, LDCE, Ahmedabad on 28<sup>th</sup> may, 2020.
- ➤ Prof. Hettal Mahendrakumar Tokle has participated in the Webinar of Three Days National Webinar Series on "Integrated Urban Water Management & Modelling using software

- MIKE powered by DHI" on "Specifications for Flexible Pavement Construction as per Ministry of Road Transport and Highways (MoRTH)" jointly organized by ISTE Chapter, PG- WRE, Civil Engineering Department, LDCE, Ahmedabad on 28<sup>th</sup> may, 2020.
- ➤ Prof. Hettal Mahendrakumar Tokle has participated in Interactive Webinar on "PRE ENGINEERED BUILDINGS Evolution & Advantages" Organized by Department of Civil Engineering-IGBC Student chapter held on 29<sup>th</sup> May 2020.
- ➤ Prof. Hettal Mahendrakumar Tokle has participated in the Interactive Webinar on "Solid Waste Management : Pre & Post COVID" organized by Civil Engineering Department, VGEC Chandkheda on date 28<sup>th</sup> may 2020.
- ➤ Prof. Hettal Mahendrakumar Tokle has participated in the Interactive Webinar on "Environmental Impact of Cement and Potential Viable Solutions" organized by Civil Engineering Department, VGEC Chandkheda on date 29<sup>th</sup> may 2020.
- ➤ Prof. Hettal Mahendrakumar Tokle has participated in Interactive Webinar on "3 Rs: Repair, Retrofitting & Rehabilitation" Organized by Civil Engineering Department, Dr. S. & S. Ghandhy College of Engg. & Tech., Surat on 30<sup>th</sup> May 2020.
- ➤ Prof. Hettal Mahendrakumar Tokle has participated in the International webinar on "Five essential elements of science & technology (Panchtatvam)" Organized by Shri Satsangi Saketdham "Ram Ashram" Group of Institutions, Vadasma, on 23<sup>rd</sup> May 2020.
- ➤ Prof. Hettal Mahendrakumar Tokle has participated in the Interactive Webinar on "Opportunities of Civil engineers in the field of interior work" organized by Civil Engineering Department Sir Bhavsinhji Polytechnic Institute-Bhavnagar on date 25<sup>th</sup> May 2020.
- ➤ Prof. Hettal Mahnedrakumar Tokle has attended webinar on "Resources Used In Construction Industries" organized by Civil Engineering Department Sir Bhavsinhji Polytechnic Institute-Bhavnagar on date 26<sup>th</sup> may 2020.
- ➤ Prof. Hettal Mahendrakumar Tokle has participated in the Interactive Webinar on "An Introduction to Methods and Software's Used In Traffic Engineering And Transportation Planning" organized by Civil Engineering Department Sir Bhavsinhji Polytechnic Institute-Bhavnagar on date 2<sup>nd</sup> June 2020.
- ➤ Prof. Hettal Mahendrakumar Tokle has participated in the Interactive Webinar on "Application of GEO Spatial Techniques for the Preparation of Village Development Plan-A Case Study" organized by Civil Engineering Department Sir Bhavsinhji Polytechnic Institute-Bhavnagar on date 3<sup>rd</sup> June 2020.
- ➤ Prof. Hettal Mahendrakumar Tokle has participated in the Interactive Webinar on "Geography and geometry: Digital tools for civil engineers" organized by Civil

- Engineering Department Sir Bhavsinhji Polytechnic Institute-Bhavnagar on date <sup>4th</sup> June 2020.
- ➤ Prof. Hettal Mahendrakumar Tokle has participated in the Interactive Webinar on "Optimization of Reservoir Operation using JAYA Algorithm" delivered by Dr. S. S. Arkatkar (Associate Professor, CED, SVNIT, Surat) Organized by Civil Engineering Department, Dr. S. & S. Ghandhy Government Engineering College, Surat under Students' Chapter of Institution of Engineers (I) on 19th June 2020.
- ➤ Prof. Ankita Kapadia has attended 5 days webinar series organized by LDCE from 22 May to 26 May under ISTE chapter.
- ➤ Prof. Ankita Kapadia has attended 3 days webinar series on Integreted urban water management and modelling using software MIKE powered by DHI organized by LDCE from 26 May to 28 May under ISTE chapter.
- ➤ Prof. Ankita Kapadia has attended one day webinar on The next steps: Automation and simulation organized by LDCE under ISTE chapter on 16 May
- ➤ Prof. Ankita Kapadia has attended one day webinar on Remote sensing in Reservoir sedimentation through case studies, organized by LDCE under ISTE chapter on 15 May.
- ➤ Prof. Ankita Kapadia has attended one day webinar on Future trends in AI to be, organized by GTU on 20 may.
- ➤ Prof. Ankita Kapadia has attended one day webinar on Ancient Indian Technology in present Era organized by GTU on 21 May.
- ➤ Prof. Ankita Kapadia has attended one day webinar on Digital Transformation Fundamental organized by GTU on 29 May.
- ➤ Prof. Ankita Kapadia has attended 5 days webinar series on Recent Advances in civil engineering organized by Dr. S & S.S.Ghandhy Government engg college ,Surat under ISTE chapter from 17 June to 21 June
- ➤ Prof. Ankita Kapadia has attended one day webinar on Project Management organized by Dr. S&S.S. Ghandhy Government Engg college, Surat on 16 June.
- ➤ Prof. Ankita Kapadia has attended one day webinar on Optimization of reservoir operating using JAYA Algorithm under Directorate of Technical Education, Government of Gujarat, Gandhinagar on 11 may.
- ➤ Prof. Ankita Kapadia has attended one day international webinar on Waste to energy concepts and its Role in Waste Diversion organized by Hindustan college of engineering and technology, Coimbatore on 19 June.
- ➤ Prof. Ankita Kapadia has attended one day webinar on Road Safety consideration for Indian Traffic condition organized by Nalla Narsimha Reddy Education society's group of Institutes, Hyderabad on 18 July.

- ➤ Prof. Bibhabasu Mohanty, Prof. Mitul Patel, Prof. Hiren Patel and Prof. Kunj Patel have attended 1 day webinar on "Basics of Earthquake Engineering" organized by Department of Civil Engineering, Sal Institute of Technology & Engineering Research on 21<sup>st</sup> April, 2020.
- ➤ Prof. Bibhabasu Mohanty, Prof. Mitul Patel, Prof. Hiren Patel and Prof. Kunj Patel have attended 1 day webinar on "Seismic Hazard Analysis and Mitigation Techniques" organized by Department of Civil Engineering, Sal Institute of Technology & Engineering Research on 6<sup>th</sup> May, 2020.
- ➤ Prof. Bibhabasu Mohanty, Prof. Mitul Patel, Prof. Hiren Patel and Prof. Kunj Patel have attended 3 days webinar on "Repair Strategies for Concrete Structures" organized by Department of Civil Engineering, Sal Institute of Technology & Engineering Research from 13<sup>th</sup> to 15<sup>th</sup> May, 2020.
- ➤ Prof. Bibhabasu Mohanty, Prof. Mitul Patel, Prof. Hiren Patel and Prof. Kunj Patel have attended 1 day webinar on "R.C.C. Structure Detailing –Do's and Don'ts" organized by Department of Civil Engineering, Sal Institute of Technology & Engineering Research on 6<sup>th</sup> May, 2020.
- Prof. Jigar Zala has attended 1 day webinar on "Advanced Technique for Monitoring Real-Time Cast-in-Situ Concrete Strength" organized by Civil Engineering Department, Dr. S. & S. S. Ghandhy Government Engineering College, Surat, on 15<sup>th</sup> June 2020.
- ➤ Prof. Jigar Zala has attended 1 day webinar on "Stability Assessment and Role of NDT" organized by Civil Engineering Department, Dr. S. & S. S. Ghandhy Government Engineering College, Surat, on 13<sup>th</sup> June 2020.
- ➤ Prof. Jigar Zala has attended 1 day webinar on "Recent Advances in Structural Engineering" organized by Civil Engineering Department, Dr. S. & S. S. Ghandhy Government Engineering College, Surat, on 12<sup>th</sup> June 2020.
- ➤ Prof. Jigar Zala has attended 1 day webinar on "Advanced Post Tensioning System for Building Construction" organized by Civil Engineering Department, Dr. S. & S. S. Ghandhy Government Engineering College, Surat, on 8<sup>th</sup> June 2020.
- ➤ Prof. Jigar Zala has attended 1 day webinar on "Role of NDT in Rehabilitation of Concrete Structures" organized by Civil Engineering Department, Babaria Institute of Technology, Varnama, Vadodara, on15<sup>th</sup> May 2020.
- ➤ Prof. Jigar Zala has attended 1-day National webinar on "Intellectual Property for New India" organized by GTU on 16<sup>th</sup> May 2020.
- ➤ Prof. Jigar Zala has attended 1 day webinar on "Advanced Technique on Monitoring Real Time Cast-in-situ Concrete Strength" organized by BITS Innovation Centre, Babaria Institute of Technology, BITS Edu Campus, on 14<sup>th</sup> May 2020.

- ➤ Prof. Jigar Zala has attended 1 day webinar on "Concrete a 360 degree view from quality prospective in Maha metro" organized by ACC on 14<sup>th</sup> May 2020.
- ➤ Prof. Jigar Zala has attended 1 day webinar on "BIM" organized by Civil Engineering Department, Babaria Institute of Technology, Varnama, Vadodara, on 6<sup>th</sup> May 2020.
- ➤ Prof. Jigar Zala has attended 1 day webinar on "Common Complaints at Site and Its Remedies" organized by Nuvovo held on 16<sup>th</sup> May 2020.
- ➤ Prof. Chirag Patel has attended webinar on "3D Modelling" organized Civil Engineering Department of SAL college of Engineering on 20 May 2020.
- ➤ Prof. Chirag Patel has attended Seminar on "WORLD ENGINEERING DAY CELEBRATION" on 4th march 2020 at SAL Education Campus
- ➤ Prof. Chirag Patel has attended webinar on "Intellectual Property for New India" on 16th May 2020 organized by GTU.
- ➤ Prof. Chirag Patel has attended webinar on "Common Complaints Problems at sites and it's Remedies" organized by Civil Engineering Department of SAL Institute of Technology at 16th May, 2020.

## STUDENTS PAPER

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Energy self-sufficient for domestic wastewater treatment by using microbial fuel cell

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### Abstract:

Developing countries such as India's growth depends on the energy generation needed for industrial and agricultural sectors, and on the energy-use efficiency of their processes. It is now a major concern of policymakers and academics in the current energy crisis to look for alternative and sustainable energy sources for the future. Fuel cell systems provide dual purpose solutions for generating electricity and treating wastewater. A microbial fuel cell (MFC) is an advance tool to compete with high-cost and pollution-generating systems with three-dimensional problems of fossil fuel-based energy production. It is an emerging wastewater treatment technology which produces energy. It has the ability to use wastewater for microorganisms as a feed substrate and to produce bio-electricity. MFCs may also be used in carbon capture, bioremediation, biosensing, processing of bio-hydrogen, and desalination. A microbial fuel cell (MFC) is a system that converts the chemical energy produced as a result of the oxidation of complex organic carbon sources that micro-organisms use as substrates to produce electrical energy and thus proves to be an effective means of renewable energy production. The electrons released due to the microbial metabolism are captured to maintain a constant density of electricity, without an efficient environment carbon emission. Key Words: Microbial, Fuel cell, Energy production, Sustainable, Wastewater,

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Removal of color from domestic and industrial treated effluent by using aluminium sulphate as a coagulant and sodium hydrosulphite as reducing agent

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### Abstract

In industrial wastewater, advanced color removal treatment such as chemical coagulation can be used as a pre-treatment to improve wastewater biodegradability during biological treatment. Chemically enhanced wastewater treatment attracts significant interest in wastewater treatment among the processes currently employed by the chemical units. Coagulation-flocculation has received considerable attention for producing high removal of pollutants, especially color removal. This work introduces a novel method of coagulation / flocculation for the removal of color from domestic and industrial wastewater and shows its efficacy. Results show the novel formulation can effectively extract color content from wastewater. Via flocculation / coagulation treatment the treated waste water eliminated color by using Alum as a coagulant and Sodium hydrosulphite as a reduction agent. The present research was conducted with Alum as coagulant using jar testing apparatus. Alum was used to increase flock size at various pH levels and with different chemical doses. The residual color, as well as pH of water was measured after the process. The findings showed a substantial improvement in color removal at an ideal 8.5 alkaline pH and an optimum 600 mg / 1 dosage.

Key Words: Fabrication, Urbanization, Coagulation/flocculation, Biodegradability, Industrial effluents

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