

Report on Presented paper at National Conference (ETCE-2015)

A national Conference on “Emerging Trends in Civil Engineering- 2015” was organised by Sakalchand Patel College of Engineering (SPCE), Visnagar during 30th & 31st March 2015. I have presented two papers at national conference. The abstracts of both papers are written below. I have attended second day i.e. 31st March 2015. The key note expert was Dr. D. P. Patel, H.O.D. Saffrony Institute of Technology Mehsana. He has given lecture on Hydrological domain and also on the use of Literature Review in writing research papers. The session was also chair by him accompanied by co-chair Prof. Y.S. Patel, H.O.D., SPCE, Visnagar. The session was followed by presentation of about 11 research papers. Post lunch, research papers belonging to domain of structural engineering was presented. Nearly 14 papers were presented in that session. Dr. P.J. Patel has delivered expert lecture and he was the chair person for that session. I am thankful to my college management authority and principal madam (Dr. Ami H. Shah) for giving me the opportunity to write and present paper. I am always indebted to them as this opportunity is being given to me second time to present paper at conference.

1. Paper 1: Paper ID:- ETCE- 15-6007

Title:- IRRIGATION AND FLOODING MANAGEMENT USING SOFT COMPUTING TECHNIQUES

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Abstract: Soft-Computing techniques can be used to control real time operation of dam/spillway gates of a reservoir during high inflow or flood. Floods during monsoon can be used for optimization of Irrigation methods and flood control has to be account too. It is used to increase crop production to satisfy increasing need of increasing population. Dam control system takes information about water level, gate opening ratios, gate operation as parameters and controls spillway in case of flooding. In this paper a new advanced

method is proposed to control reservoir. The method is based on fuzzy rule based control and iterative algorithms for solving hard combinatorial optimization problems such as algorithm for simulated evolution. The proposed system is more reliable and efficient over existing systems.

2. Paper 2: Paper ID:- ETCE- 15-6013

Title:- WATER DISTRIBUTION NETWORK RE-DESIGN FOR SVNIT SURAT CAMPUS

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Abstract: Main objective of study is designing and evaluating the water distribution network due to revision in water demands at SVNIT Surat's campus. SVNIT's water distribution work has been chosen to help for further designing of an optimum pipe network that will be capable of satisfying the future water requirements. In performing the complete work, Arc-GIS 4.2 was used to identify the locations, element and joints while WaterGems software has been used in order to attain perfection in every aspect of the work. The water demands increased significantly due to new constructions to meet the needs of increasing population in the campus.. Different kinds of pipes available in the market and their cost are referred from standard manual issued by government of Gujarat. Paper presents an output which is good, economical and well optimized in all aspects of a good water distribution network. The total study area has been divided into four different zones Academic, Residential, Administrative and Other zones to simplify the work. The two categories of network are Gravity network and Pressurized Network. The total network is divided into two categories based upon the fundamental whether the required head is more or less than the available head. The optimization of distribution network is done using WaterGems. The total cost of the water distribution network has been calculated.

PHOTO GALLERY



PICTURE 1: During Presentation



PICTURE 2: During Conference

