Sr. No.	Name of the teacher	Title of the book/chapters published	Title of the paper	Title of the proceedings of the conference	Name of the conference	National / International	Year of publication	ISBN number of the proceeding	Affiliating Institute at the time of publication	Name of the publisher
1	Dr. Vishal Janardan Suryavanshi	Handbook of Algal Biofuels: Aspects of Cultivation, Conversion and Biorefinery	Photosynthetic microalgal microbial fuel cells and its future upscaling aspects https://doi.org/10.1016/C2020-0-00532-3				2021	978-0-12-823764-9	Dr. Harisingh Gour Central University, Sagar, M.P.	Elsevier
2	Mrs.Puja S.Gurav		A Review on Different Regeneration and RangeExtension Systems for Electric Vehicle	National Conference on Emerging Trends in Engineering & Technology (NCETET-2023) Bharati Vidyapeeth's College of Engineering, Kolhapur Date: 31* March 2023 ISBN: 978-93-91535-44-5	National Conference on Emerging Trends in Engineering & Technology (NCETET-2023) Bharati Vidyapeeth's College of Engineering, Kolhapur Date: 31* March 2023 ISBN: 978-93-91535-44-5	National	2023	978-93-91535-44-5	Engineering & Technology (NCETET-2023) Bharati Vidyapeeth's College of Engineering, Kolhapur Date: 31* March 2023	Engineering & Technology (NCETET-2023) Bharati Vidyapeeth's College of Engineering, Kolhapur Date: 31* March 2023
3	Mrs.Trupti S. Shirdhone		Analysis of model based shadow detection & removal in color images	Inventive Systems and Control (ICISC), 2019 Third International Conference	Inventive system & control	International	2019	ISBN:978-1-5386-3950-4		Institute of Electrical and Electronics Engineers (IEEE)
4	Prof R.S.Powar		System Reliability-Redundancy Optimization with High Level of Subsystems	System Reliability-Redundancy Optimization with High Level of Subsystems			26-27 th August 2022			
5			Effect of Human and Organizational Factors on Reliability and Maintainability of CNC Turning Center	Effect of Human and Organizational Factors on Reliability and Maintainability of CNC Turning Center			43556	ISSN 2195-4356		
6	Mr. Rajendra S. Panditrao	Advertising and Sales Management (Marketing Specialization) ISBN No.978-93-5480-177-8					2022	978-93-5480-177-8	Shivaji University	Thakur Publication Pvt.Ltd., Pune

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7	Mr. Rajendra S. Panditrao		"Role of RSETI in Rural Development with special reference to Kolhapur District" in International conference on Global Business Transformation – Leveraging Technology organized by Mount Carmel College Bengluru 560 052	"Role of RSETI in Rural Development with special reference to Kolhapur District" in International conference on Global Business Transformation – Leveraging Technology organized by Mount Carmel College Bengluru 560 053	MCC Bengluru 560052 Online	International	2022		Mount carmell cpllege,autonomous	University of central oklahoma
8	Mr. Rajendra S. Panditrao		with special reference to Kolhapur Distric	International Conference on Global Business Change and Transformation E-Summit GBCTS 2021" Organized by SIIMS Pollachi Coimbatore.	SIIMS Pollachi Coimbatore.	International	2021			
9	Ms. Gunali Dinesh Diwan	Impact of Demonetisation on Education Sector in India	Presented during international conference at CSIBER	Impact of Demonetisation on Education Sector in India			2019			
10	Dr. Swati M. Patil		Best Presentation Award: 3 rd INTERNATIONAL Conference on Advances in Science, Engeering & Management (ICASEM-2022) Venue: Hyderabad, Telangana.	3 RD INTERNATIONAL Conference on Advances in Science, Engeering & Management (ICASEM-2022)	Hyderabad,Telangana		2022			

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CHAPTER

16

Photosynthetic microalgal microbial fuel cells and its future upscaling aspects

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16.1 Introduction

With an increase in globalization and industrialization, recent studies show that electricity production by solar panels, wind power, and hydropower stations faces challenges to fulfill the current demand for electricity by electric vehicles (EVs) [1]. However, lithium ion (Li^+) batteries, which are an alternative solution to conventional power storage for EVs are not feasible in many countries where neither Li^+ reserves nor Li^+ manufacturing industries exist [2–4]. Hence there is need for a stable and renewable energy source for the production of electricity [5]. Even though EVs run by electricity and are superior to gasoline in having zero carbon emissions [6], a discontinuity in electricity supply may switch them back to gasoline vehicles, hence not only a continuous and reasonable electricity supply but also gasoline and biofuel with a zero-carbon footprint is the need of an hour [7]. A lot of research has been done on alternative sources to generate electricity and gasoline reservoirs to run hybrid electric vehicles which operate by both electricity and gasoline. Such renewable resources should have the following attributes: readily available, abundant, feasible, economical, and have zero carbon emissions [8,9]. A report from the International Energy Agency shows that biofuels from renewable energy resources

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produce 10% of the world's total primary energy compared to 2.4% from water and 1.1% from sun and wind [10]. Biofuel from algae are supposed to have zero carbon emissions [11]. They are promising candidates as they are readily available and abundantly found compared to nonrenewable energy resources.

Of the different approaches employed to harvest energy, the microbial fuel cell (MFC) is one such technique that not only produces bioelectricity but also acts as a synergistic approach to harvest metabolites from microalgae by simultaneously recycling wastewater. MFC are thus very advantageous bioelectrochemical devices which have their anode and cathode chamber separated by a proton exchange membrane. They produce electricity and degrade microbes at the anode while reducing oxygen at the cathode [12,13]. This method of producing electricity is not only cost-effective but also completely carbon-neutral [1]. The growth of microorganisms in a MFC depends mainly on the anolyte and type of substrate characteristics [14,15]. Generally, energy produced by mixed microbial cultures is higher than by one pure culture but exceptions also exist for example, *Rhodopseudomonas palustris* DX-1 generates higher power in pure culture than mixed and this increases with increasing light intensity, whereas *R. palustris* ATCC 17001 does not produce power [16]. The highest power densities obtained are with *Shewanella oneidensis*, *Escherichia coli* (acclimated, nonmediated), *E. coli K12* at 3000, 600, and 760 mWm^{-2}, respectively [17]. Another very interesting aspect of MFC is the use of wastewater rich in microbes as anolyte. This not only helps in treating wastewater for its recycling on agricultural crops but is also beneficial because of no energy requirement and high output [18,19]. Further it has been confirmed that MFC using microalgae have higher power densities compared to MFC employing other substrates [20]. Such redox reactions that are carried out by algae or cyanobacteria as substrates are known as algal microbial fuel cells (AMFC) [21].

In AMFC, microalgae can be used either in living form or as dry powder at the anode with wastewater as anolyte to produce power [22]. At the anode, microalgal biomass (dead algae) serves as a substrate for bacteria which degrades biochemical metabolites like carbohydrates and protein to produce electrons [23–26]. In a single-chamber MFC, *Chlorella vulgaris* while utilizing dead microalgae powder produced a power density of 980 mWm^{-2}, whereas with *Ulva lactuca* it produced 760 mWm^{-2} [26]. The biomass dry powder of other microalgae, such as *Scenedesmus*, also served as a feedstock for MFC. This feedstock results in instant electricity generation due to the excessive amount of fatty acids. The cell voltage enhancement from 258 ± 74 to 584 ± 18 mV was observed with a chemical oxygen demand (COD) of 147 ± 18 and 353 ± 15 mg/L, respectively, using *Scenedesmus* powder as a substrate. However, coulombic efficiency was in the range of 3.5%–6.3% for the substrate of 400–2500 mg COD L^{-1} of *Scenedesmus* powder [23]. This is much less than that produced using *C. vulgaris* (about 10%–28%) and macroalgae *U. lactuca* powder as MFC feedstock [26].

However, the major drawback of AMFC is that since it uses dried algal powder as a bacterial substrate, the algae needs pretreatment such as thermal treatment and ultrasonication etc. [27]. This is necessary since wastewater sludge rich in electricity producing bacteria can't feed directly on algal powder due to the thick cell wall of algal cells. Therefore pretreatment is a must for the algal cells to be digested by microbes. Also the power density of nontreated algal biomass is less compared to pretreated algae, as seen in *Laminaria*

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A Review on Different Regeneration and RangeExtension Systems for Electric Vehicle

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Abstract

Once the public discusses electric vehicles, two questions inevitably arise: how far can it travel between charges and how fast can it travel. Both of these issues are related in part to the amount of electrical energy stored and the efficiency with which electrical energy is converted to mechanical energy. One of the most significant challenges for battery electric vehicles (BEVs) is their limited range and higher price when compared to conventionally powered vehicles. Many electric vehicle drivers have been observed using only 10-20% of the vehicle's range before recharging. The desire to avoid running out of energy and having to return to a charging station drives drivers to be extremely cautious. One solution is to outfit the vehicle with an auxiliary power supply that will recharge the batteries. Batteries in Electric Vehicle has a fairly limited driving range per charging and takes a long time to charge. Electric vehicles (EVs) are efficient, cheap and produce fewer emissions than internal combustion engines (ICEs) in use today. However, they lackgood range because the current charging infrastructure does not allow it. Many people view electric vehicles as a gimmick rather than a true daily commute due to their limited range. In Electric vehicle, batteries shape the number one energy storage. Sometimes to be had strength from battery won't be enough to satisfy high load demands. To overcome these problem different system are available. This paper examines systems based on various parameters to improve the range of EV. Improved Storage Technology, Improvement in the Motor, Contactless Power Transfer etc. these methods are reviewed. To tackle these issues, solutions that can significantly expand their range are discussed. Keywords- Battery, Super capacitor, Electric Vehicle (EV)

I INTRODUCTION

The current range of EVs covers in average 80- 90 % of most people's needs in most countries. However the most common explanation of not buying an EV is that the rangeisn't sufficient[1]. However, riding variety of EVs is a whole lot shorter than traditional vehicles. The longer riding variety is needed to disseminate[2]. Theoretically speaking, an ideal EV can get 150- 200 miles on a single charge, but practically speaking, there aren't enough charging stations compared to gas stations. This makes EVs less reliable and less convenient

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CERTIFICATE

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Paper ID : ICISC 141

Dear Author

It is our pleasure to inform you that our Conference Committee has accepted your refereed research paper for the oral presentation at **3rd International Conference on Inventive Systems and Control [ICISC 2019]** being held on 10-11 January 2019 at JCT College of Engineering and Technology, Coimbatore, Tamil Nadu, India.

The main theme of 3rd International Conference on Inventive Systems and Control [ICISC 2019] is facilitating, fostering and harnessing the recent innovations in the area of smart systems and control techniques to meet the key challenges of the rapidly developing smart society.

The deadline of the full paper submission is 03 Jan 2018 Papers meeting the IEEE standards are set forth to publish in the conference proceedings and will be recommended for publication in IEEE Xplore Digital Library. All the conference participants are expected to pay the registration fee according to the conference policy.

We are looking forward for your participation in 3rd International Conference on Inventive Systems and Control [ICISC 2019] at JCT College of Engineering and technology to give an oral presentation on your potential research work.

Sincerely,

P. Pitchandi

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System Reliability-Redundancy optimization with High-Level of subsystems

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ABSTRACT

High systems' reliability is crucial in competitive industrial plants. System Reliability-Redundancy Allocation (RRA) is an essential design consideration for maximizing the overall systems' reliability under various systems' constraints. This paper addresses the system RRAP problem by investigating two effective nature-inspired optimization techniques, namely Particle Swarm Optimization (PSO) and Grey Wolf Optimizer (GWO), implemented with penalty functions. Their capability in solving the RRA problem is evaluated regarding a system consisting of fifteen subsystems connected in series. Results show that the PSO is a better approach to solving this problem than the GWO.

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1. Introduction

System Reliability-Redundancy Allocation (RRA) is an essential design consideration for system designers [1,2]. The system is usually made up of several subsystems, each of which is made up of several components that are coupled in such a way that the overall system achieves a specific level of reliability [3]. Under various system constraints (e.g., volume, weight, cost, etc.), RRA aims to optimally allocate redundancy and reliability (i.e., decision variables) to the components of each subsystem (i.e., redundancy and reliability allocation problem, respectively) to ultimately achieve a high overall system reliability value [2]. Thus, the RRA is mathematically formulated as an NP-hard optimization problem that necessitates sophisticated solution approaches (such as those built based on the evolutionary computation methods) capable of optimizing overall system reliability while fulfilling all system constraints [2,4,5].

For example, a novel BAT-SSOA3 algorithm based on a combination of a novel small-sampling tri-objective orthogonal array (SS3OA), new simplified swarm optimization (SSO), and the binary-addition-tree algorithm (BAT) has been proposed to solve general RRA problems [6]; a novel solution based on the popular non-dominated sorting genetic algorithm-III (NSGA-III) has been proposed to solve many-objective optimization RRA problems [7]; a Random Walk Gray Wolf Optimizer (RW-GWO) [8] and the Brain Storm Optimization algorithm in Objective Space (BSO-OS) [9] have been proposed to solve the typical RRA problems. In [5], a new Simplified Swarm Optimization (SSO) with a penalty function has been proposed to solve bi-objection active RRAP problems, whereas an improved Particle Swarm Optimization (PSO) algorithm has been proposed to solve RRA problem in various system configurations [10]. In [11], a hybrid PSO and Grey Wolf Optimization (GWO) has been proposed to solve some RRA problems.

The present work aims to address the RRA problem for a system consisting of fifteen subsystems connected in series. Two effective nature-inspired optimization techniques are implemented with penalty functions, namely the Particle Swarm Optimization (PSO) [12] and the Grey Wolf Optimizer (GWO) [13], and their application results are compared. The RRA problem of this work involves XX decision variables.

The remaining of this paper is organized as follows: Section II formulates the problem under study; Section III illustrates the

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techniques employed for the RRA problem; Section IV presents and discusses the application results. Finally, Section V concludes the paper.

2. Problem formulation

The problem consists of a system involving fifteen subsystems connected in series (see Fig. 1).

In [14–17], the authors worked on this problem by considering the Redundancy Allocation (RA) optimization problem. This paper addresses the Reliability-Redundancy Allocation (RRA) optimization. Therefore, the problem can be written as follows:

$$\text{Maximize} R_s(r,n) = \prod_{i=1}^{15}[1-(1-r_i)^{n_i}] \quad (1)$$

subject to:

$$g_1(r,n) = \sum_{i=1}^{15} c_i n_i \le C \quad (2)$$

$$g_2(r,n) = \sum_{i=1}^{15} w_i n_i \le W \quad (3)$$

$$0.5 \le r_i \le r_{i,max}, 1 \le n_i \le 10, n_i \in Z^+; i = 1,2,\cdots,15$$

where R_s is the system reliability, r_i is the reliability of the redundant component at subsystem i, n_i is the number of redundant components to add at subsystem i, c_i is the cost of a redundant component at subsystem i, w_i is the weight of a redundant component at subsystem i. C and W are the cost and weight resource limits, respectively.

3. Solution approaches

In order to find the best system configuration, two strong optimization techniques are implemented, namely the particle swarm optimization and the grey wolf optimizer.

3.1. Particle swarm optimization (PSO)

PSO is a nature-inspired optimization algorithm inspired by the moving principles of swarms in nature, such as birds and fishes. The position and velocity of the particles of the swarm update the solutions during iterations. More details on PSO can be found in [18–20]. Algorithm 1 illustrates the pseudo-code of the implemented PSO [19].

Algorithm 1 (*Pseudo-code of the implemented PSO*).

Initialization;
While number of iterations not reached.
  Objective function evaluation;
  Constraint handling using penalty function;
  Velocity of each particle;
  Best particle;
  Update positions;
End while.
Display the results.

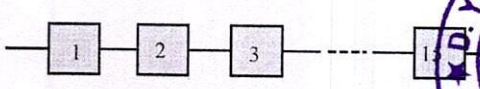

Fig. 1. Series system with fifteensubsystems.

3.2. Grey wolf optimizer (GWO)

GWO is a nature-inspired optimization algorithm inspired by the lifestyle of the grey wolf. This species mainly lives in four hierarchies. Hunting principles are the inspiration of this algorithm. Details on GWO can be found in [13,19,21]. Algorithm 2 illustrates the pseudo-code of the implemented GWO [19].

Algorithm 2 (*Pseudo-code of the implemented GWO.*).

Initialize the gray wolf population;
Calculate the suitability of each research agent;
Best search agent;
Second best search agent;
Third best search agent;
While number of iterations not reached.
For each search agent.
  Update current search agent position;
End for.
Updates;
Calculate the suitability of each research agent;
Constraint handling using penalty functions;
Updates;
End while.
Display the results.

4. Results and discussion

The date considered for the system is reported in Table 1. The cost and weight are in arbitrary units. The PSO and GWO have been implemented using MATLAB 2019a and run on a PC (I5-7300U vPro 7th Generation, 2.7 GHz, 8 GB of RAM). The population size and the maximum number of iterations are 100 and 200, respectively. Each algorithm has been run over ten independent runs

The system reliability, required number of function evaluations, and CPU time of each run are reported in Table 2.

From Table 2, it can be observed that the best system reliability value obtained by the PSO is at run#7 (R_s = 0.93319) with NFE = 18600 and CPU = 1.2353 s, whereas those obtained by the GWO was at run#1 (R_s = 0.92901) with NFE = 20000, and CPU = 0.5917 s. The statistical comparison, including the optimal component reliabilities and redundancies are reported in Table 3.

It can be observed that PSO provided better system reliability, required fewer number of function evaluation. Moreover, PSO has less standard deviation than GWO (6.1629E-04 and 5.9928E-03, respectively). GWO consumed less CPU time. It can be concluded that PSO has outperformed GWO. Fig. 2 illustrated the convergence of both algorithms.

5. Conclusion

In this paper, the reliability-redundancy allocation problem of a high-level series system involving fifteen subsystems has been addressed. Two strong nature-inspired optimization techniques, namely the particle swarm optimization (PSO) and the grey wolf optimizer (GWO) have been implemented with penalty functions. The results obtained show that the PSO is a better solution approach to solve this problem than the GWO. Future works will be devoted to the development of a hybrid approach for more efficiency.

Table 1
Data of the system.

Subsystem i	c_i	w_i	$[r_{i,min}, r_{i,max}]$	C	W
1	5	8	[0.5,0.80]	400	414
2	4	9	[0.5,0.75]		
3	9	6	[0.5,0.65]		
4	7	7	[0.5,0.80]		
5	7	8	[0.5,0.85]		
6	5	8	[0.5,0.83]		
7	6	9	[0.5,0.78]		
8	9	6	[0.5,0.66]		
9	4	7	[0.5,0.78]		
10	5	8	[0.5,0.90]		
11	6	9	[0.5,0.79]		
12	7	7	[0.5,0.77]		
13	9	6	[0.5,0.70]		
14	8	5	[0.5,0.79]		
15	6	7	[0.5,0.67]		

Table 2
Results obtained over ten independent runs.

Run #	R_s		NFE ($x10^4$)		CPU (s)	
	PSO	GWO	PSO	GWO	PSO	GWO
1	0.93069	0.92901	1.97	2	1.1978	0.5917
2	0.93248	0.92084	1.82	1.99	1.1254	0.2266
3	0.93244	0.92190	1.98	1.98	1.1644	0.2150
4	0.93248	0.92027	1.97	1.99	1.1825	0.2245
5	0.93224	0.91254	1.98	1.99	1.3034	0.2298
6	0.93248	0.92806	1.95	1.99	1.3256	0.2283
7	0.93319	0.92732	1.86	2	1.2353	0.2247
8	0.93280	0.91103	1.93	1.95	1.2630	0.2041
9	0.93246	0.9222	1.99	1.99	1.2048	0.2362
10	0.93212	0.92755	1.86	1.99	1.3170	0.2178

Table 3
Statistical Comparison.

r	n	R_s	NFE	CPU	σ
PSO					
(0.8, 0.749998, 0.649996, 0.8, 0.849996, 0.829999, 0.779999, 0.659997, 0.779998, 0.899999, 0.789999, 0.769999, 0.699998, 0.789999, 0.669999)	(3, 4, 6, 3, 3, 3, 3, 5, 4, 3, 3, 4, 5, 4, 5)	0.93319	$1.86x10^4$	1.235	$6.1629x10^{-4}$
GWO					
(0.797501, 0.748950, 0.65, 0.791910, 0.85, 0.83, 0.78, 0.658206, 0.78, 0.897605, 0.79, 0.77, 0.698285, 0.79, 0.668822)	(4, 4, 5, 4, 3, 3, 3, 5, 4, 3, 3, 4, 4, 3, 5)	0.92901	$2x10^4$	0.592	$5.9928x10^{-3}$

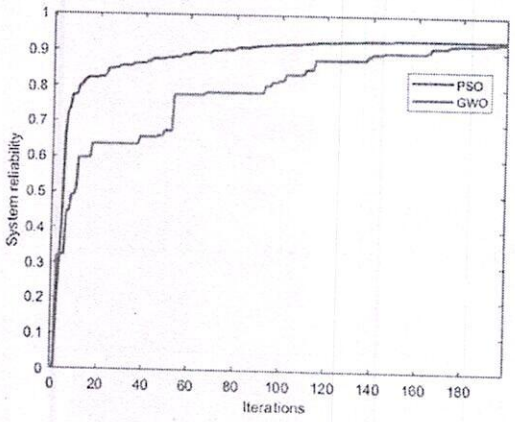

Fig. 2. Convergence of both algorithm.

Data availability

The data that has been used is confidential.

Declaration of Competing Interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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Effects of Human and Organizational Factors on the Reliability and Maintainability of CNC Turning Center

Rajkumar B. Patil, Basavraj S. Kothavale and Rajendra S. Powar

Abstract Human and Organizational Factors (HOFs) play an important role in the safe, reliable, and maintainable operation of the CNC turning center (CNCTC). Several human performance influencing factors (PIFs) and organizational factors (OFs) influence the human reliability. In this paper, some human PIFs and OFs which may affect the human reliability during maintenance phase are defined and considered for the prioritization according to their criticality using the expert judgments. It is observed that experience is the most important human performance influencing factor (PIF) and safety culture is the most critical organizational factor (OF) affecting the human reliability. The time-between-failure (TBF) and time-to-repair (TTR) data significantly influenced by HOFs are analyzed using the techniques of reliability and maintainability, and the results of the analysis are compared with those of the TBF and TTR data which are not significantly affected by HOFs. The field failure and repair data were sorted considering the influence of hardware, software, and HOFs using expert judgments and outcomes of reliability and maintainability analysis. It has been observed that 16.33% of the total failures and 15.49% of total repairs are significantly influenced by HOFs. Nearly 66% of the total failures and repairs are due to hardware system. The reliability and maintainability of the CNCTC are greatly influenced by HOFs. The HOFs can reduce the expected life of the components or sub-systems of the CNCTC by 33%.

Keywords Human and organizational factors · Human reliability · Maintainability analysis · Performance influencing factors · Reliability analysis

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Reliability, Safety and Hazard Assessment for Risk-Based Technologies

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About the Book

This book of ***"Advertising and Sales Management"*** provides comprehensive information about various concepts of advertising and sales management, etc. It describes the fundamental aspects of advertising, sales force management and SCM. The book is enriched with exercises, cases and model paper to make students understand the text easily and effectively. This book is a valuable for students, teachers, and others interested in learning concepts of sales and advertising.

About the Author

Mr. Uday V. Hiremath has **13 years'** experience in teaching to undergraduates and post graduate students of rural and urban area. His academic qualifications are **M.A., R.B.A.**(Econ.), **M.B.A., M. Phil.** also his **Ph.D** is registered. He is currently working as **Assistant Professor** in **ATS, Sanjay Bhokare Group of Institutes, Faculty of Management, Miraj** Dist.- Sangli (Maharashtra). He has 3 years industrial experience with national and multinational brands. He taught the syllabus of Guru Jambheshwar University, Hissar (Haryana), Maharshi Dayanand University, Rohtak (Haryana). He worked in Delhi NCR. He also taught the syllabi of Delhi University, Delhi. At present he is teaching major subject of Marketing Management of Shivaji University, Kolhapur. He attended and organised many SDP, FDP, MDP as well as STTP under the area of management. He presented articles and research papers in many conferences, seminars, workshops etc. He published 16 National and 5 International level research papers. One of the article entitled "Digitalisation in Rural Entrepreneurship: A Paradigm Shift" get the international recognition by IA digital library which is in California in US. The research work stored for the farther study on rural entrepreneurs. He worked with Shivaji University as Paper setter, Examiner, Moderator, CAP Director, Exam Co-ordinator, Internal as well as External senior supervisor, also worked on grievance redressal committee of Shivaji University, Kolhapur. He also guide the youths who are the part of Yuva Sanskar Varg run by JVM, NGO, Mumbai.

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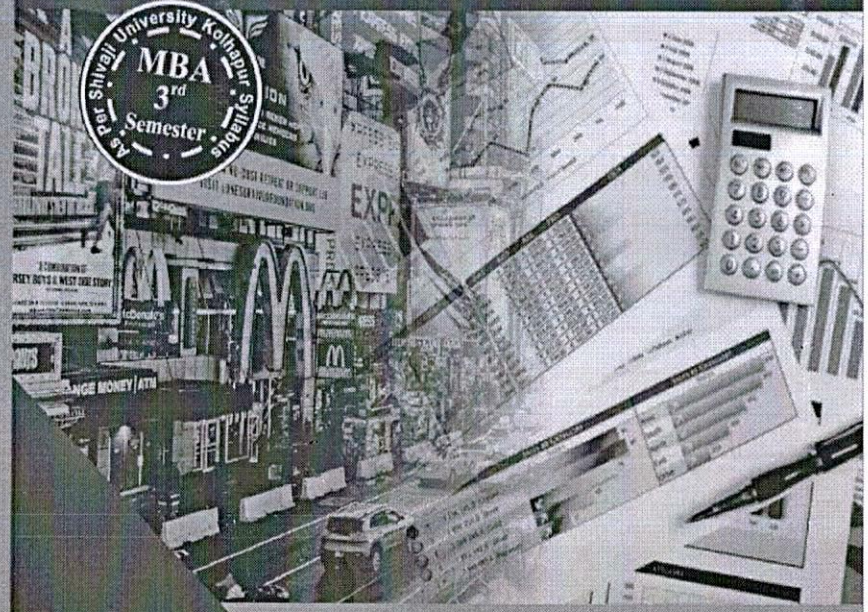

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Mr. Uday V. Hiremath
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"A role of RSETI in rural development – Comparative study of Kolhapur and Nanded District"

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Abstract:

This study reviews the role of RSETI in Rural Development in Kolhapur and Nanded District. Researcher has focused on SHG members for this study. The objective of the study is to study the Entrepreneurship skills provided by RSETI as well as Impact of Entrepreneurship skill on SHG group under RSETI Training in Kolhapur and Nanded District. Rural Self Employment Training Institute (RSETI) is a replicated model of Rural Development and Self Employment Training Institute (RUDSETI) and a unique initiative which not only imparts training to the rural youths for different economic activities but also extends supports to beneficiaries to settle through self-employment by providing credit linkage to the beneficiaries. RSETI Institutions designed as to ensure necessary skill training and skill up gradation of the rural BPL youth to mitigate the unemployment problem. The SHGs plays a major part in achieving a sustaining livelihood by easing the rural women to enter into entrepreneurial conditioning. Globally, it's slowly proving one of the most effective strategies to neutralize poverty.

Keywords: RSETI, Entrepreneurship Skills, SHG, RUDSETI.

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A ROLE OF RSETI IN RURAL DEVELOPMENT WITH SPECIAL REFERENCE TO KOLHAPUR DISTRICT

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A STUDY OF GREEN MARKETING AWARENESS IN SELECTED AUTOMOBILE COMPANIES AND ITS IMPACT ON THE CONSUMER BUYING BEHAVIOUR

Mr. Rajendra S. Panditrao

Assistant Professor

D.Y.Patil Technical Campus, Talsande Kolhapur

Abstract :

This study reviews the Green marketing practices of automobile industries in Kolhapur District. The objective of the study is to find out Green Marketing awareness in selected automobile companies and its impact on consumers in Kolhapur. Research study was carried out to understand the awareness, attitude and behavior of consumers in terms of environment more specifically related to automobile sectors in Kolhapur. Vehicular Pollution is one of the biggest threats to human life as it creates air pollution and this pollution exists at that level from where humans use air to breath. Rapid increase of passenger cars and commercial vehicles are one of the main reasons of air pollution in the environment. Green Marketing is the marketing of products that are presumed to be environmentally safe. It includes a wide range of activities i.e. Product modification, changes in the production processes, modification of the advertising messages, etc.

Keywords : Green Marketing strategies, Consumer awareness, Buying behavior, Automobile industries.

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Unearthing Leadership

A study of Impact of Demonetisation on Educational Sector in India

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Abstract:

On 8th November 2016, Indian Prime Minister Mr. Narendra Modi announced that the notes of Rs.500 &Rs.1000 would no longer be recognized legally as currency. Demonetisation is the act of stripping currency units of its status as legal tender. The demonetisation had a great significant and immediate impact of the state of Indian economy. For a common man demonetisation means the change in old currency or the conversion of old notes into new notes and denominations.

Demonetisation had significant impact on various sectors of the Indian economy. One of these sectors is education sector. This paper is a review of the impacts of demonetisation on educational sector.

- **Introduction:**

The demonetisation had a great significant and immediate impact on the state of Indian economy. Demonetisation for us means that Reserve Bank of India has withdrawn the old Rs.500 & Rs.1000 notes from the circulation and has come up with the new notes as an official mode of payment. A common man has taken demonetisation as just a change in the currency of Rs.500 & Rs.1000 notes. The 'demon' in demonetisation is in the beginning. Any government withdraws the legal tender rights of any denomination of currency, it is known as demonetisation. On November 8, 2016 Indian Prime Minister Mr. Narendra Modi announced that notes of Rs.500 & Rs.1000 would no longer be recognized legally as currency.

Demonetisation is the act of stripping a currency units of its status as legal tender. The government believes that this demonetisation is required for the reasons like:

a) For stopping the funding of terrorism
b) For facing the problem of fake currency

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A Study of Normality Distribution of Quality of Work-Life & Work Life Balance of Employees in Foundry Units in Kolhapur District, Maharashtra

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Abstract
The economic, social, and cultural development of any country mostly depends on human resources it has. The 21st century most of the business houses understand that their distinctive competencies depend not in particular products or technologies but in distinctive expertise, skills and knowledge pool of their people. According to Arthur Lewis "there is big contrast in development between countries with approximately the same resources. Therefore, it is necessary to find difference in human behavior." Though the countries are endowed with same level of natural resources like natural, international aid and technological etc. Countries development largely depends upon. The availability of effective human resources, as well as their dedication, is critical to a country's growth. Human resources, not technical, economic, or social issues, cause the majority of difficulties in any business. When individuals labour to the best of their ability and with zeal, excitement and dedication to the company skyrocket. In actuality, every group has about the same resources to work with, such as supplies, equipment, cash, land, and buildings, among other things. The only thing that sets you apart from the competition is your attitude. Associations are nothing more than groups of individuals. They employ physical, financial, and human resources to achieve long-term goals. As a result, any organization necessitates remarkable efforts from its members. It has been observed that when there is a difficulty at work or in the home, the individual becomes psychologically disturbed, which can affect the individual's professional as well as personal life. If there is a work–life balance issue, it might affect the quality of Foundry's goods.

Keywords
quality of life, quality of work life, work life balance, organizational outcomes, achieve long term goals.

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