CHAPTER – 2 REVIEW OF LITERATURE :

**Udosen, E. D. (1997)**: EVALUATION OF SOME METALS IN THE INDUSTRIAL WASTES FROM A PAINT INDUSTRY AND THEIR ENVIRONMENTAL POLLUTION IMPLICATIONS.

Here the author has tried to put some light in the waste management issues in the paint industry and their environmental pollution implications by analyzing the sludge samples for Zn, Pb, Cd, and Cu using Spectrophotometer.

The article is about the cure of the industrial waste from the paint industry and its environmental pollution. The data collected here are having the concentration of the Metals used to establish relationships between different samples by using the Atomic absorption spectrophotometer from the paint industry and this all receiving paint waste are having the different correlations which are compared from the analysis of on contaminated soils applications and the implications of the samples for different metals in the industrial waste and their environmental problems for the samples taken for different metals are identified by such studies.

**Brian, W. (1997)**: OFF LINE PROGRAMMING: A SUCCESS FOR THE AUTOMOTIVE INDUSTRY.

Your main objective of the article is to study the offline programming in the manufacturing process of the paint industry. It also reveals the argument of an industrial robot where this study examines the developing uses in the paint industry particularly in the areas of robot welding and robot painting of vehicle bodies.

States that due to the development of the graphical simulation tools and outlines the role with their policies. It also describes the use of offline programming in the manufacturing systems and design houses.

**Donald M. (1997)**: FINDING NEW PAINT SYSTEMS – ANTI CORROSION METHODS AND MATERIALS.

In this article a researcher has mainly focused on the new technology that should be implemented for the current scenario of the manufacturing industry in which 2 uses obtained are easily aware that a coat of paint sufficient to prevent from being dry and not only by chemicals but also by the harmful effect of the environment.

The main aspect of the study was carried out in order to help the consumer to get the full knowledge of the available conditions by the technical Service Department to be implemented for a better quality and low cost products.

**Sawicka, E. (1998)**: THE CHEMOPROTECTIVE EFFECT OF COENZYME Q ON LIPIDS IN THE PAINT AND LACQUER INDUSTRY WORKERS.

In this study the examinations were carried out in the group of 24 workers employed in the paint and lacquer production. The influence of the coenzyme Q on the lipid parameters in the paint and lacquer industry workers which is presented in this study.

**Sargent, P. (1998)**: MULTILAYER PAINT: THE FIRE PROBLEM

Here in this article one of the main aspect of study is to analyse the issues in the paint industry production during the multilayer handling properties of the paint. Here the importance gives a detailed range of coatings manufactured by their adhesion properties of the paint films.

Here the main objective of the study is to get the maximum utilization of an attritor in the paint industry. This study reveals the methods for an effective use of the attritor in the paint industry in order to get the maximum utilization with compared of ball mill.


Here the author explains the life cycle of the models of simulation requirement and case studies in the paint industry. Here it is assumed of the tendency of the model to maintain and to use some simulation models which is one implemented over several years. In this study the different life cycles which are required to be studied in the automotive industry in Germany which are related to the application of simulation models in a long term use which have the tendency to maintain a reasonable technological development over a period of several years.


Here the author talks about the worldwide environmental issues on the automobile environmental issues on the Automobile Paint Industry.

Here the US plant Assembly plants to examine the role of equipments & machinery causing harm to the environment. The study here conducted to determine how the plant response to the cost and quality of paint operations which are having the extent to the nature and supplier involvement for the successful application of innovative Technologies in the case study of us assembly plant. The main objective of the study is for the automobile assembly plants facing ideas environmental pressures to examine the role of manufacturers which are addressing the challenges of the significant level of achieving the successful application of innovative technologies and ideas to face the problem.


The study reveals the research on the favourable feel paint with sense of touch as compared with the visual sense of the auditory sense which is difficult to describe with physical quantities.

Finally the conclusions were acceptable as the survey of the favourable feel paint was to set the target values for the formula. The paints are currently being developed with these values.

Crump, D.(2000):- METHODS FOR MEASURING VOC EMISSION FROM INTERIOR PAINTS

In this article the author explains the idea for measuring different technologies for understanding the possibilities of a mission from interior paint suspense.

Here the chamber tests were undertaken to rank 12 paints comprising of high solids undercoat and several emulsion and other water based materials. The different methods used for measuring VOC emission which lost the paint thickness and the type of substance used in the mixture which is
satisfactory to the total level of the VOC rate of emission which describes the use of the chemical chamber for undergoing interior Paints in solid coatings are used on the basis of the total level of emission rates as per standard norms.

**Huffman, L.(2000) :- LEAD PAINT LEAVES ITS MARK ON BRIDGE REPAINTING WORK**

Here the study is on the lead based paint abatement and the related issues on the environmental, worker and public concern came in the forefront of the US maintenance painting industry in the midst of 1980 when the regulations on hazardous waste disposal and lead exposure to workers were promulgated by the US and the occupational society and health administration.

This article examines the seminar’s themes of compliance and its effect on the industry, current practice and new technology, cost and the effect of multiple jurisdictions on lead paint removal projects.

**Mary, J. (2002):- PROCESS MANAGEMENT TECHNOLOGIES INNOVATION: A LONGITUDINAL STUDY OF THE PHOTOGRAPHY AND PAINT INDUSTRIES**

Here the author (Mary J.) contributes to the impact of process management activities on technological innovations. The study reveals the research in organizational evolution and learning, of the practices to reduce the variance in organization routines and influence the innovations.

The results of the study conclude that the exploitation crowds out exploration. Here the new innovation Technologies and management process paint industries draws and attention towards the organization evolution and selection of innovative techniques which enhances the incremental learning process an exploration practices by focusing on efficiency at the expense of variance routine of the industry. The result shows that the hypothesis for the song photography industries in quality program certifications having both exploitative an existing knowledge of the total shares involved in the management activities.

**Apostophi, P. (2003):- REDUCED EXPOSURE TO ORGANIC SOLVENT BY THE USE OF WATER BASED PAINT SYSTEMS IN CAR REPAIR SHOPS.**

Here the author (Apostophi, P.) has made the study to determine to what extent the substitution of solvents for spray painters to reduce the potential exposure to organic solvents in car repair shops.

Here the significant relationship correlation between the toluene in air samples and air samples are taken and it was concluded that the exposure levels of the organic solvents were below the limit values. This sampling method for the full shift was carried out for this and organic solvents to determine the substitution of solvent based paint in car repair shops. The conclusions carried out in the exposure levels limit values to be used as the additive factor for the concentration applied involving the risk of health effects can be low by using the organic solvents 3 times higher than the water based solvents. The results were collected by highest level water based systems after shifting of geometric mean to the Norwegian limit which signifies the toluene in blood samples at the end of shift on the present study where is the organic solvents were quite low at its concentrations as compared to the water based solvents.

The presentation outlet which provides the choices of the shade card in the piece of paper for the customers to identify their choices which they want to paint the surfaces and selection of the shade. In this article the main focus is on the introduction of first colour Shades that were introduced having 1000 different textures which tool today have the craze of the customers from different perspective. The need of the database for the colour making system it is not necessary to differentiate the shade card having the Unique Identity on the minds of the customers and to be covered in the list of the shade card so that it becomes the attraction of the customers. This data is shown by scattered coefficient of graph determining the concept of Kuber in order to reproduce many different colours which newest identity so that it can be the trend of the market.

**Muniz, A. (2003):** A STUDY OF PAINT SLUDGE DEACTIVATION BY PYROLSIS REACTIONS

A serious environmental problem that is effecting the environment on a largely basis is the paint sludge during the production.

This study assembles the evaluation and the use of pyrolysis as a process for deactivating sludge from the paint that generates a gas phase and a liquid solvent phase. The analysis done for the extended views of the plant sludge characterization inorganic compound exclusion in which the recovery process is maintained under the use of generation of waste for having a solvent liquid phase and significant reduction in total mass off the heat exchanger processor used inorganic Polymers and discussing the total cost for the disposal of the waste in the paint sludge. The different types of waste are classified into latex resin and polyurethane tattoos water based solvent and organic solvents supplied to the pyrolysis reactor by the power supplied to the respondent variables.

**Sahay, B.S. (2004):** REENGINEERING THE SUPPLY CHAIN IN A PAINT INDUSTRY

Here the clear aspects of the supply chain integration in the paint industry and outline its importance and its benefits in the organization. The benefits are for achieving superior customer service & lower working capital. The main benefits of the study is to work in the superior Customer services and operating in the supply chain integration by applying the research findings for the enhanced level of competitiveness which requires the organisation to set the agenda to obtain the business objectives of the paint industry. The main aspect of the study is to design the essential structure and strategy by achieving three dimensional role involving the customers and business partners for carrying out organisational transformation process.

**Vorlop, K. (2004):** INDUSTRIAL BIOCONVERSION OF RENEWABLE RESOURCES AS AN ALTERNATIVE TO CONVENTIONAL CHEMISTRY

In this study the Renewable Sources are identified at the concept of bio convention for the Industrialist to use it as the conventional source for the alternatives to convert the waste into useful material.

As shown in the article the chemical techniques that is used by different possibilities of replacing it with the bio technological methods and then converting it into the Renewable Sources. By introducing new technologies these different possibilities can be identified in the process for the efficient use of raw materials in order to save the cost of manufacturing for producing the
Renewable Sources that can work for longer period. The author also talks about the fossil raw materials data been promoted by the utilization of new production techniques and are used as a replacement materials for benefiting the environmental conditions in near future.

Here the main objective of the study is to enhance the automotive cotton market which has a major impact in the Global economic system.
The automotive coatings are coatings which are applied to automobiles light trucks vans and other associated vehicle parts in a factory environment. This study reveals on the intensive market research conducted for the report and examines how the continuing down town in the global economy imports the automotive market.

This study present the findings of the effect of solids content in the wastewater which requires of concentration of the continent which has been found to be important variables which results in quality improvement. The result shown in the study are carefully monitor over an extended. For the products which are made from the wash water in which the exact reduction. Here careful study using low concentration ferric chloride solutions is essential before the sludge can be recycled. this leads to high concentration of flocculants leads to insufficient use due to high rate of dilute water to be disposed which is required for sludge treatment and reduced quantities of modifier. This study results analysis of solid content of different samples to be carried out by avoiding constant dosage of coagulant which cannot be used for the treatment of wastewater in the paint industry.

Riala, R. (2005): RESPIRATORY SYMPTOMS AND DISEASES AMONG CONSTRUCTION PAINTERS
Here the author (Riala, R.) has included in his research about the paint industry which has succeeded in achieving adequate performance of paints for automotive, industrial and decorative applications, both in terms of mechanical and technological arguments for the disease among the painters due to hazardous chemicals affecting the respiratory systems. A different questionnaire study to determine the prevalence of respiratory systems among the employees and workers in the paint industry for last 10 year having the painting experience and the risk of the asthma patients as compared to the carpenters for the last 10 years was conducted on more than 1000 workers in the paint industry for sharing the construction work but without the significant role of modeling an occupation duration of paint experience. In such case the results indicate that the age and smoking habits also plays an important role during the study of the chronic respiratory during the constructive work between the occupations and environmental health issues.

Here the main objective of the study is a self reported prevalence of respiratory symptoms and diseases among construction painters and estimate the potential risk for this group as compared to another.
Here a construction of painters is a kind of representative group of carpenters sharing the construction work environment but without the exposure to paint. Here different symptoms and
diseases our song among the workers in the paint industry for more than 30 years of painting work which indicates higher risk of respiratory systems in the potential risk as compared to the carpenters which shares the same amount of work in the constructive department. This study focuses on the logistic regression modeling and the prevalence of asthma for the period of 10 years in the occupation with allergic dust particles earring smoking habits and other age factors for the study.

Here the main objective of the study was to determine the change that is needed in the coating industry. The main focus is on the health and safety measures that need to be taken with regard to the paint and coating industry which has been designed to undergo ratio on the manufacturers of the paint industry and to preserve the ecology, to protect the environment and increase the health and safety measures work.
The main goal of this study was to undertake the challenge of the paint manufacturers regarding the manufacturing products data both safe and high quality to the user and to the ecology at which at the same time it initialize the compliment within the industry.

Your the main aspect of the article used to determine the relationship between the crystalline inorganic solids and a well established potential of hydrous amorphous solids. In this study it reviews a special emphasis on the formation and reaction of synthetic variables which promote compound in adequate functions.
In different industries applications inorganic solids plays an important role for providing high potential compounds with a reach and technological variations.

Bilsover, J. ; Rajan, B. (2006) : - WORKPLACE PROTECTION OF AIR-FED VISORS USED IN PAINT SPRAYING OPERATIONS
The study was done to determine the visors commonly used for protection against exposure to airborne isocyanates during spraying. This study also examines the effect of reduced air supply flow rates on this type of respiratory protection.

The study was done at the workplace highlighted common problems that occur when attempting to measure the protection factors and interpreted the data collected. Hear the work gone for the research is reportedly established to determine the protection level of air fed and to determine the respiratory protection which is highlighted by the air supply flow rates to exhibit the concentration of class of device which is assigned for the protection of manufacturer’s instructions and other possibilities for providing different sources of respiratory sensitization. These observations were made in the field test for a reason of comfort and compressed air fed which are not derived by the performance data to a workplace and manufacturer’s instructions which are readily available to approach the volatile compounds which are present during spring. In this study organic compounds which are sensitized in accordance to the manufacturer’s specification allowing the air flow over inside the visor. During the survey the researcher employees minimum design flow rates for the measurement of specified European standards to be fitted ammo blog which gives the actual continuous sample for the comparison of outside spread droplets passing in the same position.

The current study shows that inhalation of solvent vapors in workers decreased as a result of wearing respirators and dermal exposure became the main contributor to the total body burden of solvents.

Because workers had different attitude and behavior to wear the respirators, the measured workplace protection factors varied. It is therefore important from being exposed to solvent through skin.


Here the author (Patel D.) refers to the improvement in the production technique, working condition and reduction of the toxination in the manufacturing of the Paint in the industry.

The article refers to the characterization and synthesis of the content of Polyurethane dispersion from the PET (Polyethylene Terephthalate) which is the hazardous waste in the process. In this study differential scanning calorimeter was used for the improvement of production technique when to get a permissible transformation of PET waste due to the reduction of toxic emissions having an added advantage in waste management for the Dispersion of polyurethane and other toxic chemicals to the atmosphere. The virtual diameter of the process focuses on the placement of international agencies for the improvement of the production technique buy infrared spectroscopy to get a better quality of product and having favourable conditions to develop work environment in the industry.


Here in this study the author has taken two algorithms by picking and peaks correlations which have been compiled in a portable laser induced breakdown system and used specifically for spectral fingerprints of paints and coatings which contain multiple ingredients and require several application steps.

Here the result indicates that despite the compositional complexity in organic metal finishing the spectral fingerprint of paints and coatings can be effectively determined by the LIBS technique.


Here the author (Schaller C.) deals with the recent scenario of the industry in achieving adequate performance of the paints and automotive, industrial and decorative applications both mechanical and other properties.

Here there is an increasing demand of the UV stabilizers which can meet today’s demand. To develop new techniques for converting the hydrophobic products having higher performance and quality requirements for new encapsulation for both meeting customer needs as well as having low manufacturing cost which is in demand in automotive industries for a wide range of water base and
solvent based products. This ensures the capability for the increasing demand of light stabilizers in the coating industry having adequate performance for achieving decorative purpose as well as industrial purpose having stable and compatible product forms for durable wood coatings and other applications.

Dane, J. (2007):- DEVELOPMENT OF A PERFORMANCE AND ENVIRONMENTAL CERTIFICATION SYSTEM FOR RECYCLED PAINT PRODUCTS. The study was developed several by key Federation and manufacturers of virgin paint products which gives an estimate to the customers in the US rich manage by harmful waste and over 275 million of cost was found in 2000. This research was done in order to test the performance of the virgin paint with respect to the environmental integrity and product quality as for the system. The project was funded by the California integrated waste management board and regional government.

Otto, J.T ; Trumbo D.(2007):- EXPOXIDIZED FATTY ACID DERIVED OXAZOLINE IN THERMOSET COATINGS

The authors in his study reveals to determine an oxazoline with an unsaturated side chain was reacted with chloroperbenzoic acid in order to convert the instauration to saturation stage in the manufacturing process of paint process.

The properties of the films ranged from moderated to good depending on what species was used as a cross linker in the process.

Ahamefuna, N.; Sunday, A.(2007):- CURRENT LEVELS OF LEAD IN PAINT SOLD IN NIGERIA

This study was based on the health effects of lead poisoning have affected and the methods to eliminate lead use in paint.

The study found that more than standard level of percentage of the enamel paint had higher than the approved levels of lead. Thus all pain manufacturers should make efforts to regularize the use of lead for a better human benefit. There is no significant difference between the concentrations of the lead poisoning taken in 10 different shades which are determined by atomic absorption method which causes serious health effects and environmental pollution which was derived why Global campaign in different paint samples which was found in enamel paints with the mean value and median value higher than the standard range obtained by the approved levels of lead in different countries. This significant level determines the regulatory authority rules to be carried out under the proper guidance of pain production team by using the sample positioning of the solvents to determine the outcome in the paint manufacturing process.

Buckmaster, D. (2008):- CHARACTERIZATION OF THE EFFECTS OF INSULATING WALL PAINT ON SPACE CONDITIONING IN A ROOM

Here the author study talks about the effects of the insulating wall paint where the manufacturers of insulating paints continue to enter the marketplace with the claims of their products exceptional potential building energy consumption.

The benefits of insulating paint are shown to be minimal even under the highly favorable conditions so the energy consumption is reduced by less than 1%.The computer techniques used for the
analysis of energy consumption by simple theoretical analysis of performance and testing of the products is used as a function of various parameters in highly favourable conditions in order to enter the market with superior products having exceptional potential for energy consumption.


Here the study reveals the concern of environment which is a worldwide issue due to the release of heavy metals during the process in the paint industry.

Here different studies have demonstrated that natural agents have a high removal capacity for divalent heavy metal ions. Wood ash is a natural adsorbent in comparison with others, has a very low price. This study shows that the absorption process follows the amount of wood ash has a greater role and adsorption rate increased as wood ash increased.


In this research the main focus is to find a new techniques and innovations for attaining a successful formula for success in the paint and coating industry. Here in this study the main focus is implemented on arriving at a new design for innovations and to implement the methods for obtaining a measurable growth for achieving the health and quality of the paint during the manufacturing process.


Here the author (James, I) contributes his research to develop a model to evaluate the performance of process safety management systems of paint manufacturing facilities.

Safety work on four areas of paint facilities were conducted by government officers, by consulting engineers and professionals. The author confirms the safety measurements for paint manufacturing industries due to the chosen government inspectors approaching the constructed based three level models to evaluate the performance of safety measurement process to be calculated based on this safety auditors. The result carried out by two way anova methods in order to justify safety consults in the industry sector in which differential method was used to stabilize the constructive measurement having high scope of independent evaluation and considering safety values at the maximum level.


Here the author (Khezri) presents the study on the automotive industry which contains heavy metals and other toxic substances for the paint sludge. The existence of the titanium dioxide in the paint sludge of the considerable amount is used for the recycling and decreasing of pollutant entrance which contains heavy metals and other toxic substance which harms the environment. The results carried out in this method approaches main components of paint sludge such as DTA having higher concentration but different applications in different industry, thus creating environmental pollution. Various aspects of the study also focus is on the purity of the compound which is more than 80%.
when having impurities of about 34% which magnifies the high cost and economical method for extracting titanium dioxide in the automotive industry.

Nouri J. (2009) - REMOVAL OF HEAVY METALS FROM PAINT INDUSTRY’S WASTEWATERS USING LECA

Here in this article the author focuses on the harmful effects of the heavy metals during the paint industry’s water waste.

Leca is light expanded clay aggregate, a method used to remove Lead, Cadmium and other heavy metals from Paint industry’s effluents. The existence of the heavy metals that is not biodegradable including the effects it harms The Nervous System as well as the reproductive systems and has a similar symptom of anemia damage during the process off the paint industry. For this reason the method is carried out to nullify the harmful effect of the heavy metals and absorption process is used as a natural agent having the removal capacity of the heavy metals and solutions that can be justified to avoid the respiratory disease present in the competitive adsorbents such as kaolinite and micas.


Here the author refers to the scientific problems occurring during the manufacturing of paint in China.

The levels of Benzene in the production were found more than the standard concentration allowed and the harm caused due to it. The author has covered the comparative analysis of benzene measurements having the maximum concentration and a systematic review was conducted in 1956 which includes manual searching as well as online searching. This data concluded that the higher amount of benzene was found during the study in the paint industry in China for which significant difference was not found among different paint products which affects the respiratory system as well as lungs of the employees. The analytical report produced during the study was about the limitation of the benzene which having an exposure for painting activities over a period of time even though nova substantially facilities was suggested as the input method.

Vincentz, V. (2009) :- HINDERED AMINE LIGHT STABILIZERS IN PIGMENTED COATINGS.

The article here is about to stop the amine which is an organic compound of ammonia with UV absorbers. The study here done is for the protection of coatings & plastics in the paint industry.

The author tries to resemble the idea of environmental issues due to the manufacturing in the paint industry and the solution behind it. The light stabilizers for the coating in automotive industry using paint as the main product output has higher concentration of pigments having heavy materials metals which requires certain amount of UV method to form the neutral base off the paint solvent based and water based products having pigmented coatings for the industrial applications and favourable working conditions.


Here the author (Weiss D.) provides the understanding behind the Paints and coatings industry. This article provide the first understanding that the overall infrastructure of the industry and its
willingness to change. The various understandings provided in this articles regarding the technological solutions having the emphasis by the paint industry is associated with the polyester, amino another formulations having the context with the world economy for preparing the performance and cure the reactions in order to comprehend the newly technological services in the market categories as well as geographical areas caring the UV radiations and other future development.


The author in this case reveals the distribution and supply chain management of the Asian paints a large player of the paint industry. In this case the study tries to throw the light on the main strategies of Asian Paints in terms of the distribution of supply chain

The study also reveals on the recent scenario in the paint industry and the trends in the industry.

**Hu, D. ; Hornbuckle, K.(2009):- INADVERTENT POLYCHLORINATED BIPHENYLS IN COMMERCIAL PAINT PIGMENTS.**

This test was observed in Chicago where 3 samples of PCB were found to be the fifth most concentrated congener throughout the city. The congener exhibited strong seasonal concentration trends that suggest volatization of this compound from common outdoor surfaces.

PCB congeners were detected which are mainly used in paints but also in inks and textiles. In this study the measurement of the findings of the compounds present in water are reported in their symbols collected in Chicago which are more than 50 PCB including several toxic substance having different types of pigments in manufacturing process which suggest the volatile station and outdoor common surfaces which effects commercial paint structure and commercial pigments purchased from the local stores in the paint industry. Many pigments which are commonly used in Paints are also used in textiles, plastics and other materials which have possible mechanisms for in advance production to exhibit a strong concentration on the seasonal compounds which have volatile characteristics that affects the environment.

**Contant, S. (2010):- EVALUATION OF THE EFFECT OF DRY FILM BIOCIDES ON PAINT FILM PRESERVATION USING NEURAL NETWORKS**

Here the author (Contant, S.) describes the important role of biocide in the preservation of a variety of products susceptible to microbiological growth such as paint that can undergo microbial activities.

It also enhances artificial neutral network which were used to predict the growth of fungal above the standard level. The artificial neural networks are designed by the artificial intelligence method which requires less processing time to predict the level of microbiological growth and the composition of the biological blend for paint producers having higher microbial growth for a certain combination and their use in the chemical process has to be one of the greatest computational tools for having the better agreement for nonlinear data. Networks supervise a composition of layers having different properties of paint coating which includes elasticity resistance hardness etc. which deals with the utilization of the neural networks where Paints can be applied. Search input signals consists of the adjustment of weights to minimise the procedure to perform the algorithm and also training of the multilayer propagation to equate the complex networks.
El-Shazly, M. A. (2010) :: APPROPRIATE TECHNOLOGY FOR INDUSTRIAL WASTEWATER TREATMENT OF PAINT INDUSTRY

Here the research clearly summarizes as to introduce a proper wastewater treatment process suitable for treatment of highly polluted industrial water waste.

Here a traditional treatment process is identified so that the water waste is purified up to maximum level after manufacturing. Here the concerned chemical agents tetra respectively used as secondary treatment is introduced for treatment process of wastewater achieved by palm hemns for the treatment of highly polluted industrial waste which is accepted as secondary treatment to remove the toxicity of the elements in the paint industry.


Here the author (Leet, J.) gives a structural image of the application of the paint industry. The physical properties and strength enhancement and energy conversation to antimicrobial properties and self cleaning surfaces of the paint.

In order to achieve environmentally responsible technology in the construction, it is important to achieve review of potential benefits in construction related to paint industry. In order to achieve consequent manufacture nano materials assessment of the environmental implications the physical properties to convert the structural strength in energy conservation in order to release adverse effects on human beings another environmental pollution to affect the health and self cleaning properties the antimicrobial self cleaning surfaces.

Mayor, G. (2010) :: LIFE CYCLE OF SIMULATION MODELS: REQUIREMENTS AND CASE STUDIES IN THE AUTOMOTIVE INDUSTRY

Here the author (Mayor G.) has included in his research about the tendency to maintain and use some simulation models which were once implemented over a period of time in a paint industry. Here two different cases for formulating the simulation models in order to assess the life cycle for two different automotive industries cases that are bounded for long term model for discussing various reasons for a BMW group.

Contant, S. (2010) :: EVALUATION OF THE EFFECT OF DRY-FILM BIOCIDES ON PAINT FILM PRESEVATION USING NEURAL NETWORKS

Here the main focus of the study was on the biocides which play an important role in the preservation of a variety of products susceptible to micro and biological growth of things such as paint.

This is the microbiological growth of paints which is a substance which can undergo microbiological deterioration both in storing and after the application on a surface. The relationship between different sets of data which are used in the commercial experiment for the industrial environmental test for the preservation of variety of products which are important for the biodeterioration and microbial deterioration for both storing and application of the solvent in the paint film in the paint industry during the process of manufacturing of dry films. The Polymers and paints are important
biocides data used for the prevention of microorganisms which are harmful to the environment in
used in the which can be harmful to the environment industry as a experiments surface coating and
also the pigments which are considered as a raw material in the inadequate quantity are taken into
consideration data favourable to the growth of the bacteria which can be harmful to the
environment. The conclusion of the study shows that the paint friends that are responsible for the
microbiological spoilage in unfavourable conditions for the application of the paint and old coatings
were observed for more than 40 weeks period. After several years of examination that is based sites
where widely used for the paint protection in 1997 where two acidic formations are produced in the
fungus test where the specimens shows the growth of the efficient compound for the building
materials and molecules inside the cell and membrane. Much work has been derived for the
potential of neural networks which demonstrates commonly used algorithm and proven history to
solve the complex networks which are involved in the input method.

George P. (2011):- DEVELOPMENT OF UREA FORMALDEHYDE AND POLYETHYLENE WASTE AS A
COPOLYMER BINDER FOR EMULSION PAINTS FORMULATION.
Here the author (George P.) contributes his idea behind the urea and polythene waste as a
copolymer for emulsion paint formulation.

The clear identity on the development of the process waste such as urea formaldehyde and
polythene waste as a copolymer binder for emulsion formulation, during the manufacturing of the
paint.

Martin, C. (2011):- APPROACHES TO MANAGING GLOBAL SOURCING RISK
In this study (Martin C.), the author offers a historical study that most companies do not have a
structured supply chain risk management and mitigation system.
Here the findings are presented as a classification of risk covering the categories of environmental
risk and its sustainability. Here the findings and design required for dealing the Global Sourcing risk
and sustainability risk can bring many benefits the organisations for studying a consistent sources
supported by documentary evidence across the entire supply chain in order to take action and
address the research gap by approaching the managers in the Global content. This geniality values
define the environment of the managers to expose the number of risk in the actions to be taken to
nullify close risk in order to achieve the organisation goals at a global level applicable to different
industries.

Here the author (Morton H.G) presents the concentrated review of the architectural paint films by
concentrating on the biodeterioration in the paint industry

Here the study reveals about the new technologies in the paint industry such as photo catalytic
layers, cool paints, silver nanoparticles and silicon containing paints. Here the instrumental methods
used to present a review of biodegradation process of micro biota paint films having the Silicon
contains and other nanoparticles of silver affects the Paints abstract for the influence of paint formulation for concentrating on external films. In this biodeterioration method new coating Technologies for managing the paint components for appropriate coatings at different weathers for the formulation of biofilm are used so that new trends in the paint industry can be included for further studies.

**Pat, E. (2011):** LEAD SPECIFICATION IN INDOOR DUST: A CASE STUDY TO ASSESS OLD PAINT CONTRIBUTION IN A CANADIAN URBAN HOUSE.

Here the author (Pat E.) talks about the old contribution of paint in a Canadian urban house to detect the specification of lead. The study reveals the specification of the residents in older homes may experience increased lead (Pb) exposures due to release of the lead from interior paints.

The objective of the study was to determine the specification of Pb in settled dust from an urban home built during the test. In this study different test samples containing lead are taken to study the increased exposure in the environment for the fraction of titanium based pigment in old Paints where a suggestion of external contribution of outdoor sources of the finest dust particles data collected in the micro based species which forms the paint pigments as well as volatile base. The lead specification of the old Paints near the edge structure determines the x-ray absorption spectroscopy method which is both supported by us department of energy contributing to the constructive methods which appreciates research to be conducted in Chicago. Health department of chemicals management in Chicago in Canada runs the experimental unit which is part of this research at the beam line having the advanced Photon source at US department.


Here the author (Ray, B.C) explains the ideology to improve the paint properties and its methods for the same. Here the performance of the core-shell latex has been optimized and the best combination achieved with 25-40% of hard phase in Core-shell Latex. A semi batch emulsion process is used for the polymerization for the core phase consisting of polymers containing the particle size which were determined by block resistance and prepared using core shell latex used for the elongation wallpapering from copolymer and studying the effect of solid particles. The paint industry uses this method that could be extended for the structured core shell latex and purpose of this study is to determine the characteristics of MMA - BA about 40% of hard phase for optimized and best combination used in this method for improving the paint properties.

**Robert, J. (2011):** LIFE CYCLE ASSESSMENT OF A PYROLYSIS/GASIFICATION PLANT FOR HAZARDOUS PAINT WASTE

Here the author (Robert J.) reveals the idea to reduce the waste and the cause for the environmental problems due to the harmful chemicals in the paint manufacturing industry.

The life cycle of the pyrolysis or the gasification plant when used during the process makes hazardous effects in the environment. So new waste management technologies should be introduced to reduce the effect. The main objective of the study used to determine the benchmark level of results for obtaining the environmental permits used as an impact based on the guidelines of centre of environmental science which is not only normalized but also derived directly based on
emissions of final waste for the interventions accounted on different waste by physical relations. The results arrived not only defined as treatment of hazardous waste with different physical relations and functional unit as a treatment of environmental pollution in the manufacturing industry. Several influences are based on the significant results related to the specific emissions of harmful agents which are performed as a decrease process for shredders and consumption of using green electricity.

Suzzanne, B. ; Pat, E. (2011) :- LEAD SPECIFICATION IN INDOOR DUST : A CASE STUDY TO ASSESS OLD PAINT CONTRIBUTION IN A CANADIAN URBAN HOUSE.

Here the study reveals that the houses in the older places are experiencing the increased lead exposures due to release of lead from interior paints manufactured in the past decades.

The main objective of the study was to determine the specification of lead in the settled dust from an urban home built during the study.

Rochelle L. (2011):- SPLATTER! SPLATTER! SPLATTER! WORKER’S HEALTH AND THE SPRAY MACHINE DEBATE

Here the author (Rochelle L.) has studied the conflict between industrialization and worker health developed in the paint industry during the late 90’s with the introduction of spray machine. This technology increased the work rate but exposed the painters to lead and other toxins. During 1920 the different ideology was used in the paint industry for making easier for the workers by the use of the spray machine in the paint job. This concept was industrialized for the prevention of use of spray machine which affects the wealth of the workers in the paint industry and which allowed the application at a higher speed than the regular work which was carried out for the exposed of lead and other harmful chemicals used in Paint.

Kalevi, I. ; Joonas, A.(2011) :- WORKER EXPOSURE AND HIGH TIME RESOLUTION ANALYSIS OF PROCESS RELATED SUB MICROMETRE PARTICLE CONCENTRATIONS AT MIXING STATIONS IN TWO PAINT FACTORIES.

The main objective of the article was based on the paint and coating industry which is known to have significant particular rate matter emissions to the atmosphere. Thus in this study investigates particle emissions during the handling of powder and paint mixing into paint factories. The purpose of the study to determine the potential off to paint factories at different mixing stations is known to have relatively significant emissions to the atmosphere. Please changes when simultaneously measured at difference distance from the work department and the breathing zone of the workers in painters in the paint industry to determine the exposure and resolution of high time towards the concentration of the particles which are harmful to the human health as well as to the environment. This study was conducted under the supervision of managerial department beachwear characterized by different instruments negotiated by the electron microscopy which was appeared to occur at different mm which was higher than the stationary level and results were concentrated due to the exposure management on the personal monitors. The results were verified by the NF particles
between 500 NM up to 1000 nm which provides better Insight for stronger dominated pigments and fillers used for different concentrations in the paint industry.

**Carneiro, C. (2012) :- NANOCOMPOSITE ACRYLIC PAINT WITH SELF CLEANING ACTION.**

Here the author (Carneiro, C.) had showed significantly lower dirt pick up than the equivalent paint formulations. Here the main idea was conceptualized of the Nano roughness in the paint industry created by these nano silica particles which was functionalized in the surface to incorporate the good dispersion within the polymer matrix formulated towards both organic and inorganic solvents which are used for further dot retention. The hardness of the surface indicates the difference between the original and composite paint films showing the significant level increase of the nanoparticles which creates hardness for washing cycles which was researched during 1 month.

**Rani, N. ; Singh, A. (2012):- OPTIMIZATION OF PHOSPHATE COATINGS PROPERTIES ON STEEL SHEET FOR SUPERIOR PAINT PERFORMANCE.**

In this research the author aims on the properties of phosphate coatings for the Optimization on steel for superior and high quality paint performance. Here the main aspect is related by taking the samples which were studied by scanning the electron microscope. This article reviews about the inferior corrosion resistance performance which substitute heat treatment and importance out of painted samples and its formulations.

**Dimitris, P.S. (2012) :- A COMBINED COAGULATION & MEMBRANE FILTRATION PROCESS FOR THE TREATMENT OF PAINT INDUSTRY WASTEWATERS**

The author has considered a non-expensive and effective method to reduce the organic & inorganic content of the industrial wastewaters. The study was done for the treatment of paint industry wastewaters. Here it was examined that the lower dirt pick-up was attributed to nanoroughness created by the particles present in the paint film. The self cleaning performance towards both organic and inorganic solvents for running water in the Nano dispersion surface which is functionalized for the best coagulation of particles which and utilized according to the size distribution and almost eliminate the organic content which permits the final results which are tested and optimized the existing flocculation which eliminates the organic content suitable for the premises of the paint industry. These particles are the chemical agents which are tested to optimize more than 90% of reverse osmosis process which eliminates the harmful agents and industrial water waste during the concentration of polyelectrolyte neutralize the effect of higher potential chemical solvents.

**Dias , P. ; Sousa, J.(2012):- CHARACTERIZATION OF A WATER-BASED PAINT FOR CORROSION PROTECTION**

Here the study is based on the corrosion of steel rebars in reinforced concrete which is one of the major problems in the paint industry. The carbonation reactions of concrete with carbon dioxide and mainly the chloride salt action which are the main causes responsible for concrete degradation.

The main objective of this work is to investigate the influence of the pore size and porosity on the permeability of the paints films towards sodium chloride. Here the characteristics of water based
paint was implemented with the similar qualities of characteristics of paint coatings in which time lag method was used as the main cause of chloride cells to be responsible for degradation and one of the major problems of corrosion in the paint industry as well as construction industry. The threshold value that is required to determine the possibility of sodium chloride which is approximately more than 90% having the humidity related to the Helium and other harmful elements which was not found suitable for the protection of the surface in the formulated Paints which were obtained as a result for the protective layers of paints having corrosion which is obtained in a much shorter time. These qualities correlate with the poor average size and structure of the concrete materials which acts as the area of origin material which is reacted to the carbonization of the Paints with the formation of the carbon during the process.

**Pushkar, L. (2012) :-** METAL STEARATE DISTRIBUTION IN MORDERN ARTISTS’S OIL PAINTS: SURFACE AND CROSS-SECTIONAL INVESTIGATION OF REFERENCE OF PAINT FILMS USING CONVENTIONAL AND SYNCHROTON INFRARED MICROSCOPE

Here the author (Pushkar, L.) coveys about the industrial age pigment that readily reacts with fatty acids in oil based paints to form zinc carboxylates. This study is to identify and mark the difference between exposed and protected surfaces. Hear the cross-section maps buy used in the protected surfaces for thin Paints are distributed in the micro spectrometry machine which is used to investigate metal carbonyls and zinc carboxylates is both conventional and nonconventional composition which results broad range of concentration gradient used during the process of the paint. The higher concentration of zinc at a margin of saturated carbons distributes the higher special resolution of the polyester substance in the paint manufacturing industry influence on zinc carbonate with the potential of long term stability due to paint additive and vulnerable Paints used at Higher concentrations using synchrotron infrared spectroscopy method.

**Aviraj, D. (2012) :-** BIODEGRADATION OF VOLATILE ORGANIC COMPOUNDS FROM PAINT INDUSTRIES.

This study was to determine the constitute significant proportion of the total VOC emissions from manufacturing and application processes of surface coatings.

The main aspect of the study was among the several systems in which the experimental data was obtained from the single pollutant system was used to estimate the bio-kinetic parameters for these compounds. Among different combinations of compounds methyl ketone using mixed culture of biodegradation studies were carried out for the volatile organic compounds in the paint industries in which the predictions were not up to the mark for systems due to the concentration and interaction of the compounds with higher competitive margins in bio Kinetic systems.

**Nazarov, V. I. ; Bulatov, I. A.(2012) :-** EFFECT OF MECHANICAL ACTIVATION TECHNOLOGY FOR FINELY DIVIDED TALC AND TITANIUM DIOXIDE ON THE QUALITY OF PAINT COATINGS AND GLASS ENAMELS.

Here the author reveals the study on the effect of mechanical activation technology for finely divided talc and titanium oxide on the paint coatings and glass enamels.

The main objective of the study was to determine the new technology for the activation for finely divided particles of the titanium oxide and on the quality of paint coatings and glass enamels.

The above study reveals about the chemicals that are present in or which are used for production of a large no. of products which are available for private consumers.

Generally there are many risks which are related to chemicals which can occur during the steps of production and use of a product and different criteria are involved to handle the risk connected to waste management. Here the different risks involved are connected to the chemicals and product can cycle for the production of large number of products to investigate the aim of the thesis production end waste management. The main objective of the study is to result difference between communication of chemical risk and consumer products that are interviewed for the analytical data collected during interviews for the handling of external factors and negative side effects off the market. This change are considerable developed in producing important conclusions for the restricted substance of paint and other chemicals correlated for the informative production chain during the process of paint industry.

Kumar, R.; Kumar, S. (2012): HOW SUPPLY FUNCTION ANALYSIS WILL HELP TO DEVELOP A HEALTHY AND WEALTHY RELATIONSHIP WITH WORKING CAPITAL OF MAJOR PLAYERS IN PAINT INDUSTRY: AN EMPIRICAL STUDY

In this study the author has selected paint industry in India and companies like Asian, Shalimar, Berger, Dulux and Nerolac Paints. In this study the flow of data makes a supply chain truly effective as it allows for the full optimization of the supply chain as a whole.

With this type of supply chain in place the overall production and distribution will be greatly improved and better sales and profits for the companies involves is likely a result. At the professional level of supply chain analysis different sections has been carried out for the management to select the paint industry and its process undergoing different layers of practical application in the market. The first section determines the introduction of supply chain management which calculates the average performance ratio at the basic level of the company which reveals the exchange information based on the analytical samples and finding the conclusion of the study. The second section contains the objective of the study which consists of the research methodology which involves free discussions between managers and employees to develop an upward balance sheet for the production capacities to improve the overall production, distribution and effective sales of the company which is based on the relationship of capital and supply chain management. The 3rd section consists of the overall result and conclusions based on the financial terms which allow entering the Optimisation level to improve the overall result and length of the supply chain in the paint industry which shows the relationship between financial applications and managerial levels by using the best technique of production at a minimum cost.

Mostafa, K. (2012): EVALUATION OF EXTRACTION TITANIUM DIOXIDE FROM WATER BASED PAINT SLUDGE IN AUTO MANUFACTURING INDUSTRIES AND ITS APPLICATION IN PAINT PRODUCTION.

In this research the author talks about the application in Paint production from paint sludge which are produced annually in the paint manufacturing plant for recycling and reproduction of beneficial
Here x-ray diffraction and centrifuge was used to extract the titanium dioxide in the paint sludge which was found as 70% used for the paint production. If this technique is used as a waste management the fresh paint required annually will be reduced by 21% and the heavy metals and toxic waste will be removed for a better ecology and a better environment.


In this article the overall knowledge of paints and the painted surfaces which are biodegradable due to the atmosphere and a natural growth an activity of living organisms. In this review and enhance description of the Paints and its products properties are given, so that motion on the surfaces causing structural damage due to natural weathering of bacteria algae fungus and other microorganism can be known to the users.

**Odior, A. (2012) :- JOB SCHEDULING IN A PAINT MANUFACTURING COMPANY IN BENIN CITY.**

In this study the author talks about the basic types of paints available, gear manufacturing unit and job scheduling how to control the consistency of a Binder or a pigment which usually consists of thinner or solvents which were developed buy the art of painting using a variety of colours and in different shades. The Paint production process four major groups of raw materials namely pigments, binders, solvents and additives. These raw materials are scheduled for the processing of the paint in such a manner that in minimum time maximum output can be obtained at reasonable cost for different amounts of orders which are required by the customers in the scheduling framework. The author presents different types of sequencing methods used for the job scheduling such as single machine sequencing which visits the machines in the same sequence, Johnson’s machine algorithm in which the optimizing sequence can be obtained by the flow time of the job.

**Safty, A. ; Mohammed, M. (2013) :- STUDYING THE EFFECT OF ANTIOXIDANTS ON CYTOGENETICS MANIFESTATIONS OF SOLVENT EXPOSURE IN THE PAINT INDUSTRY**

The main objective of the study was to determine the antioxidant role in reversing the cyogenetic changes caused by solvent exposure in paint industry.

In the study after the supplementation of antioxidants, there was a statistically significant decrease in the frequency of CAs and the abnormal levels of SCEs were back to normal levels.

**Beldar, Y. ; Kulkarni, A. (2013):- APPLICATION OF ENGINEERING MICROORGANISM FOR THE EFFECTIVE TREATMENT OF PAINT SHOP WASTEWATER.**

Here the main focus of the study was to determine the new technology to reduce the harmful effect of the paint industry manufacturing to the environment and to the health of the people. Paint industry produces some heavy pollutants which are organic and heavy metals for the degradation which are used as treatment which is harmful to the environment. Present article use a different method for the treatment of such pollutants and also emphasizes defeasible and the need of future development for economically sustainable environment.

**Pandey, D.(2013):- REVIEW OF SKU IN THE INDIAN PAINT INDUSTRY** Here the author reviews of the SKU in the paint industry of India. Here a stock keeping unit is a unique identifier for each distinct product that can be purchased.
Here the combination of different products, shades and size resulted in the confusion of the stock management of the different products, through the survey of paint dealers, effort has been made to analyze the reasons for accumulation of slow moving stock. There is a wide range of different products, shades, and pack sizes for the new colour of carpets and curtains to analyse the reason for accumulation of slow moving stock in order to offer innovative products, in the availability to enable the company on a systematic track so that different packages at different range and decorative items can be made available to the customers for the variety of range and prices.

**Sharmila, S. ; Rebacca, L.(2013) :- EFFECT OF PLANT EXTRACTS ON THE TREATMENT OF PAINT INDUSTRY EFFLUENT.**

In this article various industries which release the effluent particles in the environment which causes the pollution which is a major issue in the current scenario. The author address is the adverse effect due to these harmful pollutants which are studied for the improvement of the paint effluent using natural and synthetic methods.

In this case the powdered samples were taken in different solvents such as methanol, ethanol, chloroform and benzene for 48 hours and the extracts don't feel tired by using the filter paper. The important idea of the paint coatings which is applied for the house decorative that holds the main components obtained provided colours to decorate and protect what the layers and this abstract surface so that the liquids I mostly used as a solvent for polymers and to adjust the consistency of the additives. In conclusion clear aspect of paint industry effluent resulted as one of the major polluting compounds of the environment which are treated with various extracts of compounding elements.

**Godwin ; Achara, C. (2013) :- OPTIMUM MAINTENANCE STRATEGY FOR PAINT MANUFACTURING INDUSTRIES , A CASE STUDY**

In the fast going technological environment as the population is growing the demand for the paint and its products r also increasing day by day. Growing population which creates an additional value by delivering better and innovative service to the customers for the performance measurements and IT Solutions to highlight the opportunities for improvement.

The result concludes that the engineering decision which are associated for the optimisation of the equipment capabilities are also defined as the ability to perform specific functions within the range of the performance for its quality and it safety measurements ratios.

**Gajjar, N. Patel, N. (2013):- TREATMENT OF PAINT INDUSTRY (EMULSION) WASTEWATER BY ELECTRO COAGULATION.**

Here of the study is to invent investigate for the treatment of paint emulsion and its different parameters for using different electrode materials which are used as the temperature controller for the magnetic stirrer for more effective materials ketamine used for the electro coagulation process. In this study the different types of electrode materials where used as a result for higher COD removal efficiency obtained with aluminum electrodes. The time operating effect was studied at a constant density of 2.4A which two aluminum electrodes. So when the operating time was differed from 10 to 40 minutes the maximum efficiency was obtained within 20 minutes.

**Pandey, T. ; Mani, R.(2013) :- INFLUENCERS AND THEIR IMPACT ON DECORATIVE PAINT TRADE.**

The author has represented a qualitative segment in the paint industry e-marketing which is the most important and functional area of Management. In order to succeed any company with good
implementation depends on the process of sales as a strategic input with the qualitative output. In this study the various factors affecting the growth of the Indian paint industry has been focused. The overall growth of the organised retail sector depends on the economic development and seasonality of the overall market. This study concludes that the industry should give attention and priority for enhancing the skill, training and professionalism of the Painters for getting the maximum advantage and incentives within the business. The companies should involve the experience management employee’s major decisions in the manufacturing process to gain their confidence for a better result.

Patel, A. ; Rathod, H. (2013) -- AN OVERVIEW ON APPLICATION OF NANOTECHNOLOGY IN CONSTRUCTION INDUSTRY.
In this study the main focus is on the technological expects in the paint industry during the construction work which are present in the commercial products which make use of the technology in the construction and civil engineering industry. Here the article reveals the information the enhanced properties used in the Civil Engineering and construction materials which is the base of the structure which reduces this section of the beams and columns in the building for faster construction and overall life time cost of the project. As a part of the paint industry the main focus of the study is to use the nanotechnology in such a manner that it reduces the content and minimizes the effort.

Udeozo, P. (2013) -- FORMULATION OF GLOSSY EMULSION PAINT.
In this study the preparation of the paint emulsion by using the formulation of pigment, glycol and other solutions where used. This research investigates the different ways in which the Paints can be Limited for testing the emulsion and degree of dispersion, dryness and optical properties which are formed on the glossy part of the emulsion paint. This study talks about the degree of dryness of film fact of glossy nature of paint during the emulsion process. The paints that can be produced with the optimum composition of rare percentage and is a factor depending on the degree of pigment and the quantity of binders used during the manufacturing process.

Woods, G. (2013) -- RECENT APPLICATION OF MASS SPECTROMETRY IN PAINT ANALYSIS.
In this article the analysis can be performed by either mass spectrometry in the paint industry by performing one molecule at a time for complex and very complex mixtures. In this study for past few years different methodologies not performed for the elucidation that requires MS techniques for the composition of paint during the manufacturing process of the composition of the molecules of paint in different field of art for the Restoration and preservation purposes. Here different numbers of samples were taken in order to investigate the composition of planes for the analysis of additives for which the animal urine was taken as a pigment by the author. In conclusion of this research n analytical review for the different methodologies required to search decomposition of paints in both artist paints and conservation purposes.

In this study the main objective of the study is to associate with an opinion of survey of dealers of Berger Paints private Limited in which the necessity was to understand the factors affecting the domestic Paints in the recommendation with respect to the dealers and interior designers of Berger
Paints. In the present scenario the result denotes song important factors having an impact on choices process of the respondents in India with the main objective to associate with the customers regarding their choice and loyalty towards the company. The main objective of this study is to declare the factors affecting selection of paints to help the practicing managers, dealers and interior designers to associate with the reference of revealing the deciding factor in to analyses the marketing perspective for the designing of paints. The study concluded that by concentrating on the features of the paints one can identify the variety and quality of the domestic paints on the basis of the brand features which are given promotional offers which create and psychological image for the promotional offers which adds value to the factors for designing the marketing strategy of Berger Paints products.

Kwaambwa, H. ; (2013) :- A REVIEW OF CURRENT FUTURE CHALLENGES IN PAINTS AND COATING CHEMISTRY.

In this study the author explains the efficient formulation that demands for the basic rules of the chemical aspects off the paint industry. This article highlights the challenges in the Paints which emphasis in the future for the formation of the chemicals which replaces organic solvents with VOC free ingredients such as water. The introduction of the new technologies that are evolved over the past decade which replaces the performance of the traditional coatings with all alternatives that can improve the performance and lower the cost without harming the environmental pollution. The study predict that the growth of the high Technology systems will evolve the investment cycle for the different methods and performance of the products by lowering the operating cost in capital cost by different methods. The new challenges that are faced by the paint industry today are the target to achieve better quality at lower cost without affecting the environment. On the global level it is difficult to formulate the race of the companies for new advances in Paints and coatings which formulates the marketing edge to have an opportunity to gain entry in the market by introducing value added products into the market.

Sripathy, L. ; Vinay, G. (2013) :- EFFECT OF LEAD ON EMPLOYEES WORKING IN PAINT INDUSTRY

In this study the author on elimination of the lead source that has not been completely removed by the paint industry in Bangalore which affects the functioning of every brain transmitter of the employees working in the industry. The main objective of the study is to determine level of lead in the blood of employees which contains higher concentration of Pb considerable for low level of the evidence which causes health problems in both adults as well as children. This study indicates on the levels of the lead in the blood samples of the employees which is basically related conditions industrial Area providing reminder that high concentrations which indicates certain measurements to be taken care in the manufacturing of paints so that the harmful effects be avoided. The methodology used in this study is by collecting analytical samples of the employees in the Peenya industry where the paint industry owners where convinced for the approach and blood samples were collected from each individual body analyzer using standard calibrations. The study concluded that the blood level of lead of the employees’ co contains higher concentration where there is considerable evidence from the present survey to work in the industry for longer period of time. The main objective of the study is to provide an informative reminder to the Employees regarding higher concentrations of lead which can lead to lungs disease when exceeded to the safety level of the manufacturing product.
In this article the author highlights the pigments data used in coating industry, their chemical inertness advantages and disadvantages for some Nigeria deposits which are utilized as alternatives to Titanium dioxide in the paint formulation. The main objective of the study is to determine the phase changes of kaolinite during heat treatment. The importation of kaolin in local industry is bound initials and major deposits which have the potentials to meet the quality of the industry pigment for the outcome in the available range. The result shown in this study is the increasing demand for titanium oxide and the price that has been increasing from 2011, in order to find the solution the substitute of paint pigment calcined kaolin which does not have a negative effect on the environment what is associated with economic factors which requires higher capital investment than the sulphate process. The market Trends of pigments in Nigeria indicates the availability of non metallic raw materials below installed capacity it shows the breakdown of various paint pigment which are imported from foreign countries. the formulation used in this process contains silica which is the ideal composition for paint pigment which is expected to contain more impurities on their surfaces because of availability of valid charges and physical properties of kaolin useful in Paint formulation.

Luka, I. ; Garba, S. (2013) : DETERMINANTS OF CAPITAL STRUCTURE IN THE NIGERIA CHEMICAL AND PAINT SECTOR.  
The present paper talks about defect in packaging order theory on chemical structure that suggest a negative relationship between the growth rate in level of leverage which contradicts this study which have the significant variables whereas the remaining includes profitability intangibility which are studied from the secondary data of the annual reports of Nigerian Stock Exchange. The major problems of this study is in the evidence data used as external Finance in typically industrialized countries in which the manager may use the dimensions of assessing his companies external Dept for financing the deficit exist and also to be aware office forms bargaining power where all the findings appears surprising in the stock market. This also emphasizes the importance for conducting a research on the functioning and financing of private companies in a wide range of developing countries. The study concludes that the coefficient of two variables namely size and profitability are both significant correlated to one another. It also reveals that the policy of Nigeria stock market in managing their Finance will maximize the range of shareholders and increases the value of firms.

Awuor, E. ; Manyallah, F. (2013) : CROWN PAINTS KENYA LIMITED: SUPPLY CHAIN VALUE ANALYSIS IN MANUFACTURING FIRMS.  
In this study the recommendation was shown to formalize the organisation structure and supply chain planning process in which strategic business units that makes markets leading to decorative brand and Automotive Paints requires a competitive advantage in both cost and customer service at large scale. This study was conducted due to the lack of formal supply chain planning process which sells its products locally to dealers and other hardware shops. This concludes that the observations that are made on the built up materials reveal the findings under the utilization structure of the organisation having capacity, material stock in other sources continuous relationship with the customers and dealers can be built for long run business. Study also talks about the warehousing, distribution and customer services for the material handling its results in the uncontrolled access with no regard to manufacturers for the lack of storage plan revealing the existence of large suppliers having no long term contracts. The qualitative approach method was used by conducting
focused interviews against the backdrop in the organisation having the international supply chain solutions to its overall corporate growth strategy.

**Raheem, A. ; Olowu, O. (2013) - PRODUCTION OF HOUSEHOLD PAINT USING CLAY MATERIALS.**
The main objective of the study is to use to claim materials for the production of household Paints. In this method the emulsion Paints castigated by using purple and spoon clay and grey Brown coarse for the production of emulsion clay Paints in which the Atomic absorption method was used for the concentration of heavy metals on the paints which are carried out by taking into consideration the quality control and pigmentation to determine the chemical composition of the clay during the formation of the emulsion Paints. The synthetic pigments and additives are used for the production of household Paints by volatile organic compounds which are considered to have a close relationship in the characteristics of synthetic pigmentation and in the production of extender pigment paint. The procedure for preparing clay is done by drying the sample 120 degree Celsius for 30 minutes for the pigmentation of separate batches a and b which are measured in 3 different containers. The second batch of the clay forms a paste in 4 minutes by using a stainless steel palette knife until the desired results were achieved. Here the results concluded that a better type of clay for producing natural Paints can be served as replacement for chemical pigment in the paint production and are cheaper than the conventional chemical Paints. Natural clay Paints have also less volatile ratio which is based on the types of solvents used in its preparation.

**Suresh, G. ; Nalathambi, V. (2014) - CONTRIBUTION OF NANO TECHNOLOGY IN THE PAINT AND COATINGS.**
This paper focus is on the technology that will be used for every aspect and in every field to give more performance of the output. To study I developed and several advantages for the nanoparticles in the paint to give antireflection resistance which will be used for various purpose.
The nanoparticles medical fields are useful for the asthma patient to prevent the harmful effects for health. The result concludes that which are developed as the positive growth for the human and economic development to conserve the natural resources.

**Kamil, N. (2014) - A REVIEW ON PAINT SLUDGE FROM AUTOMOTIVE INDUSTRIES: GENERATION, CHARACTERISTICS AND MANAGEMENT**
Here the author (Kamil, N.) focuses on the fraction of the hazardous waste from automotive industry. Very limited no. of studies has been reported on paint sludge recycling.

The manufacturing process in the automotive industry results in the consumption of the hazardous wastes in the painting process. Here the characteristics of the paint sludge constitutes a major part of wastewater in the automotive industry which are limited for the recycling and effects the chemical substance which are harmful to the environment hazardous waste which are increasing every year organic carbon content of the paint sludge used for the construction materials and Research can be done for the applicability of ongoing research techniques for the advancement of paints and coating industry which are summarised by the findings of paints not samples having the disposal techniques used for the investigations in the field of paint industry which are used as a formulation and disposal of the paint sludge by new technologies involved mainly in the car production.

Here the author (Mishra, P.) claims for the actual challenge for the managers to develop and implement a suitable supply chain performance which not only helps for making the right decisions but also helps in increasing the performance. The main purpose of the study is to develop the productivity in the working capital which is a real challenge for the managers to determine the relationship between supply chain management and total length of the supply chain related to the inefficiency ratio and productivity capital which are determined by the performance of the managers in the industry. The goods and services which are managed by the supply chain is a complex task because it includes all the activities from the advantage over the Rivals, competitive market success or failure of the product, the quality provide to the customers and services given at the final stage of the management. Fast moving consumer and other quantifying performance of the market determines the growth rate of the company which leads to increase productivity in comparison chart of the managers in the field of the expertise which are classified by the analytical process of operations which can be used as the best tool for the theoretical Foundation and business operations which gives the priority to the managers for a better practice to the customers. This study use the performance score related to the cost, quality in service performed by the company having the crucial strategies in participations with changes the production rate and behaviour of the company towards the customers.

Alam, T. (2014): A STUDY ON SATISFACTION, PERCEPTION AND EXPECTATION LEVEL OF INSTITUTIONAL CONSUMERS TOWARDS PAINT BRANDS IN AL-KHARJ REGION, KINGDOM OF SAUDI ARABIA.

Here the main expect of the study is for the consumer look for the brands having better quality, service and more importantly g competitive price. In this article paint marketing strategies have been focused to enable competitive advantage for the consumer's. This research paper helps the manufacturing paint companies in a direction so that a satisfied level of understanding towards the paint industry can be developed for the consumers. A large sample in Saudi Arabia of the Middle East is been taken as a research objective focusing on both private and government companies in the paint industry. Present study includes all different brands used in the Saudi Arabia in the decorative, marine and protective market segment.

Stijn, S.; Peter, H. (2014): TOXICITY OF NANOPARTICLES EMBEDDED IN PAINTS COMPARED WITH PRISTINE NANOPARTICLES IN MICE

In the present study the author has evaluated the toxic effects and biodistribution of three pristine and aged paints containing ENPs after oropharyngeal aspiration in mice.

Here the occupational exposure to ENPS used in paints and coatings can occur during the production process, handling and application of the paint on a surface or secondary after ageing. The different physical and chemical properties used in the paint additives and other solvents along with control
Paints side effects in the bio distribution, self cleaning in purification of nanoparticles which are performed by the systematic blood toxicity to evaluate the major parameters present in the blood and negligible alterations which affects the lungs where observed in blood samples of the employees working in the paint industry. The bio distribution chart shows the experimental values having direct exposure and no adverse toxic effects in the wide range of engineered nanoparticles where observed. This characteristic of ENP determines restraint and higher potential of the paint additives free industrial applications and coatings including the thermal and photocatalytic properties off the paint solvents in which the production process in both coatings as well as the surface area. As a part of the UV exposure special arrangements were made to release the larger part of matrix particles containing the controls the auxiliary exposure for a systematic evaluation of aspiration of the employee’s health.

In conclusion, the author has demonstrated that even though direct exposure to enps induced some toxic effect, once they were incorporated in a complex paint matrix little to adverse toxicological effects were identified.

**Pareek, P. (2015)**: A STUDY ON PERCEPTION OF END USERS TOWARDS VARIOUS PAINTS BRANCH IN AHMEDABAD AND NORTH GUJARAT.

In this research there is a lot of scope for the various players in the Indian market in the decorative segment. This study argues about the various paint brands in Ahmedabad and nearby towns where the paint dealers and painters meeting were conducted solution to change the perception of the customers towards the paint dealers and behaviour for the same. In future landscape of Indian paint industry from B2B to BTC, the marketing initiative to involve customers for the selection process and to create awareness for different products and different brands.

**Claudia, S.(2015)**: LIFE CYCLE ASSESSMENT OF FACADE COATING SYSTEMS CONTAINING MANUFACTURED NANOMATERIALS

Here the author (Claudia S.) reveals the study of the paint sector where the nanotechnologies are expected to hold considerable potential for the development of new materials in the paint industry sector.

The environmental benefits and risks of products containing manufactured nanomaterials have been quantified only to a limited extent. The new compositions which are added as an additional ingredient which results in a better environmental performance quantified to limited extent for the development of new materials to hold up to the considerable potential in the construction sector. This new composition releases to the lowest possible level for the improved environmental performance indeed compositions having conditions of boundary data full field particularly by dumping unused hazardous raw materials by using life cycle assessment and other factors to be involved.

**Zhao, P. ; Cheng, Y.(2015)**: EFFECT OF RESIN CONTENT AND SUBSTRATE ON THE EMISSION OF BTEX AND CARBONYLS FROM LOW –VOC WATER BASED WALL PAINT.

In this study the author main aim of this work was to explore the effect of resin content and the effect of substrate on the emissions of benzene from low – VOC water based wall paint.
Here it was found that both green calcium silicate and green cement substrates have strong power of absorption of VOC from wall paints. The effect of the resin in the primary quantity of work determines different organic volatile compounds to be calculated in the concentrations of VOC. Chambers for the specimen of resin effect for both green calcium silicate and cement substrates for the slow process for the slow process determining the benzene, toluene and emission of other harmful chemicals which had the effect on the quantity and quality of paint for different studies over the period of time. These compounds access the solvents to tolerate the environmental effects on the walls of the house in the power of absorption of VOC from wall paint are to be taken under consideration.

Mazurek, J.; Learner, T.(2015)- PY-GC/MS APLIED TO THE ANALYSIS OF SYNTHETIC ORGANIC PIGMENTS: CHARACTERIZATION AND IDENTIFICATION IN PAINT SAMPLES

Here in this study a collection of 76 synthetic organic pigments was analyzed using pyrolysis gas. The purpose of this study was to expand the knowledge on synthetic pigments and to access characteristics pyrolysis products that could help in the identification of these pigments in paint samples.


Here the study reveals the aim with which zinc and polymer coatings are applied to rolled product is improved corrosion and atmosphere resistance.

Here the paper shows that there is an increase in coating resistance requires a high-level of technology development and use of high quality materials. Data for different forms of coatings including those produced by comparative evaluation of their resistance are provided.

Porwal, T. (2015) :- PAINT POLLUTION HARMFUL EFFECTS ON ENVIRONMENT.

In this article the harmful effects of the paint on the environment and its impact on the life cycle of the ecology as discussed. The World Health Organisation has reported a 40% increased risk of certain types of lung cancer for the people who come in regular contact with work of paint has also possibility of neurological damage. Here the formation of excessive levels of harmful elements such as lead is house paint which can be hazardous when it is on the surface which causes damage and disturbs the health of the workers. The paint which is in good condition that is not flocking is covered by a well maintained lead free paint which is not harmful to the environment. This study focuses on the environmental impacts associated with pain which comes from the manufacturer components rather than the manufacturing product itself.

Pareek, P. (2015):- A STUDY ON PERCEPTION OF END USERS TOWARDS VARIOUS PAINTS BRANCH IN AHMEDABAD AND NORTH GUJARAT.

In this research there is a lot of scope for the various players in the Indian market in the decorative segment. This study argues about the various paint brands in Ahmedabad and nearby towns where the paint dealers and painters meeting were conducted solution to change the perception of the
customers towards the paint dealers and behaviour for the same. In future landscape of Indian paint industry from B2B to BTC, the marketing initiative to involve customers for the selection process and to create awareness for different products and different brands.

Khan, A. (2015) -- FUNCTIONAL COATINGS BY INCORPORATING NANOPARTICLES.
Here the main expect of the study is to determine the roughness of the paint used in the healing and coating of the nanoparticles which are used to determine the smoothness of the surface to avoid speaking of any particles. You are the main focus of the nanotechnology plays an important role for determining various Technologies which are conventional to the environment. The important factor for the improvement used to lower the size on the larger surface in the coating and making it smoother at a very small angle. The immersion test shows the nature of both the rough and smooth low surface of the silica particles having the chemical nature which are painted on the surface.

Vyas, T. (2015) -- AN EMPIRICAL STUDY ON BRAND AWARENESS AND ITS IMPACT ON CUSTOMER SATISFACTION WITH SPECIAL REFERENCE TO APOLLO PAINTS IN BANGALORE.
In this study for the sample Apollo Paints is taken as a research company in the Bangalore city which has commercial expansion in the manufacturing industry for paints sector which is referred as decorative coatings in the market. In this study the author highlighted the customer awareness words the paint and dissatisfaction for the same. In the market of paint industry main challenges for the new business is available at high level of competition targets needs to be understood to satisfy the need of the customers.
The main objective of the study is to create brand awareness among do customers and awareness of Apollo Paints in Bangalore. In this study conclusion is to determine decorative products of the Apollo paint industry in the market and to maintain the quality standards of the company which is the main factor what company will never compromise.

Siddiqui, N.; Phukan, R. (2015):-- FIRE RISK ANALYSIS IN THE PAINT SHOP OF AN AUTOMOBILE INDUSTRY.
In this study the researcher has considered the risk factor affected by the storage and handling of combustible materials in terms of both financial loss and property loss. In the paint industry the solvents used for manufacturing are highly flammable and at the same time contents the risk factor with materials which can create explosion when mixed together. So the products used in the manufacturing process requires a special storage so that they do not threat the environment and to the general public working in the industry. So the safety measures should be taken in order to avoid the risk of Fire in the industry. In this article analysis between the general safety measures and recommended regulations should be considered to follow environment which is important aspect for production and sales goal.

Emeti, C. (2015):- THE EFFECTS OF TRAINING/DEVELOPMENT ON THE PERFORMANCE OF PAINT MANUFACTURING FIRMS IN RIVERS STATE.
In this study the paint manufacturing firms follows the ideology of substantial training and development in the major findings of the research the operational difficulties in rivers state. A questionnaire was involved for collecting the primary data for receiving the discriminatory nominations of workers for identifying effective control to the operational problems which involves the organisation performance and creativity under cross-sectional survey. Seeing the negative approach of the employees towards training and development a measurement has been taken who
controls the required operational basis performance focusing on providing knowledge and skills with a specified area so that in explorative image of the employees can be developed. The main objective of the study is to involve the competition growth within the employees for the human resource development practices which leads to draw overall performance and development of the employees.

**Yadav, R. (2015)**: APPLICATION OF ENGINEERING TECHNIQUES TO OPTIMIZE QUALITY OF PAINT ON STEERING WHEEL COMPONENTS.

In this research the author talks about the quality of paint on a vehicle for the automobile industry which face is a competitive challenge to control the overall quality of the paint and to determine the technological changes to access the quality parameters. Automotive plants quality and price are the first job ratio for the process jobs resulting in commercial impact on production and quality control. The application of the paint is the important factor in the automobile industry which influences the first impression of the client regarding the services of the company. Such increasing economic pressure determines the quality standard of the product off the paint which is necessary with a uniform coat thickness and optimization of the paint quality. The thickness of the paint is the main factor reflecting the durability, colour matching different elements in influencing the quality of the vehicle paint in which the automobile body surface is important and the defect would be reduced. The study approaches towards the simulation method for finding the optimal process which results in line balancing and increasing the quality of the defective products have the impact of manufacturing system design throughout the process by maximizing the production efficiency, cost and the time of operation. The IT network is concerned with the artificial intelligence tools leaving the capability of adjusting the complex problems according to the layers of simulation for identifying the neutral range of the process.

**Ramezani, L. (2015)**: WASTE MANAGEMENT IN SOLVENT BASED PAINT INDUSTRIES

In this article the author talks about the solution for minimizing the waste generation and environmental pollution in the paint industry why different methods and techniques in solvent based paint industries. The suggestions are made regarding the research is done in this study for minimizing the waste production and its options such as source reduction recycle and recovery.

The main objective of the study is to observe effective support for making the management decisions relating to environmental policies and different ways to secure final disposal. The study concludes that the solvent used in the manufacturing practiced for reducing the generation of waste and should be made to recycle within the unit. The paint industry wastewater due to improper treatment for the source reduction and recycling both are equal importance for economic and environmental benefits. Other suggestions such as ensurty of the colour formulation, deport of bags that can save large sums and simplify the formulation, for reducing the cost before delivery to the customers.

**Jaiswal, A. ; Madhukar, S. (2016)**: IMPROVING PRODUCTIVITY IN PAINT INDUSTRY USING INDUSTRIAL ENGINEERING TOOLS AND TECHNIQUES

In this article the project was taken up to improve the plant efficiency which can be improved through systematic layout planning where the management service is based on this method study
and work measurement leading to investigation of all resources that affect efficiency an economy of situation for further improvement. The topic also covers tea packaging method proposed for redesigning the process flow and efficient material handling for determining improve productivity of the industry. There are number of techniques which are identified why is operation process involved from raw materials to finished goods and observe how the material flows from one operation from another in the manufacturing industry. Careful analysis is done for the allocation of free space which requires relocating the chemicals and bonds so that free space is available and also minimizes the intrusion for the package goods in the Machines to set up the process. The correct application concludes that by applying knowledge for the increase productivity is approximately the correct application for applying engineering techniques which can have a positive impact in the process.

**Parinda M.S. (2016)**: STUDY ON CUSTOMER SATISFACTION TOWARDS ASIAN PAINTS IN METTUR TOWN.

This study provides the basic significance on customer satisfaction based on the analysis, vision, history and customer satisfaction in Asian Paints for various products and future planning. The main scope of the study is to determine the influence of the customers on the brand choice to take necessary decisions regarding the loyalty of Asian Paints. The main objective of the study is to determine the growth and origin of the development of the company and to know the level of awareness in the customers who are using this brand. It also offers this suggestion for valid development of the company influencing the brand preference of the customers. The conclusion of the study is to take necessary planning which takes place in a distribution network followed by primary marketing plans.

**Sadek, A. ; Hazana, R. (2016)**: STUDY ON THE TREATMENT OF EFFLUENTS FROM PAINT INDUSTRY BY MODIFIED ELECTRO FENTON PROCESS.

The main objective of the study is to determine the treatments of COD removal for highly contaminated paint manufacturing wastewater in the treatments of effluents in the paint industry by modified electron Fenton process. The result shown in this study is the application of electron Fenton which has been increased in the last decade to receive an increase attention to treat manufacturing paint wastewater promising Technology for the application in wastewater treatment. In this study the COD removal of highly contaminated paint in the manufacturing industry has been studied for the removal of the wastewater by increasing the eradication of UV light with low capital cost.

**Lakhani, H. ; Tahir H. (2016)**: ANALYSIS OF ROLE ADVERTISING ON JOINING CUSTOMER SATISFACTION: IN STUDY BASED ON PAINT INDUSTRY OF PAKISTAN.

In this study which is based on general buyers of paint products which are responsive best on the efforts of the customers satisfaction in the paint industry for providing strong relationship with the customers to determine the primary response for the growth in sales. The main focus of the study is to establish the relationship between the customer value and brand for customer satisfaction. In the paint industry buying decision of the respondents packaging should be highly attractive in order to attract the customers. At the same time the price factor should also be kept comfortable for the customers in order to choose the best quality available in the market according to their budget.
**Goswami, K.(2016) :- CORRELATION BETWEEN BLOOD LEAD LEVELS AND ANAEMIA IN COMMERCIAL ENAMEL PAINT INDUSTRY WORKERS.**

Here the main aim of the study was to assess the hematological indices and serum iron levels in the enamel paint industry workers who are exposed to very high lead levels due to their occupation and determine the iron deficiency in the blood levels of the workers.

The conclusion of the study seems to be a direct relationship between the lead exposure and hematological disturbances resulting in the iron deficiency of the workers. In this study the lead toxicity in the blood samples measured by the Atomic absorption and also by inhibiting enzymes which were analysed by the iron levels which courses the correlation between blood lead levels other particles which are harmful to the environment. The main objective of the study is to determine the end results by all the parameters and to determine the direct relationship between chronic exposure of lead and to create the awareness in the paint industry among the employees and paint workers to control their significant health levels as compared to the analytical values resulting in the deficiency of iron in the blood level.

**Burra ; Gandhi, R. (2016):- UNDERSTANDING SEASONALITY AND ITS IMPACT ON DEMAND FORECASTING: THE CASE OF INDIAN PAINT INDUSTRY**

Here the main aspect of the study was on the demand forecasting which is primary exercise for a company to strategically accomplish its planning and execution route map at all levels and business functions.

Here the author has introduced one of the techniques that help us in making better forecast its time series with seasonality.

So the main objective of the study is to understand the pattern and latest demand trends in the paint industry. For determining the strategic analysis inter paint industry demand forecasting is used at the informative levels for different time series and feasibility which can be derived to establish the wide discussions and evidence to formulate data in the industry at organisation level. To understand different demand patterns in the paint industry the seasonality pattern in management to forecast in aggregate planning in a particular organised manner the foundation has laid out the different demand patterns in the Indian paint industry.

**Hangloo ; Shiny (2016):- ISOLATION AND CHARACTERIZATION OF EXTRACELLULAR LIPASE PRODUCING BACTERIAL ISOLATES FROM EFFLUENT WASTE OF PAINT INDUSTRY.**

The main aim of the research was to isolate and select lipase producing bacteria from effluent waste of paint industry. These bacterial isolates could be exploited to treat oil and paint based industrial effluents and contributes to reduce environmental hazards. The main objective of the study is to analyse the different methods used for the selection of lipase for the molecular identification based on pseudomonas production in all 5 isolates which shows different activities of carbon and nitrogen used for the treatment of industrial effluents and also to nullify the harmful hazardous substance of the environment in the paint industry.

**Obiageli, O. ; Leo, O. (2016) :- BEHAVIOUR MODIFICATION AND EMPLOYEE PERFORMANCE IN SELECTED PAINT MANUFACTURING COMPANIES IN ANAMBRA STATE.**
The researcher in this study president's current situation of paint manufacturing industry, employee performance and examines the behaviour in order to change the unfavourable conditions to achieve organisation goals. The present idea emphasis that the paint manufacturing industries should help to enhance the employee’s performance and its goal in order to derive correlation between the structured organisation goals. For employees to change the behavior for the commitment towards the company may recognize and praised by the organisation search that the profit generation capability should not be affected. The quantity of the product produced determines the efficiency scenario of the employees and the performance of the organisation productivity and rewards focusing in the selected department off the paint manufacturing industry. This subject the moral of the employees, which supports the business strategy buy reinforcing their behaviors without pre determined goals.


In this article the author has revealed the household poisons that can cause serious damage to the health of children. So turpentine is used as a volatile hydrocarbon which is used in solvents paints and textile industry.

The main objective of this study is to get the capability of three poisons that can cause serious damage to the people weather ingested or inhaled.

Venkatesh , R.(2016) : A STUDY ON BRAND PREFERENCE AMONG THE PAINT USERS IN DHARMAPURI TOWN.

In this article the author has used for the first time the evidence for the paint which is been used for a long period of time. The Indian paint industry is an ever increasing dealer’s monopoly system in which the customers get confused among the explanation of the shopkeepers regarding the brand preference in the paint industry.

The promotional and regulatory bodies for huge volume of paint should be controlled and organised so that d factors like pollution Control, packaging rules, weights and measures, labour Department etc. can be focused to the end users.

Lubberink, G.(2017) :- PUMPING PAINT MORE GENTLY

Here the author focuses on the new range of electric piston pumps reduces resource consumption in paint circulation systems and makes the process more efficiently.

Thus it leads to lower costs and a longer service life for the pumps. As a result of this a more effective and more energy-efficient concepts are needed. Here the author discusses about the new technologies in the Piston pins which leads to higher Services and durability at low cost for the pumps which makes the process to reduce the consumption of electricity and makes the process more efficient to the users. The concept of pumping in the paint supply systems has been developed for increasing this standards off the paint forms in order to meet the efficiency ineffectiveness in the paint industry which can be easily integrated buy less installation work in benefits Honda symmetric load structure of the vertical piston arrangement of the pumps. This concept also helps to strength the life of the pumps eventually reduced cleaning agent by small volume of paint at lower price and also beneficiary to the environment by reducing the pollution. Maintenance can be easily
approached the reliable lubricant which is provided by manual greasing to the bearings without disconnecting from the main department and replacing the entire paint unit at much less time then compared to the other pumps. This also helps for the customization of the paint supply system due to increasing the pumping capacity at higher level of performance comparing to the long-term operations and different levels of conventional pneumatic pumps which minimizes the speed of the paint and also the supply can be adjusted so that the needs of the customers can be met.

Zhien, Z.; Fang, W. (2017) - EMISSION CHARACTERISTICS OF VOC FROM AUTOMOBILE COATING INDUSTRY IN CHONGQING CITY.
In this article an analytical review of the automobile industry in Chongqing city during 2012 is given to investigate the detail about the related Enterprise and the emission of harmful particles during the production of paint in the automobile industry. During the process of the automobile coating industry the major ingredients discharged for the formation which is mainly produced during the process of spraying and drying of paint where vocs are partly produced process of mixing, waxing and repairing. Show the maximum Ozone formation of the pollutants does not include the contribution of alkaloids from formation in the automobile coating industry with Economic and social development in the Chongqing City.

Gupta, S.; Bisaria, C. (2017) - SUPPLY NETWORK VALUE ANALYSIS: A STUDY WITH SPECIAL REFERENCE TO INDIAN PAINT INDUSTRY.
In this research the author talks about the drastic change in the structure that deals with the study of supply chain network and value analysis for shaping the structure of the paint industry. With the significance of the binding it into two categories, organized sector and unorganized sectors. The supply chain network is very critical aspect for the demand of paint is very high in the market because it provides the right product at the right time to the customers which are very important in today’s scenario. In this network the inventory management and Logistic management also plays an important role in the business view of manufacturing industry which provides various benefits to the organizations for the sufficient supply in network process to control the quality of the product expenses wastage and inventory levels at etc. In this article the main focus of the company is on the management between the parties truck supplies the goods from the supplier to the end user. The objective of the study is to come over the analytical solution for the smooth function of the organization.

Khedkar, S.; Thorat, P. (2017) - STUDY OF SEPARATION OF PIGMENTS IN PAINTS FOR DEVELOPMENT OF MULTICOLOUR PAINT
A descriptive analysis of the multi colour paint and decorative textures is applied to the surface coating which provides a good weather resistance having a strong adhesive force which belongs to the field of chemical Technology and having various real granite good elasticity which includes the decorative Paints, automotive Paints for the layered surface coating. The mixture of the base paint is approved by the processing Technology which provides a low cost option and also gives a better look and finish to the walls by mixing it with the protective solution. To give a better look on the walls the tinted portion should not be mixed with the loose pigments as per the colour of the chips in the selected area in order to get the final product having a separation to form a multi colour paint and
also effects the poor temperature preservation, which provides variety of decorative effect acer replacement of natural solution and other construction materials.