

INDIA - SRILANKA ACADEMIC COLLABORATION



Between

E.G.S.PILLAY GROUP OF INSTITUTIONS – INDIA

And

SOUTH EASTERN UNIVERSITY OF SRILANKA – SRI LANKA



MoU SIGNING CEREMONY
AT
E.G.S.PILLAY ENGINEERING COLLEGE CAMPUS



In the above Photo, the Secretary of EGSP Group of Institutions Dr.S.Paramesvaran and Vice Chancellor of South Eastern University of Srilanka Prof.M.M.M.Najim (1ST Nov. 2017)



Exchanging the MoU documents. Photo left side Dr.S.Ramablan (Principal) Right side Dr.V.Sivaraman (Director- Industry Institute Relations)



In the Photo Left to Right, Chairman/Secretary Dr.S.Pramesvaran, V-C. Prof. M.M.Najim and Dr.V.Sivaraman (Standing) Director (Industry Institute Relations)

INTSYM2017(SEUSL) PARTICIPANT PHOTOS



Dr.P.V.Manivannan Professor, Mechanical Engineering, IIT Madras and Academic advisor E.G.S.P.Group of Institutions delivered keynote address during IntSym2017 inauguration.





EGSP GOI. faculty members sitting in the middle row and listening inaugural address



Our faculty members sitting near entrance of conference hall



Group Photo along with Dr.A.M.Muzathik, Head / Mechanical Engineering, SEUSL



Group Photo In front of Conference Venue

INTSYM 2018 (SEUSL) PARTICIPANTS GROUP PHOTOS





INTSYM 2019 (SEUSL) PARTICIPANTS GROUP PHOTOS





Photos taken during (i) Charing the Session (ii) Paper Presentation in Conference

Dr.M.B.M.ISMAIL Professor, Faculty of Management & Commerce, SEUSL
Inaugurated International Seminar on **“Growth and Competitiveness of Entrepreneurship”** organized
by Department of Management Studies, E.G.S.Pillay Engineering College, Nagapattinam 611002



Dr.M.B.M.Ismail delivered keynote address on
“Challenges & Opportunities for Young Entrepreneurs at Global Level”

**Prof. A.L.Hanees SEUSL Inaugurated One Day International Seminar on
“Wireless Sensor Network With Data Mining”, Organized by
“PG & Research Department of Computer Science”
E.G.S.Pillay Arts & Science College, Nagapattinam 611002**



Prof.A.L.Hanees, SEUSL delivered keynote address on “Networking and Communications”

FACULTY DEVELOPMENT PROGRAMME



Mr.A.L.HANEES, Head/Dept. of Mathematical Sciences, **SEUSL** attended Faculty Development Program at **E.G.S.P.Engineering College** from 25-11-19 to 07-12-2019 sponsored by Entrepreneurship Development Institute of India, Govt. of India.

LIST OF PAPERS PRESENTED DURING CONFERENCE HELD AT SEUSL (2017-2020)

Proceedings of 7th International Symposium, SEUSL, 7th & 8th December 2017

OPTIMIZATION OF CUTTING PARAMETERS ON TURNING MULTIPHASE MEDIUM CARBON MICROALLOYED STEEL

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Abstract

This paper discusses the optimization of process parameters such as speed, feed and depth of cut while machining multiphase ferrite-bainite-martensite (F-B-M) Vanadium-microalloyed steel using Taguchi orthogonal array. The effect of process parameters on cutting force and surface roughness were studied and the analysis of variance (ANOVA) was also employed to identify the most significant parameter that influence cutting conditions. A regression model was also developed for prediction of cutting force and surface roughness. Confirmation tests were also conducted to validate the model.

Keywords: Multiphase microalloyed steel, optimization, taguchi, ANOVA

1 INTRODUCTION

Medium carbon microalloyed (MA) steels are cost effective in terms of processing as compared to quenched and tempered (Q&T) steels. MA steels are widely used in automotive components such as engine, crankshaft, connecting rods, etc. (Naylor, 1998). Two step cooling (TSC) procedure after forging followed by annealing was adopted to produce multiphase (ferrite-bainite-martensite) microstructures and the mechanical properties were analogous to those of Q&T steels (Sankaran, Sangal and Padmanabhan, 2005). However the machinability of such a high strength multiphase microalloyed steel has not been reported elsewhere, which motivated to study machinability aspects and to optimize the machining parameters.

Turned components are extensively used in critical automotive and aerospace applications and hence the turning process was selected to assess the effect of machining parameters on cutting forces. (Hasçal k and Çayda 2008) optimized the machining parameters on surface roughness and tool life for Ti-6Al-4V alloy and concluded that feed rate and cutting speed are most influential factors. The investigations on S45C steel bars showed that tool life and surface roughness are improved by applying taguchi technique (Yang and Tarn, 1998). The studies on the influence of cutting conditions on turning metal matrix composites shows that cutting velocity influenced more on tool wear than cutting time and feed rate (Davim, 2003; Muthukrishnan et al, 2008). It is also observed that feed rate influences more on surface roughness than cutting velocity and cutting time. Applying taguchi method to find optimum parameter for end milling of AISI D2 steels shows that cutting speed is the most influencing parameter than feed, depth of cut and width of cut (Gopalsamy et al., 2009).

Shetty et al., (2009) optimized the cutting parameters in turning of age hardened Al6061-15 vol. % SiC25 µm particle size with steam as coolant and it was found that steam pressure influenced more on surface roughness than tool wear, cutting force, feed force and thrust force. Pawade et al. (2007) studied the surface damage during



ISBN 978-955-627-128-1

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Enabling IT and ITES in Intelligence Systems

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ABSTRACT:

Artificial Intelligence is the field of emerging trends in economical, societal, industrial and technological area. Intelligent systems is played important role in day-to-day life and provide various decision support applications. The competition in the field of internet world the multiple numbers of intelligent systems are working as essential role in real time. The demand of supply and development of customer needs the automated and autonomous functional agents are used. The involvement of IT and ITeS and the technological swift, this paper provide the survey of how the AI driven in society and real time applications. This survey includes industrial information, intelligent technologies, machine learning, social networking and data analytics process. It summarizes the study of automated and autonomous nature agents or decision support systems involves in the field of IT and ITeS.

Keywords: Artificial Intelligence, Decision Support systems, IT and ITeS.

GROUP KEY MANAGEMENT SCHEMES IN DISTRIBUTED COMMUNICATION ENVIRONMENT

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Abstract: Distributed group communication is the most optimistic approach to provide a secure group communication in many emerging network applications such as peer to peer communication, Skype, Facebook, Whatsapp, PAY-TV, Video conferencing, E-mail, Twitter and online network games. Because, in distributed group communication the data are sent from any one of the group members to the remaining group members and also there is no centralized coordinator in the distributed group communication and hence it would take more computational complexity. Moreover, in distributed group communication, the users themselves generate and distribute the necessary keys to maintain the secrecy and group membership. Hence, providing security with less computation complexity is a challenging task in distributed group communication. In this paper, a detailed survey has been done towards various distributed group communication and also comparative performance analysis has been done for all the approaches. In order to do that, we have considered various parameters such as computation complexity, communication complexity and storage complexity of both the user and the server during key generation, key distribution and key updation process. Moreover, in this paper we have also included various security challenges that need to be solved to make the distributed group communication more secure. Finally, we have also given a solution to improve the various parameters in order to increase the security and performance of the distributed communication performed in various applications.

Keywords: Distributed Group Communication, Authentication, Availability, Integrity, Non-repudiation.

1. INTRODUCTION

Today many people are participating in distributed group communication performed in variety of applications. The growth of the number of many real time network group applications results in increasing security issues and minimizing the computation complexity of the distributed group key management for a dynamic secure group communication is a challenging task. This is because, in a distributed network, each user in the network can act as a client or server of the same network to provide shared and common access to the various resources without using a key server. Moreover, in distributed network, all the tasks will be divided among the users involved in the network. Hence, it will provide effective communication and more coordination among the users efficiently.

Figure 1 shows the centralized group key management scheme where only one user act as a sponsor user/key server which maintains the information about the participating users and also manages the entire system and the remaining users acts as participating users. In this scheme, a key server alone is responsible for generate, distribute and update the keys to the participation group users. The major challenges of a centralized group

AN INVESTIGATION OF CUTTING FORCE DURING TURNING INCONEL 718 SUPERALLOY

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ABSTRACT

Inconel 718 is a nickel-based alloy designed for very high yield strength. The alloy is used in jet engine and parts like bolts, fasteners, pump shafts, valves etc. The machining of Inconel 718 is difficult due to extreme toughness and work hardness of alloy. This paper discusses the effect of cutting parameters like cutting speed, feed and depth of cut on cutting force. The study on cutting force helps to predict the tool life of the cutting insert.

Keywords: cutting force, machining, super alloy

1. Introduction

Inconel 718 is a nickel based super alloy widely used in aerospace, automobile sectors due to high corrosion resistance and gives excellent yield strength at elevated temperature. During turning the tool life is greatly affected due to combination of properties like toughness, high temperature strength, hardness and chemical wear resistance. [1] The very high cutting force gives rise to work hardening, surface tearing and distortion in machined components due to induced stresses. [2]. Due to continuous work hardening it is difficult to machine Inconel using conventional machining processes and also plastically deforms the tool and workpiece surface. [3] Stress relieving of Inconel before machining will increase the tool life by minimizing the wear and tear of cutting tool. [4] This paper discuss the effect of cutting parameters like cutting speed, feed and depth of cut on cutting force during machining Inconel 718.

2. Experimental Procedure

The experiment was carried out in a high speed conventional lathe. SNMG120408 cutting tool was used to perform turning operation. During turning the cutting force was measured using Kistler dynamometer. The piezoelectric force sensors in the dynamometer produce an electric charge which varies with the applied load on the sensor. The charge amplifier converts the electric charge

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STANDARD FACE RECOGNITION TECHNIQUES**R. Kannadasan¹, A.S. Anakath², S. Rajakumar³ & S. Ambika⁴**

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ABSTRACT

Face recognition is one the most trending technologies which is used everywhere in the present world. It involves the scanned part of our body parts which are unique to everyone and are stored in a database which makes hackers impossible to steal passwords or any personal information. It has a lot many advantages and helps a lot to scientists, political parties to protect their private party matters from stealing by the other parties or the hackers. Face recognition involves a lot of coding and it even requires mathematical knowledge to retrieve one's information. Mathematics topics like eigen vectors and integration is used to retrieve data, since these eigen values and integration take the lengths of the body parts computer interaction. Now that face recognition makes hackers impossible to steal someone's passwords and hack their belongings that have to be safe guarded. Face recognition is useful for people like- journalists, political parties to ensure their data is safe and to protect their data from stealing by other political parties or by the stealers. Our topic is face recognition which one of the most used technology in our daily lives. It involves scanning of face and get the points on the face which is unique for everyone and it get the points using mathematics topics like eigen vectors and integration. It also involves python language and matlab language. Matlab is used to get the mathematical values and python is general coding language which is used in biometrics and it is also used in artificial intelligence and machine learning. Python has inbuilt libraries which we make use of them and get the face values. All these faces are stored in databases and whenever we keep a live face it recognizes the face of the person which is already present in the database. Even face recognition is used in the data security and high security labs where only limited people have access to control over the labs. So face recognition is even used there to ensure high security to the companies. Almost all the software companies, educational institutions have these face recognition technology to ensure the fraud or make their more comfortable. And now in our project we look this complex process will happen in simpler terms.

Keywords: face recognition, face detection, python, matlab, database**1. INTRODUCTION**

Now a days face recognition is growing rapidly. So many people are researching on it. We need to have some extra knowledge to know about it. We should know about the face highlights and geometric invariants. It depends on the face revolution and distortion. We even have some advantages too and disadvantages but one of the most peculiar disadvantage is there is less solid invariants.

Face detection involves the 2 step procedure: 1 containing the faces. It is hard to find the faces so the first step involved in face recognition technology is to get or capture the face. There are different problems while capturing the face such as light, background, quality and many more. So we need to have an ideal face detector which detect any face at any point of time. After getting the input using face detector we can get the output in 2 ways one way is keeping all the images in the folder as an input and when we scan the face then it will say if the given image is present or not, if the given image is present

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EASE AND SECURE LEAVE MANAGEMENT SYSTEM IN CLOUD COMPUTING ENVIRONMENTS. Rajakumar¹, A.S. Anakath², R. Kannadasan³ & S. Ambika⁴

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ABSTRACT

Provisions on availing different categories of leaves are important in any type of organization in this world of information technology. Providing a system on the internet, intended to solve the leave problems of the employees in an organization is inevitable now a days. This system assumes that the level of authority in organizations follows a tree structure. An employee is viewed as internal node of a tree in an organization and involves in two roles, one as a supervisor and another as a supervisee. The supervisee is viewed as leaf node of a tree. Some employees only are able to act as supervisee. Through this system the employee can apply leave to his respective supervisor i.e. to the parent node of an supervisee node. The supervisor is able to check and approve the leave of his supervisees. The major features include this system is independent of any operating system so that any computer system with a browser and internet connection is sufficient for the operation of this system, ease to use and afterall, enhanced security features. An employee is properly authenticated before allowed to enter into this system. There is an admin other than is responsible for adding and removing employees from an organization i.e. adding and removing nodes from a tree. This system is planned to be implemented in a cloud environment. The results show that this system is implemented and used in ease manner and enhanced authentication and approval of leave process is achieved.

Keywords: easy-leaves, leave system, MVC pattern, supervisor, supervisee

1. INTRODUCTION

Easy-leaves is a user-friendly online system. The main motto of Easy-leaves is to help employees to manage the leaves easily. The easy-leaves includes admin login and employee login. Once the employee is logged in, he can apply leave, view the leave status, cancel the leave, view leave history, view and manage the leaves of his supervisees, check the leave history of his supervisees. Once the admin of the organisation is logged in, he can add the new employee to the organisation. He can manage the employees in the organisation. The login system is same for both employee and admin. Only the users that are logged in can make changes to the data in the database. The interface is more user-friendly. The project has been developed from node.JS as server language and mongo DB as database.

2. LITERATURE SURVEY

In this work the authors use the idea of brainstorming to come up with an idea of managing leaves easily. The main aim of this idea is to develop an easy leave management portal that is of important to an organization (Vikrant Kumar Kaushik et al., 2017). NoSQL stands for Not only SQL. These are the set of database management systems that are emerged to overcome the limitations of traditional relational database management systems. these Database systems are Schema-less. Which makes them much faster in doing the CRUD

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**DESIGN AND IMPLEMENTATION OF ELECTRICAL MACHINE:
MONITORING AND CONTROLLING USING IOT**K. Piravin¹, G. Vignesh² & T.S. Padmanabhan³

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ABSTRACT

The rapid growth of industry and advancement of technology has resulted in reduction of human effect, the main reason for which being machines. Machines are playing an important role in your life. In this project they use internet to establish communication between the users and monitoring unit. In this proposed system, they are monitoring and controlling the speed of electrical machines as well as direction of the motor this system consist of microcontroller, temperature sensor, induction motor and Wi-Fi module with think speak software. Here they are controlling the speed of the motor using opto coupler to sensing the speed through think software. They can measure the temperature and electrical machine using temperature sensor. This project presents the calculation and display of five temperature and speed of the motor through think speak software using IOT. Think speak software simultaneously store the electrical machine operating conditions through Arduino Uno, wi-fi module (ESP8266). At the same time they can control the electrical apparatus (or) electrical machines running status from the remote area using IOT.

Keywords: monitoring, module, arduino uno, opto coupler, IOT**1.INTRODUCTION**

Electrical machine plays an important role in that world because of electrical machine has reduced human efforts and main useful in agricultural purpose, industries factories and cities. This project has improved our knowledge with easy operate electrical appliances. The rapid growth of industries, factories and also agricultural purpose technology has resulted in reduction of human efforts. This project, use Internet to establish communication between the user and monitoring unit.

Electrical machine has various problems occurred in electrical operation Because of it can damage mainly in electrical rotation with temperature, so this problems are reduced by using our project for electrical machine monitoring and controlling using IOT though think speak software with Arduino Uno via, Project consists of microcontroller, temperature sensor, electrical machine, Wi-Fi modulo, opto coupler with think speak software through Arduino microcontroller software.

Here they are controlling the speed of electrical machine using think speak software IOT based through Arduino Uno microcontroller. At the same time they are measuring though temperature though think speak software using IOT. For example the electrical machine has rotating at high speed it can damage or firing on electrical machine coil. This kinds of problems

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EXPERIMENTAL STUDY ON FIBRE AND FLY ASH BASED INTERLOCKING BRICKS

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ABSTRACT

The use of interlocking bricks masonry has gained speedy quality in several foreign countries as an alternate to standard bricks for property housing. It is being always challenge for researchers to make interlocking brick light weight, low cost and improve the performance against aggressive environment. An experimental effort made in this concern. This paper offers the results of associate degree experimental investigation during which the compressive strength, water absorption and density were investigated by using varying percentage of fly ash, stone dust, and sand with different mix proportion. A manmade fibre, glass fibre reinforce polymer (GFRP) utilize as reinforcing material to produce the interlocking blocks which gives appreciable results discuss in detail. The experimental results compared thereupon normal force clay brick and interlocking brick found sturdy in aggressive environments and have decent strength for his or her use in property building construction. The utilization of interlocking blocks workmanship has increased fast prevalence in numerous remote nations as an option in contrast to customary blocks for reasonable lodging. It is as a rule consistently challenge for specialists to make interlocking block light weight, minimal effort and improve the exhibition against forceful condition. A trial exertion made in this worry. This paper gives the aftereffects of a test examination where the compressive quality, water retention and thickness were explored by utilizing fluctuating level of fly debris, stone residue, and sand with various blend extent. An artificial fiber, glass fiber fortify polymer (GFRP) use as strengthening material to deliver the interlocking squares which gives calculable outcomes examine in detail. The test results contrasted and that conventional burnt earth block and interlocking block found solid in forceful conditions and have adequate quality for their utilization in reasonable structure development. tool to evaluate the mechanical performance of the panels comparing to idealized design.

Keywords: fly ash, GFRP, compressive strength, water absorption, density

1. INTRODUCTION

A very high measure of waste is being delivered all around the globe. The most widely recognized strategy for overseeing waste is through its transfer in landfills making in that way colossal stores of waste. In this circumstance, squander reusing is increasing expanding significance [1]. At present in India, around 206 coals based warm power plants are delivering around 160 million tons of fly debris consistently; the evaluations arranged by Ministry of Power just as Planning Commissions up to the year 2031-32 show that age of fly debris during the year 2031-32 would be around 900 million tons for every year [2-3]. While the present yearly generation of fly debris worldwide is assessed around 600 million tones [4]. The Government of India showed approaches drive for use and transfer of fly debris [5]. In a tropical nation like India the consumed mud block is the most fundamental structure material for development of houses. It is accounted for that the necessity of blocks for development movement sums to be in excess of 140 billion numbers every year [6]. For satisfy such request fly debris interlocking block might be one of option for maintainable development industry.

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BLOCK CHAIN TECHNOLOGY: MYTHS, ETHICS AND CURRENT TRENDS IN IT AND ITES

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Abstract

A blockchain is essentially a allotted database of information or public ledger of all transactions or digital activities that have been finished and shared amongst collaborating events. Each transaction in the public ledger is validated via consensus of a majority of the members inside the gadget. And, as soon as entered, data can never be erased. The blockchain consists of a sure and verifiable document of each unmarried transaction ever made. Bitcoin, the decentralized peer-to-peer digital currency, is the most popular instance that makes use of blockchain generation. The virtual foreign money bitcoin itself is distinct arguable but the underlying blockchain technology has worked perfectly and observed wide variety of packages in both economic and non-financial international. The most important hypothesis is that the blockchain establishes a gadget of making a distributed consensus in the virtual on-line international. This allows participating entities to recognize for sure that a virtual event befell by growing an irrefutable file in a public ledger. It opens the door for growing a democratic open and scalable digital economic system from a centralized one. There are terrific opportunities on this disruptive era and revolution on this space has simply begun. This white paper describes blockchain era and some compelling specific programs in each monetary and non-financial quarter. We then study the challenges in advance and business possibilities in this essential era that is ready to revolutionize our virtual world.

Keywords: Blockchain, Chain cods, Risk, Issues, Mitigation

**Effect Of Preheating The Work Material During
Machining Of Medium Carbon Micro Alloyed Steel**

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The turning operation was performed on 38MnSiVS5 microalloyed steel to study the surface finish under two different machining conditions viz., with and without preheating the work material. For machining, the preheated work material was maintained around 300⁰C with the help of oxy-acetylene flame. Taguchi robust design method was followed to design the number of experiments. This technique is very effective in predicting the effect of cutting parameters like cutting velocity, feed and depth of cut on surface roughness (R_a). The results showed that the surface roughness was significantly low for gas flame assisted machining compared to machining without preheating. Contour plots were derived to predict the surface roughness for different cutting conditions. Scanning electron microscopy was used to study the surface morphology of the machined part. 3D surface profile was also acquired to correlate the surface topography of the machined surface for varying parameters



Trust Information Management System for Cloud Service Providers

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Abstract

Trust model depends on the conduct of client and specialist organization to figure the trust esteems. The trust is fluffy, which propelled us to apply fluffy rationale for figuring the trust estimations of the cloud clients and service providers in the cloud environment. We make use of a Mamdani fluffy technique with gauss participation work for fuzzification and triangular enrollment work for defuzzification. The trust value is classified using the fuzzification. If the trust value is between 0 and 4 there is a low trust between the CSP and client/user. If the trust value is 5 then there is an agreeable trust between the CSP and client/user. If the trust value is between 6 and 10 then there is high trust among CSP and client/user. Parameters for example: execution, pliancy and versatility are taken for trust assessment of the asset. This characterization of fuzzy values is helpful in computing the trust value to be considered for communication. The properties for ascertaining execution are remaining burden and reaction time. What's more, for figuring flexibility, we have taken versatility, accessibility, security, and ease of use. The fluffy C-means gathering/bunching is applied to parameters for assessing the trust estimation of clients, for example, terrible solicitations, counterfeit solicitations, unapproved demands, and all out solicitations. Our method of computing trust value considers the parameters and compare them using the mathematical models equipped with software. This trust method implemented between the Cloud Service Provider and the Cloud User is considered to be efficient by incurring less time and hence is faster comparing to existing methods.

Keywords: trust model, fluffy technique, versatility, accessibility, fluffy C-means.

1. Introduction

Trust model which has its basis on the nature of Cloud user and Cloud Service Provider to calculate the trust values. The trust has been unclear, which encourages us to apply fuzzy logic for calculating the trust values in the cloud environment. Models which are comprehensive might quickly become inaccurate in the case where the training and testing data vary significantly over time due to changes in work-loads, configurations,

Joint Proposal Submitted to Department of Science and Technology (India)

Under

“Indo – Sri Lanka Joint Research Programme” (2019)

Department of Science & Technology

Subject: Acknowledgement of Online Project Submission & Temporary Registration No.

Dear Dr. SIVARAMAN VIJAYAKUMARAN

Online Project Management System

onlinedst.gov.in | Email: pmso_dst@nic.in

This is to acknowledge the online submission of your project proposal entitled **LASER ASSISTED MACHINING OF REACTION SINTERED SILICON NITRIDE CERAMIC FOR SPACE APPLICATIONS** testing the proposal submission.

You can track the status of your proposal quoting the reference as given below:

Temporary Registration Number : **TPN / 42941**

You will be receiving a File Number shortly.

Please mention **TEMPORARY REGISTRATION NUMBER** and **TITLE OF THE PROJECT** in all future correspondence with DST, till you receive the File Number. You can access this project account at <http://onlinedst.gov.in/> using the Principal Investigator (PI) username and password.

Regards
Administrator
e-PMS

Activate Windows
Go to Settings to activate Windows.

INDO SRILANKA JOINT RESEARCH PROGRAMMES

A. PROJECT IDENTIFICATION

1. Title of the Project :
LASER ASSISTED MACHINING OF REACTION SINTERED SILICON NITRIDE CERAMIC FOR SPACE APPLICATIONS
2. Duration of the Project :
12 Months
3. Field of Science and Technology covered by the proposal:
SPACE RESEARCH and APPLICATIONS
4. Key words qualifying the scope of the proposal:
Laser assisted machining, ceramic machining, precision machining of ceramics
5. Principle Investigators (PI) and Collaborating Institutions

	SRI LANKA	INDIA
Name of PI	Dr.U.FAROOK	Dr.V.SIVARAMAN
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B. TECHNICAL INFORMATION

1. Objective of the Project

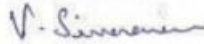
- a. To study the machinability of reaction sintered silicon nitride ceramic rod using PCD tipped cutting tool during turning process.
- b. To study the machinability of reaction sintered silicon nitride ceramic rod using PCD tipped cutting tool during turning process with Laser Assisted Heating.
- c. To analyze the surface finish, cutting force, chip morphology and surface integrity for various cutting parameters and comparing the same with laser assisted machining.
- d. Optimizing the cutting parameters for Laser Assisted Machining Process (LAMP).

3. Signatures of the Principle Investigators



Dr. U. FAROOK

SRI LANKA Head
Department of Mechanical Engineering
Faculty of Engineering
South Eastern University of Sri Lanka
University Park, Oluvil



Dr. V. SIVARAMAN

INDIA

Department of Mechanical Engineering
E.G.S. Pillay Engineering College
Nagapattinam

4. Declaration from the Heads of the Collaborating Institutions

It is certified that:

- (i) The institutions agree to participate in this joint research project
- (ii) The institutions shall provide infrastructure and necessary facilities for implementing the joint project
- (iii) The institutions assume to undertake financial and other management responsibilities for the part of the project work to be carried out at their institutions; and
- (iv) The back-up funding for human resources, consumable, etc. is available to this project.

Signature & Seal of the Head of the Institution



Dean
Faculty of Engineering
South Eastern University of Sri Lanka
SRI LANKA University Park, Oluvil



INDIA Dr. S. RAMABALAN, M.E., Ph.D.,
PRINCIPAL
E.G.S. PILLAY ENGINEERING COLLEGE
NAGAPATTINAM - 611 002



INTERNATIONAL WEBINAR



International Webinar 2020

TIME: 3.30 PM DATE: May 29th

Title of Talk

Visionary Leadership and Emotional Intelligence

REGISTER NOW AT <https://tinyurl.com/EGSPEC1>

Coordinator, Dr.V.Sivaraman M.Tech. Ph.D.(IITM), Director (Industry Institute Relations)

Organized by

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[An Autonomous Institution, Accredited by NBA, NAAC'A'
Affiliated to Anna University, Chennai, India 611002]

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OUR SPEAKER



Dr.S.GUNAPALAN
DEAN
Faculty of Management and Commerce
South Eastern University of Sri Lanka



TIME: 3.00pm DATE: 4th June 2020

Title of Talk

ONLINE EDUCATION DURING COVID 19 PANDEMIC

REGISTER NOW AT <https://tinyurl.com/EGSP55>

Coordinators

Dr.V.S.Rajakrishnan HOD/MBA, Dr.S.Karpagam HOD/BBA
Session Moderator: Dr.V.Sivaraman, Director (IIR) EGSP601

Organized by

PG & RESEARCH DEPARTMENT OF MANAGEMENT STUDIES
E.G.S.PILLAY ARTS & SCIENCE COLLEGE
[Accredited by NAAC 'A', Affiliated to Bharathidasan University, Trichy, INDIA]

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Dr.Rameez Aboobacker
DEAN
Faculty of Arts & Culture
South Eastern University of Sri Lanka

International Webinar 2020



TIME: 10.00 am IST DATE: 30 June 2020

Title of Talk

Eco-Friendly Magnesium Technology for Engineering and Bio Medical Applications

REGISTER NOW AT <https://tinyurl.com/EGSPEC-MECH7>

Coordinators

Dr.V.Sivaraman Director (Ind.Inst.Relations),E.G.S.Pillay Engg. College, India
Dr.Ervina Efsan Director (Research Prog. & Collab. Centre), MMU, Malaysia
Dr.U.Farook Head, Mech. Engg., South Eastern University of Sri Lanka

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OUR SPEAKER



Dr. Manoj Gupta
Professor
Department of Mechanical Engineering
National University of Singapore

INTERNATIONAL WEBINAR 2020

**E.G.S.PILLAY ENGINEERING COLLEGE, INDIA
MULTIMEDIA UNIVERSITY, MALAYSIA
SOUTH EASTERN UNIVERSITY OF SRILANKA**

Jointly Organizing

Talk on
Metallic Glasses for Engineering & Bio Medical Applications

Our Presenter




Dr.-Ing. Sree Harsha Nandam
B.Tech.(IITM) Ph.D.(KIT)
Post Doctoral Researcher
Institute of Nano Technology
Karlsruhe Institute of Technology
GERMANY

31 JULY 2020 | 11AM (IST)

Register Now at
tinyurl.com/EGSPEC-MECH10

Coordinators
Dr. V. Sivaraman, Director (Ind. Inst. Relations), EGSPEC, India.
Dr. Ervina Efzan, Director (Research Prog. & Collab. Centre), MMU, Malaysia.
Dr. U. Farook, Head, Mechanical Engineering, SEUSL, Sri Lanka.

For Queries
vs@egspec.org ervina.noor@staff.mmu.edu.my druthumanfarook@seu.ac.lk





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INTERNATIONAL WEBINAR 2020

**E.G.S.PILLAY ENGINEERING COLLEGE, INDIA
MULTIMEDIA UNIVERSITY, MALAYSIA
SOUTH EASTERN UNIVERSITY OF SRILANKA**

Jointly Organizing

Talk on
3 Important Considerations for Next Generation Manufacturing Engineers

Our Presenter




Mr. M. Brij Bhushan
B.Tech.(IITM), MS (MIT- USA)
Ex-R&D Manager, MGTI, INDIA
Researcher
Massachusetts Institute of Technology
USA

26 August 2020 | 3.00pm (IST)

Register Now at
tinyurl.com/EGSPEC-XXX

Coordinators
Dr. V. Sivaraman, Director (Ind. Inst. Relations), EGSPEC, India.
Dr. Ervina Efzan, Director (Research Prog. & Collab. Centre), MMU, Malaysia.
Dr. U. Farook, Head, Mechanical Engineering, SEUSL, Sri Lanka.

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INTERNATIONAL WEBINAR 2020

**E.G.S.PILLAY ENGINEERING COLLEGE, INDIA
MULTIMEDIA UNIVERSITY, MALAYSIA
SOUTH EASTERN UNIVERSITY OF SRILANKA**

Jointly Organizing

Talk on
Metal Additive Manufacturing: Industry Trends and Outlook

Our Presenter





Mr. M. Boopalan
B.Tech., MS (IITM)
Sr. Application Engineer
Centre for Additive Manufacturing
Eaton Research Labs, INDIA

24 September 2020 | 3.00pm (IST)

Register Now at
tinyurl.com/EGSPEC-MECH12

Coordinators
Dr. V. Sivaraman, Director (Ind. Inst. Relations), EGSPEC, India.
Dr. Ervina Efzan, Director (Research Prog. & Collab. Centre), MMU, Malaysia.
Dr. U. Farook, Head, Mechanical Engineering, SEUSL, Sri Lanka.

For Queries
vs@egspec.org ervina.noor@staff.mmu.edu.my druthumanfarook@seu.ac.lk





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CERTIFICATE ISSUED TO PARTICIPANTS



**E.G.S.PILLAY ENGINEERING COLLEGE - INDIA
MULTIMEDIA UNIVERSITY - MALAYSIA
SOUTH EASTERN UNIVERSITY OF SRI LANKA - SRI LANKA**

Jointly Presents this

Certificate of Participation to

Mr. T.M.K.K. THENNAKOON
South Eastern University of Sri Lanka

*for his / her active participation during the conduct of an International Webinar on
"Eco-Friendly Magnesium Technology for Engineering and Bio Medical Applications "
held on 30th June 2020 at 10 am (IST)*

Distinguished Speaker : Dr. Manoj Gupta
Professor, Mechanical Engg., NUS - Singapore

Dr.V.Sivaraman
Director (Ind. Inst. Relations)
EGSPEC

Dr.Ervina Efzan
Director (Research Prog. & Collab. Centre)
MMU

Dr.U.Farook
HEAD, Mechanical Engg.
SEUSL



**E.G.S.PILLAY ENGINEERING COLLEGE - INDIA
MULTIMEDIA UNIVERSITY - MALAYSIA
SOUTH EASTERN UNIVERSITY OF SRI LANKA - SRI LANKA**

Jointly Presents this

Certificate of Participation

to

**Mr. Zuriel Shee Da En
FET, Multimedia University - Malaysia**

*for his / her active participation during the conduct of an International Webinar on
"Eco-Friendly Magnesium Technology for Engineering and Bio Medical Applications "
held on 30th June 2020 at 10 am (IST)*

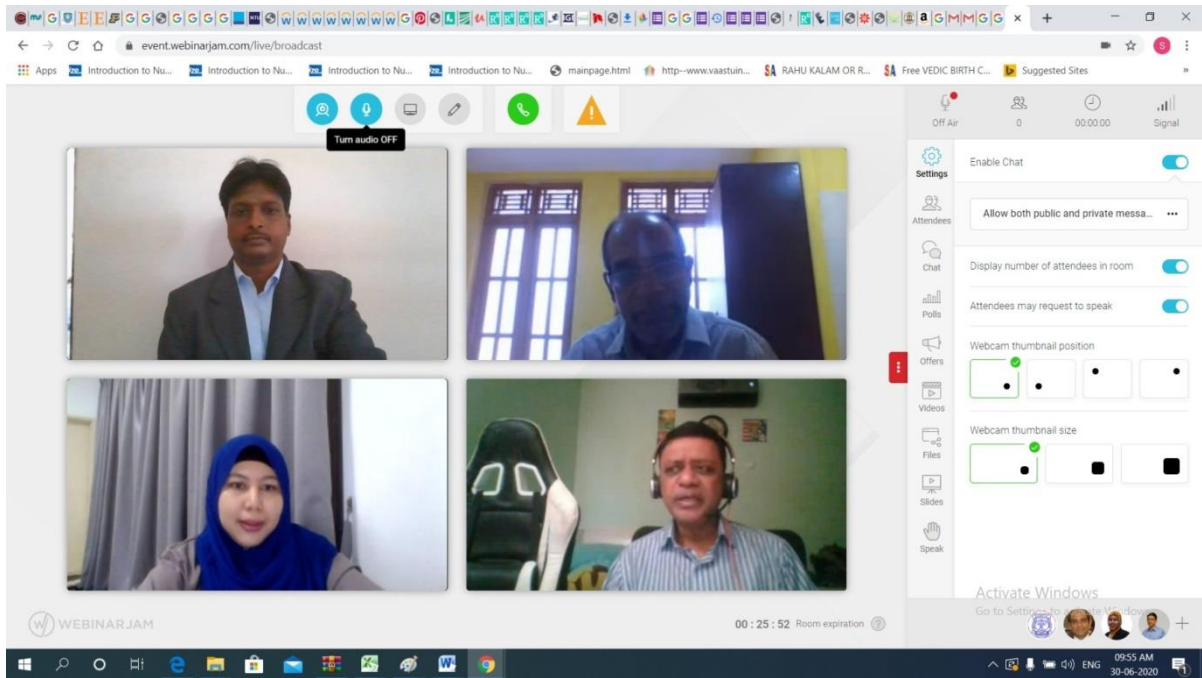
**Distinguished Speaker : Dr. Manoj Gupta
Professor, Mechanical Engg., NUS - Singapore**

Dr.V.Sivaraman
Director (Ind. Inst. Relations)
EGSPEC

Dr.Ervina Efzan
Director (Research Prog. & Collab. Centre)
MMU

Dr.U.Farook
HEAD, Mechanical Engg.
SEUSL

WEBINAR PHOTO TAKEN DURING INTRODUCTION OF SPEAKER



From Left to Right:

1. Dr. V. Sivaraman EGSPEC, India
2. Dr. U. Farook SEUSL, Sri Lanka
3. Dr. Manoj Gupta NUS, Singapore
4. Dr. Ervina Efan MMU, Malaysia



Speaker: Mr. M. Brij Bhushan, Massachusetts Institute of Technology (MIT) – USA
MIT ranked as world No.1 Institute in Engineering and Technology.

List of Faculty Members Visited
South Eastern University of Sri Lanka

S.No.	Name of the Faculty	Department	Institution
1.	Prof.Adhavanathan.T	Civil	EGSPEC
2.	Dr.Anakath.A.S	MCA	EGSPEC
3.	Prof.Anandaraj.R	EEE	EGSPEC
4.	Dr.Chinnadurai.M	CSE	EGSPEC
5.	Dr.Krishnamohan	Mechanical	EGSPEC
6.	Dr.Karpagam	BBA	EGSPA&Sc.
7.	Prof.Kamalaveni.S	Mathematics	EGSPA&Sc.
8.	Prof.Malliga.P	Civil	EGSPEC
9.	Dr.Manikandan.S	IT	EGSPEC
10.	Dr.Mohan.V	EEE	EGSPEC
11.	Dr.Murali.N	CSE	EGSPEC
12.	Dr.Ramabalan.R	Mechanical	EGSPEC
13.	Dr.Ramanujam.N	Mechanical	EGSPEC
14.	Dr.Rangarajan.R	EEE	EGSPEC
15.	Dr.Rajakrishnan.V.S	MBA	EGSPA&Sc.
16.	Prof.Raju.K	IT	EGSPEC
17.	Dr.Sivaraman.V	Mechanical	EGSPEC
18.	Dr.Sivaramakrishnan.V	Mechanical	EGSPEC
19.	Mr.Surendar.R	Commerce	EGSPA&Sc.
20.	Dr.Vijayasundaram.S.V	Physics	EGSPA&Sc.
	STUDENT		
21.	Mr.Hariraam.M	Mechanical (ME Manufacturing Engg.)	EGSPEC

List of Faculty Members Visited E.G.S.P.Group of Institutions

S.No.	Name of the Faculty	Department	Institution
1.	Dr.M.M.M.Najim	Vice-Chancellor	SEUSL
2.	Dr.M.B.M.Ismail	Management	SEUSL
3.	Prof.A.L.Hanees	Mathematical Sciences	SEUSL

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Dr.S.PARAMESVARAN, Secretary

Mr.S.SANKAR GANESH, Trust Member

EGS Pillay Group of Institutions

Chief Guest

Prof.M.M.M.NAJIM

Former Vice Chancellor, South Eastern University of Sri Lanka

Professor, Faculty of Science, University of Kelaniya, Sri Lanka

Guest of Honor

Dr. ERVINA EFZAN BINTI MHD NOOR

Director, Industrial Collaboration and Engagement Centre

Multimedia University, Malaysia

Guest of Honor

Dr. UPPU SRINIVAS RAO

Associate Professor, Department of Mechanical Engineering

IIT BHU, India

In the August Presence of :

Dr.S.Chandrasekar, CEO. Dr.S.Ramabalan, PRINCIPAL,

Dr.M.Chinnadurai, COE. Dr.S.Krishnamohan, Dean/Mech. & Building Sciences

Coordinators : Dr.V.Sivaraman Ph.D.(IITM), Director / Ind. Inst. Relations
Dr.N.Ramanujam, Dean / Student Affairs

With Best Compliments from:

Dr.G.Gurumoorthi ,HOD/Mechanical, Dr.V.Sivaramakrishnan Professor/Mech.,

Dr. J.Jeevamalar Assoc. Prof./Mech., Dr. S.Chockalingam, Assoc. Prof./Mech.,

Organized by : Department of Mechanical Engineering
E.G.S.PILLAY ENGINEERING COLLEGE (Autonomous)
(Accredited by NBA , NAAC with “A” Grade)
NAGAPATTINAM – INDIA 611002

Dr.U.Farook, (SEUSL) Deivered Lecture in ISTE STTP

The screenshot shows a Zoom meeting interface. The main content is a presentation slide with the following text:

APPLICATIONS OF ADVANCED MANUFACTURING TECHNOLOGY PROCESSES IN THE CERAMIC INDUSTRY

By
Dr. (Eng.) U. Farook, FIMMM (UK)

Head / Department of Mechanical Engineering
South Eastern University of Sri Lanka (SEUSL)

Author of following text books:

1. **Fundamentals of Ceramics for Engineers and Technologists**, Excellent Publication, Sainthamaruthu, Sri Lanka. ISBN: 978-824-5513-11-6
2. **Furnace Engineering**, Excellent Publication, Sainthamaruthu, Sri Lanka. ISBN: 978-824-5513-11-6

On the right side, there is a list of participants (21) with their names and initials:

- SV Sivaraman Vijayakum... (Host, me)
- UF Uthumankandu Farook
- AJ Anushka Jayarathne
- D ARUNKUMAR SIVARAMAN
- S Charuka Rupasinghe
- Deshan Randika
- DC Dr.A.THANGARASU, CIT
- Dr.Edward AnandE
- EA ECSS Ananda
- IS ilango Sritharan
- KS KBM, Sajith Umar
- Navami Premalal
- NS NENAMATH SURYA
- PP P.W.G.S.Dilshika Pusseewaththa
- PS Pasindu Silva
- Prasad Jayarathne

The bottom of the screenshot shows the Windows taskbar with the date and time: 10:03 AM 16-09-2021.

LIST OF FACULTIES AND STUDENTS PARTICIPATED FROM SEUSL

S.No.	Name of the Participant	Designation
1.	Mr. K.B.M. Sajith Umar	Instructor / Mechanical
2.	Mr.A.V.Nisath Hussain	Instructor / Mechanical
3.	Y.G.Asanka Ramesh Kumara	Student
4.	M.A.A.C. Jayarathne	Student
5.	P.W.G.S.D.Pussewaththa	Student
6.	Ilango Sritharan	Student
7.	PGCSP Gedara	Student
8.	H.K. Isuru Prasad Jayanath	Student
9.	S.G.N.N.Premalal	Student
10.	K.A.D.Randika	Student
11.	SM Paranavithana	Student
12.	Tharuka Indrajith Karunamuni	Student
13.	M.R.H.S.Gunathilaka	Student
14.	P.H.Sanduni Ruvinda	Student
15.	K. G. P. M. Silva	Student
16.	E.C.S.S. Ananda	Student



THANKYOU

Prof. A. RAMEEZ

Vice Chancellor, South Eastern University of Sri Lanka

Prof. M.M.M. NAJIM

Former Vice Chancellor, South Eastern University of Sri Lanka

Dr. S. PARAMESVARAN

Secretary, E.G.S.Pillay Group of Institutions, India

Prepared by

Dr.V.Sivaraman M.Tech. Ph.D.(IITM)

Director (Industry Institute Relations)

Professor / Mechanical Engineering

E.G.S.Pillay Engineering College

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India 611002

iitmvs@gmail.com vs@egspec.org