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DEPARTMENT OF MECHANICAL ENGINEERING

BRCM COLLEGE OF ENGINEERING & TECHNOLOGY

BAHAL - 127028, DIST. - BHIWANI, HARYANA



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MECHANICAL ENGINEERING SOCIETY (MES)

AIMS & OBJECTIVES

Main objective of MES is to involve participation of students in various academic and cultural activities of the department. Through the activities of MES there will be enhanced interaction of students with faculty members. The students will be exposed to personality and skill development through its activities. The MES will organize following activities:

- ❖ Introduction/Welcome functions of fresher students and farewell of outgoing students.
- ❖ Farewell of outgoing faculty members.
- ❖ Invited lectures of outside and inside experts.
- ❖ Group discussion and Debate competition.
- ❖ Cultural/Picnic/Sports activities.
- ❖ Publication of departmental magazine “MECHANICA”.

OFFICE BEARERS OF MES

- | | |
|------------------------------|---|
| 1. Patron | Principal (Ex officio) |
| 2. President | Head of Deptt. (Ex officio) |
| 3. Faculty Advisor | Faculty member to be appointed by HOD |
| 4. Secretary | III Yr B.Tech. student to be nominated by HOD |
| 5. Jt. Secretary | III Yr B.Tech. student to be nominated by HOD |
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| 7. Executive members of MES: | |
| i. B.Tech. I Yr | 01 student |
| ii. B.Tech. II Yr | 01 student |
| iii. B.Tech. III Yr | 01 student |
| iv. B.Tech. IV Yr | 01 student |
| v. M.Tech. I Yr | 01 student |
| vi. M.Tech. II Yr | 01 student |
| vii. Non teaching staff | 01 member |

SOURCES OF FUNDING FOR ACTIVITIES OF MES

- ❖ Financial support from Management
- ❖ Membership subscription (per annum):
 - I. Faculty members Rs. 200.00
 - II. Technical staff Rs. 100.00
 - III. All students Rs. 100.00
- ❖ Collection of Sponsorship / Donations / Advertisements through students efforts

M.TECH DISSERTATION (ABSTRACT) 2015-2017

Hydraulic Press system design and implementation of modelling

NAVEEN

This project deals with dynamic analysis of hydraulic unit by matlab simulation. It directly relates with machine response of the various component. In the case of the hydraulic systems, which are discussed in this paper, the actual input is some kind of prime mover such as an internal combustion engine or an electrical motor. The speed and torque of the prime mover is converted to the hydraulic power parameters at the pump, the directional control of the hydraulic power is provided by a valve, while the output can be the force and velocity of the double acting cylinder.

To analyse piston rod displacement, pressure and force acting in the system. Dealing with complicated system which contain customized valve, power supply unit and PID controller. The hydraulic system is described mathematically in preparation for modeling. At first, the model with high degree of detail, but their non-linear character is created. The linear model which used in design of an appropriate control system which enables the accurate control of velocity, force and pressure of the system.

An input signal of sine wave to pass through the actuating device of customized valve. Using closed loop control system with PID regulation, which is used to tune the performance of system along the transfer function of system. One of the complicated task taken in this part, design and performance of the high response servo valve (Moog D661). And it is tuned by PID controller with appropriate parameters.

The principle of closed loop hydraulic system was analysed and the total pressure control valve was discussed in detail. There are two methods were used to compute the whole system natural frequency based on building hydraulic system model in frequency domain. The other is Laplace transform method in which we got the relationship between the whole system and every part's of natural frequencies. So, our final result to determine the transfer function of the closed loop of hydraulic system.

Analysis of Sheet Metal Drawing Process with Different Methods of Providing Blank Holder Force

Amandeep Tanwa

The objective of the study is to optimize best quality draw operation performed using minimum forces namely Die force, punch force and binder force which are directly proportional to power consumption. Therefore, due to minimum force applied in draw operation the power consumption is reduced. This new technique also helps in improving the quality of product. In the study some of the factors which affect the quality of drawn component and power consumed are

- Die ,Punch & binder forces
- Formability
- Thinning
- Spring back
- Wrinkles

From the above factors Die, Punch & binder forces define the process forces to develop them power is used and all remaining factors Formability, Thinning, Spring back and Wrinkles define component quality which is produced by the process.

In this study, for every case sheet metal drawing process is performed on same component and tool, only type of working force for binder is changed. The cases considered in this study are as follows

- Draw of the simple cup where binder force is provided by press cushion set
- Draw of the simple cup where binder force is provided by gas springs
- Draw of the simple cup where binder force is provided by coil springs
- Draw of simple cup where binder or blank holder is rigid and no binder force is used

The whole study is done by using an upper end simulation software “AutoForm plus R7” which gives most real results for the sheet metal processes. This software can simulate every operation of sheet metal components as cutting as well as non-cutting operations, but in this study only draw operation is simulated.

To simulate a draw operation by using this software all the forces the software can calculate itself but the component, blank, tool element and stroke has to be provided as input to run the simulation. In this study simple cup as component, a round sheet of 2 mm thickness as blank, Die, punch and blank holders as tool element and Die stroke of 150 mm has been provided as input for the simulation. After the first iteration, tentative forces are obtained from results which can be modified as per requirement and improvement required in component.

After the complete study of drawing process with different methods of providing working forces to binder, simulation results are obtained and analysed for finding the best method of providing working force to blank holder. The results of the drawing process with the rigid binder maintaining sheet thickness gap between the binder and die has been considered the best results as the minimum forces is required for drawing process and best component quality is obtained.

Optimization of Flow and Geometrical Parameters for improving performance of a rectangular duct: A Taguchi approach

Dinesh Kumar

In the present study, the optimal set of design parameters for the rectangular duct with tabulators has been determined using a Taguchi experimental design method. The numerical investigations have been performed to find the heat transfer and friction factor characteristics inside the rectangular duct mounted with rib of variable inclination angle of front face (α) on one wall having different roughness parameters using computational fluid dynamics (CFD). With variation in inclination angle of the front face of the rib can generate right triangular ($\alpha = 45^\circ$), trapezoidal ($\alpha = 60^\circ$ and 75°) and square ($\alpha = 90^\circ$) geometries simultaneously. The effects of the three design parameters such as Reynolds number (4000, 8000, 12000, and 16000), rib pitch to height ratio (3, 6, 9, and 12), and rib geometry due to variation in inclination angle of the front face of the rib ($\alpha = 45^\circ, 60^\circ, 75^\circ, \text{ and } 90^\circ$) are investigated. The CFD results show that the reattachment length increases with increase in inclination angle of the front face of the rib. In addition, a trapped vortex has been observed at the lowest rib pitch to height ratio i.e. $p/e = 3$; however, the flow separation, recirculation bubble, flow reattachment and boundary layer redevelopment has been witnessed at higher rib pitch to height ratios ($p/e \geq 9$).

Further, in the Taguchi experimental design method, Nusselt number and friction factor are considered as performance parameters. An L16 (4^3) orthogonal array is selected as an investigational plan for the design parameters. Minimization of the friction factor (minimum pressure drop) and maximization of the Nusselt number (maximum heat transfer) are taken as the criteria of optimization. Results show that Reynolds number has the greatest influence on the heat transfer, while rib geometry (α) on the friction factor ratio. The optimum configurations of design factors for Nusselt number and friction factor are $A_4B_4C_1$ and $A_4B_1C_1$, respectively.

Numerical results validate the suitability of the proposed approach. So, this investigation suitably offers an improved rib design for internal fluid flow investigations related to cooling applications.

Keywords: Heat Transfer, Friction Factor, Rectangular Duct, Rib Geometry, Computational Fluid Dynamics

Enhancement of Assembly Line Efficiency with Optimization of Productivity

Anulay Kumar Anu

Manufacturing process is a process of producing and creating a product with the use of technologies and machinery resources. In manufacturing process there are three dimensions, which are important in improving the production system. These are cost, quality, and speed that can be considered as basics of every process. In this thesis speed of the manufacturing process is enhanced, which leads to acquire the production orders in given time and also reduces the number of dropped orders.

Assembly lines are the part of manufacturing process to convert raw materials into finished products. Considering optimization problems in assembly lines, applying PSO algorithms to the established model could lead to efficient manufacturing. PSO algorithm is a programming search technique for maximizing productivity, maximizing line efficiency and reducing production time.

This work presents an approach for developing assembly line simulation models used for optimization of assembly lines. This model is designed in MATLAB 2015(a) with the help of inbuilt Production Toolbox. The simulation of the assembly line is created to assess cycle times and utilization of workstations using MATLAB Simulink. The optimization, in the context of presented work, is the process of locating and scheduling the products in the line achieving best timing to fulfill production orders. The workstations can be first balanced for better performance and then products are scheduled based on reduction of the production time.

TEACHERS' DAY CELEBRATION

Mechanical Engineering Society, in association with other departmental societies celebrated Teachers' Day, "GURU NAMAY: A tribute to Teachers", on 5th September 2017 in the Mechanical block. The event started with the speech of Master Baljeet Singh 4th Year ME and Master Rishabh 4th Year CSE, sharing the importance of this day. The chief guest Dr. S.K. Sinha (Director, BRCM Education Society), shared his thoughts with students about this very day. Afterwards, Principal Dr. Arabinda Sharma addressed the gathering and shared the importance of teacher in a student's life. Event was made memorable with the various cultural activities performed by students, and the healthy tasks performed by the faculty members. Personality matching titles were given to the faculty members by the students. The complete event was boosted by the music and cheers, faculty members shared funny experiences and memorable moments of their life. The students presented a gift as a mark of respect to all the faculty members. Mr. Durgesh Srivastava, head of Student Activity Cell, congratulated the student coordinators for putting on a great show.



EXPERT LECTURE ON CAREER IN RESEARCH FIELD

Department of Mechanical Engineering organized an expert lecture on “Career in Research Field” for the students of final year. This invited lecture was delivered by Dr. Jaiveer Singh, an alumnus of BRCM CET (2009-Batch) on 29/9/2017. In his lecture, Dr. Jaiveer emphasized on the importance of research and career opportunities in this field. He also shared his experience gained during PhD at IIT Bombay and overseas experience while pursuing PDF in South Korea. Dr. Jaiveer during the interaction helped the students figure out their doubts and queries regarding challenges in research. He, in his interactive way, cleared the vision of students towards the research field. Faculty members presented floral bouquet to Dr. Singh as a token of respect. All in attendance were benefited by his words.



EXPERT LECTURE ON ETHICS AND MORAL VALUES

Department of Mechanical Engineering organized an expert lecture on “**Ethics and moral values**” for the students of Mechanical Engineering. This invited lecture was delivered by Dr. S. K. Mishra (Principal GDC Memorial College, Bahal) on 11/10/2017. In his lecture Dr. Mishra emphasized on the importance of moral values in youths. Dr. Mishra also highlighted the importance of self-confidence, hard work and positive thinking in one’s life. Dr. Mishra in his lecture mentioned that self confidence, patience and consistency are the most important ingredients to cook the recipe “victory”. He interacted with the students and helped them figure out their queries. All in attendance were benefited by motivational words of Dr. Mishra.



Vishwakarma Day Celebration

Vishwakarma Day also known as Vishwakarma Jayanti or Vishwakarma Pooja is a day of celebration for Vishwakarma, a Hindu god, the divine architect and one of the fourteen precious things born of the Samudra manthan. He is considered as swayambhu and creator of the world. As a mark of reverence, the day of worship is not only marked by the engineering and architectural community but also by artisans, craftsmen, mechanics, smiths, welders, industrial workers, factory workers and others. It is customary for craftsmen to worship their tools in his name. Modern electronic servers are also worshipped for their smooth functioning.



The workshop in Mechanical Engineering Department was decorated with flowers and other decorative items. Unlike the previous years, Mechanical Engineering Department celebrated

Vishwakarma Day on 17th September, 2017 as a mark of reverence towards Vishwakarma, a Hindu deity. On the holy occasion of Vishwakarma Day whole staff of Mechanical Engineering Department along with students gathered in workshop, performed holy “Havan” and prayed for a better future, safe working conditions, and success in their respective fields. Instructors also prayed for the smooth functioning of various machines.



ACME NOV-2017

Mechanical Engineering Society organized its annual tech fest "ACME-2017" on 16th and 17th November, 2017. This was the 5th time MES organized "ACME" and celebrated its glory.

The fest was inaugurated on 16th November at 10:00 AM in seminar hall, in the auspicious presence of Chief guest Sh. Sudhir Dhanda, Sub-inspector in CBI and Alumni BRCM-CET, Guest of honor Sh. S.S. Beniwal, financial advisor PNB, Bahal, Dr. Arabinda Sharma, Principal BRCM-CET, Sh. Kanwarpal Singh, Head of Mechanical Engineering Department, Faculty members and students of BRCM-CET. The ceremony was inaugurated by lamp lighting remembering Goddess Saraswati and an introductory speech by Master Baljeet Singh, Secretary MES. This was followed by address speech of Principal, Dr. Arabinda Sharma. Guest of honor Sh. S.S. Beniwal motivated the students and shared his experience. HOD Mechanical Engineering Department Sh. Kanwarpal Singh and faculty advisor MES Sh. Sunil Baloda, addressed the audience and expressed their warm wishes to the students for upcoming events in ACME. After the inaugural ceremony, the events Technical Paper Presentation and Talent Hunt were organized.

After inaugural ceremony various technical and fun events like Quiz, CAD Race, Treasure hunt and races were organized on the very first day, where students showed their technical and cultural skills. MES achieved milestone with over 150 participants in aptitude test and over 350 participants in ACME-2017.

The second day started with G-3 test and was followed by other events like GD & Brain storming, Machine operation and Logo Quiz.

On 17th nov in the second session closing ceremony was held from 2:30 PM onwards and winners of various events were awarded with trophies and medals. The closing ceremony was concluded in presence of Sh. Manish Khatri, chief finance officer BRHD trust, Dr. Arabinda Sharma Principal BRCM-CET, Sh. Kanwarpal Singh, Head of Mechanical Engineering Department, Heads of various Departments and faculty & staff members.

Sh. Kanwarpal Singh appreciated the efforts of coordinators and managing team of ACME-2017. Sh. Sunil Baloda, Faculty advisor of MES proposed vote of thanks and announced the name of position holders of Mechanical Engineering Society for coming session and motivated the MES executives to achieve greater height.

APTITUDE TEST/GD/TURN THE COAT

The event Aptitude test/ GD/ Turn the coat was organized in ACME 2017. The event was organized in two phases. First phase was a written Aptitude test organized on 16th November 2017, in which about 150 students from BRCM CET, GDC Memorial College and BRCM Public School took part. Out of these students, 40 students made their way to the second phase of the event. The second phase was a Group Discussion Round, organized on 17th November 2017 in the seminar hall C-305. Out of the 40 qualifiers from Aptitude test, 10 students were selected for the final round of the event, Turn the Coat. This one was a debate based round, in which the participant had to speak in the favor and against of the given topic simultaneously. The top three students from this round were declared 1st, 2nd and 3rd position holders.

WINNERS:-

1st Position:- Mayank Dwivedi (ME 4th Year)

2nd Position:- Anshul Garg (CSE 3rd Year)

3rd Position:- Monika (BRCM Public School Gyankunj)

EVENT COORDINATORS:-

Prabhanshu Sinha (4th Year), Baljeet Singh (4th Year), Manish Kumar (4th Year) , Anil Kalirawana (4th Year)

Jaikishan Sharma (3rd Year), Vishal Thakur (2nd Year), Krishan Kumar (2nd Year)





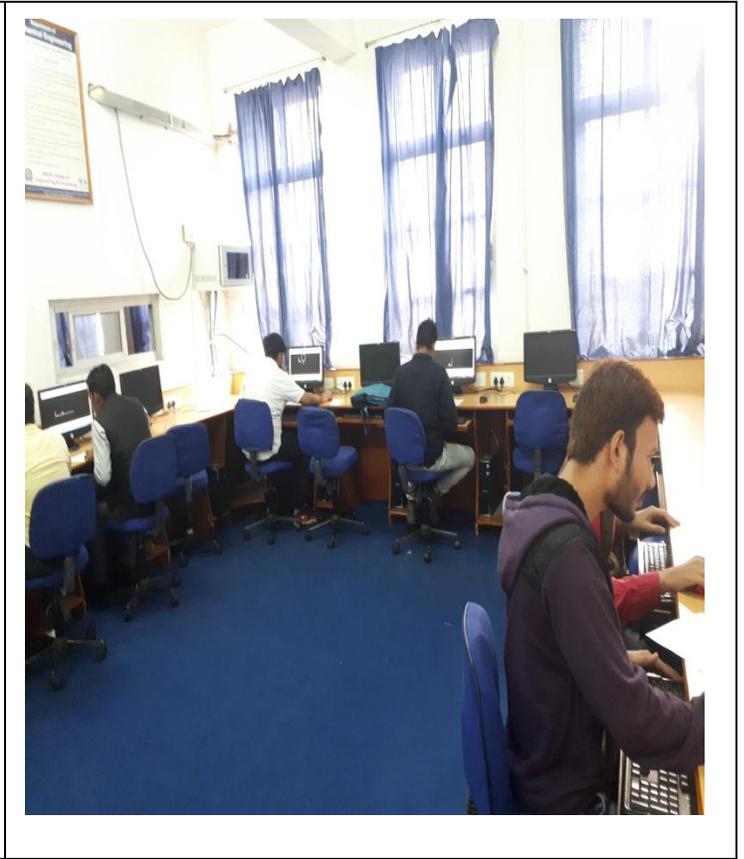
CAD RACE

The event “CAD Race” was organized on 16th November 2017 in the CAD LAB of ME Department from 12:00 PM onwards. There were a total of 15 participants. The participants of this event had to design a basic engineering drawing on AutoCAD software within 20 minutes. All the participants have shown equal zest in the event and following were the winners of this event:-

1st Position: - Amit (ME 2nd Year)

2nd Position: - Navneet Bulla (ME 2nd Year)

Event Coordinators: - Sahajdeep Singh (4th Year) and Ravi (3rd Year)



GAADI GADGET AUR GYAAN(G3)

The event Gaadi Gadget aur Gyaan (G3) was organized in ACME 2017 on 16th November 2017 from 11:30 PM onwards in seminar hall B-106. The event was a paper pen test comprising of questions from technical sector, including automobiles, smart gadgets and computers. There was a total of 20 MCQ based questions with no negative marking. Around 40 students from BRCM CET and 150 students from BRCM Public School took part in this event and following students were declared winners from BRCM CET and BRCM Public School:

Event was coordinated by:-

Baljeet Singh (4th Year)

Manish Kumar (4th Year)

Prabhanshu Sinha (4th Year)

Vishal Thakur (2nd Year)



KAUN BANEGA QUIZPATI(KBQ)

The event “Kaun Banega Quizpati(KBQ)” was organized on 16th and 17th November 2017. The event was of 2 phases. The 1st phase was a pen-paper based test in which around 350 students participated from the 3 esteemed institutes BRCM CET Bahal, GDC Memorial College and BRCM Public School took part. Out of these, 15 students were shortlisted for the second phase. The main event, KBQ Quiz, comprised a set of 10 questions for each shortlisted candidate. The lifelines for this event were Dr. Jitendar Gaur (HOD AS&H), Dr. Vivek Kumar (HOD EEE deptt.) & Mr. Abhishek Pilania (Teacher, BRCM Public School Gyankunj). Each candidate was allowed to use only three lifelines. The students showcased their basic GS & GK and the cash prizes were given to the students who successfully cleared the 2 levels of quiz.

POSITION	WINNERS FROM SCHOOL	WINNERS FROM COLLEGE
1 ST	ANOOP (12 TH)	NEELAB PANDEY (ME 4 TH YEAR)
2 ND	ROHIT (12 TH)	VISHAK MITTAL (CSE 3 RD YEAR)
3 RD	VIPUL AGGARWAL (10 TH)	ROHIT RANGA (CSE 2 ND YEAR)

In a special round, Mr. Bhoop Sheoran(Chief guest) and Mr. Kanwarpal Singh (HOD ME) participated in KBQ and all the cash money won by them was donated to students’ aid fund of BRCM CET.

Event Coordinators: - Prabhanshu Sinha (4th Year), Baljeet Singh (4th Year), Manish (4th Year), Pradeep Chaudhary (4th Year), Sonu (4th Year)



LOGO QUIZ

The event “Logo Quiz” was organized on 17th November 2017 from 12:00 PM onwards in seminar hall (B-108). There were a total of 25 teams, each consisting of two players. The teams had to guess the logos of various known brands and organizations. The event was conducted in three rounds. There were eliminations in first two rounds. In the final round, there were only 10 teams, and out of them, following was declared the winners:-

WINNERS: - Mayank Dwivedi (ME 4th Year) and Sahajdeep Singh (ME 4th Year)

Event Coordinators: - Chanderkant Parashar (4th Year), Konark (3rd Year), Ravi (3rd Year)



POWER POINT PRESENTATION

A Technical PowerPoint Presentation event was organized on 16th november at 10:30 AM in the Seminar Hall. It was judged by Mr. Amit (ME Department) Mrs.Anita Dalal and Mr. Nitesh Jain(ME Department). The event TPP was held for the holistic development of students. Participants presented various topics, based on theme “”.

The top three positions were grabbed by following students respectively:-

1. Mehak Goyal From 12th (BRCM Gyankunj Behal)
2. Sakshi Priyadarshi from EEE 3rd year.
3. Anshul Garg From CSE 3RD year.

Event Coordinator-RAVI, ANIL KALIRAWANA





LATHE OPERATION

“LATHE OPERATION” was organized on 17TH November 2017 at 11:00 AM in the Machine Shop. Participants were divided into teams of two students each. Each team was given a work-piece on which they had to perform Step turning using Lathe Machine. The teams were then invited for the questioning round.

The following teams grabbed top 3 positions:

1ST POSITION: Sombir (ME 3RD Year) & Sanjeev (ME 3RD Year)

2ND POSITION: Amit kumar (ME 2ND Year) & Navneet (ME 2ND Year)

3RD POSITION: Rajnish (ME 4TH Year) & Rajat lamba (ME 3RD Year)

Event Coordinators: Vineet thapan(ME 4TH), Ritesh Kumar Gautam (ME 3RD)



BRAIN TRICK

A “BRAIN TRICK” event was organized on 17TH Nov 2017 at 2:00 PM onwards in the Seminar Hall B-108. About 25 teams, each consisting of 2 students took part in this event. The event was wrapped up in the only single rounds. In this round each team was asked 25 questions of GK and General Awareness. No negative marking in this quiz. All the questions are very easy. Top2 teams were selected:

1ST POSITION: Abhinav (CE 3RD YEAR), Shubham (ME 4TH YEAR)

2ND POSITION: Sombir (ME 3RD Year) & Sanjeev (ME 3RD Year)

Event coordinator: Rajat lamba (ME 3RD YEAR)& Rajnish Bishnoi (ME 4TH YEAR)



CHANNEL SURFING

The Channel surfing are the event conduct on the 16th November 2017 at 12:00 PM onward in the Saminar hall. Many students are participated in this event. In this event choose any suitable TV channel and role play according to the channel. This event gudge by Mr.Amit (ME Department) and Mr.Nitesh jain(ME Departmant). Top 2 students are selecting. And the winners are:-

1ST POSITION: Monika from 12th (BRCM GYANKUNJ)

2ND POSITION: Anu (BRCM GYANKUNJ)

Event coordinator: Jai kishan (ME 3RD YEAR) & Vineet thapan (ME 4TH YEAR)



TALENT HUNT

Talent Hunt event was organized in seminar hall on 17th November 2017 at 2:30 PM. The event started before at the end of the Annual Technical Fest ACME-2K17. In this event around 10 students showed their skills in various cultural activities like dancing, singing and skit performances. The event was judged by the Mr. kawarpal (HOD ME Department), Mr. Sunil baloda (A.P. ME), Mr. Pramod Saharan (A.P., CE).

Winners :

1st Position: Shilpa Poonia from GDC Collage

2ND Position: Sheetal from CSE 2ND YEAR

Event Coordinators : Rajnish Bishnoi (4th Year ME) & Rajat lamba (3rd Year ME)



TREASURE HUNT

An event “TREASURE HUNT” was organized on 16TH November 2017 at 3:30PM onwards in the Central Lawn. A total of 50 students (10 teams) took part in this event. The teams were supposed to find out the treasure by making the use of clues, hidden in the campus at various sites. The team which found the treasure was awarded with a gift hamper. The whole event was coordinated under the guidance of Mr. Sunil Baloda (A.P. ME Department) and Mr. Nitesh jain (A.P., ME Department).

WINNER TEAM: SR. NO.	NAME	BRANCH	YEAR
1	SHEETAL	CSE	2ND YEAR
2	RASHI	CSE	2ND YEAR
3	BABAITA	CSE	2ND YEAR
4	SALMA	CSE	2ND YEAR
5	KUSUM	CSE	2ND YEAR

Event Coordinators: Jay kishan (3rd Year), Ashish Dubey (3rd Year), Rajat lamba (3rd Year), Ritesh (3rd Year)



BOLT (100 M RACE)



TIC TAC TOE



BEG BORROW STEAL



Miasma-2k18

Mechanical Engineering Society Report Writing

BRCM CET organized its annual tech fest "MAISMA-2K18" on 20th and 21th March, 2018.

The fest was inaugurated on 20th march at 09:00 AM in seminar hall, in the auspicious presence of Chief guest Dr. Arabinda Sharma, Principal BRCM-CET, Sh. Kanwarpal Singh, Head of Mechanical Engineering Department, Dr. Sudesh jakker HOD CSE Department Faculty members and students of BRCM-CET. The ceremony was inaugurated by lamp lighting remembering Goddess Saraswati vandana. This was followed by address speech of Principal, Dr. Arabinda Sharma. After inaugural ceremony various technical and fun events like Quiz, CAD Race, Treasure hunt and races were organized on the very first day, where students showed their technical and cultural skills. maisma achieved milestone with over 100 participants in aptitude test and over 250 participants in MAISMA-2K18.

The second day started with G-3 test and was followed by other events like GD & Brain storming, Machine operation and Logo Quiz.

LOGO QUIZ

The event "Logo Quiz" was organized on 21st march 2018 from 10:30 AM onwards in seminar hall (B-108). There were a total of 35 teams, each consisting of two players. The teams had to guess the logos of various known brands and organizations. The event was conducted in three rounds. There were eliminations in first two rounds. In the final round, there were only 10 teams, and out of them, following was declared the winners:-

WINNERS: Vaibhav (CE 3rd Year) and Rahul jaglan (CE 2ND Year)

Event Coordinators: Rajat lamba (3rd Year ME), Ravi (3rd Year ME)



LATHE OPERATION

“LATHE OPERATION” was organized on 20TH March 2018 at 10:30 AM in the Machine Shop. Participants were divided into teams of two students each. Each team was given a work-piece on which they had to perform Step turning using Lathe Machine. The teams were then invited for the questioning round. A total of 10 teams took part in this event. The event was judged by Mr. Vishwas Yadav (A.P., ME Department) and Mr. Pradeep (Lab Technician, ME Department). The following teams grabbed top 3 positions:

1ST POSITION: Sombir (ME 3RD Year) & Sanjeev (ME 3RD Year)

Event Coordinators: Jai kishan (ME 3rd year), Ashish Dubey (ME 3rd year)



ARM WRESTLING

The event “arm wrestling” was organized on 21st march 2018 from 02:00 PM onwards in central lawn. There were a total of 25 participants, each consisting of many players in many weight categories. The event was conducted in three rounds. There were eliminations in first two rounds. In the final round, there were only final players goes to the final round, and out of them, following was declared the winners:-

	Name	Positions
Weight category 0-55 kg		
1.	Nishant Tomer (cse 1 st)	1 st
Weight category 56-65 kg		
1.	Vijay (me 3 rd)	1 st
Weight category 65-74 kg		
1.	Vaibhav (ce 3 rd)	1 st
Weight category 75-84 kg		
1.	Mukul (ce 3 rd)	1 st
Weight category 84-open kg		
1.	Rahul jaglan (ce 3 rd)	1 st

PICTURE PERCEPTION TEST

“PICTURE PERCEPTION TEST” was organized on 21st March 2K18 from 9:30 AM to 10:00 AM in the Mechanical Seminar Hall B-108. Participants were shown 5 pictures one by one for 30 seconds after the time period of 5 minutes each. In 30 seconds they had to observe the full picture and then after 5 minutes were given to write the story based on that picture. A total of 25 participants took part in this event. The event was judged by Mr. Naveen Sheoran (T.P.O.). The only participant qualified this test:

1st POSITION: Siddharth Kumar (ME 2nd year)

Event Coordinators: Ashish Dubey (ME 3rd year) & Jay Kishan Sharma (ME 3rd year)



(100 M RACE)

The event “100 Meter” was organized on 21st march 2018 from 02:00 PM onwards in football ground. There were a total of 25 players. 5 players run in one time and total 5 groups run in race and winner players of each groups run in final round. So there will be result are declared to :

1ST POSITION: Sunil Nehra (ME 3rd)

2ND POSITION: Shubham (EEE 2nd Year)

3RD POSITION: Jai Kishan (ME 3rd)

EVENT COORDINATORS: Ritesh kumar gautam (ME 3RD)

TIC TAC TOE

The event “TIC TAC TOE ” was organized on 20th march 2018 from 03:00 PM onwards in central lawn. There were a total of 30 players. A team of 3 players play this game. This game is very interesting and funny, all players fully enjoying in this game. Two team playes combined at one time. This game are some different to other games but its very interesting. So there will be result are declared to this game:

WINNERS: Ankit (cse 2nd yr.), Gagan (cse 2nd yr.), Sukhpander (cse 2nd yr.)
EVENT COORDINATORS: Rajat lamba (ME 3RD YR.), Ravi (ME 3RD YR.)





APTITUDE TEST

The event Aptitude test was organized in MAISMA 2K18. The event was organized in 3 phases. In Ist phase was a online Aptitude test organized on 20th march 2018, in which about 150 students from BRCM CET. Out of these students, 40 students made their way to the second phase of the event. The second phase was a Group Discussion Round, organized on 21st march 2018, in the seminar hall C-305. Out of the 40 qualifiers from Aptitude test, 10 students were selected for the final round of the event, PI. This type of events was very knowledgeable for students. They events are very interesting . The toper of the aptitude test were declared 1st position .

WINNER: Vivek (EEE 3RD YR.)

EVENT COORDINATOR: Rajat lamba (ME 3RD YR.)





DEPARTMENTAL VISIT

INDIA INTERNATIONAL TRADE FAIR (IITF)-2017 **PRAGATI MAIDAN, NEW DELHI**

A visit to India International Trade Fair (IITF)-2017 was organized on 24th November, 2017. Around 55 students of ME department visited the Trade fair. Faculty coordinators Sh. Amit Kumar (A.P., ME Department) and Sh. Ankit Panghal (A.P., ME Department) accompanied the students to the site.

IITF is organized every year in national capital Delhi. Various business startups showcase their work. Different states of India were participating in this trade fair. Also some of the government organizations, like Ministry of Earth Sciences, were also there.

Visit was initiated by visiting each and every hanger of trade fair. Various startups across India have showcased their work and startup plan. Students has shown a lot of enthusiasm and grabbed most of this visit. Some students took part in few competitions there and were rewarded with appreciation certificates. Also a visit to Rajghat and India Gate was made.

In the end, Sh. Amit Kumar and Sh. Ankit Panghal motivated the students to get more and more exposure to the current trends in industry and to get going with the startup idea of Indian government.



Faculty Mechanical Engineering Department

Name	Designation	Qualification
Mr. Kanwarpal Singh	HOD Mechanical & Asstt prof	B.Tech(ME), M.Tech(M&A), (Ph D Purshing)
Dr.Sandeep Chauhan	Asstt prof	B.Tech(ME),M.Tech(MT&A),Ph.D
Mr. Sunil	Asstt prof	B.Tech(ME),M.tech(Thermal Engg.(Ph.D Pursuing)
Mr Vishwas Yadav	Asstt prof	B.Tech(ME),M.Tech(I&P)
Mr. Amit Kumar	Asstt prof	B.Tech(ME),M.Tech(ME), (Ph.D Pursuing)

Mr.Nitesh Jain	Asstt prof	B.Tech(ME),M.Tech (M&A)
Mr.Ankit Panghal	Asstt prof	B.Tech(ME),M.Tech(Renewable Energy)
Mr.Mandeep	TA	Diploma (ME),B.Tech (ME),M.Tech

Supporting Staff Mechanical Engineering Department

Name	Designation	Qualification
Mr. Arvind Godara	Instructor (Sr. Scale)	Diploma (ME)
Mr. Pardeep Kumar	Instructor (Machine Shop)	ITI (Turner), CTI, BA
Mr. Ladhu Ram	Technician (Welding)	ITI (Welder)
Mr. Sanjay Kumar	Carpenter (Workshop)	ITI

Faculty Publications/ Conferences (Int. National and National)/Seminar and Workshops attended

Kanwarpal singh

- “An Analysis of Sintering Mechanism”, Proceedings of National Conference on Recent developments in Mechanical Engineering , 19-20 February, 2010, pp 272-275, BRCM-CET, Bahal, Haryana.
- “Powder Metallurgy (PM) of Aluminum Alloy”, Proceedings of National Conference on Recent developments in Mechanical Engineering , 19-20 February, 2010, pp 208-211, BRCM-CET, Bahal, Haryana.
- “Cogeneration of Energy”, Proceedings of National Conference on Industrial Electronics, Drives and Embedded Systems, March 7-8, 2009, BRCM CET Bahal, Haryana.
- “Sintering Technology: An Analytical Overview”, Proceedings of NCTI, October 11-12, 2008, pp 418-423, BRCM CET Bahal, Haryana.
- “An Analysis of Surface Roughness and Machinability of Al-Fe-Si Alloys”, Proceeding of National Conference TAME-2012, October 19-20, 2012, YMCAUST, Faridabad (Haryana).
- “Numerical simulation of finer particles at higher concentration for pipeline flow” Proceedings of National Conference on Recent Trends and Innovation Civil Engineering held at BRCM CET, Bahal during 15th-16th November, 2013.
- “CFD Modeling For Slurry Pipeline Flow: A Literature Review” Proceeding of National Conference on Recent Trends and Innovation Civil Engineering held at BRCM CET, Bahal during 15th-16th November, 2013.
- “Effect of process parameters on hear affected zone using gas metal arc welding” Proceeding of National Conference on Recent Trends and materials engineering held at BRCM CET, Bahal during 4th-5th October, 2013.
- “Optimization of parameters in welding of MS plates” Proceeding of National Conference on Recent Trends and materials engineering held at BRCM CET, Bahal during 4th-5th October, 2013.

- “Optimization of parameters in powder metallurgy of Al-based alloys” Proceeding of National Conference on Recent Trends and materials engineering held at BRCM CET, Bahal during 4th-5th October, 2013.
- “CFD modeling of slurry transportation in pipeline for Concentration Distribution using different models “communicated for national conference on recent advances in mechanical and civil engineering (RAMCE-2014), Ghaziabad during 4th-5th April, 2014.
- “Simulation of Thermal Power Plants”, Proceedings of International Conference on Innovative Technologies, p-662, June 18-19, 2009, PDM Bahadurgarh (Haryana).
- “Modern World Class Manufacturing Scenario”, Proceedings of International Conference on Innovative Technologies, p-681, June 18-19, 2009, PDM Bahadurgarh (Haryana).
- “Development of Robot Technology” Proceedings of International Conference on Innovative Technologies, p-660, June 18-19, 2009, PDM Bahadurgarh (Haryana).
- “Simulated Study of Feasibility and Design of 10 KWp STV” Proceedings of 2nd International Conference on ESTEEM-2013, March 3-4, 2013, PPIMT Hisar (Haryana).
- QIP short term course on “Challenges in Measurements of Single and Two Phase Flow – Recent Trends” held during June 24-28, 2013, organized by MIED at IITR, Roorkee (U.K.).
- Attended two days National Seminar on “Applications of Graph Theory A Novel Technique for Research” at YMCA-UST.
- Participated in Workshop MF-2015, 11-12 September, 2015 held at BRCM-CET, Bahal.
- “CFD Modelling and experimental investigation of bi-modal slurry flow in horizontal pipelines and bends” in IUP journal of Mechanical Engineering.
- Computational modeling for fine particle flow in horizontal slurry pipelines” in International Journal Research and Reviews : Journal of Physics
- A paper entitled on “ Performance analysis of centrifugal pump used in slurry pipe line transportation by CFD modeling in ANSYS 15” IJERMCA, Vol. 7(2), pp. 437-442, ISSN 2319-7471
- A paper entitled “Nano technology and nano materials: In advance developing approach in Indian industries” IJARESN, Vol. 6(4), pp. 1-6, ISSN 2455-6211.

aper entitled “CFD modeling of silica sand slurry flow through straight pipeline and bend using FLUENT” IJCER, Vol. 8(5), pp. 47-51, ISSN(e): 2250-3005.

- “CFD Modelling and experimental investigation of bi-modal slurry flow in horizontal pipelines and bends” accepted for international conference FLAME 2018 will be held at AMITY University Greater Noida on 3-5 October, 2018.

Sunil

- Water-Energy Nexus; a Thematic Approach for Sustainable Future, Proceedings of National Conference RACEE-2015, Nov. 28-29, 2015, pp. 108-113, BRCM CET, Bahal (Haryana).
- Experimental investigation of the performance of an indirect mode natural convection solar dryer for drying Fenugreek Leaves, J Therm Anal Calorim DOI 10.1007/s10973-014-3949-2. Available online 22 July, 2014.
- Construction and performance analysis of an indirect solar dryer integrated with solar air heater, Procedia Engineering (Elsevier) 38 (2012), pp. 3260 – 3269.
- Modeling the Drying Kinetics of Green Peas in a Solar Dryer and Under Open Sun, IJEE, Vol. 4, Issue 4, 2013, pp. 663-676.
- An Overview of Optimization Techniques Used in Solar Drying, Asian Journal of Science and Applied Technology (AJSAT) Vol1.No.1 2013 pp 5-11.
- Optimization of thermal performance of a flat plate solar air heater using constrained non linear optimization technique, Proceedings of 4th International Congress of Environmental Research, December 15-17, 2011, SVNIT Surat, Gujarat.
- Construction and performance analysis of an indirect solar dryer integrated with solar air heater, International Conference on Modeling Optimization and Computing (ICMOC-2012), April 10-11, 2012 at Kumarakoil (Tamil Nadu).
- Solid waste a concern of metro cities, Proceedings of National Conference on Recent Developments in Mechanical Engineering, February 19-20, 2010, BRCM-CET, Bahal, Haryana, pp. 337-340.
- An overview of heating process used in Jaggery making, Proceedings of National Conference on Recent Trends in Materials Engineering, October 4-5, 2013, BRCM-CET, Bahal, Haryana, pp.76-81.
- Syngas Produced In Biomass Gasification System- A Practical Approach, First

National Conference on Advances in Mechanical Engineering (NCAME-2011), 20th - 21st May 2011, UIET, Panjab University, Chandigarh, pp. 19-22.

- CFD modeling of particulate flow (2-phase flow) in pipelines using fluent software, Proceedings of National Conference on Recent Trends in Materials Engineering, October 4-5, 2013, BRCM-CET, Bahal, Haryana, pp. 386-397.
- Applications of Nano-materials and Nanotechnology in Construction Industry- A Review, Proceedings of National Conference on Recent Trends and Innovation in Civil Engineering, November 15-16, 2013, BRCM-CET, Bahal, Haryana, pp. 48-52.
- Career prospects for Mechanical engineers, Technical journal of Mechanical Engineering Society (MES), June, 2013, p. 5, BRCM CET, Bahal (Haryana)
- Attended one week QIP sponsored Short Term Course on "Recent Advances in Utilization of Hydrogen in Internal Combustion Engines" organized by Centre for Energy Studies, Indian Institute of Technology Delhi from July 7-11, 2014.
- Attended two week ISTE Workshop sponsored by MHRD on "Control Systems" organized by IIT Kharagpur from Dec. 02 – Dec. 12, 2014.
- Participated in Workshop on, 'MF-2015, 11-12 September, 2015 held at BRCM-CET, Bahal

Amit Kumar

- Evaluation of Convective Heat Transfer Coefficient for Sensible Heating of Sugarcane Juice by Copper Immersion Rod, Proceedings of National Conference NEIET-2012, April 28, 2012, BITS, Bhiwani (Haryana).
- Thermal Performance of Copper and Brass Immersion Rods for the Evaporation of Sugarcane Juice, S-JPSET: ISSN: 2229-7111, 2012, Vol. 4, Issue 1.
- An overview of optimization techniques used in solar drying, Asian Journal of Science and Applied Technology (AJSAT) Vol1.No.1 2013 pp 5-11.
- An overview of heating process used in Jaggery making, Proceeding of National Conference RTME-2013, October 4-5, 2013, pp.76-81, BRCM CET, Bahal (Haryana).
- Effect and Comparison of Open Sun and Indoor Forced Convection on Heat Transfer Coefficients for Drying of Vermicelli, Proceeding of National

Conference RTME-2013, October 4-5, 2013, pp.136-144, BRCM CET, Bahal (Haryana).

- Career prospects for Mechanical engineers, Technical journal of Mechanical Engineering Society (MES), June, 2013, p. 5, BRCM CET, Bahal (Haryana)
- I attended one week TEQIP sponsored short term course on "Fundamentals of Tribology" organized by Department of Mechanical Engineering, National Institute of Technology Hamirpur, (H.P.) from May 26-30, 2014.
- I attended one week TEQIP sponsored short term course on "Recent Advances in Utilization of Hydrogen in Internal Combustion Engines" organized by Centre for Energy Studies, Indian Institute of Technology Delhi from July 7-11, 2014
- Participated in Workshop MF-2015, 11-12 September, 2015 held at BRCM-CET, Bahal.
- Published a paper entitled "Design and implementation of hydraulic press system using MATLAB", in the International Journal of Engineering Sciences and Research Technology (IJESRT), Vol. 7(8), pp. 13-17, 2018, ISSN: 2277-9655.
DOI: 10.5281/zenodo.1336656.

Vishwas Yadav

- Presented a paper entitled ,” Applying Total Productive Maintenance in Auto-Sector: A case study with Sandhar Gurgaon, Proceeding of national conference on Recent Trends in Mechanical Engineering ,October 4-5,2013, BRCM-CET, Bahal, Haryana, PP.409-415.
- Presented a paper entitled, “Effects of Total Productive Maintenance : A case study with Sandhar Automotive Gurgaon, Proceeding of national conference on Emerging Trends in Mechanical Engineering(NCTEM-2014), Organized by Gate Way Institute of engineering and Technology, Sonapat.
- Presented a paper entitled,” Anaysis of Magneto Rheological fluid, Proceeding of national conference on Emerging Trends in Mechanical Engineering (NCTEM-2014), Organized by Gate Way Institute of engineering and Technology, Sonapat.
- Presented a paper entitled ,” Different techniques used for drying agriculture products in current scenario, Proceeding of national conference on Emerging

Trends in Mechanical Engineering(NCTEM-2014), Organized by Gate Way Institute of engineering and Technology, Sonapat.

- Participated in Seminar on, Design Technology Interface, on 28th August, 2012 held at NIT Kurukshetra and sponsored by national institute of design, Ahmedabad.
- Attended two week ISTE Workshop sponsored by MHRD on “Control Systems” organized by IIT Kharagpur from Dec. 02 – Dec. 12, 2014.
- Participated in Workshop on DERC, 2-3 March, 2015 held at BRCM-CET, Bahal
- Participated in Workshop on MF-2015, 11-12 September, 2015 held at BRCM-CET, Bahal
- Published a paper entitled “ Management of supply chain management in agro food sector”, A case study, in the International Journal of Manufacturing Technology Management, Vol. 3, issue 5, pp. 240-251, ISSN 1741-038X

Nitesh Jain

- Convective heat transfer coefficient for indoor forced convection drying of vermicelli, IOSR Journal of Engineering June. 2012, Vol. 2(6) pp: 1282-1290.
- Effect and Comparison of Open Sun and Indoor Forced Convection on Heat Transfer Coefficients for Drying of Vermicelli, Proceedings of National Conference RTME-2013, October 4-5, 2013, pp.136-144, BRCM CET, Bahal (Haryana).
- Participated in Workshop MF-2015, 11-12 September, 2015 held at BRCM-CET, Bahal.

Ankit Panghal

- Ankit Panghal, Gulshan Sachdeva “Analysis of ejector refrigeration system of fixed ejector geometry “International Conference on “Sustainable Development through Research in Engineering and Management (“SDREM 2016”), at YMCA University of Science and Technology on 26-27 Dec.2016.

- Ankit Panghal, “Experimental investigation of passive cooling in buildings with insulation and thermal energy storage system” 2nd International Conference on Research Trends in Engineering, Applied Science and Management (ICRTEASM-2017), National Institute of Technical Teachers Training & Research (NITTTR), Ministry of MHRD, Govt. of India, Sec-26, Chandigarh.
- Ankit Panghal, Gulshan Sachdeva “Analysis of ejector refrigeration system of fixed ejector geometry” National Conference on Recent Advances in Mechanical Engineering. June 02-03, 2017, at NIT Kurukshetra.

Sandeep chauhan

- Sandeep Chauhan, Ujjwal Prakash, P.C. Tewari and Dinesh Khanduja (2016), “**Analysis of Powder Metallurgy Process Parameters for Mechanical Properties of Sintered Fe-Cr-Mo Alloy Steel**”, Materials and Manufacturing Processes, Taylor and Francis, Vol. 32, Issue 5, pp. 537-541, **Impact factor = 2.669**, Print ISSN: 1042-6914 Online ISSN: 1532-2475 <http://dx.doi.org/10.1080/10426914.2016.1221083>. **(SCI)**.
- Sandeep Chauhan, Ujjwal Prakash, P.C. Tewari and Dinesh Khanduja (2017), “**Studies on induction hardening of powder-metallurgy-processed Fe–Cr/Mo alloys**”, International Journal of Minerals, Metallurgy and Materials, Springer Publication, Vol. 24, Issue 8, pp. 918–925 , **Impact factor = 1.261**, DOI: 10.1007/s12613-017-1478-2 **(SCI)**.
- Sandeep Chauhan, Ujjwal Prakash, P.C. Tewari and Dinesh Khanduja (2018), “**Influence of Sintering Temperature and Cooling Rate on Microstructure and Mechanical Properties of Pre-Alloyed Fe-Cr-Mo Powder Metallurgy Steel**”, Transaction of Indian Institute of Metals, Springe Publication, Vol. 71, Issue 1, pp. 219-224, **Impact factor = 0.91**, DOI 10.1007/s12666-017-1157-z **(SCI)**.
- Sandeep Chauhan, V. Dr. Ujjwal Prakash, Dr. P.C. Tewari and Dr. Dinesh Khanduja (2016). Paper entitled, “**Processing of Cr-Mo Alloy Steel via PM Route**”, Elsevier- Materials Today Proceedings,

<http://dx.doi.org/10.1016/j.matpr.2016.09.001>, ISSN: 2214-7853
(SCOPUS).

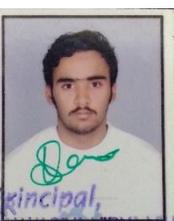
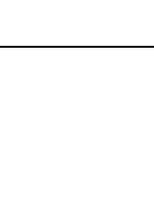
- Sandeep, Ujjwal Prakash, P.C. Tewari and Dinesh Khanduja (2014). Paper entitled, **“Ranking of Sintered Material for High Loaded Automobile Application by Applying Entropy-TOPSIS Method”**, Elsevier- Materials Today Proceedings. <http://dx.doi.org/10.1016/j.matpr.2015.07.306>, ISSN: 2214-7853 **(SCOPUS).**
- Sandeep Chauhan, Ujjwal Prakash, P.C. Tewari and Dinesh Khanduja (2014), paper entitled **“Analysis of Powder Metallurgy Process Parameters for Relative Density of Low Carbon Alloy Steel using Design of Experiments Tool”**, published in Applied Mechanics and Materials Journal, Trans Tac Publications, 592-594, 72-76, [DOI:10.4028/www.scientific.net/AMM.592-594.72](http://dx.doi.org/10.1016/j.matpr.2015.07.306), ISSN: 1662-7482 **(INSPEC).**
- Sandeep Chauhan and Dr. P.C. Tewari (2013), paper entitled **“Effect on Mechanical and Metallurgical Properties by adding Alloying Elements in Iron by using Powder Metallurgy Technique: A Critical Literature Review”** International Conference on Advances in Mechanical and Computer Engineering on January 18-19, 2013 organized by Ganpati Institute of Technology and Management, Bilaspur, Yamuna Nagar, Haryana, India.
- Sandeep, P.C. Tewari and Dinesh Khanduja (2013), paper entitled **“Framework for Induction Hardening Parameters Optimization of Sintered Iron Alloy by using Intelligent Techniques”**, 4th International Conference on Emerging Trends in Engineering and Technology (IETET-2013) and Technically co-sponsored by ACEEE, IDES, USA on October 25-27, 2013 organized by Geeta Institute of Management & Technology Kanipla, Kurukshetra, India.
- Sandeep, P.C. Tewari and Dinesh Khanduja (2013), paper entitled **“Conceptual Analysis of Heat Treatment Aspects for Low Carbon Alloy Steel by Using Powder Metallurgy Technique”** The proceedings of the International Conference on Emerging Material Technology (ICEMT 2013) on April 8-10, 2013 organized by Gyan Ganga Institute of Engineering and Technology, Jabalpur, Madhya Pradesh, India.

- Sandeep, P.C. Tewari and Dinesh Khanduja (2013), paper entitled “**Hardness and Case Depth Optimization Strategy for Induction Hardening Process in Powder Metallurgy by using TOPSIS**” National Conference on Recent Trends in Materials Engineering (RTME-2013) on October 4-5, 2013 at BRCM CET, Bahal, Bhiwani, Haryana, India.
- Sandeep, P. C. Tewari, Dinesh Khanduja (2014), paper entitled “**Optimization of Powder Metallurgy Process Parameters for Relative Density of Aluminium using Design of Experiments Tool**”, National Conference on Advance and Research Technology, March 8- 9, 2014, Yamuna Group of Institution, Yamuna Nagar, Haryana, India.
- Sandeep, Ujjwal Prakash, P.C. Tewari and Dinesh Khanduja (2014), paper entitled “**Analysis of Powder Metallurgy Process Parameters for Relative Density of Copper using Design of Experiments Tool**”, 4thNational Conference on Recent Advances in Manufacturing on June 26-28, 2014, National Institute of Technology, Surat, Gujrat, India.
- Sandeep Chauhan, Ujjwal Prakash, P.C. Tewari and Dinesh Khanduja (2015), oral presentation on “**Study of Powder Metallurgy Process Parameters for Mechanical Properties of Sintered Fe-Cr-Mo Alloy Steel**”, National Conference on Advanced Materials and Processing (CAMP-2015) on December 2-4, 2015 organized by Malaviya National Institute of Technology, Jaipur, Rajasthan, India.
- Sandeep Chauhan, Zahir Hasan, P.C. Tewari (2015), oral presentation on “**Study on Induction Hardening of Sintered Low Carbon Alloy Steel**”, IVth International Conference on Production & Industrial Engineering on December 19-21, 2016 organized by Dr. B R Ambedkar National Institute of Technology Jalandhar-144011, Punjab, India.
- Sandeep Chauhan, Ujjwal Prakash, P.C. Tewari and Dinesh Khanduja (2016), Poster presentation on “**Processing of Cr-Mo Alloy Steel via PM Route and their Characterization**”, International Conference on Advances in Refractory and Reactive Metals and Alloys (ARRMA-2016) held on January 27-29, 2016 organized by Materials Group, Bhabha Atomic Research Centre, Trombay, Mumbai-400085, India.

- Sandeep Chauhan, Ujjwal Prakash, P.C. Tewari and Dinesh Khanduja (2017). Poster Presentation on “**Analysis of Induction Hardening of Fe-Cr/Mo Alloy Processed via PM Route**”, International Conference on Emerging Trends in Materials and Manufacturing Engineering, IMME17 held on March 10-12, 2017, National Institute of Technology, Tiruchirappalli, Tamil Naidu, India
- Attended National Level Workshop on “**Computer Aided Technology(CA-X)**” held on 4 to 6 March, 2011 at BRCM CET Bahal, Bhiwani, Haryana, India.
- Attended Seminar on “**Advance in Material Processing and Production Technology**” held on 24-25 Feb., 2012 at GGITS Jabalpur Madhya Pradesh, India.
- Attended National Workshop on “**Modeling and Simulation using Simulink with Engineering Application**” held on 13th Oct., 2012 at BRCM CET Bahal, Bhiwani, Haryana, India.
- Attended Global Conference on “**Emerging Trends in Mechanical Engineering**” held on 22nd Feb., 2013 in Siddhivinayak Group of Institution Yamuna Nagar, Haryana, India.
- Attended International Workshop on “**Advances in Composites in Auto Industries**”, the proceedings of the International Conference on Emerging Material Technology ICEMT 2013, April 8-10, 2013, Jabalpur, Madhya Pradesh, India.
- Attended Two Days Workshop on “**Entrepreneurship**”, held on April 19 to 20, 2013 at National Institute of Technology Kurukshetra, Haryana, India.
- Attended STC on “**Design of Experiments: An Optimization Tool (DOEOT-2013)**” held on Dec. 27 to 29, 2013 at National Institute of Technology, Rourkela-769008, Odisha, India.
- Attended one week Short Term Course on “**Advanced Engineering Optimization Through Intelligent Techniques (AEOTIT-2014)**”, held on September 22-26, 2014 at Sardar Vallabhbhai National Institute of Technology (SVNIT), Ichchanath, Surat, Gujarat, India.
- Attended Two Days Workshop on “**Developments in Energy Resources and Conservation**”, held on March, 2-3, 2015 at BRCM CET, Bahal, Bhiwani, Haryana, India.

- Attended one week Short Term Course on “**Advanced Materials and Characterization**” held on **June 08 - 12, 2015** at National Institute of Technology, Kurukshetra, Haryana, India.
- Attended four days Short Term Course on “**Powder Metallurgy Short Course (PMSC-15)**” held on September, 24-27, 2015 at College of Engineering, Pune, Maharashtra, India.
- Attended Two days’ Workshop on “**Research Methodology and Manuscript Writing**”, held on **April 9 to 10, 2016** at National Institute of Technology Kurukshetra, Haryana, India.
- Attended one week Short Term Course on “**Materials and Processes for High Temperature Applications**” held on June, 6th to 10th, 2016 at Indian Institute of Technology, Roorkee, Uttarakhand, India.
- Attended one week Short Term Course on “**Advances in Manufacturing (AIM 2016)**” held on October 17-22, 2016 at National Institute of Technology, Kurukshetra, Haryana, India.
- Attended one week short term course through GIAN on “**Microstructural Engineering and Properties of Advanced Ceramics**” held on November 15 to 21, 2016 at Indian Institute of Technology, Roorkee, Uttarakhand, India.
- Attended Two days’ short term course on “**Renewable Energy: Technologies & Transitions**”, held on March 22-23, 2017 at National Institute of Technology Kurukshetra, Haryana, India.

B-TECH MECHANICAL ENGINEERING STUDENTS (2014-2018) BATCH

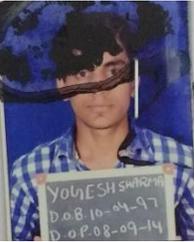
<p>College Roll No.: -14-me-2506 Name:-Andeep Kumar D.O.B.: -16-10-1997 P.A.: -Bahal E-mail ID:-Panghalandeeep@gmail.com Life at BRCM-CET:-Good I'll always remember:-Friends P.J.:-</p>		<p>College Roll No.: -14-me-2513 Name:-Bhavesh D.O.B.: -23-12-1995 P.A.: -Bagan, Jhunjhunu E-mail ID:-bhaveshojha26@gmail.com Life at BRCM-CET:-Good I'll always remember:-H.O.D. P.J.:-</p>	
<p>College Roll No.: -14-me-2522 Name:-Konark D.O.B.: -29-06-1995 P.A.: -Hisar E-mail ID:-bansalkonark2906@gmai.com Life at BRCM-CET:-Good I'll always remember:-HOD, Sunil Baloda P.J.:-</p>		<p>College Roll No.: -14-me-2515 Name:-Chanderkant D.O.B.: -26-01-1996 P.A.: -Bhiwani E-mail ID:-ckparashar279@gmail.com Life at BRCM-CET:-Good I'll always remember:-HOD, Nitesh Jain P.J.:-</p>	
<p>College Roll No.: -14-me-2524 Name:-Krishan Kumar D.O.B.: -21-12-1996 P.A.: -Mandholi Kalan E-mail ID:-krishansheoran91@gmail.com Life at BRCM-CET:-Good I'll always remember:- P.J.:-</p>		<p>College Roll No.: -14-me-2518 Name:-Dharmender D.O.B.: -05-03-1997 P.A.: -Devrala, Bhiwani E-mail ID:-dharmendersura568@gmail.com Life at BRCM-CET:-very good I'll always remember:-Friends P.J.:-</p>	
<p>College Roll No.: -14-me-2553 Name:-Sarveen D.O.B.: -17-11-1995 P.A.: -Bidhwan E-mail ID:-Sarveensura@gmail.com Life at BRCM-CET:-Average I'll always remember:-Friends P.J.:-</p>		<p>College Roll No.: -14-me-2503 Name:-Akash D.O.B.: -10-7-1998 P.A.: -Haluwas E-mail ID:-Akashtamwar89563@gmail.com Life at BRCM-CET:-Average I'll always remember:-Friends P.J.:-</p>	
<p>College Roll No.: -14-me-2572 Name:-Yogesh D.O.B.: -03-03-1997 P.A.: -Naya bazar, Bhiwani E-mail ID:- iamyogeshverma@gmail.com Life at BRCM-CET:-Poor I'll always remember:-Campus&Dhaba P.J.:-</p>		<p>College Roll No.: -14-me-2504 Name:-Akshay D.O.B.: -10-04-1995 P.A.: -Mohabbatpur E-mail ID:-Akshay30101996@gmail.com Life at BRCM-CET:-Good I'll always remember:-Good Experience P.J.:-</p>	

<p>College Roll No.:14-me-2530 Name:-Mohit D.O.B.:01-07-1998 P.A.:Tigrana, Bhiwani E-mail ID:-tanwar.mohit856@gmail.com Life at BRCM-CET:-very good I'll always remember:-Friends P.J.:-</p> 	<p>College Roll No.:15-me-2580 Name:-Naveen D.O.B.:07-12-1992 P.A.:Noorsar E-mail ID:-Naveennoorsar@gmail.com Life at BRCM-CET:-very good I'll always remember:-Frineds P.J.:-</p> 
<p>College Roll No.:14-me-2537 Name:-Pardeep D.O.B.:18-03-1996 P.A.:Sungarpur, Bhiwani E-mail ID:-pardeepkhanna18396@gmail.com Life at BRCM-CET:-good I'll always remember:-Friends P.J.:-</p> 	<p>College Roll No.:14-me-2562 Name:-Pankaj D.O.B.:28-10-1995 P.A.:Bhiwani E-mail ID:-pankajkumar3478@gmail.com Life at BRCM-CET:-very good I'll always remember:-Friends P.J.:-</p> 
<p>College Roll No.:14-me-2548 Name:-Sachin D.O.B.:24-08-1997 P.A.:Jeetwanball E-mail ID:-sachinrajput2548@gmail.com Life at BRCM-CET:-good I'll always remember:-Friends P.J.:-</p> 	<p>College Roll No.:14-me-2514 Name:-Bhupender D.O.B.:05-06-1996 P.A.:Devrala E-mail ID:-bhupendersura474@gmail.com Life at BRCM-CET:-good I'll always remember:-Friends P.J.:-</p> 
<p>College Roll No.:14-me-2539 Name:-Prabhanshu Sinha D.O.B.:08-04-1995 P.A.:Palam E-mail ID:-prabhanshu804@gmail.com Life at BRCM-CET:-Fantastic I'll always remember:-Principal P.J.:-</p> 	<p>College Roll No.:15-me-2583 Name:-Vikas Sharma D.O.B.:15-11-1994 P.A.:Bhiwani E-mail ID:-vikassharma301887@gmail.com Life at BRCM-CET:-Average I'll always remember:-Friends & Studies P.J.:-</p> 
<p>College Roll No.:14-me-2559 Name:-Sumit Chakra D.O.B.:27-09-1996 P.A.:Hisar E-mail ID:-mesumitbhakar@gmail.com Life at BRCM-CET:-Awesome I'll always remember:-Principal P.J.:-</p> 	<p>College Roll No.:14-me-2541 Name:-Pratik Jain D.O.B.:14-03-1997 P.A.:Bhiwani E-mail ID:-pratikjain17.pj@gmail.com Life at BRCM-CET:-Good I'll always remember:-Faculty & Friends P.J.:-</p> 

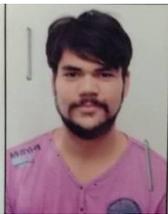
<p>College Roll No.:15-me-2576 Name:-Girnar Dev Jain D.O.B.:14-01-1997 P.A.:Hisar E-mail ID:-girnarjain8@gmail.com Life at BRCM-CET:- I'll always remember:-Friends P.J.:no</p> 	<p>College Roll No.:14-me-2512 Name:-Baljeet singh D.O.B.:9-01-1997 P.A.:hisar E-mail ID:-balisag00@gmail.com Life at BRCM-CET:-Marvellous I'll always remember:-being 360 P.J.:one thing an engineer can do & a doctor can't, that "understand own writing"</p> 
<p>College Roll No.:15-me-2584 Name:-Vikash D.O.B.:02-05-1995 P.A.:bhandwa,Bandara E-mail ID:-vikashjogi@2584@gmail.com Life at BRCM-CET:-Good I'll always remember:-Friends and juneja sir P.J.:-</p>	<p>College Roll No.:14-me-2516 Name:-Deepak bhardwaj D.O.B.:01-01-1998 P.A.:bahal,Bhiwani E-mail ID:-bhardwaj6075@gmail.com Life at BRCM-CET:-Good I'll always remember:-all friends,faculties and staffs P.J.:-</p> 
<p>College Roll No.:14-me-2545 Name:-Rajiv sangwan D.O.B.:16-05-1994 P.A.: E-mail ID:rajivesangwan778@gmail.com Life at BRCM-CET:-Amaging I'll always remember:-Everyone P.J.:-</p> 	<p>College Roll No.:14-me-2561 Name:-Sunil D.O.B.:19-09-1996 P.A.:Bhatla E-mail ID:-sunilberwal55@gmail.com Life at BRCM-CET:-Nice I'll always remember:-Friends P.J.:-</p>
<p>College Roll No.:14-me-2509 Name:-Arvind singh D.O.B.:22-09-1996 P.A.: E-mail ID:-arvindphogat8816@gmail.com Life at BRCM-CET:-Nice I'll always remember:-Friends and teachers P.J.:-</p> 	<p>College Roll No.:14-me-2508 Name:-Ankit D.O.B.:25-11-1997 P.A.: E-mail ID:-shearonankit54@gmail.com Life at BRCM-CET:-Nice I'll always remember:-Friends P.J.:-</p> 
<p>College Roll No.:14-me-2540 Name:-Pradeep choudhary D.O.B.:28-04-1996 P.A.: E-mail ID:-pradeep1996choudhary@gmail.com Life at BRCM-CET:-Nice I'll always remember:-Friends,teachers,memories P.J.:-</p> 	<p>College Roll No.:14-me-2520 Name:-Karan D.O.B.:06-01-1997 P.A.: E-mail ID:-karanrathee0@gmail.com Life at BRCM-CET:-Nice I'll always remember:-Friends P.J.:-</p> 

<p>College Roll No.: -14-me-2533 Name:-Nishant Kumar D.O.B.: -27-12-1995 P.A.: -Af.Samachak,Hajipur(Vaishali) E-mail ID:-nishantcool.kumar@gmail.com Life at BRCM-CET:-Fabulus& Fantastic I'll always remember:-Masti with friend P.J.:-</p> 	<p>College Roll No.: -15-me-2581 Name:-Sonu D.O.B.: -09-04-1998 P.A.: -Loharu E-mail ID:-Sonumalkhat@gmail.com Life at BRCM-CET:-Interesting I'll always remember:-Juneja sir lecture & Friend P.J.:-</p> 
<p>College Roll No.: -15-me-2582 Name:-Sushil Kumar D.O.B.: -26-06-1998 P.A.: -VPO,JandquALA.Bagerbattu E-mail ID:-ksushil917@gmail.com Life at BRCM-CET:-Mast,interestin,Fullenery I'll always remember:-Juneja sir lecture & my friends P.J.:-</p> 	<p>College Roll No.: -14-me-2517 Name:-Deepak Kumar D.O.B.: -18-01-1995 P.A.: -Pur,The-Bhiwani Khera E-mail ID:-dkrana434@gmail.com Life at BRCM-CET:-Awesome I'll always remember:-Lecture of Juneja P.J.:-</p> 
<p>College Roll No.: -14-me-1971 Name:-Kunal dhahia D.O.B.: -29-11-1994 P.A.: -45/11-B,Shanti Nagar,Hisar E-mail ID:-Kunaldhahia@gmail.com Life at BRCM-CET:-Great &Interesting I'll always remember:-Teacher& classmates P.J.:-</p>	<p>College Roll No.: -14-me-2571 Name:-Yushoardhna Sharma D.O.B.: -25-07-1996 P.A.: -H.no-gandhi.co.sirsa E-mail ID:-Yashoardhir.Sofficial@gmail.com Life at BRCM-CET:-Great exprience I'll always remember:-Teacher & classmate P.J.:-</p> 
<p>College Roll No.: -14-me-2529 Name:-Mohd. Shariq D.O.B.: -09-10-1996 P.A.: -Mohalla-KassawanBilranDist-(kasgang) E-mail ID:-Shariq057@icloud.com Life at BRCM-CET:-Interesting I'll always remember:-Friend circle P.J.:-</p> 	<p>College Roll No.: -14-me-2534 Name:-Nitesh D.O.B.: -28-12-1996 P.A.: -Lohari,Distt(Bhiwani) E-mail ID:-Nitusharma281296@gmail.com Life at BRCM-CET:-Interesting I'll always remember:-Friend circle P.J.:-</p> 
<p>College Roll No.: -14-me-2549 Name:-Sahajdeep Singh D.O.B.: -20-03-1997 P.A.: -#28307,Sec9/11,Hisar E-mail ID:-Sahadeep.Singh17@gmail.com Life at BRCM-CET:-Interesting I'll always remember:-Hostel Circle P.J.:-</p> 	<p>College Roll No.: -15-me-2579 Name:-Naveen D.O.B.: -25-11-1995 P.A.: -Mandholi Kalan E-mail ID:-Sheorann200@gmail.com Life at BRCM-CET:-Good I'll always remember:-Friend circle P.J.:-</p> 

<p>College Roll No.: -14-me-2543 Name:-PuspendraKr.Upadhaya D.O.B.: -12-11-1994 P.A.: -VPO-Pasarma Distt-Gopal E-mail ID:-pku2543@gmail.com Life at BRCM-CET:-Better I'll always remember:-K.P(HOD) P.J.:-</p> 	<p>College Roll No.: -14-me-2569 Name:-VivekSangwan D.O.B.: -11-01-1997 P.A.: -Dabulcolony,Bhiwani E-mail ID:-Sangwanvivek8@gmail.com Life at BRCM-CET:-Worst I'll always remember:-My outer day P.J.:-</p> 
<p>College Roll No.: -14-me-2565 Name:-Vikash D.O.B.: -05-12-1996 P.A.: -V.P.O.Barsi,Bihwani E-mail ID:-Vdhakarwal@gmail.com Life at BRCM-CET:-full masti I'll always remember:-hostel masti P.J.:-</p> 	<p>College Roll No.: -14-me-2546 Name:-Rajnish D.O.B.: -14-08-1996 P.A.: -V.P.O.SarangburMandiadampar,Hisar E-mail ID:-rjbishnoi2914@gmail.com Life at BRCM-CET:-Awesome & cool I'll always remember:-Final 7th P.J.:-</p>
<p>College Roll No.: -14-me-2563 Name:-vijaypal D.O.B.: -20-12-1996 P.A.: -V.R.O-lilas Tesh sivani E-mail ID:-vijaypalbishnoi34@gmail.com Life at BRCM-CET:-Gach,nice one I'll always remember:-the love of brcm &HOD'S lecture P.J.:-</p>	<p>College Roll No.: -14-me-2555 Name:-shubham sharma D.O.B.: -16-03-1997 P.A.: -777,lakshminagar ,kaurat road bhiwani E-mail ID:-shubhamsharma96@gmail.com Life at BRCM-CET:-great,inspiring I'll always remember:-my friends &teachers. P.J.:-</p>
<p>College Roll No.: -14-me-2535 Name:-nitish shrama D.O.B.: -08-03-1996 P.A.: -sector-4 rewari E-mail ID:-nitishkumar2782@gmail.com Life at BRCM-CET:-great I'll always remember:-my friends and lovable teachers P.J.:-</p>	<p>College Roll No.: -14-me-2536 Name:-pankaj yadav D.O.B.: -14 dec 1995 P.A.: -vishal colony rewari E-mail ID:-4 pankaj483@gamil.com Life at BRCM-CET:-great I'll always remember:-the love of branch HOD'S &teacher P.J.:-</p> 

<p>College Roll No.: -14-me-2528 Name:-mayank divedi D.O.B.: -13-8-1996 P.A.: -mspark delhi E-mail ID:-iammak devd@gmail.com Life at BRCM-CET:-awesome I'll always remember:-my hostel P.J.:-</p> 	<p>College Roll No.: -15-me-2585 Name:-Vineet Kumar D.O.B.: -24-09-1996 P.A.: -Fatehabad E-mail ID:-vineetthapan29771@gmail.com Life at BRCM-CET:-awesome I'll always remember:-my hostel P.J.:-</p> 
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<p>College Roll No.:14-me-2575 Name:-yogesh sharma D.O.B.:26-12-1996 P.A.:dichora kala E-mail ID:-yogeshsharma@gmail.com Life at BRCM-CET:-good I'll always remember:-my hostel P.J.:-</p>	<p>College Roll No.:14-me-2566 Name:-sudeep kadyan D.O.B.:07\10\1996 P.A.:ch dadri E-mail ID:-sudeepkadyan007@gmail.com Life at BRCM-CET:- I'll always remember:- P.J.:-</p> 
<p>College Roll No.:14-me-2507 Name:-anil kumar D.O.B.:15-12-1995 P.A.:V.P.O dadri E-mail ID:-anilkalisyung200@gmail.com Life at BRCM-CET:- I'll always remember:- P.J.:-</p> 	<p>College Roll No.:14-me-2556 Name:-shubham sharma D.O.B.:15-08-1996 P.A.:bhiwani E-mail ID:-shubhamburgu@gmail.com Life at BRCM-CET:-poor I'll always remember:-friends P.J.:-</p> 
<p>College Roll No.:14-me-2557 Name:-Sudeep Kadyan D.O.B.:07-10-1996 P.A.:Bhiwani E-mail ID:-sudeepkadyan007@gmail.com Life at BRCM-CET:- I'll always remember:-kp sir P.J.:-</p> 	<p>College Roll No.:14-me-2568 Name:-virendra singh D.O.B.:26-12-1997 P.A.:bikanel E-mail ID:-virendra singh@gmail.com Life at BRCM-CET:-poor I'll always remember:-kp sir P.J.:-</p> 
<p>College Roll No.:15-me-2579 Name:-Naveen D.O.B.:25-11-1995 P.A.:Bhiwani E-mail ID:-sheoran200@gmail.com Life at BRCM-CET:-poor I'll always remember:-kp sir P.J.:-</p> 	<p>College Roll No.:15-me-2577 Name:-mangaldeep D.O.B.:06\09\1994 P.A.:saniana E-mail ID:-er. Mangal deep 1 @gmail.com Life at BRCM-CET:-memorable I'll always remember:-amit phogla P.J.:-</p> 
<p>College Roll No.:14-me-2547 Name:-Ravi singh D.O.B.:08-09-1996 P.A.:V.P.Osungarpur E-mail ID:-rsroxx67@gmail.com Life at BRCM-CET:-good I'll always remember:-kp sir P.J.:-</p> 	<p>College Roll No.:14-me-2531 Name:-Mohit sharma D.O.B.:06-04-1997 P.A.:v.P.O-GIGORANI E-mail ID:-mohitsharma64972531@gmail.com Life at BRCM-CET:-good I'll always remember:-kp sir P.J.:-</p> 

<p>College Roll No.: -14-me-2573 Name:-Yogesh D.O.B.: -12-01-1997 P.A.: -Rudroul E-mail ID:- Life at BRCM-CET:- I'll always remember:- P.J.: -</p>		<p>College Roll No.: -15-me-2578 Name:-Mohit D.O.B.: -07-07-1994 P.A.: -Hisar E-mail ID:-mohit92015@gmail.com Life at BRCM-CET:-Nice I'll always remember:-My practical marks P.J.: -</p>	
<p>College Roll No.: -15-me-2586 Name:-Vinod Kumar D.O.B.: -30-09-1995 P.A.: -V.P.O. Badopal 125048 E-mail ID:-Vineet Thapan29771@gmail.com Life at BRCM-CET:-Mast I'll always remember:-Rajinish&Bhakar P.J.: -</p>		<p>College Roll No.: -14-me-2526 Name:-Manish Kumar D.O.B.: -27-08-1997 P.A.: -Muzaffarpur, Bihar E-mail ID:-mkrajmu2136@gmail.com Life at BRCM-CET:-Very good I'll always remember:- P.J.: -</p>	





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