



Shri Nishant Tripathi  
Chairman, SSIPMT

It is a matter of great pleasure and satisfaction that the Department of Mechanical Engineering, SSIPMT has come up with the first issue of the Departmental Newsletter "MECHANICAL EXPRESS".

It has indeed been an eventful year, replete with a plethora of activities and events that celebrate the spirit of learning, growth and creativity. This remains our belief that through the newsletter students can achieve their full potential to their innate talents.

I believe that the newsletter will serve as a platform where the members of the department will express their creative pursuit and co-curricular activities, achievements and progress made during the specific period. The contents of the magazine reflect the wonderful creativity of thoughts and imagination of our students and faculty members. I am sure the newsletter will enable the department to think, create and unfold the magic of innovation and achievements.

Best wishes for the success and bright future of "MECHANICAL EXPRESS" and to continue this journey on the road of excellence.

I convey my warm greetings and heartfelt thanks to the Department of Mechanical Engineering to bring forward Departmental Newsletter "MECHANICAL EXPRESS".

I am thrilled to collaborate students, and faculty members in advancing our mission and expressing the news of activities, events, happenings and achievements of the Mechanical Engineering Department among the SSIPMT fraternity.

It is my conviction that as a collective, cohesive and well knitted Team comprising all of us from bottom to the top, we can achieve any heights. I invite you to read through the great news about our institute in this edition, and learn some more exciting events taking place.

There is a lot of information contained in this newsletter and more will come each month from our institute's newsletters. In addition, you should always know that all of us at SSIPMT believe in open communication. We are here for our students and for you.

I wish success to MECHANICAL EXPRESS in all its endeavors.



Dr. Alok Kumar Jain  
Principal, SSIPMT

Greetings to faculty members, friends and students!

It gives me immense pleasure and pride to announce that the Department of Mechanical Engineering, Shri Shankaracharya Institute of Professional Management and Technology, Raipur, is publishing its First Newsletter, "Mechanical Express". This newsletter will be a vehicle to communicate and share the news of activities, events, happenings and achievements of the Mechanical Engineering Department among the SSIPMT fraternity. It will highlight how the students are equipped with technical knowledge, critical thinking skills and creativity, through periodic seminars, workshops, industrial visits and industrial trainings. The sincere endeavors of the Editorial Board are praiseworthy. I would like to congratulate all the members on the Editorial Board for putting in their sincere efforts to realize this new venture.



Mr. Naveen Jain  
Head of Department, Mech

## Editorial Board

### Editor In Chief

Manish RK Sahu  
Asst. Prof., Mech Dptt.

### Photography

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Asst. Prof., Mech Dptt.

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**“ ENGINEERING IS THE  
CLOSEST THING TO  
MAGIC THAT EXISTS IN  
THE WORLD”**

Elon Musk

## Departmental Mission

- To provide state of art infrastructure to impart quality education to make students globally competitive to pursue higher studies.
- To provide environment for enhancing the capabilities of students to build their career in industry, academia and government organization.
- To create awareness about ethical guidelines to motivate for life long learning and enhance leadership quality to serve the society.

## Departmental Vision

“To be recognized as a center of excellence in education, training, research and innovation to produce successful entrepreneurs and engineers to meet current and future global challenges.”

## Alumni Section



**Aishwarya Chakraborty**  
Batch – 2012-16  
Associate Consultant  
Capgemini

From mechanical engineering to IT, it has certainly been a bumpy ride. When I was placed, I was happy but also skeptic about how I would fit into an IT Role with absolutely zero programming experience. Turns out the background doesn't really make much of a difference when the training starts. It all comes down to hard work. So the transition from Campus to Corporate was pretty smooth, thanks to the strict college discipline and the fresher induction programs and trainings given at Capgemini. I have been in this industry for more than 2 years now. I am quite content with how things turned out and as alumni, I would like to suggest my juniors to be technically strong and to keep an open mind, you never know what good an opportunity might do to you.



## GROWTH THROUGH RESEARCH & DEVELOPMENT

Up gradation in the product quality without higher cost of production is a tough challenge now a days. After a lot of experiments & research this is turn into the production technologies and various segments of alternatives in the field of mechanical engineering. Being research scholar our students performed appreciable in this field with more than 50 research article last year in National/International Journals with live projects from Chhattisgarh and other states. Today's need is to promote and encourage the youth strengths into the vital utilitarian of engineering & techno knowledge for social development as well as personal.

Production technology is very interesting subject as per my concern and has huge futuristic scope for research and career for individual/firm. Currently most of industry has produced national wide adopted commodities apart from the environmental hazards. Environment conserving production would be possible only through possession of GREEN Technology by industrial community.



**Mrs. Neha Verma**  
Asst. Professor  
Dept. of Mechanical  
SSIPMT

## PROSTHETIC HAND



**Mr. Pradeep Kumar Sahu**  
Asst. Professor  
Dept. of Mechanical  
SSIPMT

The problems of the physically handicapped (born with Symbrachydactyly or lost in his hand/ finger by accident) vary in time and space. Their problems are multi-dimensional physical, psychological, social, cultural, educational and vocational. There are hundreds of activities which a person performs from the moment he wakes up in the morning till he goes to sleep at night. The activities comprise everything entailed in

human life and relationships. Many of such activities require physical mobility of some degree or the other. A person with a normal body performs these activities without noticing the importance of mobility involved in the process. However, the physically handicapped person faces a great deal of uncertainty because of his

restricted movements or limitation or the loss of locomotors abilities. Passive prosthetic hand which are available in market, they are mainly used for aesthetic purposes and limited functionalities that do not have any moving part. The aim of this project to provide a low-cost three-dimensional (3D)-printed active prosthetic hand for



physically disable person. Active prosthetic hand incorporate mechanical and electronic elements in the attempt to offer a wider range of functionalities.

Although the external design of these prostheses can be the same as the passive prosthetic hand, they offer to the patient the capability to move individual parts of the prosthesis, thus extending the functionality of the hand and its interaction with everyday objects.



# Student Section

## Heat Seeking Missile

**H**eat seeking missile is a come under 50's, when there is no computers to guide the missile towards the target. So scientist and engineers developed a heat sensor which automatically detects the most heat liberating surfaces on the sky.. This H.S missile is used for air to air or surface to air attacks. When a missile is launched to destroy a target let's say ,a plane then this missile detect the most heat liberating surface in the sky in its range since the hottest surface in the sky is aircraft engine and a guide system in missile automatically take the missile towards target and the target destroys.



**Aaditya Sahu**  
3rd Semester, Mech

## Events Organized by Mechanical Engineering Department

| S.No. | Name Of Events/Workshops                                   | Date                    | Duration | Conducted By             |
|-------|--|-------------------------|----------|--------------------------|
| 1     | Workshop On Designing Of Utility Drones                    | 5/8/2017                | 01 Day   | Mr. Aryan Verma          |
| 2     | Workshop On Orientation Program For Entrepreneur Aspirants | 6/9/2017                | 01 Day   | Mr. Amit Singh, NEN      |
| 3     | Three Day Workshop On Quality Concepts                     | 25/09/2017 - 27/09/2017 | 03 Days  | QCFI BhilaiChapter       |
| 4     | Workshop On Automotive CI Engine                           | 08/10/2017- 09/10/2017  | 02 Days  | Creative Experts, Raipur |
| 5     | Ssipmt's GOT Talent Competition                            | 07/11/2017              | 01 Day   | MEA                      |

## Placements

| S.No. | Name                | Current Job                  | Place            |
|-------|---------------------|------------------------------|------------------|
| 1     | Lavit Lanjewar      | Customer Care Representative | Motif            |
| 2     | Abdul Jarjeesh Khan | Customer Care Representative | Motif            |
| 3     | Aditya Sharma       | Assistant Software Engineer  | Nucleus Software |
| 4     | Amit Pandey         | Pitstop Excutive             | Rivigo           |
| 5     | Abhishek Sahu       | Pitstop Excutive             | Rivigo           |
| 6     | Sonesh Dhankar      | Assistant Software Engineer  | Collabera        |

## Achievements

| Name.               | Achievement(s)   | Batch     |
|---------------------|--|-----------|
| Ravi Valecha        | M.Tech, IIT, Guwahati, Dassault Systems                              | 2008-2012 |
| Madhukant Nirmalkar | ONGC, Govt. of India   | 2010-2014 |
| Anmol Jain Duggad   | ONGC, Govt. of India<br>IOCL, Govt. of India<br>HPCL, Govt. of India | 2013-2017 |
| Umesh Nande         | IOCL, Govt. of India   | 2013-2017 |

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