



Jaipur Engineering College & Research Centre

The Applied Science Newsletter
Volume 1, Issue 1
2017-2018



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Jaipur Engineering College & Research

Vision & Mission Jaipur Engineering College &
Research Centre, Jaipur

VISION

VISION

To become a renowned centre of outcome based learning, and work towards academic, professional, cultural and social enrichment of the lives of individuals and communities.

MISSION of individuals and communities.

Focus on evaluation of learning outcomes and motivate students to inculcate research aptitude by project based learning.

Identify, based on informed perception of Indian, regional and global needs, areas of focus and provide platform to gain knowledge and solutions.

Offer opportunities for interaction between academia and industry.

Develop human potential to its fullest extent so that intellectually capable and imaginatively gifted

leaders can emerge in a range of professions.

Vision & Mission Jaipur Engineering College & Research Centre, Jaipur

VISION

To become a renowned centre of outcome based learning, and work towards academic, professional,

1. **Engineering Knowledge:** Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.

2. **Problem analysis:** Identify, formulate, research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.

MISSION

1. **Focus on evaluation of learning outcomes and motivate students to inculcate research aptitude by project based learning.**

2. **Identify, based on informed perception of Indian, regional and global needs, areas of focus and provide platform to gain knowledge and solutions.**

3. **Offer opportunities for interaction between academia and industry.**

4. **Develop human potential to its fullest extent so that intellectually capable and imaginatively gifted leaders can emerge in a range of professions.**

5. **Environment and Sustainability:** Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.

8. Ethics: Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.

Individual and Team Work: Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.

10. Communication: Communicate effectively on complex engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and

design documentation, make effective presentations

11. Project Management and Finance: Demonstrate knowledge and understanding of the engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.

12. Life-long Learning: Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.



Director's Desk



My heartiest congratulations, to the Department of Applied Science, for the next edition of their bi-monthly departmental newsletter. The newsletter compiled earlier very efficiently summarized the hub of activities that took place in the department during the semester. It is commendable that right from first year the students get an exposure to the outside world and grow commendably in the process. I realize the role of mentorship provided by the esteemed faculty members in this process and would take this opportunity to appreciate their efforts in this direction.

JECRC has always seen quality education as first priority, thus, ensuring the academic rigor, institute industry interface and overall personality development of the students. Consistent efforts are made for bringing in refinement in everything that concerns the Institution. It is believed that generation of knowledge enriches us with freshness and empowers each individual to overcome obsolescence. It feels good to see the efforts of all involved moving towards the achievement of this goal.

However, since there is always scope for continuous improvement I would request the Department to continue un their strife towards excellence. I once again congratulate the whole Editorial team of "Vayvharika" for moving ahead in the right direction set by the Institute.

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Applied Sciences

Principal's Desk



With immense pleasure I welcome the second volume of the Department Newsletter of Applied Sciences. The first set the benchmark and the second I am sure will do full justice to the standards set by the first. The name “Vyavharika” in itself sets the tone of the motto followed in the Department and that is to develop an attitude among the students. This attitude has to be one of quest, of achievement and of values.

JECRC creates an attitude among the students of having an edge over their counter parts by enabling them to prepare themselves for a world that is yet to be created, for jobs yet to be invented, and technologies yet undreamed. The objectives of imparting education, combined with creation are being met in an integrated form to create a synergetic impact. The JECRC Foundation has established itself as one of the leading self financed colleges in north India. This has been primarily due to the large significance that the College puts on the teaching-learning process. Speakers from Corporate world and academicians and thought leaders regularly visit JECRC to interact with the students.

I wish the best to the whole team involved in this venture and also wish the newsletter to be a success.

Dr. V.K Chandna
Principal, JECRC

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Message From Dean



It gives me immense pleasure to greet and welcome you all on behalf of the entire JECRC family. Over the years, JECRC established itself as a favorite destination for the students of this region. It has huge infrastructure, fully developed Labs, a library with wide range of collections and a large fleet of highly experienced faculty.

Our students come from different walks of life and bring with them high ambitions and dreams to make a difference in the society. We cultivate in them cultural confidence, professional competence, and versatility to become productive citizens of the country. We inspire their creative minds and help them to have an international perspective, be it in education, character building or even in sports & cultural activities. It is our endeavor to constantly evolve curriculum support, so our students stay abreast with the latest updates in this technologically developed world.

As an established professional institution, we are aware of the fact that our responsibility does not cease by just producing the graduates, but help them to get suitable employment during their study tenure. To enhance their employability, we arrange additional support to empower them with latest technological knowledge.

The mystery of our success is on our belief that a good academic model along with a commitment to providing quality is the cornerstone for the success of higher education institutions. We look forward to another great year with increasing numbers of graduates, nationally recognized research programs, and expanding activities of our extension programs. Please join us in the journey.

Prof. U. K. Pareek
Dean I Year



Message From Dy. Dean



It is a pleasure that the First Year department of JECRC is continuing with the next issue of newsletter which is a reflection of the work done, efforts made and achievements in the semester by faculty members and students of the department. The Newsletter enhances the collaboration and association not only among the department members but also among the students and gives them an opportunity to create, explore and be expressive.

At JECRC, we emphasize on enrichment of young minds to face the future challenges and make use of the available opportunities. Through innovation and hard work duly supported by cutting edge research, our engineers play a very significant role in the overall development of our nation. I hope that contributions made in this newsletter will pave way for a better understanding of challenges and opportunities, and actions required.

I congratulate the editorial board for bringing out this newsletter and wish the team a grand success in their endeavors.

Dr. Poonam Gupta
Deputy Dean I Year

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JECRC

Applied Sciences

Editorial Board



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Newsletter



JECRC

Applied Sciences

Department of mathematics



HoD's Message



The department of mathematics come into existence since the inception of the college in the year 2000. Since then the department has been running in accordance with the guidelines provided by AICTE.

With a strong team of senior and experienced faculty together with young, dynamic faculty members, we are committed to excellence in teaching and outcome based learning. Our focus is to produce engineers equipped with modern mathematics tools with strong understanding towards real world and engineering problems.

I extend my best wishes and greetings for the release of our newsletter.

The amount of enthusiasm that our students and faculty members contribute to the newsletter is remarkable. I am sure that our students will prove to be an invaluable asset to any organization.

This newsletter has made an earnest attempt in the direction of bringing out certain aspects of the department so that we may understand and know each other even better. I am sure the department will achieve greater heights in the years to come and serve many more millions in the society.

I extend my warmest wishes to all members associated with this newsletter to maintain its excellence with great distinction.

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Dr. Ruchi Mathur

Faculty Profile



Dr. Umesh Pareek, is an alumni of Rajasthan University having more than 20 years of teaching and administrative experience at undergraduate and post graduate level and around 5 years of research experience. Presently he is serving as Professor in Mathematics

Dr. Poonam Gupta have 16 years of teaching, research and administrative experience. M.Sc., M.Phil. and Ph. D. from University of Rajasthan, Jaipur.



Dr. Sarita Poonia is well known academician in Mathematics with 10 years of experience, Presently she is working as Assistant Professor in Mathematics Department. She has done her M.Sc from **University of Rajasthan (Jaipur)** and M.Phil & Ph. D. from Maharaja Ganga Singh Univesity, Bikaner.



Dr. Smita Jain ,is well known academician in Statistics with 12 years of experience of UG and PG. Presently she is working as Asst. Professor in mathematics department. She has done her M.Sc. and Ph.D.(in Statistics) from University of Rajasthan, Jaipur.



known mathematician and administrator. Presently he is serving as
partment. He has done M.Sc. from Rajasthan University and having
administrative experience at graduate and post graduate level. He is

is well known academican in Mathematics with **11** years of experience, Presently she is
essor in Mathematics Department. She has done her M.Sc. Mathematics from M.D.S.
M.C.A. from Kota University and M.Tech (CS) from Jagannath Univer



vastava is serving as Assistant Professor in Department of Mathematics. He has obtained
egrees from Deen Dayal Upadhya Gorakhpur University, Gorakhpur. He has more than 9
administrative experience of handling UG and PG classes.



n in mathematics with **16** years of experience, Presently she is
cs department. She has done her Doctorate, M. Phil, and M. Sc.
ity of Rajasthan, Jaipur..





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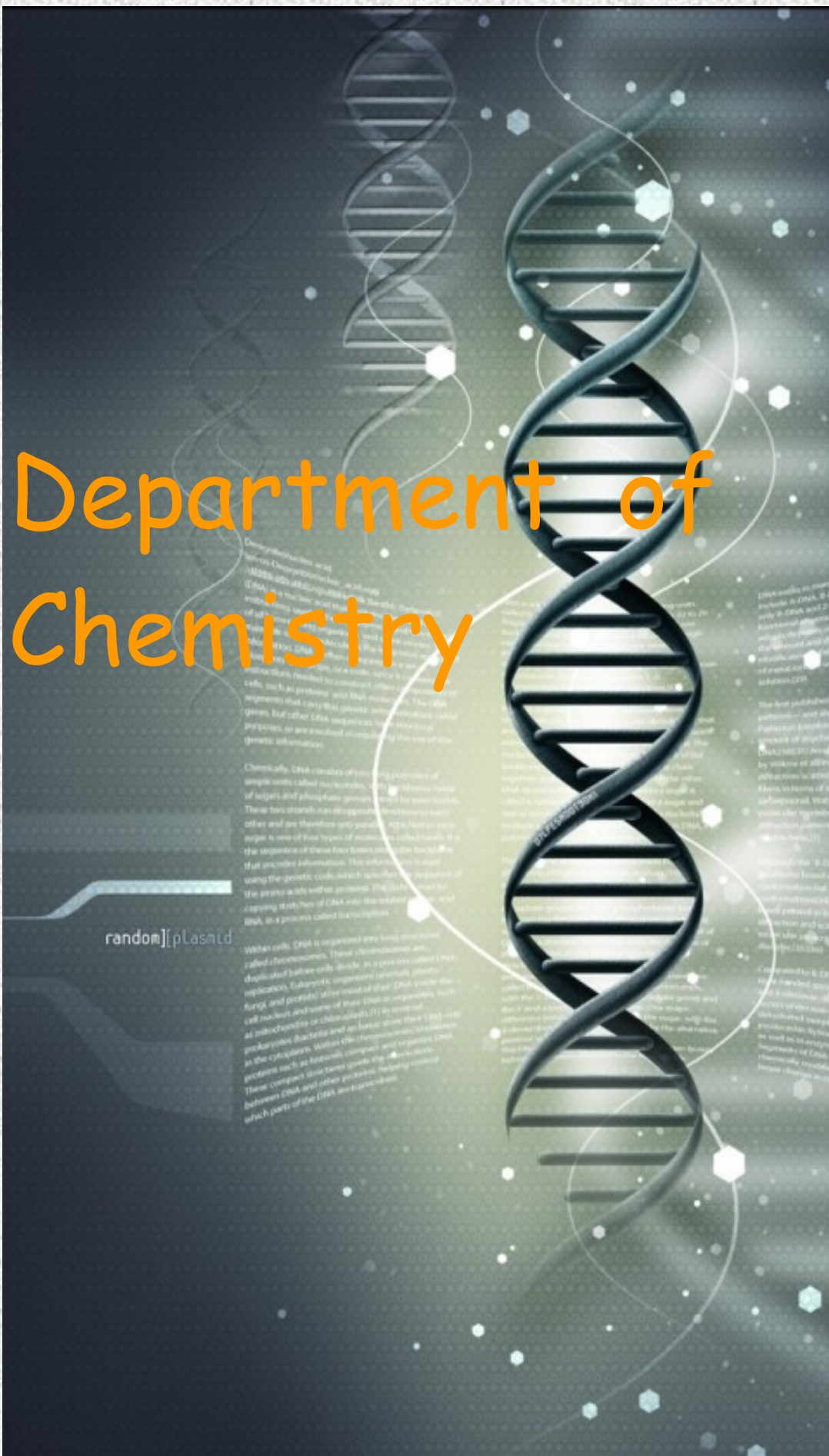
Newsletter



JECRC

Applied Sciences

Department of Chemistry



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Newsletter



JECRC

Applied Sciences



Greetings from the department of Chemistry !!!

Being the part of JECRC foundation , the vision of the department of chemistry is to be a place of excellence in engineering education, and thereby to facilitate the development of competent and committed professionals for practice, research and teaching. It develops and disseminates knowledge; and reaches out to the larger community through extension, that promotes and protects dignity, equality, social justice and human rights for all.

The department with qualified and experienced team of faculty members dedicates to reinforce effective teaching learning process in the ambience of helpful environment well supported and stuffed with curricular along with co-curricular activities. The department is wide open to innovative ideas, methodologies to establish itself as the most hunted excellent learning centre in this part of the state.

I would like to congratulate the Department of Applied Sciences of JECRC, this new endeavour is the result of the efforts put in by a dedicated team of students and teachers. The newsletter offers a platform for showcasing our activities and sharing the journey of our department. I hope that it will provide increased opportunities for interaction amongst students of the present & previous batches.

I would like to thank our constructive & ever supporting Management and Principal sir, colleagues and students for their determined support and contribution.

Best Wishes !!!

Dr. Barkha Shrivastava

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Dr. Barkha Shrivastava

Faculty Profile

Dr. **Seema Joshi** (M.Sc., PGDES, Ph.D.) Professor, Department of Chemistry & Environmental Engineering. She has more than 20 years teaching and research experience. Awarded **JRF** and **SRF** by UGC.



Dr. **Rekha Mithal** is working as an Assistant Professor in the Department of Chemistry. She possess a total of 14 years of experience including teaching and research. Currently guiding 2 Ph.D students of JECRC University.



Ms. **Rekha Vijay** is working as an Assistant Professor (F) in Department of Chemistry, JECRC since July 2012. She has attended 9 conferences/seminars/FDPs.



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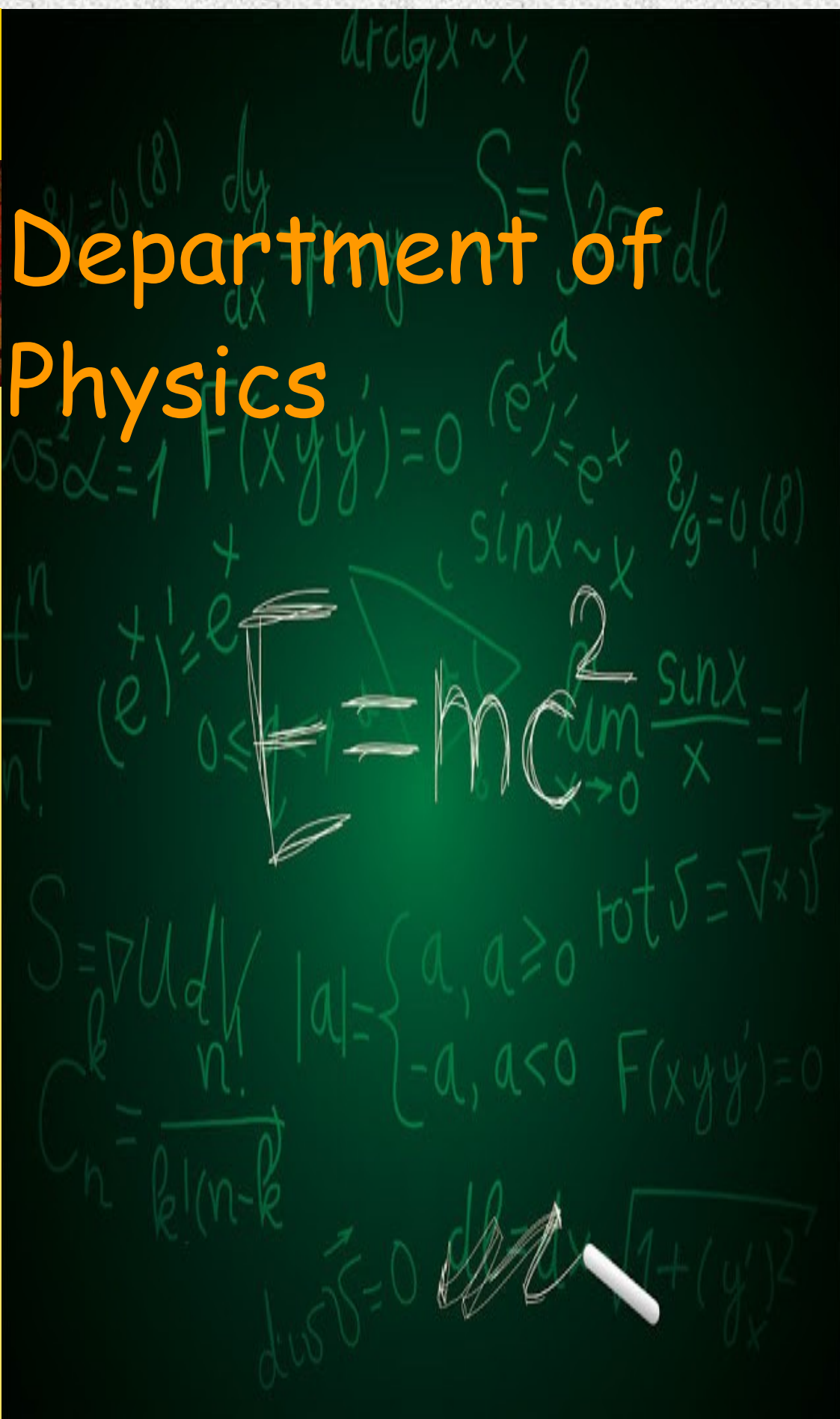
Newsletter



Department of Physics

JECRC

Applied Sciences





HoD's Message



I am delighted to learn that our college is bringing out a magazine for this academic year 2017-18. It is an active platform for both staff and students to showcase their academic talents and imaginations. I strongly believe that it would be an excellent medium through which the world can learn about the potential and achievements of JECRCians. I hope that this would be an ongoing process and the magazine would bring out the latent talent of everyone. I am happy to congratulate the management and members of the magazine committee for their unflinching effort to release our college magazine and in wishing them success in their endeavor.

Prof. R. K. Mangal

Faculty Profile



Dr. Dixit is working as a Professor in Physics Department. He has twenty year of teaching experience of UG classes. He obtained Ph.D. Degree in Physics from Barkatullah University, Bhopal.

Awards/Achievements:

He has awarded first prize at National level from Plasma Science Society of India in 1989. He has also awarded consolation prize from Department of Atomic Energy, Govt. of India.

Dr. Pandey is working as Professor in Physics Department. She has more than 20 years of teaching experience. She obtained her M.Sc. from Agra University and Ph.D. from Meerut University.



Mr. Pathak is working as done his M.Sc. from Vinayaka Mission University, Tamilnadu.

Faculty Profile



Lab Technicians



Mr. Chandan
S. Rajput



Mr. Mukesh
Kushwah

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Department of
English and
Humanities

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HOD'S MESSAGE

Ignorance is the curse of God
Knowledge is the wing
wherewith we fly to heaven

These lines are from the famous playwright William Shakespeare. I do believe that knowledge and imparting of knowledge is the service of God. Teachers are in the noblest of Professions. And the teachers of Humanities in an Engineering college, more so. They are the ones showing the path of human values to the students. In an era full of violence they are the ones who can spread the message of Being Human, of realizing the meaning of Being Human in the young blood. It is on us that the duty of grooming, molding and creating good citizens has been bestowed and I am proud to be leading a team of Professional, Well trained and most important Dedicated teachers both in English and Human Values. I am very certain that they will guide and mentor the students of JECRC to reach the zenith and make the organization proud of them.

I also take this opportunity to congratulate the Editorial Team which also is a part of my department. Their tireless efforts have brought the magazine into the present shape and their hard work speaks for itself.

I also take this platform to thank the Management, Principal Sir, and all other dignitaries who have given their constant support and encouragement to undertake the new and innovative challenges and to move towards success in all fields.

Best Wishes!

Faculty Profile



Dr. Ruchida Barman is at present working as Associate Professor in the Department and has an experience of almost 16 years to her credit. Teaching and Mentoring are her passions in which she indulges wholeheartedly. Besides being a Professional teacher she is also a professional creative writer whose contributions are published on a regular basis in online magazines and anthologies.

Dr. Priyanka Mathur is an academician to the core and is also working in the Department as Associate Professor. She is well known for her publications and her multi disciplinary Research Projects. She has over 13 years of teaching experience.

Research Proects



Dr. Ritu Soryan has joined the Department recently and she too brings with her a rich and varied teaching experience of 14.5 years. She has also authored books on Professional ethics and Human Values.







ON

NATIONAL LEVEL ESSAY COMPETITION

JECRC Foundation celebrated *SWACHHTA PAKHWADA 2017* from 1st to 15th September under the guidelines of AICTE & MHRD Govt. of India. One of the activities of this *pakhwada* was a National Level Essay Competition on the subject "**Innovative Ways for Spreading the Message of Hygiene**".

The objective of the essay competition was to generate awareness towards cleanliness and implementation of the same at higher education institutional level. It also focused on the role of young engineers in taking an initiative role for community led sanitation initiatives.

The activity was taken up by Department of English and Humanities and led by **Dr. Priyanka Mathur**. The National Essay Activity was decided to be executed at two levels: - First at the Institutional Level & Second at the National Level through online portal of MHRD, Delhi. The last date for the submission of entries at the institutional level was September 5, 2017.



The young students showed an overwhelming response and around 200 entries from different branches and semesters were received. The department formed a panel of four faculty members to assess the content, innovative approach and quality of essays. Top 60 essays with *innovative methods or ideas of cleanliness* were screened by the **Selection Panel of the Department**. On September 8, 2017, the following students were declared as the winners of first round contest by the selection panel:

I Position : Bhuvnesh Pratap Singh Daiya (III yr IT)

II Position : Ayush Jain (III Yr ECE)

III Position : Gaurav Sukhani (I yr IT)

After the declaration of the results, on the same day, the winner students were personally informed through official emails and phone calls to get themselves registered on the online web portal of MHRD www.mygov.in in order to upload the entries of the essays with prior permission of Principal sir Dr. Vinay Kumar Chandna. The students ensured their participation at National level competition.

The “*Swachhata Pakhwada*” will end on 15th September 2017. On this day, the closing ceremony will take place, wherein, prizes and certificates will be distributed to the winners and participants.

**Department of English and Humanities
JECRC, Jaipur**



Exhaustive: Three faculty members along with 400 students in 2017-18. It took 1 hour to cover the distance of Jaipur Saras Dairy. The company is located at JLN Marg, Near MNIT. As soon as we reached company we were guided by Mr. Atul Sakla and Mr. Chandanto aorientation of company along with history and how company was established. After introduction all students were divided in two groups of 50 students and were headed by one manager of company who helped them to understand how production is carried out in company and how company reaches their customer. Mr. Chnaam offer every one for ice-cream after completion of company presentation and query session.

Dr. Poonam Gupta appreciate staff member who guided students with each and every question with detailed answers for both companies.

We leave the Saras Dairy at 2:05 PM and retuning journey start at 2:05PM, we reached JECRC campus on 2:30 PM.



Conclusion: It is rightly said that “See & know’ is better than ‘read & learn’. Students have got real feel of company’s working after this visit. They got a chance to transfer their theoretical knowledge to practical implication. This will even help students to understand subject matter clearly in future also.

Feedback: It’s had the most amazing visits which gave us real technical insight. They learned so much about the functioning knowledge where we visited & procedure to become a good employees or entrepreneur. It helped us to discover our skills and was truly enlightening. These types of visits should be carried out for the students regularly so that the students get exact exposure about the working and requirements of the industries which is expected from the students at the time of placement and after the session.

Dr. Poonam Gupta, Mr. Dilip Prajapati, Mr. Vipin Goyal and Mr. Hukum Chand Nagar along with student would like to extend our gratitude to company for permission and support they gave to make our visit a success with accomplishment of objective and our principal Dr. Vinay Chandra for permitting this visit for our student.

Thanks

Dr. Poonam Gupta
(in coordination with faculty and students)



A Report on ICT based Short Term Course

on

**“Managing Yourself”
September 18th – 22nd, 2017**

Organised by

Department of Applied Science & Humanities

Jaipur Engineering College and Research Centre, Jaipur

In association with

**National Institute of Technical Teachers Training and Research,
Chandigarh**

Course Coordinators

Prof. R. K. Mangal, Dr. Ruchi Mathur

Dr. Barkha Shrivastava, Dr. Mukul Sharma

9251039860 (M), 0141-2770232, 2770120 (O)

Email: hod.phy@jecrc.ac.in

Objectives of the Course

This ICT based course has been specifically designed for developing interest among the faculty of Applied Science and Humanities.

The main contents of the STC will include:

Develop understanding of self and decide about vision and goal of life.

Analyze individuals role to determine the extent of Role

Efficacy present in one's position and actions required to enhance role efficacy.

Identify the competencies required for performing role effectively as a teacher in particular and citizen in general.

Manage body, mind, emotion, value and role effectively

Make aware of the desirable behavioural parameters such as leadership, creativity, management of communication etc. for development.

Aware of the causes of stress in role and method of coping it.

Make understand importance of emotional balance in profession

Develop a plan for managing self to achieve high in profession and lead a happy life.

Target Audience

The program is targeted towards the development of the faculty of various Universities, Engineering Colleges and Polytechnic Colleges. This course was specially designed for developing interest among the faculty of Applied Science and Humanities

Resource Persons

Faculty from NITTTR, Chandigarh, experts/ academicians from IITs & NITs.

A REPORT ON ICT BASED SHORT TERM COURSE ON “MANAGING YOURSELF”

The Department of Applied Sciences and Humanities of Jaipur Engineering College and Research Centre, (JECRC), Jaipur organized a five-day long Faculty Development Program (FDP) in the form of an ICT based Short Term Course (STC) on the topic “*Managing Yourself*” from September 18 to 22, 2017. This STC Course was conducted in association with National Institute of Technical Teachers Training and Research, Chandigarh. The whole course was divided into three sessions.

Some Photographs of Inaugural function:

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Day – 1: Monday, September 18, 2017

The ICT program was inaugurated by Guest of Honour, Prof. B. R. Tripathi, Professor of Physics, S S Jain Subodh P G College, Jaipur in the Seminar Hall of the college. At this occasion, Dean B. Tech. I Year, Prof. U. K. Pareek; Course Cordinators, Prof. R. K. Mangal, Dr. Ruchi Mathur, Dr. Barkha Srivastava, Dr. Mukul Sharma expressed their views on the relevance and importance of the topic under discussion. Prof. Tripathi emphasized on the values, which are necessary for leading a peaceful and successful personal and professional life. At this occasion, faculty members of department and students showed their enthusiastic approach towards learning the values and the most relevant topic like ‘*managing yourself*’.

The second session started at 11.00 AM, in which the Resource Person was eminent personality Prof. R.K.

Wats from NITTTR, Chandigarh. Prof Wats, in his address, **empha**sized on the role **an**d importance of

effective communication in personal **and**

