

MECHAZINE

VOLUME-2 ISSUE-2

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GUEST LECTURES /SEMINARS/FDP'S ORGANIZED IN THE DEPARTMENT

S.NO	DATE	DESCRIPTION OF THE EVENT
1.	04/12/2014	Guest lecture on " Design of thin & thick cylinders " by Dr. Ramadasu chennamsetti, Scientist-E, R&DE(E), DRDO Pune India

PUBLICATIONS IN THE NATIONAL AND INTERNATIONAL JOURNALS

s. No	Name of the faculty	Publication details
1.	N Tulasi Radha and K Dorathi	Modeling, Structural and Thermal Analysis of Conrod Using Composite Materials Frontiers in Material Processing, Jan 2015

GUEST LECTURES /SEMINARS/FDP'S ORGANIZED IN THE DEPARTMENT

S.NO	DATE	DESCRIPTION OF THE EVENT
1.	03/02/2015	Guest lecture on " Design Fabrication and installation of off shore platforms at KG Basin " by Prof. Illa satya Narayana, Retd. Chief manager, HSI, Visakhaptnam
2.	22/04/2015	Guest lecture on " Different. Applications of Finite element methods " by Dr. A. Gopala Krishna, Prof. of ME- JNTUK

STUDENT PARTICIPATIONS

S.No	MONTH & YEAR	EVENT DESCRIPTION	EVENT VENUE	STUDENT NAME
1.	FEB 2015	BASKET BALL	JNTU KAKINADA	B SAGAR HANUROOP
2.		VOLLEY BALL		CH VENKANNA
3.				K M S CHANDRASEKHAR

4.			V PAVAN KUMAR
5.		SHUTTLE BADMINTON	S KIRANMAI

Top 14 PSUs to Hire through GATE Exam

Given below is the list of top 14 PSUs that will recruit through GATE exam. The following list also provides a brief description of each company's profile, eligibility criteria for selection and the cost to company (CTC) offered by each company.

- **Power Grid**-This is the Central Transmission Utility (CTU) of India and a Navratna public sector enterprise under the Ministry of Power, Govt, of India. Power Grid operates around 1, 01,379 circuit kms of transmission lines and wheels about 50% of total power generated in the country through its transmission network. The company has already made announcement for the recruitment of its 19th batch of electrical executive trainee engineers on the basis of GATE exam scores. The CTC offered is 13.4 lakhs per annum (PA).

- **National Hydroelectric Power Corporation (NHPC)**- This is India's leading company in the power sector having excellence in planning, designing and executing hydro projects and operation and maintenance of hydro power stations. The company has released notice for the recruitment of trainee engineers in the civil, electrical and

mechanical stream through GATE exam 2014. The CTC offered is between 5 and 5.51 lakhs PA.

- **Hindustan Petroleum Corporation Limited (HPC1)** - It is a mega integrated Oil refining and marketing company that accounts for about 20% of the market share and about 10% of the nation's oil refining capacity. The company requires bright and dynamic engineering graduates from mechanical, civil, electrical, electronics & telecommunication and instrumentation stream with a valid score in the upcoming GATE exam 2014. CTC to be offered is 6 lakhs PA.

Mineral Exploration Corporation Limited (MECL)-Established in October, 1972

As an autonomous Public Sector Company, MECL has worked with a mission to provide high quality, cost effective and time bound geo-scientific services for exploration and exploitation of minerals for the nation. The Company has recently released a recruitment notification for the posts of mechanical engineer, chemist, geologist and geophysicist post through GATE 2014. All other relevant details regarding number of vacancies, CTC offered etc., will be notified soon on the company's official website.

National Thermal Power Corporation (NTPC)-It has been ranked 6th best company to work for in (The Economic Times and Great Places to work Institute-2013). As part of its growth plan, the company is going to recruit eligible graduates from electrical, mechanical, civil, instrumentation and electronics stream with a good score in the GATE exam. Selected candidates will be offered an annual CTC of 6 lakhs.

Indian Oil-This company operates one of the Asia's largest networks of refineries, pipelines and marketing and petrochemicals business with a turnover of Rs 4.15 lakh crore (US\$ 76.2 billion). It has released a recruitment notice for hiring eligible graduate engineers from various disciplines. Candidates should have a valid GATE 2014 score. The company will offer an annual CTC of 7-10.5 lakhs.

• **Bharat Petroleum** - Bharat Petroleum Corporation Limited (BPCL) is a Fortune 500, leading Navratna Public Sector Company in the exciting and dynamic energy sector, engaged in refining,

marketing and distribution of Petroleum products, exploration of Oil / Gas, with an annual turnover of over 2,50,649 crores in the year 2012-13. The company is looking for young, energetic, ambitious graduate engineers in the field of mechanical engineering and chemical engineering for the post of management trainee at an annual CTC of 10.5 Lakhs.

. **Mazagon Dock Limited (MDL)** - It is one of India's leading shipbuilding companies with ISO 9001:2008 accreditation. MDL has a current turnover of Rs. 2300 Cr with employee strength of around 8700. The company announced that they will hire executive trainees from mechanical, electrical and electronics stream at annual CTC of 5-12.9 lakhs. Candidate should hold a valid score in the GATE exam 2014.

. **GAIL (India) Limited-GAIL** is a Maharatna PSU and the largest state-owned natural gas processing and distribution company headquartered in New Delhi, India. The company is looking for committed, vibrant and passionate young graduate engineers for recruitment as executive trainees in the discipline of mechanical, electrical, instrumentation and chemical engineering. Candidates should appear in the **GATE** exam 2014 and hold a valid score to be considered for any of the positions. The annual CTC offered is between 6 and 6.5 Lakhs.

Neyveli Lignite Corporation Limited (NLC) - NLC is a government-owned lignite mining and power generating company in India. It operates the largest open-pit lignite mines in India. The company is presently mining 24 metric tons (MT) of lignite and has an installed capacity of 2,740 MW of electricity. It has annual turnover of Rs. 5590 Crores (approx.). To add to its strength and empower its growth, NLC is looking for young, dynamic & result oriented engineers from mechanical, electrical, mining, control & instrumentation, civil, and computer science disciplines for the post of graduate executive trainee for its units and facilities located in various parts of the country. Eligible candidates will have to appear in the GATE exam 2014 and pass with a remarkable score to be considered for this exciting opportunity. The CTC offered by the company is 6.15 lakhs PA.

Central Electronics Limited (CEL)- This Public Sector Enterprise operates under the Department of Scientific & Industrial Research, Ministry of Science & Technology and is engaged in manufacturing of Solar photovoltaic cells, module & systems, railway electronics systems and microwave electronics systems. The company has expressed interest in recruiting high calibre and talented engineering professionals from electronics & communication, mechanical and material science/physics/ chemistry

stream. You are eligible to apply for this post, if you are planning to for the GATE exam 2014. A valid score in the exam is the first selection criterion for these openings. Selected candidates will be offered an annual CTC of 5.5 Lakhs.

National Fertilizers Limited (NFL) - Established in 1974, NFL is a major Indian producer of inorganic and organic fertilizers and industrial chemicals. The company is looking for dynamic and result oriented graduate engineers from chemical, mechanical, electrical, instrumentation and materials engineering disciplines. The annual CTC to be offered to successful candidates with a valid score in GATE exam 2014 is between 4.5 and 5 lakhs.

Vizag Steel-This is India's first shore-based integrated Steel Plant equipped with state-of-the-art technology. The company, which has an annual turnover of Rs. 14000 crores, is a prime producer of long steel products in the country. The company has planned to recruit Management Trainees in different disciplines, such as, metallurgy, mechanical and electrical engineering, based on scores of GATE 2014 exam

Bihar State Power (Holding) Company Limited (BSPHCL) - BSPHCL is a state-owned electricity regulation board that operates within the state of Bihar in India with more than 14,850 employees under its aegis. The company has invited application from eligible engineering graduates from electrical and civil engineering discipline. Candidates with a valid score in the GATE 2014 exam stand a good chance to be appointed for these positions on an annual CTC of 2.8 - 6.2 lakhs.

TOP 5 MECHANICAL INVENTIONS

Spark Ignition 50cc Engine with the power 11 Kw-500 RPM and EURO-5 emission

- Spark ignition 50cc engine with extreme parameters of operation, capitalizing unique thermodynamic cycle (S-cycle) that guarantees high specific both power (not less than 11 kW -7500 RPM) and torque, and provides fuel economy and environment friendliness - emission control up to the level of EURO-5

Supercharger Kit improves a very common small diesel engines like 170F(E), 178F(E), 186F(E), R175, R180, R185, R190, S195, SHOO, ZH195, ZH1100, ZH1105, ZH1115 with the engine displacement from 200cc up to 1200cc or the similar ones. The Supercharger (air compressor) as a main unit of the Supercharger Kit supplies the naturally aspirated engine with as much as additional 40% to 75% fresh air. Diesel engine power and torque increase accordingly. It's to make the head of the Cylinderhead movable Fig3.(3), and, in this case we have the wizard Cylinderhead which give the exhaust gas the high capability of escaping with four holes of the entire valves situated on top of the Cylinderhead(2), and for the admission of the air it's replaced with entire moving of the roof of the Cylinderhead (3) as one big valve of enhanced admission of the air, this valve when it open it have the four holes of the places of escapement valves with the outline of the entire big valve which constitute the top of the cylinder.

Supercharger (air compressor) for motorcycle, motor bike, scooter, and small automobile engines

Supercharger dramatically improves, up to 75%, performance of an internal combustion engine used for motorcycles, mopeds, scooters, and small cars with a displacement of 50cc to 1,500cc. The Supercharger is an easily manufactured positive displacement air pump. This inexpensive "true" air compressor has a simple design, acceptable reliability and light weight.

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Fabulous Association of Mechanical Engineers



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