"New Year Greetings" from Director General

2015
“Dream, Dream, Dream . Dreams transform into thoughts , And thoughts result in action.”

“Dream is not that which you see while sleeping it is something that does not let you sleep.” — A.P.J. Abdul Kalam, *Wings of Fire: An Autobiography*

Dear Colleagues,

Happy new year to you all. I hope you celebrated the start of 2015 in good spirits with family and friends.

The year 2013-14 has witnessed the rapid growth of our organisation. We have met all parameters and set a higher benchmark. As DG, CPRI, I take pride in what we have achieved together through the year 2014, as much as in what each and every one of you have demonstrated. As the New Year is drawing near, on behalf of the organisation I would sincerely extend my gratitude and give my best regards to all of you and your families. Now it’s good to look ahead and think about what this year may bring us. But first, a quick look back.

**Achievements during the financial year 2013-14**

- Revenue: Rs.159.96 Crores
- Papers presented/published: 340
- Conference/Workshops/Training Programmes conducted: 96
- Patents filed: 11

**Major projects approved for CPRI under 12th Five Year Plan.**

At the outset CPRI thanks to all officers of MoP/CEA/ Planning/ Dept of Expenditure/ (Shri Umashankar, P.K.Sinha, Ratan P Watal, Chaturvdedi, Dr. Saurabh Garg, Arunish Chawla, i Bakshi, Mrs Neerja Mathur, Shri Major Singh, RC Jha, Ramesh Kumar, Devendra Chaudhury, Rakesh Jain, Dr Pradeep Kumar, Manoranjankumar, Raj Pal, Braj Mohan, Ravi, CS Rao, Rajesh Kumar, Sharma, Sumbly, Raja, Ms Anjali Goel, Koul, Satrugsan Lal, Chittaranjan Dash, MJ Varughese, Nigam ) who devoted and supported our proposals for the last 4 years to come to fruitful. CPRI is thankful to all officials to make CPRI as a model Institution in our country to emulate! Special thanks to the present team of T & R and IFD and their efforts would make CPRI as one of the largest institution in the world in the time to come!

Projects worth Rs.1182.00 crore( 80cr ( R&D) +105.90 cr ( Augmentation ) +996.10 cr ( Addl SC Generators Rs 640 Crs+ Establishment of New Test facilities Rs 356.10 Crs) have been approved for implementation covering major facilities like:
- **Research & Development Projects – Rs 80 Crs**
  
<table>
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<tr>
<th>Scheme</th>
<th>Cost</th>
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<tbody>
<tr>
<td>In house Research Scheme of CPRI</td>
<td>Rs 15 crs</td>
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<tr>
<td>Research Scheme on Power</td>
<td>Rs 25 crs</td>
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<td>National Perspective Plans (NPP)</td>
<td>Rs 45 crs</td>
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- **Augmentation projects of CPRI – Rs 105.90 Crs**
  
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<tr>
<th>Project</th>
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<tr>
<td>Upgradation of High Voltage/Ultra High voltage Test facilities</td>
<td>Rs. 14.00 crs</td>
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<td>Upgradation of Real Time Digital Simulator</td>
<td>Rs. 8.35 Crores</td>
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<tr>
<td>Augmentation of energy meter &amp; calibration</td>
<td>Rs. 15.87 Crores</td>
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<tr>
<td>Augmentation of Protocol and Meter Testing</td>
<td>Rs.15.68 Crores</td>
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<tr>
<td>Establishment of test facilities for Solar Photovoltaic modules</td>
<td>Rs.28.00 Crores</td>
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<tr>
<td>Augmentation, Modernisation &amp; Capacity Addition of Battery, Ingress Protection, and Illumination Test Facilities</td>
<td>Rs.11.00 Crores</td>
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<tr>
<td>Augmentation &amp; Modernisation of Diagnostics, Cables, Capacitors, Temperature rise, Environmental test facility</td>
<td>Rs.13.00 Crores</td>
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- **“Up gradation of Short Circuit Test facilities including addition of 2500 MVA Short Circuit Generators”- Rs 640 Crs**
  
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<th>Project</th>
<th>Cost</th>
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<tr>
<td>Additional Generators for HPL, Bangalore (2500 MVA to 7500 MVA)</td>
<td>Rs 509 crs</td>
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<tr>
<td>On-line short circuit test facility at UHVRL, Hyderabad</td>
<td>Rs 120 crs</td>
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<tr>
<td>Excitation system for existing Generator (Refurbishment of test facilities)</td>
<td>Rs 11.00 crs</td>
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- **Establishment of New Test facilities Rs 356.10 Crs**
  
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<th>Project</th>
<th>Cost</th>
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<tr>
<td>A1. Establishment of transmission line tower test station and associated test facilities at an estimated cost: Rs. 90.00 crore. (At Hyderabad &amp; Bangalore)</td>
<td>Rs 90.00 crs</td>
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<tr>
<td>Tower Testing Station &amp; Civil works at UHVRL</td>
<td>Rs.65.00 crs</td>
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<tr>
<td>Augmentation of associated test facilities at CPRI Hyderabad</td>
<td>Rs.25.00 crs</td>
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<tr>
<td>Augmentation of associated test facilities at CPRI Bangalore</td>
<td>Rs.25.00 crs</td>
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A2. Establishment of Supplementary test facilities like Temperature Rise Test, Meter & Oil Test Lab, Step Front Wave Impulse lab, Test facility for Auto reclosure, HVDC test, Mechanical endurance test facility, IP Test facility, Loss Measurement System, Vibration, Damper, Training Centre etc. at an estimate cost : Rs.40.00 crore

Augmentation of test facilities at STDS, CPRI, Bhopal Rs.20.00 crore

Augmentation of Pre-Qualification facilities at CPRI Bangalore Rs.11.50 crore

Establishment and augmentation of short circuit test facilities at CPRI, Bangalore Rs.8.50 crore

B. Augmentation of existing Regional Testing Laboratories at Kolkata & Guwahati and Establishment of New Regional Testing Centres (Rs. 200.4 crore)

B1. Relocation and Augmentation of Thermal Research Centre (TRC), Nagpur and Expansion of the Nagpur Unit (Rs.48.00 crore)

B2. Enhancing Test Facilities of Oil Testing Laboratories including Relocation of RTL, Kolkata (Project cost Rs.22.09 crore)

   I. Enhancing Facilities of Service oil lab (Rs.2.91 crore) and mobile unit at CRTL Bangalore (Rs.3.27 crore)
   II. Enhancement of test facilities at UHVRL Hyderabad to include service oil testing (Rs.4.27 crore)
   III. Enhancing Facilities of Service oil lab at RTL Noida (Rs.2.91 crore)
   IV. Enhancing Facilities of Service oil lab at STDS Bhopal (Rs.2.91 crore)
   V. Enhancing Facilities of Service oil lab at RTL Kolkata (Rs.2.91 crore)
   VI. Enhancing Facilities of Service oil lab at RTL Guwahati (Rs.2.91 crore)

B3. Establishment of 40 KA continuous current Temperature Rise test Facility at HPL, CPRI, Bangalore (Project cost Rs.15.00 crore)

B4. Setting up of Regional Testing laboratory in the Western Region (Project cost Rs.115.30 crore)

C1. Centre of Excellence for Non-Destructive Testing Evaluation of Power Plant Components (Rs.8.00 crore).

E1. Establishment of Phasor Measurement Unit (PMU) System Testing and Calibration Laboratory (Rs.6.65 crore)

E2. Establishment of Smart Grid Research Laboratory ( Rs. 11.45 crore)

Note: 10% cost of the capital projects would be borne by CPRI during 12th Plan period i.e Rs 110 Crores in addition to any foreign exchange fluctuations. It looks like we are the only institution in the country to do this kind of contribution and we should feel pride about it.
Land Related Activities:

- We have applied for allocating land for new unit in Nashik (about 150 acres land)
- We have applied for allocating land for relocation of Nagpur unit from Koradi to a new location at Dhuti (about 100 acres land)
- Arrangements are being made to get about 24 acres of land from BHEL, Bhopal for expanding our existing unit in Bhopal.

New Facility created during the year

- HVDC test facility at UHVRL, Hyderabad
- EHV laboratory at STDS, Bhopal
- Facility for testing of Induction Lamps

Face lifting of Roads, buildings & laboratories in Bangalore Campus at a total cost of around Rs.4.25 Cr. We planted more than 2000 various plants in CPRI, Bangalore complex. We have plans to add few thousands to make our campus clean and green.

Association with IEEMA & Important meetings held

- Meeting of STL -40th Management Committee meeting was held at Bangalore, (May 14)
- 11th Asian meeting of Power laboratories with Korea & Japan (Jan. 14)
- M/s United States Trade and Development delegation – Meeting on Smart Grid (May 14) and we received Smart grid consulting assignment from M/s USTDA, USA.
- IEEMA & CPRI meeting on Rotating Machines, Instrument transformers, Cables, Capacitors, Conductors, Transformers, Contract R&D
- CPRI – CESI MoU is on the anvil to utilize High Power Laboratory. This would be the first international agreement for lab to lab co-operation in the area of testing.

Important MoUs signed

- MoU with PGCIL for pollution mapping for southern & eastern region (Feb.14)
- MoU with BBMB, Chandigarh for training their engineers (Apr. 14)
- MoU with BESCOM for training their engineers (Aug. 14)- three years
- MoU with BSNL & CPWD for carrying out civil works for CPRI (Sept. & Oct. 2014)
- MoU with KSEB for vendor analysis
- MoU with MPMKVVL, Bhopal for training their distribution Engineers

Testing

- For the first time, HPL has conducted testing of highest ever rating of 250 MVA power transformer for BHEL, Jhansi
Awards & Accolades

- CPRI has been awarded in the category of World class National Institute in power sector by Enertia Foundation during 8th Enertia Awards -2014 held at New Delhi on 27th November 2014 recognising its yeomen contribution in advanced HV Testing facilities, Technology adoption and Research & Development etc.

- CPRI, Bangalore was awarded the Prestigious Indira Gandhi Rajbhasha Award -First and Third respectively (in ‘C’ region) for the outstanding work done in the field of Official Language for the years 2012-13 & 2013-14 by the Honorable President of India, Shri Pranab Mukherjee during the functions organized on 14 September, 2014 at Rashtrapati Bhavan, New Delhi and 15th November 2014 at Plenary Hall, Vigyan Bhavan, New Delhi.

- Dr. Amit Jain, Joint Director, CPRI, Bangalore received Outstanding Engineer Award from IEEE Power & Energy Society, Hyderabad (Jul.14)


- Two of our officers namely Sri Venkateswara Rao & Sri B Nageshwar Rao, J.D.s were awarded Ph.D. for their research work.

R&D matters:

- 31 Sr. Research Fellows and Jr. Research Fellows have been appointed during the year. These Researchers are expected to contribute to the Research output and publication of papers in the coming years, while fulfilling their award for post graduation & doctoral studies.

- The honorarium paid to Sr. Research Fellows and Jr. Research Fellows have been enhanced to Rs.30,000/- p.m. & Rs.20,000/- p.m. respectively.

- MoP has sanctioned provision for appointing 20 post doctorals for the year for which process of appointment is in progress.

- 50 post graduate projects have been sanctioned and an honorarium of Rs.6,000/- p.m. would be paid to the scholars for a period of 6 to 12 months.

- Introduced Distinguished /visiting / Adjunct Prof – 10 Positions – Honorarium ranging from Rs 0.8 to 1.3 lakhs per month.

- Workshop on ‘Challenges & opportunities for R&D in Indian Power Sector’ was held at New Delhi (Jun.14)

- Two-day International Conference on Standards for Smart Grid Ecosystem”, in association with IEEE SA (March 2014)

- International workshop entitled “Influence of Electrical Steels on the quality and service life of Transformers” organized by CPRI at CBIP Seminar Hall, New Delhi (April 2014)

- 2nd International Conference on “Innovation & Best Practices in Transformer Design, Testing and Maintenance” (Dec.14). This is class of its own which received more than 350 delegates across the country and world. It created a record so far on the conference
held in New Delhi. Congratulations to the team of Shri Raghavaiah, AD and his team for raising the standard every year in organizing world class conference.

### Customised Training

- Organising of Training Programmes for engineers of WBSEDCL, BBMB, BESCOM & MPMKVCL have been put in place.

### Deputation Abroad

- 19 officers have been deputed abroad for carrying out pre-despatch inspection, third party inspection & for presenting papers in Internal Conference during the year. We hope in the year 2015 DG, CPRI may be empowered to depute CPRI officials for these kind of deputations.

### Structural improvement & enhancement of CPRI Image

- Reviewing of CPRI’s activity by external agency M/s. Deloitte
- Branding of CPRI by M/s. Illum Design Pvt. Ltd., New Delhi
- Review of CPRI’s Byelaws by an Expert Committee
- CPRI is geared up to receive environment compliance certificate

### Change in the contract of canteen made for CRTL Canteen, CCAR / Units of CPRI including Bhopal/ Noida/ Guwahati/ Kolkata to provide good food!

### Many challenges were faced in the course of execution of many projects and assignments:

- Very few of us know how to get our projects through with many Central Government Ministries / Departments. It needed to be institutionalized for our juniors to learn to take it forward. Seniors have to take up the responsibility to expose and introduce all our juniors. It is an art!
- Getting posts sanctioned is not an issue. Our wrong approach that if you ask for positions the projects would not be sanctioned was belied with our approach and we have created about 250 positions from Technician to Additional Directors.
- We need to network with organization and officials and provide sincerely all information timely and follow it up. We should travel relentlessly for the sake of our organization. I travelled atleast 100 times in a year to various places for the sake of work. It has great effect to get your work done.
- We need to go extra mile beyond our defined official time. It only paid. If we see our comforts and convenience we may leave our organization in a vulnerable situation.
- Plan ... Plan.. Plan... Look for competitor’s capacity and raise your level.
- Many difficult situations were overcome by sheer patience and hard work. Example to become an equity partner in NHPTL.
- We had many challenges in construction activities including litigations by the contractors! Great lessons learnt! We had enough trouble with our systems and now we are working with CPWD and BSNL to execute our work.

**Looking Ahead**

**Performance so far during the current financial year (2014-15) upto November 2014**

- Revenue: Rs.86.00 Crores
- Papers presented/published: 115
- Conference/Workshops/Training Programmes conducted: 64
- Patents filed: 2

Progress we achieved so far is far from satisfactory. We need to work bit hard to keep pace with the last year trend and we need to exceed Last year bench mark. Remember that unless otherwise you reach the target you may be rated low in your APAR and accordingly your promotion would be decided. Pl. take it serious. We have only 3 months.

We have recruited 31 JRF/ SRF to increase our research content. They need to put more efforts to publish good number of research papers. Your performance would also be assessed and if not satisfactory action would be initiated as per terms and conditions in your offer. Pl. take it bit serious.

Reaching and exceeding our target gives us freedom and professional satisfaction. Many things are happening. These are changing times. Yet in the middle of all the changes there is one thing that constantly determines success. Some call it leadership. But to my mind, it is the single-minded pursuit of excellence. Excellence does not happen in a vacuum. It needs a collective obsession as I have experienced the benefits of excellence in my own life. Excellence is a great starting point for any new organisation but also an unending journey. What is excellence? It is about going a little beyond what we expect from ourselves. Part of the need for excellence is imposed on us externally by our customers. Our competition keeps us on our toes, especially when it is global in nature.

But the other driver of excellence is internal. I have found that excellence is not so much a battle you fight with others, but a battle you fight with yourself, by constantly raising the bar and stretching yourself and your team. This is the best and the most satisfying and challenging part about excellence.

Friends before closing New Year Message I would like mention few important rules proposed by Shri Azim Premji who built a respectable organization adding great value to society at large:
LESSON 1. “Be alert for the first signs of change.”
Change descends on every one equally; it is just that some realize it faster. Some changes are sudden but many others are gradual. While sudden changes get attention because they are dramatic, it is the gradual changes that are ignored till it is too late. You must have all heard of story of the frog in boiling water. If the temperature of the water is suddenly increased, the frog realizes it and jumps out of the water. But if the temperature is very slowly increased, one degree at a time, the frog does not realize it till it boils to death. You must develop your own early warning system, which warns you of changes and calls your attention to it. In the case of change, being forewarned is being forearmed.

LESSON 2. “Anticipate change even when things are going right.”
Most people wait for something to go wrong before they think of change. It is like going to the doctor for a check up only when you are seriously sick or thinking of maintaining your vehicle only when it breaks down. The biggest enemy of future success is past success. When you succeed, you feel that you must be doing something right for it to happen. But when the parameters for success change, doing the same things may or may not continue to lead to success. Guard against complacency all the time.

LESSON 3. “Always look at the opportunities that change represents.”
Managing change has a lot to go with our own attitude towards it. It is proverbial half-full or half empty glass approach. For every problem that change represents, there is an opportunity lurking in disguise somewhere. It is up to you to spot it before someone else does.

LESSON 4. “Do not allow routines to become chains.”

LESSON 5. “Realize that fear of the unknown is natural.”
With change comes a feeling of insecurity. Many people believe that brave people are not afflicted by this malady. The truth is different. Every one feels the fear of unknown. Courage is not the absence of fear but the ability to manage fear without getting paralyzed. Feel the fear, but move on regardless.
LESSON 6. “Keep renewing yourself.”

This prepares you to anticipate change and be ready for it when it comes. Constantly ask yourself what new skills and competencies will be needed. Begin working on them before it becomes necessary and you will have a natural advantage. The greatest benefit of your education lies not only in what you have learnt, but in working how to learn. Formal education is the beginning of the journey of learning. You have to constantly learn about people and how to interact effectively with them. In the world of tomorrow, only those individuals and organizations will succeed who have mastered the art of rapid and on-going learning.

LESSON 7. “Surround yourself with people who are open to change.”

If you are always in the company of cynics, you will soon find yourself becoming like them. A cynic knows all the reasons why something cannot be done. Instead, spend time with people who have a "can-do" approach.

Choose your advisors and mentors correctly. Pessimism is contagious, but then so is enthusiasm. In fact, reasonable optimism can be an amazing force multiplier.

LESSON 8. “Play to win...!!”

I have said this many times in the past. Playing to win is not the same as cutting corners. When you play to win, you stretch yourself to your maximum and use all your potential. It also helps you to concentrate your energy on what you can influence instead of getting bogged down with the worry of what you cannot change. Do your best and leave the rest.

LESSON 9. “Respect yourself. The world will reward you on your successes.”

Success requires no explanation and failure permits none. But you need to respect yourself enough so that your self-confidence remains intact whether you succeed or fail.

Story

“One day a farmer’s donkey fell down into a well. The animal cried piteously for hours as the farmer tried to figure out what to do. Finally he decided the animal was old and the well needed to be covered up anyway it just wasn’t worth it to retrieve the donkey. He invited all his neighbors to come over and help him. They all grabbed a shovel and begin to shovel dirt into the well. At first, the donkey realized what was happening and cried horribly. Then, to everyone’s amazement he quieted down. A few shovel loads later, the farmer finally looked
down the well and was astonished at what he saw. With every shovel of dirt that fell on his back, the donkey was doing something amazing. He would shake it off and take a step up. As the farmer's neighbors continued to shovel dirt on top of the animal, he would shake it off and take a step up. Pretty soon, everyone was amazed as the donkey stepped up over the edge of the well and totted off! Life is going to shovel dirt on you, all kinds of dirt. The trick is too not to get bogged down by it. We can get out of the deepest wells by not stopping. And by never giving up! Shake it off and take a step up!

**LESSON 10. “Never change: your core values.”**

In spite of all the change around you, decide upon what you will never change: your core values. Take your time to decide what they are but once you do, do not compromise on them for any reason. Integrity is one such value.

**LESSON 11. “We must remember that succeeding in a changing world is beyond just surviving.”**

It is our responsibility to create and contribute something to the world that has given us so much. We must remember that many have contributed to our success, including our parents and others from our society. All of us have a responsibility to utilize our potential for making our nation a better place for others, who may not be as well endowed as us, or as fortunate in having the opportunities that we have got. Let us do our bit, because doing one good deed can have multiple benefits not only for us but also for many others. Let me end my talk with a small story I came across some time back, which illustrates this very well.

**Story**

“This is a story of a poor Scottish farmer whose name was Fleming. One day, while trying to make a living for his family, he heard a cry for help coming from a nearby dog. He dropped his tools and ran to the dog. There, mired to his waist in black muck, was a terrified boy, screaming and struggling to free himself. Farmer Fleming saved the boy from what could have been a slow and terrifying death. The next day, a fancy carriage pulled up to the Scotsman’s sparse surroundings. An elegantly dressed nobleman stepped out and introduced himself as the father of the boy Farmer Fleming had saved. "I want to repay you“ said the nobleman. "Yes," the farmer replied proudly. "I'll make you a deal. Let me take your son and give him a good education. If he's anything like his father, he'll grow to a man you can be proud of you." And that he did. In time, Farmer Fleming's son graduated from St.Mary's Hospital Medical School in London, and went on to become known through-out the world as the noted Sir Alexander Fleming, the discoverer of Penicillin. Years afterward, the Nobleman's son was stricken with pneumonia. What saved him? Penicillin. This is not the end. The nobleman's son also made a great contribution to society. For the nobleman was non other than Lord
Randolph Churchill. and his son's name was Winston Churchill. Let us use all our talent, competence and energy for creating peace and happiness for the nation.”

“Change is the Only thing that will Never change. So better adapt to it.”

“Change is Universal... Change is Permanent.... Be ever willing to Change.....

For, change alone leads you to For, success and happiness!!!

If one desires a change, one “If one desires a change, one must be that change before that change can take place”- Mahatama Gandhi

In short, the current circumstances are all quite challenging to work in. But no matter what the circumstances are, we must not lose sight of our priority: to be strong and financially sustainable organisations that put the customer at the heart of everything we do. Showing our customers how we can support them in their needs by providing advice when needed, flexibility where possible.

It’s important for us to use our time wisely and move forward as decisively and swiftly. That will only be possible with your continued dedication and teamwork. The past few years have had a significant impact on all of us, but I would like to thank you all for your significant support and dedication during these challenging times. The year ahead will bring its own challenges but I’m sure by working together, keeping focussed on our priorities and putting our customers first we can realise our ambitions. These will certainly continue to be my priorities and I am convinced I can count on you to do the same.

In the year of 2015, we are scheduled to complete the arduous task of overall timely completion and successful commissioning of approved major capital projects. This will mark a new era of CPRI to put it on the world map as largest Power Research Institute. We need to build CPRI as one of the largest Power Research Institute in the world and leave our institute in a good standing to our successors who would take it to higher level.

The foundation stone for this is Integrity and hard work. Institutions all over the world were built on this basis. Pl. practice zero tolerance on unethical activity including corruption. Managers have the moral responsibility to safeguard our Institution . This is our common responsibility and mission.

Before closing I would like to say a powerful quote of Swamy Vivekanand. I fully believe in that and I got value from that verse.

“All power is within you; you can do anything and everything. Believe in that, do not believe that you are weak; do not believe that you are half-crazy lunatics, as most of us do nowadays. You can do anything and everything, without even the guidance of any one. Stand up and express the divinity within you.”

— Swami Vivekananda, Lectures from Colombo to Almora

Jai Hind!