2013 saw new contenders uproot old players, varsity heads assume a bigger role and push reforms single-handedly, while Delhi Police got a humble face

It took a white Gandhian cap, a broom, immense optimism and some great activism to catapult Arvind Kejriwal to the centre of Delhi’s political arena. Having defeated former CM Sheila Dikshit on her home turf to become Delhi’s youngest chief minister, he started delivering on his promises, including distribution of free water to each family, within two days of taking oath

Hopes of a fourth term dashed, Sheila Dikshit is readying herself for an aam life. Not only was Congress reduced to just eight seats in the assembly, but the suave ex-CM also lost her assembly seat by a huge margin to Arvind Kejriwal, whom she had written off as a political novice just before the elections. If that’s not enough, the Congress veteran even failed to stop her own party from offering outside support to the AAP government

Five months after he took over as the LG, former bureaucrat Najeeb Jung found himself in a political whirlpool as Delhi saw a hung assembly. His directive on nursery admissions, including removal of management quota in unaided recognized schools, got a mixed reaction. His term as the Jamia VC saw the maximum termination and suspension of teachers. His academic and administrative reforms were implemented without protest

Bhim Sain Bassi took over as the commissioner at a time Delhi Police had just come out of the shadow of the Nirbhaya gang rape. Bassi, the 20th commissioner, likes to stay out of the limelight, giving credit to his officers. Praised by his colleagues for his honesty and directness, he implemented his predecessor’s decision to allow registration of all complaints as FIRs. Bassi hopes to make the capital safe for women

"Creativity leads to thinking. Thinking provide knowledge. Knowledge make you great." — Dr. APJ Abdul Kalam
I am delighted to address and interact with the faculty members and students of the Moradabad Institute of Technology (MIT). My greetings to the Chairman, Moradabad Educational Trust, Principal, faculty members, students and staff of MIT. I am happy to know that the Moradabad Institute of Technology has over 5000 students who are empowered with quality education by 280 faculty members. The contribution of the Chairman of Moradabad Education Trust and his team for their unique emphasis on economic and social development of the community, particularly the economically weaker sections of the society is noteworthy. I congratulate the pioneers both present and past who have strived hard for laying a robust foundation for technical education in this institute. Friends, when I see you all today, I was thinking what thoughts I can share with you. Today, I would like to talk on the topic "Traits of great minds".

Dear friends, when you are in the process of shaping the vision of your life, I thought of sharing with you some incidents in the life of a few great human beings. I am sure, it will further inspire your thinking and your actions. I would like to share the uniqueness of four great minds. All of them are Nobel Laureates and each one of them having unique traits such as cherishing the value of science, integrated research and practice in multiple disciplines, birth of creativity in a difficult situation and scientific magnanimity. Certainly, I believe this will enable you to imbibe confidence and vision in your life.

The traits of Nobel minds

Value to Science: Let me start with an incident about Sir CV Raman, a Nobel Laureate in Physics for discovering Raman Effect. Raman gives the view that the color of sky is blue due to molecular diffraction, which determines the observed luminosity and in great measures also its color. This led to the birth of the Raman Effect. Raman was in the first group of Bharat Ratna Award winners. Bharat Ratna is the highest civilian honour given by the Government of India to the best of human accomplishment. The award ceremony was to take place in the last week of January, soon after the Republic Day celebrations of 1954. The then President Dr. Rajendra Prasad wrote to Sir CV Raman inviting him to be the personal guest in the Rashtrapati Bhavan (the President’s House) at New Delhi, to receive the award. Sir CV Raman wrote a polite letter, regretting his inability to go to Delhi to receive the award. Raman had a noble reason for his inability to attend the investiture ceremony. He explained to the President that he was guiding a Ph.D. student and that the thesis was positively due by the last day of January. The student was valiantly trying to wrap it all up and Raman felt, he had to be by the side of the research student and see that the thesis was finished, sign the thesis as the guide and then have it submitted. Here was a scientist who gave up the pomp of a glittering ceremony associated with the highest honour, because he felt that his duty required him to be by the side of the student. It is this unique trait of giving value to science that builds science.

Discovery of insulin brought a change in the healthcare: Friends, I am going to talk to you about the insulin discoverer Prof. Fredrick Grand Banding who He got the noble prize for the discovery of the insulin along with the Prof. JJR Maclod. Discovery of insulin in 1922, one of the greatest healthcare solutions in the area of human health. I studied the biography of the scientist Prof. Fredrick Banting, particularly, his young life on education and research, that will give message to the youth researchers. Initially his education started in the area of studying the divinity.
From this he switched over to study of medicine at University of Toronto. In 1916, the scientist took MB degree, then joined Army Medical Corps and served in the first world war. He was wounded in the battle of Cambrai and in 1919 he was awarded military cross for heroism under fire. Simultaneously, he studied orthopedic medicine and started practicing and teaching in the University of Western Ontario. He was also, awarded MD degree and became a lecturer in Pharma. This was his turning point of research and he moved in to the diabetes area with all intensity and perseverance. His research in diabetes is indeed a great achievement to scientific world. Prof. Banting was honored with Nobel Prize in Physiology or Medicine in 1923 for research done on pancreas and insulin. It is very unusual for someone to receive the Nobel Prize in Physiology or Medicine the same year as he or she is nominated for the first time. The scientists life reveals his interest and work in research, teaching and learning in multiple-fields such as medicine, orthopaedics and pharmacy, above all research in life science, apart from his services in Army Medical Corps and number of hospitals and research institutions.

Birth of Creativity in a difficult situation: Mario Capecchi had a difficult and challenging childhood. For nearly four years, Capecchi lived with his mother in a chalet in the Italian Alps. When World War II broke out, his mother, along with other Bohemians, was sent to Dachau as a political prisoner. Anticipating her arrest by the Gestapo, she had sold all her possessions and given the money to friends to help raise her son on their farm. In the farm, he had to grow wheat, and harvest and take it to miller to be ground. When the money which his mother left for him ran out, at the age of four and half years, he started wandering on the streets. He headed south, sometimes living in the streets, sometimes joining gangs of other homeless children, sometimes living in orphanages and most of the time hungry. He spent the last year in the city of Reggio Emelia, hospitalized for malnutrition. He wanted desperately to escape. Scores of beds lined the rooms and corridors of the hospital, one bed touching the next. No sheets, no blankets. That was where his mother found him on his ninth birthday after a year of searching. Within weeks, the Capecchi and his mother sailed to America to join his uncle and aunt.

He started his 3rd grade schooling afresh over there and started his education, interested in sports, studied political science. But he didn’t find interesting and changed into science, became a mathematics graduate in 1961 with a double major in Physics and Chemistry. Capecchi never took a Biology class; he learned about biology in the labs. For his practical experience, he worked several terms at the Massachusetts Institute of Technology (MIT). Although he really liked Physics, its elegance and simplicity, Capecchi realized from his lab experience that everything we learned [in Physics] was only up to the 1920s. He knew he would switch to molecular biology in graduate school, on the advice of James D Watson. Watson taught him that he should not be bothered about small things, since such pursuits are likely to produce only small answers.

His objective was to do gene targeting. The experiments started in 1980 and by 1984, Capecchi had clear success. Three years later, he applied the technology to mice. In 1989, he developed the first mice with targeted mutations. The technology created by Doctor Capecchi allows researchers to create specific gene mutations anywhere they choose in the genetic code of a mouse. By manipulating gene sequences in this way, researchers are able to mimic human disease conditions on animal subjects. What the research of Mario Capecchi means for human health is nothing short of amazing, his work with mice could lead to cures for Alzheimers disease or even Cancer. The innovations in genetics that Mario Capecchi achieved won him the Nobel Prize in 2007. Noble laureate Capecchi’s life indeed reveals:

"When you wish upon a star,
Makes no difference who you are
Anything your heart desires
Will come to you."

Scientific Magnanimity:
Now, I would like to narrate an incident which took place during a function where Nobel Laureate Prof. Norman E Borlaug, a well known agricultural scientist and a partner in India’s first Green revolution, was conferred with Dr. MS Swaminathan Award, at Vigyan Bhavan, New Delhi on the 15th of March 2005.
Prof. Borlaug, at the age of 91, was in the midst of all the praise showered on him from everybody gathered there. When his turn came, he got up and highlighted India’s advancement in the agricultural science and production and said that the political visionary Shri C. Subramaniam and Dr. MS Swaminathan, pioneer in agricultural science were the prime architects of First Green Revolution in India. Eventhough Prof Norman Borlaug was himself a partner in the first green revolution, he did not make a point on this. He recalled with pride, Dr. Verghese Kurien who ushered White Revolution in India. Then the surprise came. He turned to scientists sitting in the third row, fifth row and eighth row of the audience. He identified Dr. Raja Ram, a wheat specialist, Dr. SK Vasal, a maize specialist, Dr. BR Barwale, a seed specialist. He said, all these scientists had contributed for India’s and Asia’s agricultural science. Dr. Borlaug introduced them to the audience by asking them to stand and ensured that the audience cheered and greeted the scientists with great enthusiasm. This action of Dr. Norman Borlaug, I call it as "Scientific Magnanimity". Friends, if we aspire to achieve great things in life, we need scientific magnanimity to focus the young achievers. It is my experience that great mind and great heart go together. This scientific magnanimity will motivate the scientific community and nurture the spirit of achievement among the young towards science.

Dear friends, with this background of unique traits of great minds, I am sure you will think big. Now it is time to have a great dream in life, dream transforms into thoughts and thoughts result into action. In this environment, I was thinking when you complete your education; you have to take different assignments in different institutions in the country. Many a times you have to take the leadership position also after acquiring experience. To achieve great things in life, you need four traits (i) Aim in life (ii) Acquisition of knowledge (iii) Hard work and (iv) Perseverance.

**Conclusion**

Dear friends, I have seen three dreams which have taken shape as vision, mission and realization. Space programme of ISRO (Indian Space Research Organization), Nuclear programme of Department of Atomic Energy, AGNI programme of DRDO (Defence Research and Development Organization). Of course, these three programmes succeeded in the midst of many challenges and problems. The PURA (Providing Urban Amenities in Rural Areas) becoming the National Mission. I have worked in all these three areas. I want to convey to you what I have learnt on leadership from these three programmes.

1. Leader must have a vision.
2. Leader must have a passion to transform the vision into action.
3. Leader must be able to travel into an unexplored path.
4. Leader must know how to manage a success and failure.
5. Leader must have courage to take decisions.
6. Leader should have Nobility in management.
7. Leader should be transparent in every action.
8. Leader must work with integrity and succeed with integrity.

In order to achieve excellence in any area or in any institution, what we need is creative leadership. Creative leadership means exercising the vision to change the traditional role from the commander to the coach, manager to mentor, from director to delegator and from one who demands respect to one who facilitates self-respect. I am sure, the Moradabad Institute of Technology is generating such leaders for participating in national and international missions.

My best wishes to all the members of Moradabad Institute of Technology success in the mission of developing quality technological human resource for the nation.

May God bless you.
**Oath for Students**

1. Technology is a life time mission. I will work, work and work and succeed.
2. Wherever I am, a thought will always come to my mind. That is what process or product I can innovate, invent or discover.
3. I will always remember that "Let not my winged days, be spent in vain".
4. I realize I have to set a great technological goal that will lead me to think high, work and persevere to realize the goal.
5. My greatest friends will be great scientific -technological minds, good teachers, good books and good internal environment.
6. I firmly believe that no problem can defeat me; I will become the captain of the problem, defeat the problem and succeed.
7. I will work and work for removing the problems faced by planet earth in the areas of water, energy, habitat, waste management and environment through the application of science and technology.
8. I realize, I am as young as my faith, as old as my doubt; As young as my self-confidence, as young as my fear; As young as my hope and as old as my despair. I will develop faith, self-confidence and hope.
9. My National Flag flies in my heart and I will bring glory to my nation.

**By, Dr. APJ Kalam**
Avul Pakir Jainulabdeen Abdul Kalam usually referred to as Dr. A. P. J. Abdul Kalam, is an Indian scientist and administrator who served as the 11th President of India from 2002 to 2007. The nation knows him as a nuclear scientist and the father of India’s successful missile programme. Our college was privileged to seek his presence in May 2012.

Prof.(Dr.) Abhishek Mishra, an alumnus of Cambridge University, currently the Minister of State for Science and Technology, Government of Uttar Pradesh. He visited our college in Oct 2013.

Dr. Kiran Bedi was the first Indian woman to join Indian Police Services. She is one of the most renowned police officers, who have put in their whole hearted effort in serving the society. She visited our college in July 2013.
Shri Mangu Singh is the Managing Director of Delhi Metro Rail Coopera- 
tion, New Delhi. Mr. Singh is the recipient of National Award 
(Railway Week Award 1996) for his contribution in completing the Kol-
kata Metro Rail Project. Our college was privileged to seek his presence 
on April 2013.

Prof. A.D.N. Bajpai, Vice Chancellor, Himachal Pradesh University, is a 
person par excellence, a noble soul, a humble, religious, pious, positive 
person. He has excelled in the field of teaching in economics. Mr. Bajpai is 
a prodigious speaker. He had visited MIT and delivered lectures to the 
students of MIT in April 2013.

Shri N.K. Valecha is the site president of Reliance industries. He had re-
ceived the CII-ITC Sustainability "Significant Achievement" award 
2012 for Independent Unit, RIL- Hazira Manufacturing Division from 
the Honorable President of India, Shri Pranab Mukherjee. He had visited 
MIT in April 2013.

Prof. J. P. Gupta is presently the Vice Chancellor of Sharda Univer-
sity. Prof. Gupta has played a key role in building All India Council for 
Technical Education, New Delhi, Indian Institute of Information Tech-
nology and Management, Gwalior and Jaypee Institute of Information 
Technology, Noida. He had visited MIT and delivered lectures to the 
students of MIT in March 2013.

Prof (Dr.) Virendra C. Bhavsar is the Professor and Director at Advanced 
Computational Research Lab in University of New Brunswick, Frederic-
ton, Canada. He visited our college in Feb 2011.

Prof. (Dr.) E.G. Rajan is the Founder President of the Pentagram Re-
search Centre (P) Ltd., Hyderabad, India. He visited our college in Feb 
2011.
Continued...

Prof. Kripa Shankar is the former Vice Chancellor of Uttar Pradesh Technical University Lucknow. He was the Deputy Director of IIT Kanpur for the two consecutive terms prior to joining UPTU as its Vice-Chancellor. We felt privileged through his visit in our college in Feb 2011.

Prof. S. K. Kak is founder Vice-Chancellor of Mahamaya Technical University, Noida. Our college was privileged to seek his presence on Feb 2011.

Prof. S. C. Jain is the Vice-Chancellor of Mangalayatan University. He has been awarded prestigious ‘Life Time Achievement Award’ by 33rd World Environment Congress, New Delhi for his outstanding contribution in the area of educational planning and administration. Our college was privileged to seek his presence on Feb 2011.

Dr. Alok Nath De is Chief Technology Officer of Samsung R&D Institute India and also Senior VP for ‘Digital Media and Communication’ activities in Bangalore. He is a recipient of ‘Alexander Graham Bell Prize’ in Canada and received IETE Memorial Awards in India. He visited our college in Feb 2011.

Prof. Prem Vrat is currently the Vice Chancellor & Professor of Eminence, ITM University, Gurgaon and a Former Vice Chancellor of U.P. Technical University, Lucknow. He is the Founder-Director of IIT Roorkee. He visited our college in Dec 2006.

The Saga Continues.................
Greenest' Supercomputer Built at Cambridge University

An energy-efficient supercomputer which is the "greenest of its kind" has been built at Cambridge University. Named 'Wilkes' after computing pioneer Maurice Wilkes, the machine's performance is equivalent to 4,000 desktop machines running at once. The computer will be used for development of the Square Kilometre Array (SKA) - the biggest radio telescope ever made.

The new system has been rated second in the "Green 500" - a ranking of the most efficient supercomputers worldwide. While the first-placed machine, built by a team in Tokyo, used an oil-cooled system, Wilkes is cooled using air, making it the greenest machine of its kind.

Designed and built by the in-house engineering team within the Cambridge High Performance Computing Service, Wilkes' energy efficiency is 3,361 Mega-flops per watt. Flops (floating point operations per second) are a standard measure of computing performance.

"Energy-efficiency is the biggest single challenge in supercomputing today and our new system makes an important step forward in this regard," said Dr Paul Calleja, Director of the Cambridge High Performance Computing Service. One of the primary uses of Wilkes is as a test bed for the development of a computing platform for the Square Kilometre Array (SKA).

This is a huge, international effort to build the world's largest telescope. By detecting radio waves with unprecedented sensitivity and fidelity, the facility has the potential to answer some essential questions about the Universe, such as what the nature of dark energy is, and perhaps the most fundamental question of all - are we alone?

Cambridge is leading the design of the computational platform within the SKA. 'Wilkes' will play an integral role in this design process.

Galaxy S5 going for a February end launch at Barcelona, reveals Samsung insider

Rumors about the possibility of launch of the Galaxy S5 smartphone during the quarter 1 of 2014 were abound on the net. Today we are getting some confirmation that this Android OS flagship from Sammy. The phone will be heading for a launch in February in the Mobile World Congress, Barcelona.

According to Korea’s inews24, THE Design Lead of Samsung, Dong-hoon Chang has confirmed that Samsung would unveil its new Galaxy S5 high-end smartphone at MWC this February. This has been reported inPhoneArena. The Korean publication also mentions that this phone might launch with a different name. We have been speculating the name Galaxy S5 for the upcoming device (because it seems obvious choice to be the official name), the device might come with a different name.

The handset is expected to come with super amoled and oled display variants and at least two or three processor variants. These processor variants could be Snapdragon 800, Exynos octa 5 and Exynos true octa-core chip.

Samsung is expected to launch a range of new devices at the MWC 2014. These might include – Tizen OS smartphone, Low-cost Galaxy Note 3 and Note 3 Lite.
Walnuts are one such super good food whose nutritional qualities are never ending. It is believed that the anti-inflammatory qualities of this nut give your body a tumour fighting potential, thus reducing the risks of cancer. You can either include these nuts in your meal by mixing them along with your breakfast cereal or just have them as evening snack.

Health Tip of the Day:

Sudoku

<table>
<thead>
<tr>
<th>7</th>
<th>2</th>
<th></th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>1</td>
<td>9</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>2</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>9</td>
<td>5</td>
<td>3</td>
</tr>
<tr>
<td>3</td>
<td>1</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>4</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>3</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>2</td>
<td>1</td>
<td>8</td>
<td>7</td>
</tr>
<tr>
<td>4</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Solution:-

Place to Visit: SPITI(HP)

Rudyard Kipling described Spiti as a world within a world. This remote, high altitude area of Himachal Pradesh is tucked away against the border of Ladakh and Tibet. It's only been open to foreign tourists since 1991, and still remains relatively unexplored. Part of this is due to Spiti being barren alpine desert that's covered in heavy snow for a high proportion of the year. Getting to Spiti involves a long drive, most popularly from Manali. The constantly evolving scenery is unforgettable and well worth the journey though.

Team Reflections

O.C.

Ms. Deepti Shinghal
Ms. Anupam Yadav

Editor

Ms. Anupam Agarwal

Co-Editor

Ms. Sangeeta Mahesh

President

Mahim Gaur (EI-Final Year)

Vice President

Kavya Bhatia (EC-Final Year)

Coordinator

Manvendra Singh (EC-Final Year)

Moderators: Harshit Agarwal (CS-Final Year)

Journalists: Shivansh Gupta, Ashish Sethi, Anshika Goyal, Nikita Agarwal, Manu Chaudhary

Limitations live only in our minds. But if we use our imaginations, our possibilities become limitless. Jamie Paolinetti