kmvPHY-Spectrum

A PHYSICS NEWS LINE **WE LEAD OTHERS FOLLOW**

Vol. 1 (Issue 2): January-May-2016

The beginning of the KMVPHY-Spectrum was an initiation of the Department of Physics to do things differently and make the students aware of the activities of the department with more attention to purpose. It was also an effort to disclose the achievements of physicists in front of the students so they may enable themselves to achieve the heights they want to attain.

We are publishing our second issue and would like to thank those who have stuck with us all this time, those that came along for part of the ride, and those who joined us later and are with us still. The reader will encounter some new sections in the issue, to make the students aware of the latest news in Physics. We don't often have time to consider all the underlying *stuff* that gives our work shape, character, and meaning, but we can choose it. Thus in this issue efforts have been made to recognize the sweating and splendid achievements of students. In our first issue, we have introduced Ashok Sen and in the visionary scientists section and this time the success stories of Dr. Koti and Dr. Aditi Pant have been communicated. Please do join us by reading the published issues.

Visionary Physicist

The team has put a lot of efforts to make the second issue a success. In this section of the newsletter, the team tries to share with the readers the efforts put forward by the visionary physicists to achieve their endeavored dream and the beliefs they possess about their achievements.

DR. KOTI HARINARAYANA - THE BRAIN BEHIND INDIA'S FIRST INDIGENOUSLY BUILT COMBAT AIRCRAFT TEJAS

Dr Koti Harinarayana is revered as the Father of India's Light Combat Aircraft (LCA) program. An honest and dedicated soul, who sacrificed his entire life for LCA. He is a great leader and came from the same school of thought as that of Dr Kalam, but younger to him by 13 years. He inspired a whole generation of plane-makers and led his team against all odds. Distinguished Scientist & Programme Director, LCA was born in Berhampur in 1943, graduated from BHU in Mechanical Engineering, and post graduated in Aero-Engineering from IISc, Bangalore. He did his PhD at IIT, Mumbai. He also holds Bachelors degree in Law. He is a renowned genius scientist and is recognized as the brain behind India's first indigenously built combat aircraft, Tejas, which was the name given to the aircraft. India's first self-made light combat aircraft was built by HAL and developed by Dr. Koti. Thanks to his efforts, India succeeded in developing a state-of-art, high technology fighter aircraft of world class.

Dr Harinarayana started his career in 1967 at HAL and was at DRDO HQrs, during 1970-1982. He re-joined HAL in 1982 as Chief Designer, Nasik Division and was deputed to DRDO in 1985 as Director, ADE, Bangalore. He was appointed as Programme Director, LCA in December 1985 and was concurrently holding the post of Director, ADE till June 1986. During 1995 he was elevated to Distinguished Scientist by DRDO. As Programme Director and Chief Designer of Light Combat Aircraft, he successfully directed the project leading to flight testing and clearance for limited series production. He is the Fellow of Aeronautical Society of India (former President of the Society) and Indian National Academy of Engineering. He received distinguished alumnus award from Aerospace Department, IISc in 1993 and from IIT Bombay in 1995. He was awarded National Aeronautics Prize and FIE Foundation Award in 1996. He is recipient of the National Aeronautics Prize, FIE Foundation-1996 and SBI-Pragna Puraskar-2001 and Padmashree award-2002.

Dr Koti Harinarayan was conferred with prestigious 'Lokmanya Bal Gangadhar Tilak' Award 2011 for his outstanding contribution in the aviation sector by Tilak Smarak Trust on the 91st death anniversary of the freedom fighter. In an interview Dr. Koti mentioned that when LCA was conceived, only one percent believed that it would be a reality. They didn't have infrastructure, manpower, technology and investment. He further added to his discussion that about 300 small and medium scale industries participated in the LCA programme. He proudly states that they have not only developed the aircraft but also the key technologies that made the aircraft. India has joined the list of those countries that produce fighters. He considers that a country cannot gain strength by merely buying or making the aircrafts under license. We need to design, develop and make them in the country. He quotes in one of his interviews: **Tejas will become more Indian soon.** Till now, engine, the INS and portions of radar are imported. The rest are all coming out of India – a result of our scientific and technological might. He also assured that in near future, barring engine, everything else will be Indian. He gave a lot of credit to Mr Ratan Tata for the Tejas program. Dr. Koti feels that Mr Ratan Tata was one among the few who saved this national project from closure. In 1990-91, Dr. Koti attended a LCA program review meeting in Delhi. Prior to this meeting, a high-level committee involving MPs had visited the facilities in Bangalore to see what progresses have been made. He knew in advance that the agenda of the meeting was to close the program. While some appreciated the work and commitment, but they wanted it to be shut. But, Mr Ratan Tata completely backed up the team a`nd said: "It will be a shame if the project is closed. I have seen the technology and I am convinced that the project will definitely see the light of the day. I want private industries to come up and play an active role in the Tejas program." LCA has been made for the Nation and the pilots, the real heroes. It is their lives to be put to risk having a test drive and hence the product has to be world-class. Dr. Koti never forgets to thanks Rajiv Kothiyal, great and committed pilot who first dared to risk his life for the test drive of Tejas. Dr. Koti adds to his conversation "Today, a dozen pilots have come after him and I am not undermining their contribution to the program. But, the first man is always special. We would have flown LCA in 1999 or 2000, but kept on conducting various tests and high-speed trials again and again. Even, I was asked by many why we are not going for the first flight. Finally, after extensive flight trials, we had the maiden flight on January 4, 2001.

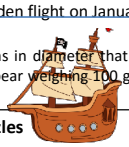
ADITI PANT: AN EMINENT INDIAN OCEANOGRAPHER

Aditi Pant born in Nagpur became the first Indian woman to participate in the cruise to the icy continent, Antarctica and to have set foot on the Antarctic. Aditi was inspired to take up oceanography as a profession when she came across the book The Open Sea, authored by Alister Hardy while doing her B. Sc. at the University of Pune. She later got a US government scholarship to study MS in marine sciences in the University of Hawaii. After doing her PhD from London in the physiology of marine algae, she started her research career at the National Institute of Oceanography, Goa after being inspired by the founder of the institute, N.K. Panikkar. From 1973-76, she got involved in coastal studies and toured the whole of west coast of India.

She participated in the third and fifth Indian expedition to Antarctica to research about oceanography and geology accepted the challenges of the oceans. The third expedition under Dr. Harsh Gupta laid the foundation stone of 'Dakshin Gangotri' the base camp in the Antarctic summers of 1983-84 for a period of 4 months and the participants had to explore this continent under rough weather conditions Pant was honoured with the Antarctica Award along with Sudipta Sengupta, Jaya Naithani and Kanwal Vilku for their outstanding and excellent contribution to the Indian Antarctic programme. She worked in The National Institute of Oceanography (Goa) and the National Chemical Laboratory (Pune). Aditi extracted in one of her interviews: "The expedition was part of a programme to collect information on the Antarctic — not an adventure trip. It was tax payers' money that sent us there." It was the then Prime Minister Indira Gandhi's initiative to set up a base camp in the Antarctic to have a presence there. "It was a move driven by political considerations, but had a scientific front," she says. A few of her team mates studied ice core samples and did weather surveys. "Just studying ice core samples three meters deep can take you back a million years," she says. She adds to her conversation to 'The Hindu': "The temperature was around -20 degrees C, and we left by the time it touched -30 degrees C. the ambience was unusual- huge space and no noice but for the wind. The tents were insulated, but the cold outside was something to contend with. You have to warm them up every now and then. Everything takes longer than usual." She also remembers her encounters with the Emperor Penguin. "The Emperor Penguin is neither friendly nor unfriendly. It doesn't care as long as it is not touched." About any gender discrimination she could have faced, she says, "In my profession, I have never faced it, and never allowed it to happen. There are lots of competent women doing excellent work. There are women scientists who have stayed in the Antarctic for sixteen months. We have reached a stage where we don't need role models. We just go out and do our bit."

The ship in the Tub Problem

A toy ship is floating in a cylindrical container 10 cms in diameter that is partially filled with water. How much will the level of the water rise if a silver teddy bear weighing 100 grams is loaded on the ship? Silver has a density of 10.49g/cc



Answers to previous issue questions and puzzles

The Bear

White: as the the bear is polar bear. North pole is the only place where the phenomenon that was told could happen.

Brain Teaser

3.3^{o}C will be the final temperature.

Think, Think, Think...

1. Larry 2. Stairs 3. Little Boy 4. Fritters or Egg

Science News Section

A new section has been added to this section to make the students aware of the new inventions and advances in the field of physics. Hope the students will enjoy the section and will find the section beneficiary for the betterment of their future.

Researchers find new phase of carbon and hydrogen

Researchers around the world have been trying for years to create the metallic state of hydrogen and now have discovered a new phase of hydrogen named phase V. also a solid phase of carbon called Q-carbon with unusual characteristics has also been discovered by the scientists. Q-carbon is ferromagnetic and harder than diamond, also glows when exposed to even low levels of energy. The team says that newly found phase of hydrogen is only the beginning of molecular separation and modifications are needed to create the pure and metallic state at higher pressures.

Trip to Mars in three days

NASA researchers are working on 'PHOTONIC PROPULSION' that could harness the power of light and may cut down travel time to Mars from months to as little as 3 days for a 10 kg craft. The system is called DEEP IN or Directed Propulsion for Interstellar Exploration. This system differs from rocket technology. The whole system is modular and scalable.

Gravitational waves Detected

For the First time, scientists have discovered ripples in the fabric of space time called Gravitational waves. These waves were detected on September 14, 2015. UTC by both of the twin laser interferometer gravitational wave observatory detectors located in Washington and detection was announced on February 11, 2016. the new LIGO discovery is the first observation made by measuring the tiny disturbances in space-time passing through earth.

Physics workshop and quiz was organized by Dr. Neetu Chopra

P.G. Department of Physics organised a 'Fun with Physics' workshop on January 30 and a 'Physics Interrogation' quiz on February 5 to simplify the basic principles of Physics to students through experiments and to probe their knowledge of the subject, respectively. The workshop was conducted by Dr. Neetu Chopra to redesign the teaching method of Physics and introduce students to the use of the principles they read in their books. She demonstrated some simple basic experiments of physics like types of waves, eddy currents, Archimedes principle, magnetic brakes etc. In developing Workshop Physics we assumed that the acquisition of transferable skills of scientific inquiry is more important than either problem solving or the comprehensive transmission of descriptive knowledge about the enterprise of physics.

National Seminar on 'Advances in Physical and Chemical sciences'

One day national seminar on 'Advances in Physical and Chemical Sciences' has been organized by PG department of Physics in Collaboration with Department of Chemistry on February 10. An excellent introduction to the seminar and overview of the lectures was given by Dr. Prashant Chauhan. Thereafter Dr. Arvind C. Ranade, Scientist, Astronomy and Space Science Communication and Popularization, Department of Science and Technology, delivered an interesting, meaningful and thought provoking lecture on the birth and life cycle of stars. He stressed on the apposite circumstances for the star formation. Dr. Gurvinder Singh Sodhi, Asstistant Professor of Chemistry and Forensic Sciences , SGTB Khalsa College, Delhi presented the developments in Forensic Sciences, recognising significant improvements in finger printing. DR. Sodhi also created a fake crime scene with the involvement of students and informed the students about the initial processes to be followed during such circumstances. Dr. Aranaya B. Bhattacharjee from School of Physical Sciences, JNU, New Delhi shared his opinions on some recent developments in Modern Physics. His talk threw light on Bose Einstein Condensate (coldest matter in Universe), Quantum Optomechanics and its applications.

Scibration 2016 : An intercollege Science Fest

Science Faculty took initiative to organise SCIBRATIONS 2016, an inter college and inter school competition on February 20 under DBT star college Scheme. Various events like Sci-Skit-The Drama Contest, Sci-Colours-The Rangoli Contest, Sci-Creative-The Collage Contest, Sci-Bhumika-The Fancy Dress Contest, Sci-Bauddhic-The Quiz Contest and Sci-Expression-The Scientific Speaking Contest were organised. the objective of the fest was to identify and nurture innovative scientific ideas among students of the region. 265 Students from 17 schools and colleges participated in various events.

Inauguration of the competition took place with devotional notes of Gayatari Mantra. Students also recited 'Science Anthem'. The chief guest of the day was Dr. Sushma Chawla, member managing committee, KMV, Jalandhar

The chicken and the egg problem

A chicken farmer has figured out that a hen and a half can lay an egg and a half in a day and a half. How many hens does the farmer need to produce one dozen eggs in six days?

National Science day celebration

National science day is celebrated as one of the main science festivals every year on February 28 to popularise science among masses and to commemorate the day on which Sir C.V.Raman discovered the Raman effect. Main aim of the activity was to popularise science among masses and enable students to know about the latest developments in the fields of science and technology. On this occasion KMV science students performed various activities involving the phenomena of science related to our daily life including Rangoli, collage making, poster presentation, power point presentation, skit and choreography on the basis of science.

Extension Lecture on Meta Materials

Dr. Venu Gopal Achanta from FOTON Laboratory , Deptt. Of condensed mater physics and material science, TIFR, Mumbai made students aware of history of electronics and invention of transistors including the concepts of optical computing, optical integrated circuits, photonic crystals and presence of photonic crystals in nature.

ACHIEVEMENTS OF STUDENTS

Eight students excels in National Examination in Physics

85 students of Kanya Maha Vidyalaya participated in NGPE held on January 24 and eight students of KMV brought laurels to the institute. Names of qualified students are Inderjit (B.Sc Ist Yr) Kirandeep B.Sc Ist Yr) Aashima (B.Sc Ist Yr) Aarti (B.Sc Ist Yr) Ambika (B.Sc Ist Yr) Neha (B.Sc IInd Yr) Simran (B.Sc IIIrd Yr) and Deepshikha (B.Sc IIIrd Yr). Principal, Dr. Atima Sharma congratulated Mrs. Parminder Kaur, Head Department of Physics and Dr. Neetu Verma, National Examination Coordinator for great achievement of students in Physics.

KMV Girls grabbed DST INSPIRE SCHOLARSHIP 'SHE'

Three Students Ms. Manisha Thakur , Ms. Prabhjot Kaur & Ms. Gagandeep Kaur of B.Sc. VI Sem Non Medical, Kanya Maha Vidyalaya, grabbed INSPIRE SCHOLARSHIP worth Rs. 1.2 Lac each, from Ministry of Science & Technology. Only meritorious students who are pursuing courses in Natural & Basic Sciences at the B.Sc. or integrated M.Sc. levels are eligible to acquire the scholarship. The main feature of this scheme is mentorship support being planned for every scholar through Inspire Scholarship. It is worth mentioning that in past four students have already attained this prestigious scholarship.

KMV Girl tops again in university exams

Guru Nanak Dev University declared the result of various classes and as usual Kanya Maha Vidyalaya maintained its glory in the list of toppers in Science. Ms. Manpreet kaur stood 1st in university (478/600), Ms. Neetu got 2nd position (464/600) in M.Sc. Physics sem I .Ms. Arwinder of of B.Sc 1st sem grabbed 4th position in the University by securing324 marks out of 400 Marks and Student of B.Sc 3rd sem Ms. Daljit Kaur attained 3rd position in the University. Ms. Amrita of the same class got 18th position by scoring 313/400. Ms. Prabhjot Kaur of B.Sc 5th Sem achieved 8th position in the university exams. Ms. Sandeep Kaur and Ms. Ravi Arti Got 11th position by scoring 323/400.

KMV Celebrates KMV Star Science Achievers' Day 2016

Science faculty of Kanya Maha Vidyalaya, celebrated KMV Star Science Achievers' Day 2016, on 29th March 2016, in which 66 students of under graduate science classes like B.Sc. Non medical, B.sc. Medical, B.sc. Biotech, B.Sc. with Food Science and Microbiology were honoured by presenting cash prizes and trophies. Students who scored above 85% marks were given cash prize of 1500/-, and those scoring above 80% were admired with cash prize of 1200/- and above 75% with Rs. 1000/- .

The prizes were distributed by Mr. John Battaglino, Dean Students, Boston university, USA and Principal KMV Prof (Dr.) Atima Sharma Dwivedi . Parents of these students were invited on the occasion. KMV has always been at the core of creating scientific temperament among students. Madam Principal in her speech congratulated the prize winners and thanked the parents for their role in academic excellence of their wards. She also encouraged those students who are not that good in studies but are proving their excellence in other activities.

An educational trip is organized to Doordharshan kendra

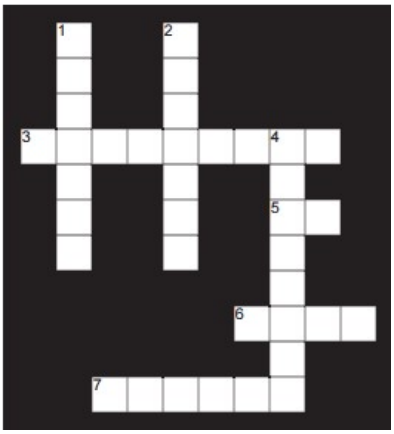
An educational trip to Doordarshan Kendra has been organized for B.sc. Non Medical students opted electronics as one of the subjects. The students learn about the transmission of the programs to be telecasted and the working details of TV transmitter. Students were thrilled to know about the topics which they study in their theory classes, actually how they are implemented practically.

A Physics workshop for the students by the students is organized

Graduate and post graduate students of Physics performed various experiments for the students of B. Sc. Sem II. Students provide knowledge to the students through fun filled activities about centre of gravity, magic tap, plasma Globe etc. They present a gallery of still and working models on various phenomenon of physics like atmospheric pressure, magnetic effects, optical illusions. They also enhanced the awareness of students about the transmission of sound waves.

Fun Times with Physics

Science Crossword Puzzles

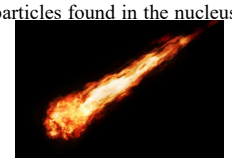


Across

3. Negatively charged particles that circle the nucleus.
5. The name of one of the types of quarks found in protons and neutrons.
6. The name of one of the types of quarks found in protons and neutrons.
7. Protons and neutrons are made up of these particles.

Down

1. The central part of the atom.
2. Positively charged particles found in the nucleus of the atom.
4. Neutral particles found in the nucleus of the atom.



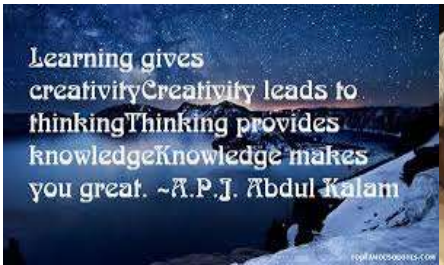
Story time

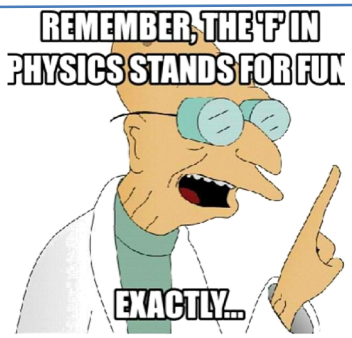
The Comet

IT was a moonless night in December. A burst of cool breeze from the window was enough to disturb the sleep of Indrani Debi. Half awake she felt for the adjoining pillow, although she knew the answer. Duttada was not there. “So he has gone to hobnob with that wretched Dibya! At least he might have bothered to close the door.” Even as she muttered her complaints Indrani Debi could not repress her smile. She knew how utterly oblivious her husband was of the practical problems of living. Didn’t his doctor tell him to take special precautions against the cold? But he wouldn’t remember to put on a sweater even if it was lying on his bedside chair! How could he when Dibya had put her spell on him? She picked up the white woollen pullover, wrapped herself in a shawl and made her way to the roof, to break up his tete-a-tete with Dibya. She found them both huddled together eye to eye. At least Duttada was looking into Dibya’s eyes. When Duttada acquired this telescope he was so thrilled that he called it Dibya Chakshu — Divine Eye. To Indrani Debi the telescope was like a designing woman who had ensnared her husband. So she just called it Dibya and the name stuck. To Duttada the telescope marked the fulfilment of the ambition of a lifetime. As an amateur astronomer he had longed for enough money to buy a good telescope and for enough spare time in which to observe the heavens. He got them both when he retired with ample money. The telescope was duly installed and long were the dark nights that Duttada spent in star-gazing. At least Indrani Debi thought so. “Here! Put on this sweater — or do you want Nabin Babu to order bed-rest tomorrow?” Like every other amateur astronomer, Duttada had a secret ambition that he would one day discover a new comet. For, comets can be new, coming as they do from the remote corners of the Solar System. Like planets, comets also orbit round the Sun but their orbits are highly eccentric. So once in a while a comet comes close to the Sun; it has a longish tail that is lit brilliantly by the sunlight and then it recedes into darkness not to be seen again for years, or for centuries. What chance did he stand with his eight-inch Dibya? Didn’t professional astronomers have gigantic telescopes? Duttada was optimistic... he knew that the professionals with their pre-assigned programmes would be looking at faint stars and nebulous galaxies. They might miss such an insignificant thing as a comet which they were not expecting to see anyway! Indeed amateurs had often discovered new comets which the professionals had missed. And, it looked to Duttada that tonight was going to be the big night. For against the background of the same old stars Duttada had detected a faint stranger. He re-examined the charts with him, checked his Dibya for any smudges on the optics, and did some calculations on his pocket calculator in torchlight— for, though absent-minded about daily chores, he was meticulous in his observations. Yes, there can be no mistake. What he was looking at had not been there earlier and it did look like a new comet. Two days later the Ananda Bazar Patrika came out with the news: Calcutta Man Discovers New Comet (From our special correspondent) Shri Manoj Dutta, a resident on the northern outskirts of Calcutta* has claimed to have discovered a new comet. He has seen the comet on the last two nights and has informed the Indian Institute of Astrophysics (IIA) at Bangalore* of its whereabouts. The IIA runs a 90-inch telescope, the biggest in Asia, at Kavalur. If it confirms Dutta’s finding it will be the high point in his lifelong career as amateur astronomer. Duttada, as he is affectionately called by his friends and admirers, estimates that the comet would be clearly visible to the naked eye in the next few months. He gives all credit for his discovery to his eight-inch telescope which he calls Dibya. Thereafter it took just one week for ‘Comet Dutta’ to be recognised and so named. For the IIA confirmed the findings and communicated it worldwide and according to the accepted practice the new comet was named after its discoverer. This brought in unwelcome publicity to the introvert Duttada. There were numerous receptions and functions to attend. Returning from one such ceremony Duttada muttered to himself in disgust, “I almost wish I had not discovered this comet.” To his surprise Indrani Debi agreed. “I wish the same, though not for the same reason”. “May I ask why you wish I had not discovered this comet?” Duttada asked. “Comets bring ill-luck and I wish a good man like you were not associated with the discovery of one,” Indrani Debi said with concern. Duttada laughed. “I see that even an MA degree has not cured you of your superstitions! There is no corelation whatsoever with the arrival of a comet and the calamities of the earth. On the contrary comets have been scientifically studied and their composition is well understood. There is nothing harmful about them. Well, you will soon see this comet of mine pass harmlessly by causing no anxiety to anybody.” In this last comment, however, Duttada was not going to be exactly right.

- A British scientist writes a paper based on Duttada’s discovery.
- He and the Defence Science Advisor have a tete-a-tete over an impending calamity.
- A conference of international experts might yield a clue to the cosmic puzzle.

Continue…





Instant Physics: The Hot Cocoa Effect

The “Hot Cocoa Effect” is a curious phenomenon that you can use to make a fun, tasty, educational physics demonstration for your family this holiday season, using materials you probably already have around the house. The best part? Once you're done, you get to enjoy a tasty mug of hot cocoa!

All You'll Need Is:

A mug Instant cocoa mix A metal spoon Hot milk or hot water

What to Do

Pour some hot milk or hot water into the mug, making sure to leave room at the top for the cocoa mix. Lift your mug by the handle so that it doesn’t rest on a surface, put the spoon into the mug, and tap it a few times on the bottom, so everyone can hear what it sounds like. Now, add the cocoa mix and stir it in. Once you’ve given it a good stir, use the spoon to tap the bottom of the mug continuously as the swirling fluid slows to a stop. The pitch will be low initially, but will rise noticeably as you tap! By stirring the liquid again, you can lower the pitch once more and start the process over.

What's Going On?

The pitch that a mug of cocoa produces when it’s tapped depends on the shape of the container and the speed of sound in the cocoa. The shape of the container doesn’t change as you tap, so it must be the speed of sound that’s changing. In fact, the pitch of the tapping is proportional to the speed of sound in the cocoa, so the rising pitch shows that the speed of sound is increasing in the cocoa along with the pitch.

So, why does the speed of sound in cocoa change? It’s because of the bubbles. When you mix cocoa into water or milk, it creates a fine foam made of tiny bubbles on the surface. Vigorous stirring spreads the bubbles throughout the liquid. The bubbles are filled with air, of course, and sound travels much slower through air than through the liquid. Distributing the bubbles in the liquid means the mixture becomes much more *compressible,* or "springy", which makes the speed of sound lower. When you stop stirring, the bubbles rise to the surface, decreasing the amount of air that the sound of the tapping passes through and increasing the amount of liquid it passes through. As the bubbles float to the top, the speed of sound in the cocoa—along with the pitch produced by tapping—goes up!

Apply It!

Try scooping the layer of foam off the top of your mug before re-stirring it. What do you notice?

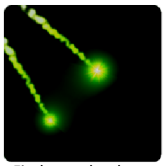
A Science Teacher

Science Discovery has increased my enthusiasm and excitement for teaching. Science Discovery has allowed me to share my passions with students who are interested and engaged making it a very rewarding and wonderful experience. I think sharing these topics with students and introducing them to complex scientific techniques, as well as showing the science in art broadens their minds and encourages them to be curious about the world at a young age. Science Discovery has solidified and fueled my ambition to become a teacher.

A Farewell party is organized

A Sayonara event was organized for the outgoing M.Sc. Physics Sem IV students to bid farewell by the post graduate students of the Department. Ms. Shikha Sharma was elected as Ms. Farewell and the other two girls, Ms. Saloni and Ms. Priyanka were elected as Miss Charming and Miss Elegant for the year 2016. A farewell speech is read by Ms. Gagandeep of M.Sc. Physics sem II.

App Center



Asteroid Impacts

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You are about to destroy dozens of worlds* in almost 60 tricky levels using different types of asteroids and your brain to figure out how to do so. Prepare to get properly entertained by a truly innovative and intuitive way to control the scene, stylish graphics, and a novel kind of gameplay.