



Exciting Science Group

Annual report
Apr 2011 – Mar 2012

Summary

The Exciting Science Group (<http://www.excitingscience.org>) is a volunteer effort, coordinated by scientists at NCL, and faculty from IISER-Pune, to excite 8th to 10th grade students about science and technology, by providing an interface with practicing scientists and researchers. Our programmes are designed *not* to teach, but to communicate the joys of practicing science.

- In 2011-2012, we continued with our Popular Science Talks, with speakers drawn from NCL, IISER-P, IISc and TIFR. These talks give students a chance to meet scientists and understand the relevance of their work to society. Typically, the scientists also perform experimental demonstrations for students to kindle a sense of wonderment.
- We also conducted talks for students at three schools, Jawahar Navodaya in Shikrapur, a Pune Municipal Corporation Vidya Niketan and the Valley View school, Kondhwa. These talks are typically on topics from school text books, and include several experiments. Students are given a small gift (such as a book, or a science kit that we specially put together) at the end of the talk, that typically relates to the science discussed. The students are also provided a snack at the end of the talk.
- This year, as part of the celebration of the International Year of Chemistry, we have organized workshops where over 1200 school students were selected to visit NCL or IISER-P, meet scientists, see our modern research laboratories and to perform experiments by themselves (supervised by our PhD students).
- In addition to these activities, we have also helped create content for a new comic magazine that popularizes science (Brainwave, from Amar Chitra Katha, August 2011 issue), spoken on local FM radio about science and technology (Radio Mirchi), etc.
- This year, as in the last year, the Director of NCL recognized this volunteer effort with a Directors commendation award.

We gratefully acknowledge that the activities of the Exciting Science group are supported by:



1. Popular Talks for (8th to 10th grade) School Students:

The Popular Talks series of once-a-month talks aims to connect school students to *practising* scientists. Thus, school students get to hear a first hand account of what it means to do research, and to get a feel for the thrill of discovery. The speakers do not attempt to teach science to the students – rather, the idea is to create a sense of “wow” and to kindle the students’ curiosity. The talks are not meant to be pedantic lectures, but combine live demonstrations, experiments and problem solving exercises to involve the students and engage their attention. We have chosen to target 8th to 10th standard students for this effort, since in most boards, students need to choose whether to stay in the science stream at this juncture.

Popular Talks are held once a month at 10 am on Sunday mornings at the NCL Innovation Park, Pashan Road. The talks are free and open to students and science teachers. Registration is on a first-come-first-served basis, and is done by sending email to register@excitingscience.org or through our new web site: <http://www.excitingscience.org>. Talks in 2011-2012 are listed below. Slides from these talks are freely available on our website after the lecture.



Popular Talk Series (2011-2012)

Date	Topic	Speaker	Feedback Score (Out of five)
24 Apr 11	Exploring Matter with Light	Dr. Vinod C Prabhakaran (NCL)	
29 May 11	Energizing the Earth	Dr K.Krishnamoorthy (NCL)	
26 Jun 2011	Experimenting in a lab without walls	Dr. Milind Watve (IISER Pune)	
24 Jul 2011	Science behind the search engines	Dr. M. S. Santhanam (IISER Pune)	
21 Aug 2011	Materials in Everyday life	Dr .Sivaram (NCL)	4.7
18 Sep 2011	Scientific Inquiry	Dr. K.P. Mohanan (IISER Pune)	4.89
9 Oct 2011	Playing Games with Molecules!	Dr. Uday Maitra (IISc, Bangalore)	4.9
20 Nov 2011	Where Did Medicines Come From? A History of Drug Discovery	Dr. Harinath Chakrapani (IISER Pune)	
18 Dec 2011	Science behind Reverse Swing	Dr. Vinod C Prabhakaran (NCL)	4.5
29 Jan 2012	Why this Cola very di? Fizziks and chemysteries of soft-drinks!	Prof. Arnab Bhattacharya, (TIFR), Mumbai	4.7
26 Feb 12	Science of Sound	Dr. Anirban Hazra (IISER Pune)	
25 Mar 12	The Art and Science of Colour	Dr. Sayam Sen Gupta (NCL)	
29 Apr 12	Acids and Bases	Dr. Kumar Vanka (NCL)	

Photographs from selected Popular Talks:

Dr K.Krishnamoorthy (May 2011)



Prof. Milind Watve (June 2011)



Prof. Uday Maitra (October 2011)



Prof. Arnab Bhattacharya (January 2012)



2. Reaching out to schools for underprivileged students:

The schedule of lectures by speakers from NCL and IISER at the Jawahar Navodaya, Vidya Niketan and Valley View Schools is given as follows.

Month	Topic	Speaker	Gift given	No. Of Participants (Three Schools)
Mar. 11	"History of Chemistry"	Dr. Sourav Pal (NCL)	"Story of Chemistry" book	290
Sept. 11	"The Art and Science of Colour"	Dr. Sayam Sen Gupta and Mrs. Sarita Dhimate (art teacher at Orchid school)	Warli kit	190
Dec. 11	"Life without Chemistry"	Dr. BLV Prasad	"Marie and Pierre Curie" book	160
Jan. 12	"Science of Sound"	Dr. Anirban Hazra (IISER Pune)	Sound kit	60 (ongoing)
Feb. 12	"Stuff of brains"	Dr. Aurnab Ghose (IISER Pune)	Illusion Cards+"Nazar ka pher" book	(scheduled)
Mar. 12	"Scientific Inquiry"	Dr. K. P. Mohanan (IISER Pune)		(scheduled)

Photographs from selected talks are shown below:

"The Art and Science of Colour"



“Life without Chemistry”



“Science of Sound”





NCL-IISER-ESG Chemistry Workshops for International Year of Chemistry (IYC) 2011

(Jointly organized and conducted by National Chemical Laboratory, Indian Institute of Science Education and Research, Pune and the Exciting Science Group)

Location: NCL and NCL Innovation Park, Dr. Homi Bhabha Road, Pune – 411008

June – Dec 2011

Executive Summary

The National Chemical Laboratory (NCL) and Indian Institute of Science Education and Research (IISER), Pune, along with the Exciting Science Group (ESG) are organizing a six-month long event (chemistry workshops) to celebrate the International Year of Chemistry, to highlight the relevance of chemistry to our life, and its importance for our future, and to inspire young students to take up chemistry and the sciences as a career path. This event was run with the generous support of the Forbes Marshall foundation, Praj foundation, Royal Society of Chemistry, British Council, Association of British Scholars, Pune.

During each of these workshops, school students (8th-9th std) participated in three activities

- Talk on “Chemistry in Everyday life” by NCL/IISER (and guest) scientists (one hour)
- A researcher guided tour of chemistry and materials research labs in NCL/IISER, where students got to witness the state-of-the-art research facilities and instruments and got to grill researchers with their curiosity and questions (one hour)
- Followed by a quick snack on mango drink, biscuits and samosas or vada pav
- A hands-on experiment session (for about 2 hours) where students got to perform (individually and as part of small groups) two experiments – one on making slime and bouncy ball using day-to-day chemicals like synthetic glue and borax solution and in the second experiment, made gold nanoparticles and explored how gold behaves in the nanoscale (like turn deep-pinkish/purple in color instead of the yellowish-gold color everyone expects to see). And learned the science behind these experiments.
- As a parting gift, each of them got a very-accessible-fun, illustration-filled version of the periodic table of elements

Some relevant numbers:

- **20** such workshops (each running between 4-5 hours) was held
- Over **1200 school students** (from over **50 schools**) participated in these workshops
- **6000 student-hours** of talks, experiments and discussions were held
- Over **50 teachers and parents** got to learn how kids learn by watching/observing these workshops
- Over **30 Ph.D research students** volunteered to share their excitement with the school students, and guided them during the tour and experiment sessions (**volunteering for over 1000 hours**)
- **10 scientists (with over 11 Ph.Ds between them)** from NCL and IISER delivered talks to the students (this includes one distinguished scientist from IISc, Bangalore who was visiting NCL then)





Speakers who delivered the talks for these workshops

<p>Dr. K.N. Ganesh, Director, IISER-Pune</p> 	<p>Dr. Sayam SenGupta Scientist, NCL, Pune</p> 	<p>Dr. BLV Prasad Scientist, NCL, Pune</p> 
<p>Dr. Anirban Hazra, Asst. Professor, IISER-Pune</p> 	<p>Dr. Uday Maitra Professor, IISc, Bangalore</p> 	<p>Dr. M. Jayakannan Assoc. Professor, IISER-Pune</p> 
<p>Dr. Harinath Chakrapani Asst. Professor, IISER-Pune</p> 	<p>Dr. A. A. Natu Visiting Faculty, IISER-Pune</p> 	<p>Dr. Prakash Wadgaonkar Scientist, NCL, Pune</p> 
	<p>Dr. Magesh Nandagopal Scientist, NCL, Pune</p> 	





Overwhelming response from the schools, students and parents:

We could accommodate only 1200 students to attend the workshops. Our websites and phone lines were bombarded with interested students, teachers and parents requesting to attend these workshops. Our dedicated website along with the excitingscience.org site got unprecedented number of hits (varying between 10,000-40,000 hits a month). The workshops were overbooked by the month of September 2011, and over a dozen school who registered could not be accommodated due to lack of workshop slots.

After each workshop, students were asked to fill up evaluation forms, in which we have asked the students to rate us between 2 and 5 (2-poor; 3-OK; 4- Good; 5- Fantastic) on each of the activity (talk, tour and experiment session). Overall, all our sessions got a rating of either 4 or 5 from the students. Particularly, the experiment sessions and the tour part got mostly 5's. Also, the students were asked for their feedback and suggestions, the following is what they had to say:

Feedback from the students who attended the workshops:

I liked the part of nano-gold experiment. It changed (color) not once but two times

Ritwik Lokur, 8th std, Bal Sikshan Mandir School

To (do) experiments myself because its interesting wearing glass and jackets like scientists

Aditi Vivek Haldule, 8th Std, Bal Sikshan Mandir School

Creating nano-particles of gold. I had only seen it in on National Geographic but today I actually did it.

Anish Kiran Kulkarni, 9th std, Bal Sikshan Mandir School

The experiment sessions with the volunteers (were) interactive and informative. The NCL campus and its people were awesome.

Rama Mahesh Balel, 9th Std, Gurukul

Keep this workshop next year also

Stemy Tomy, 8th std, St. Joseph's School





No suggestions! The workshop is unforgettable (Love the Snacks!!) Thank you!

Malavika Ramanathan, 9th Std, St. Joseph's School

I liked the experiment session the most because I would perform the experiments myself

Pratik Patil, 9th std, Vikhe Patil Memorial School

The lecture/talk (was the best part) because we came to know about different personalities and information we did not know. It was great

Vaibhav Rumale, 8th std, Vidyanchal School

The best part was when we started with our experiment. We were asked to make groups and all of us has so much fun and we learned so many things

Angel Alagiriswamy 8th std, VP's Magarpatta City Public School

[I liked the] experiment session [most] because we were directly interacting with them & asking our doubts

Omnik Chandrakant Maurya, 9th std, VPEMS

I liked the lecture most as it created interest & curiosity in my mind regarding chemistry

Rutwij Raut, 8th std, VPEMS-Baramati

The workshop was very very interesting. Our students were enjoyed it. I am requesting u that such workshops should be arrange one time in a month for school students ...All sessions were well planned. My other students should get chance to participate it.

Jyoti Mahajan, Teacher, HHCP High School



Some selected articles featuring our science outreach activities from the local press:

Sakal 17th September 2011

Indian Express, 4 July 2011

डॉ. मोहनन यांचे रविवारी व्याख्यान



पुणे, ता. १६ : राष्ट्रीय रासायनिक प्रयोगशाळेतर्फे (एनसीएल) डॉ. मोहनन रविवारी (ता. १८) 'विज्ञानाधारित चिकित्सा' या विषयावर इंडियन इन्स्टिट्यूट ऑफ सायन्स, एन्युकेशन अँड रिसर्चचे प्रोफेसर डॉ. के. पी. मोहनन यांचे व्याख्यान आयोजित करण्यात आले आहे. एनसीएलच्या इन्व्हेशन पार्कमध्ये सकाळी दहा वाजता व्याख्यान होणार आहे. सातवी ते दहावीतील विद्यार्थ्यांसाठी हे व्याख्यान उपयुक्त ठरणार असून ते सर्वांसाठी खुले व विनामूल्य आहे. अधिक माहितीसाठी www.excitingscience.org या संकेतस्थळाला विद्यार्थ्यांनी भेट द्यावी, असे आवाहन संस्थेच्या भक्ती दमहरे यांनी केले आहे.

Jelly balls to make chemistry fun

ANJALI JHANGANI
JULY 3

STUDENTS tried their hands at flubber balls at the first workshop of the International Year of Chemistry (IYC) which kick-started on Saturday at the National Chemical Laboratory, Innovation Park.

The IYC series of workshops, being organised by NCL and Indian Institute of Science Educa-

tion and Research, includes interaction with scientists and researchers, participation in hands-on sessions and talks on career opportunities that chemistry has to offer. Earlier this week, a website was launched for schools to register and keep themselves updated on the outreach activities of NCL and IISER.

About 60 students from Delhi Public School and Abhinav Vidyalaya High School attended a lecture on use of chemistry in daily lives by KN Ganesh, director, IISER, Pune. It was followed by a tour of NCL where they interacted with researchers.

In the 'Flubber experiment', students mixed synthetic glue, borax and water to make flubber, a slimy substance. The final part of the experiment was the demonstration of Super Absorbent Polymer (SAP), where students put some SAP into a beaker and poured ten times water into it which congealed immediately into a jelly. "Making the bouncy ball was fun. I added orange food colour in my flubber experiment. We learnt experiments we can do at home with things easily available at a medical store or in the kitchen," said Atharva Ghuna, a student of Class VIII, Delhi Public School.

The second experiment demonstrated the colour change of water to wine red by adding gold nanoparticles and then to blue by adding salt solution. "The experiment was very complex. We got to see what the micropipette looks like and hold it too," says Omkar Bhida, student of Class IX, Abhinav Vidyalaya School.

E - SQUARE ENTERTAINMENT ETC.

Tel. : 66044141 / 2 / 3.

: 8.15, 9.00, 11.00 am, 1.00, 3.15, 5.15, 6.30, 7.30, 9.30 & 11.30 pm.

UA) : 8.30, 8.45, 10.15 am, 1.00, 3.30, 6.00, 8.30, 10.45 & 11.00 pm.

BAAP (UA) : 9.00, 11.15 am, 1.00, 3.45, 6.00, 9.15 & 11.15 pm.

DNA, 08th September 11

Indian Express, Fri, 2nd September 11

NCL brains add buzz to kids' magazine

Scientists have done so to celebrate International Year of Chemistry

DNA Correspondent

A group of scientists from the city-based National Chemical Laboratory (NCL) have contributed their mite to the latest issue of *Brainwave*, the recently launched children's science magazine from Amar Chitra Katha.

The scientists have done so to celebrate the International Year of Chemistry in 2011. A press statement from NCL said that the scientists developed a storyline for the children's magazine.

Neelanjana Sengupta and Kumar Vanka were the two scientists who took the lead in this effort.



From left: Guruswamy Kumaraswamy, Kumar Vanka, S Sivaram and Neelanjana Sengupta were some of the NCL scientists who contributed to the latest issue of *Brainwave*, a science magazine for children (R)

Guruswamy Kumaraswamy, one of the NCL scientist who has contributed to the magazine, told DNA on Wednesday that the main theme in the current issue (now on the stands) is woven around a scientist-sleuth called Gai: Goel, who uses her knowledge of chemistry to foil terrorists from sabotaging clean energy research. "Some of us—including our



According to Guruswamy, NCL and its neighbouring institution, Indian Institute of Science Education and Research, are presently running workshops for schoolchildren where they can come and visit laboratories and do hands-on experiments. "The feedback we have got for these workshops is very good. Both teachers and students appear to like the workshops. Our scientists are also having a great time doing the workshops," Guruswamy said.

For details of the workshops visit: <http://www.excitingscience.org/IYC2011/index.php>.

CITY ANCHOR THE IDEA IS TO PRESENT SCIENCE BY WAY OF STORY-TELLING, MAKE IT INTERESTING'

Amar Chitra Katha-NCL forge 'chemical' bond to make science fun for children

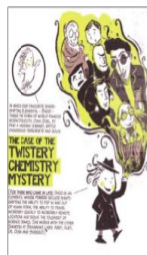
PUPIL CHATTERJEE
SEPTEMBER 1

GOING from one village to the other, Bhoos has been able to solve problems ranging from Arsenic poisoning to droughts. Conceived by a group of five scientists from the National Chemical Laboratory (NCL), Pune, Bhoos is a fictitious character in the cover story of *Brainwave*, a children's science magazine released last month. It has been brought out in association with *Amar Chitra Katha*.

Kumar Vanka, one of the five scientists who have come up with cover story *Twisty Chemistry Mystery*, said, "The whole idea behind this way of story-telling. Today we have a dearth of presenting science to kids in

a fun manner." Others who have contributed to *Brainwave* include senior scientists like former director S Sivaram, Guruswamy Kumaraswamy from the exciting science group and others.

Explaining the concept of Bhoos, Vanka added, "Through Bhoos we have explained how arsenic contamination of water can be dealt with using iron-oxide compounds as arsenic contamination is a problem prevalent in a large number of states. In another case, Bhoos goes to a drought



affected village and shows how it can be dealt with by using polymers to plant trees as they have more water retention capacity. Bhoos acts more like a science sleuth who goes to villages. The illustration by the *Brainwave* team has caught the imagination of many kids."

Amar Chitra Katha (ACK) came out with the first issue of *Brainwave* in December 2010. A monthly magazine meant for readers aged nine and above, it is likely to focus on chemistry related topics in the next one

year. "The collaboration with *Brainwave* is part of the activities undertaken by NCL as part of the International Year of Chemistry (IYC) activities. The idea conveyed through most of the anecdotes are based on the principle of improving upon existing science," said NCL scientist Neelanjana Sengupta.

Editor and art director *Brainwave*, Vinayak Varma, said, "We have been in touch with NCL since April and are working on various aspects of the issue. While this issue was dedicated to chemistry, we hope this is the beginning of a long-term association with them. Though there are several children's science magazines in vernacular languages, I think *Brainwave* is the first such attempt in English at bringing out a fun science magazine with a nationwide distribution."

Sankar Deshpanda DNA

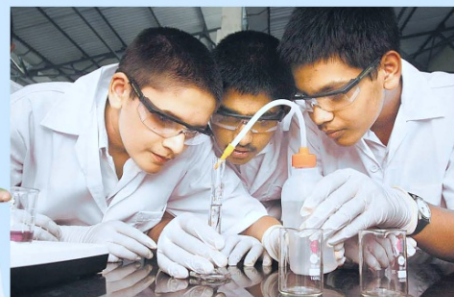


SCIENCE CAN BE FUN AND EXCITING TOO

Schoolchildren observe a reaction at a chemistry workshop organised jointly by the National Chemical Laboratory and the Indian Institute of Science Education and Research in the city on Saturday

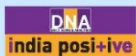
REPORT, P-4

Pune, July 3, 2011



Sixty students from standards VIII and IX of Abhinava Vidyalaya English Medium School and Delhi Public School along with their science teachers attended the first workshop at NCL and NCL Innovation Park in Pashan—Sankar Deshpanda DNA

Making chemistry fun for schoolchildren



Ajit Balkawade

The first of the twenty chemistry workshops organised jointly by the National Chemical Laboratory (NCL) and the Indian Institute of Science Education and Research (IISER), for schoolchildren, kicked off in the city on Saturday.

The twenty chemistry workshops to be held on consecutive Saturday mornings between 8 am and noon have been organised jointly by the NCL, the IISER and the Exciting Science Group (ESG) to encourage schoolchildren to pursue pure sciences (DNA June 23).

On Saturday morning, sixty students from standards VIII and IX of Abhinava Vidyalaya English Medium School and Delhi Public School (DPS) along with their science teachers attended the first workshop at the NCL and the NCL Innovation Park in Pashan.

During the workshop, director, IISER, KN Ganesh, spoke to the students about chemicals that are used in daily life. These included pet food, which help pets enjoy their naps, the similarity of chemicals in coke and the human DNA and the mystery behind the blue colour of our jeans.

The examples were simple and interesting as they provided ample food for thought to the students. The students seemed eager to learn.

Ganesh adopted a student-friendly

and humorous approach to generate interest in a subject like chemistry.

After the lecture, the students were taken on a tour of some of the NCL laboratories.

"We want to spread awareness among the students about the life of a scientist who works every day in these amazing laboratories," Mangesh Nandgopal, workshop coordinator said.

The highlight of the workshop for students was the opportunity to conduct live experiments. Several NCL doctor-

REGISTRATION DETAILS

To attend these workshops, schools or students can register by visiting the website:

www.excitingscience.org/lyc2011

For queries and correspondence, email at lyc.outreach@ncl.res.in

al students, who were working as workshop volunteers, showcased a few experiments before the students performed the experiments themselves.

One of the key experiments taught to the students was preparing slime and 'bouncy balls' by mixing synthetic glue and borax solution. The students seemed thrilled with the workshop.

"This is a completely new and wonderful experience for me as I might pursue chemistry in the future," said Advait Parulkar, a student of Abhinava English Medium School.

The workshops will continue till December 10. Every Saturday, two city schools with 30 students each will participate in the workshops.

ChemAcademia

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NCL and IISER launch chemistry workshops for school students

To celebrate the International Year of Chemistry, the National Chemical Laboratory (NCL) and Indian Institute of Science Education and Research (IISER), Pune, along with the Exciting Science Group (ESG) are organizing a six-month long program involving chemistry workshops for school students. Dr Sourav Pal, Director, NCL and Dr K N Ganesh, Director, IISER Pune formally launched the program on 22nd June at the NCL Innovation Park Campus.

As part of the program, school students will visit NCL's laboratories, interact with its scientists and faculty, and perform hands on experiments. These efforts aim to reach out to students and teachers in and around Pune, educate them on the usefulness of chemistry in our daily lives and inspire them to take up science as a career.

Dr Pal and Dr Ganesh also launched the official website for these chemistry workshops (www.excitingscience.org/iyc2011). Schools and stu-

dents interested in participating in these workshops can register through the website. The 20 workshops, which will be held between June and December 2011, are targeted at students in the 8th and 9th grades.

During the first workshop, held on 2nd July, Dr K N Ganesh, Director, IISER-Pune addressed 60 students from two Pune schools (Delhi Public School – Pune and Abhinav Vidyalaya English Medium School). He spoke about chemistry in everyday life. The students did two sets of experiments at the NCL chemistry lab.



Fun with chemistry: In one of the experiments at NCL, students prepared slime and "bouncy ball" by mixing commonly available synthetic glue and borax solution.

Dainik Bhaskar (4 July 2011)

<http://www.excitingscience.org/doc/news/dailybhaskar23jun11.pdf>



Pune: Students of standard VIII and IX in city schools can look forward to a lot of fun and excitement with chemistry. A series of 20 chemistry workshops will be held every Saturday between July 2 and December 10 at the National Chemical Laboratory's (NCL) Innovation Park in Pashan.

The workshops, a joint effort of NCL, the Indian institute of science and education and research (IISER) and the exciting science group (ECG), will be held to commemorate the International Year of Chemistry (IYC).

A website (www.excitingscience.org/IYC2011) for the initiative was launched at the NCL Innovation Park on Wednesday afternoon by NCL director Sourav Pal and IISER director KN Ganesh.

A total of 60 students from two schools (30 from each school) would be invited every Saturday for the workshop, to be held between 8 am and 12.30 pm.

The workshop would comprise a 45-minute lecture by a NCL/IISER scientist, a visit to a NCL or IISER laboratory and an opportunity to conduct chemistry experiments in a special laboratory inside the NCL Innovation Park premises under the supervision of scientists.

Speaking on the occasion, NCL director Sourav Pal said chemistry was an integral part of everyday life with 99% of everything around us having a chemistry connection.

Pal said, "Schoolchildren should get excited about science. Experiments make science interesting for children. These workshops are therefore a step in the right direction."

According to the organisers of the workshops, the objective was to reach out to students and science teachers in Pune and Pimpri-Chinchwad, and inspire the children to take up science as a career.

The initiative is supported by several prominent sponsors, including Forbes Marshall Foundation, Praj Foundation, Royal Society of Chemistry, British Council, Association of British scholars, Pune.)

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CHILD PRODIGY DEMONSTRATES SCIENTIFIC TEMPER

PRINCIPAL CORRESPONDENT
saptashikha@rediffmail.com

Pune: A Class VII student from city-based school Sushila Mehta Bhattacharya on Wednesday was demonstrating live experiment using polymers at the National Chemical Laboratory (NCL) Innovation Park when students of her age begin studying the different branches of science.

"I love Science. I keep doing little experiments at my home. I have been attending lectures on Chemistry at NCL. So when I got an opportunity to do hands-on experiment at the NCL, I felt excited and did Flubber experiment here," Bhattacharya said.

The experiment involves making a bouncing ball made out of Borax and synthetic glue. Borax is a multipurpose cleaner.

Such high-confidence in its high-end scientific experiment at such a young age comes as a shot in the arm of NCL, which is about to start an outreach programme along with Indian Institute of Science Education.

BUDGING TALENT: Class VII student Sushila Mehta Bhattacharya conducts Flubber experiment at the NCL Innovation Park under the supervision of NCL PhD student Mitunagar Kar on Wednesday.

on their own. This is the aim of our forthcoming outreach programme," Head Publication and Science Communication Unit, NCL P K Ingle said.

Announcing the launch

of its outreach programme earlier, NCL Director Sourav Pal told reporters that this programme aims at bringing schoolchildren to NCL and

They can see a work-

NCL-ISER INITIATIVE

■ NCL is about to start its outreach programme along with ISER Pune for school children. The programme starts on July 2. For registration details log on to www.ecdngscience.org/ICY2011.

ing laboratory, interact with practicing researchers, understand the relevance of chemistry in their lives, and do some experiments specially designed to evoke their sense of wonderment, Pal said.

Over the course of the year, the plan is to have about 1,000 children come to NCL/ISER Pune (20 batches of 60 children each). Programme is meant for Class VII and IX students only.

The programme starts on July 2. Workshops will be held thereafter every Saturday morning, from 8 am to 12:30 pm. For registration details log on to www.ecdngscience.org/ICY2011.

DNA PUNE

Schoolchildren to dive into the world of chemistry

NCL-ISER to conduct workshops every Saturday from July 2; 60 students in two batches of 30 will be invited

DNA
india positive

DNA Correspondent

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prise a 45-minute lecture by a NCL/ISER scientist, a visit to a NCL or ISER laboratory and an opportunity to conduct chemistry experiments in a special laboratory inside the NCL Innovation Park, promising to make the supervision of scientists.

Speaking on the occasion,

NCL Director Sourav Pal said chemistry was an integral part of everyday life with 96% of everything around us having a chemistry connection. Pal said, "Schoolchildren should get excited about science. Experiments make science interesting for children. These workshops are therefore a step in the right direction."

According to the organizers of the workshop, the objective was to reach out to students and science teachers in Pune and Prampur-Chinchwad, and inspire the children to take up science as a career.

The initiative is supported by several prominent sponsors, including Forbes Marshall Foundation, Praj Foundation, Royal Society of Chemistry British Council, Association of British Scientists, Pune.

The organisers said that the schools and students interested in registering for the workshops should access the website: www.ecdngscience.org/ICY2011.

Sushila Matra, standard VII student of Sanskriti School, conducts the 'bouncing ball' experiment in the special laboratory created at NCL's Innovation Park during the launch of chemistry workshops for schoolchildren project on Wednesday. - Anandha Rajasekar DNA

'एनसीएल' तर्फे विद्यार्थ्यांसाठी दर शनिवारी कार्यशाळा

पुणे. ता. २३

'राष्ट्रिय रसायनशास्त्रातील विद्यार्थ्यांच्या फक्त आवड असल्यासाठी राष्ट्रीय रसायनशास्त्र प्रयोगशाळा (एनसीएल) कार्यशाळा आयोजित करण्यात आली आहे. याप्रमाणे आठवडे, नववर्गीय विद्यार्थी सहभागी होऊ शकतील. मुलांकरिता वेळोवेळ कार्यक्रम राबवित जाणवण्याप्रमाणे विद्यार्थ्यांना प्रत्येक महिने प्रयोगशाळा येतील. ज्या नाहिले त्यासाठी स्वच्छक डॉ. नीलेश चव्हाण प्रमुख अधिकारी आहेत.

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www.ecdngscience.org/ICY2011 ही वेबसाइट पहावी.

'एनसीएल' तर्फे ६ महिन्यांनी कार्यशाळा

रसायनशास्त्राशी मैत्रीसाठी अजोखी कार्यशाळा

पुणे। दि. २३ (प्रतिनिधी)

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कोले जाल कार्यशाळेचे...

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Chemistry workshop for school students

TIMES NEWS NETWORK

Pune: Students of classes VIII and IX will get to interact with senior scientists and conduct experiments at the country's premier laboratory, the National Chemical Laboratory (NCL).

In an effort to encourage schoolchildren to pursue a career in chemistry, the NCL, in association with the Indian Institute of Science education and Research (IISER) and the Exciting Science Group, has organised a six-month-long event to celebrate the International Year of Chemistry (IYC). As part of the celebrations, 10 workshops, for 1,200 students from 40 different schools, have been organised.

The workshops will be conducted for four hours every

NCL INITIATIVE

Saturday between July and December. About 60 students will participate in each workshop. Students who wish to participate can register their name on www.excitingscience.org.

Sourav Pal, director of NCL, said at a press conference on Wednesday, "The students will get a chance to visit our laboratories (NCL and IISER), interact with our scientists and faculty, and also perform experiments in our laboratories."

"The effort is to reach out to students and teachers in and around Pune and educate them on the utility of chemistry in our daily lives and inspire them to take up science as a career. Students who visit our laboratories will see for themselves how and where chemistry research is conducted," said KN Ganesh, director of IISER.

Scientists and volunteers will guide the students through the experiments. Working in groups, a student will get to do three sets of experiments during the workshops.

Sakal Times, Tuesday, 10 May, 2011

Sakal times, 7th May 2011

SNAPSHOTS

Good response to Saturday Science videos

THE "Saturday Science" videos, hosted as part of Outreach's summer video screening at Innovative Park, have been receiving a good response. The video show on May 7, organised as part of the National Chemical Laboratory (NCL)'s Outreach Activity and hosted by the Exciting Science Group and Venture Centre, had screened a BBC video by British theoretical physicist, author and science communicator Prof Jim Al-Khalili. The video was about the "Discovery of Elements" The hunt for gold, considered to be one of the most precious elements, had led people to experiment with alchemy. Though alchemists failed to turn base metals into gold, the hunt had led to the development of the fundamentals of chemistry and discovery of new elements. The session "check for understanding" by NCL scientist Dr K Guruswamy and Outreach intern Vikas Saini interacted with the students and answered their queries.

Saturday Science Videos at NCL

AS a part of National Chemical Laboratory (NCL) Outreach Activity, the Exciting Science Group and Venture Centre will host Saturday Science Videos on May 7. Informing media through a press release, NCL officials said that the screening of videos are free and open to all age groups. It will be held between 4 to 5 pm at venture centre located at Pashan-based NCL Innovation Park, Dr Homi Bhabha road, and videos related to science and technology will be showcased.

Sakal Times