The Gold Lesson Colored Colore

Jugans of the LABORATORY

Duest

QUESTION | UNDERSTAND | EDUCATE | STIMULATE | TRANSCEND

Mother said many times: "Whoever gets my touch, whoever has a second of true aspiration, true love for me, he is finished for life, for all lives — he is bound to me. I have put a golden chain round his neck, his heart is bound eternally to me."

It is a thing nobody can see, you yourselves don't see; but it is a fact, it is there. The golden chain is there within your heart. Wherever you go, you drag that chain, it is a lengthening chain. However far you may go, it is an elastic chain, it goes on lengthening, but never snaps. In hours of difficulty, in hours of doubt and confusion in your life, you have that within you to support you. If you are conscious of it, so much the better; if you are not conscious, believe that it is there. The Mother's love, Her Presence is there always.

Sri Nolini Kanta Gupta (to the final-year students of the Higher Course on October 26, 1976)

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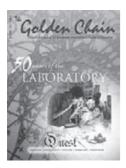
Richard '56, has been associated with the Lab from its earliest years.

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On the Cover:

A student shows how bright he is as he lights a bulb with the power in his brains (actually the electricity in his body) in an experiment demonstrated during the Laboratory's 50th anniversary celebrations. In the background is an image of the trace left by sub-atomic particles in a bubble chamber.

On the Back Cover:

The scientists featured are (clockwise from top): Albert Einstein, Antoine Henri Becquerel, Subrahmanyan Chandrasekhar, Sir Isaac Newton, David Bohm and James Prescott Joule..

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by Gopal '90

t must have been the Laboratory's 25th anniversary. I was a little boy then. We were taken to the Lab to see the demonstration of experiments that was organized for the occasion. The whole building was alive with excited students. In the Chemistry section one experiment was drawing a lot of attention. After rubbing some solution on each visitor's forearm, some senior students were using a large, almost rusted knife to make a long gash right across it. The cut then began to bleed quite profusely, but, strangely, nobody was screaming in agony. I was fascinated, but equally fearful, and though I made repeated visits to that section I never quite mustered the courage to get myself cut.

The incident has remained one of the most vivid and lasting memories of my early student life. The study of science is full of such magic moments. As we look at the world through the eyes of science, we are constantly made to question and wonder.

Science today tells us that matter can be transformed into energy. In the search for matter's primary constituents we find new and smaller sub-atomic particles — these sometimes exist separately for the briefest of moments, some of them are subject to the principle of uncertainty which makes it impossible to determine their position and momentum simultaneously. That other basic feature of the world we experience, Time, is itself found to dilate and contract. We are told that Space can curve, that the universe is expanding, that Black Holes exist in outer space that suck matter, and even light, into their gravitational field never to be seen again.

The living world too is full of its own wonders. Single-celled organisms have evolved into stunningly complex and varied life forms, each genetically programmed with unique capabilities. For instance bats have developed sonar to help them track and capture moths in dark caves. Moths have developed "stealth" characteristics and sonar-jamming abilities to survive. We know that the chameleon camouflages itself by matching its colours to those of its surroundings. Amazingly a

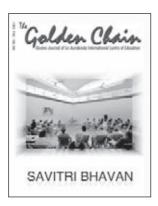
blind chameleon can do this just as well. Winter arrives and migratory birds fly thousands of miles navigating their way unerringly across continents to reach their destination, meanwhile mammals are able to switch themselves off and hibernate. The variety and wonders of Nature are endless, and her most outstanding achievement, the jewel in her crown, is surely man himself — an intelligent and self-conscious being.

As we marvel at it all, we begin to realize how many mysteries this world around us conceals. We also come across a number of phenomena that can't quite be explained by physical factors alone. In fact, in many ways, as we delve into the microcosm and macrocosm that is the physical universe, we seem only to be unveiling new layers of appearance; we begin to feel that Reality will always elude us.

As Sri Aurobindo says in The Life Divine: It may even be found that a supraphysical knowledge is necessary for the completion of physical knowledge, because the processes of physical Nature have behind them a supraphysical factor, a power and action mental, vital or spiritual which is not tangible to any outer means of knowledge.

So will modern science ever be able to open itself to supraphysical realities? Will it accept new inner means of knowledge? Time will tell.

Two months ago the Lab's 50th anniversary was celebrated, again in a big way. The arm-cutting experiment was once more on show. I had an opportunity to redeem myself, even if it was 25 years later. Amit '98 first applied Ferric Chloride on my forearm. Then he took an iron knife, wiped it with Potassium Sulpho-Cyanide, and stroked it across the applied area. Immediately the chemical reaction produced a blood-coloured solution that began trickling from my "wound". A little boy, who had come with his uncle, was looking on. I couldn't resist putting up a "it is terribly painful but I am bearing it with fortitude" expression. A mix of wonder and horror gripped the boy's face. He would remember this day. Maybe it would mark the beginning of his scientific quest. #



REMEMBERING TEHMI-BEN

This issue contains, among other interesting topics, tributes to two white flames of our Ashram memory: Rishabhchand and Tehmi-ben. I regret not having sent anything earlier on Tehmi-ben. Behind her absolutely bare simplicity there was a rich and complex ensemble. Her sweetness could at times receive a touch of Mahakali and shatter any indolence becoming

an obstacle to progress: with her magic smile as anaesthesia, she was capable of a sharp and refined sarcasm to cut asunder the wrong movement.

In addition to her fabulous memory, the spirit of rapprochement in the realm of themes and concepts was Tehmi-ben's inherent gift. In our Higher Course years, studying with her The Future Poetry was a living process, especially for those who were concerned with creative writing. The only other among our teachers to practise a similar method was Satprem (who stopped teaching abruptly). Towards the end of the '50s, she accepted to teach comparative literature in the form of an Advanced Course: side by side with the Greek tragedies, constantly switching back to the theory of Karma and other such doctrines, we discovered the source of T.S. Eliot's poetic vision by swimming upstream to Dante. I do not know

whether this course was maintained later on. This experience must have been for her a transition to the exclusive classes on *Savitri*, *The Life Divine* and *The Synthesis of Yoga*.

On one of my recent visits, one day, at noon, I was patiently waiting in front of Dyumanda's room, for my turn to go to the Samadhi; the corner of my predilection was occupied by Tehmi-ben. When she finished at last, while going to the *Bulletin* office, she gave me a big smile; I could not help asking her whether she was busy writing an epic. She replied enigmatically: "Who knows?"

Prithwindra Mukherjee '57

WE WELCOME YOUR FEEDBACK.

Please send your correspondence to: The Golden Chain, Sri Aurobindo Ashram P.O., Pondicherry 605002 or email it to us at: goldenchain@vsnl.net Published letters may be edited for reasons of space, clarity and civility.

WWW.MYSAICE.NET

The Golden Chain Fraternity realised, very early on, the need to create a presence on the Internet that would enable us, former students of SAICE, to keep in touch on a day to day basis, with each other and more importantly with our "home", the Ashram. We are glad to inform our readers of the launch, on August 15th 2006, of an SAICE alumni portal: www.mysaice.net. The Golden Chain Fraternity is happy to provide it whatever material and moral support it can to ensure that it runs smoothly and in a sustained manner. The site is in its early stages and all those who have suggestions or would like to help in any way are welcome to contact Nirav '2000 at: nirav@mysaice.net.

Let us benefit from this site to grow closer to each other, to SAICE, our alma mater, and most of all to grow closer to Her — isn't that what the "golden chain" is ultimately all about?

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A Touch of Grace

Shraddhaa '04, who studies Broadcast and Photo Jounalism at the Xavier Institute of Communications, Mumbai, was on a local train the evening of the Mumbai blasts. She recounts her fascinating story.

"...One can draw parallels between the philosophies of Marx and Rousseau. Both were idealists and strongly believed in a perfect society where an individual... but Marx's theory was based on communism whereas the French philosopher's ideas were based on...", my instructor continued to drone with a rhythmic monotony, expounding, and reiterating the points to a half-sleepy class that is usually interactive and alert. I glanced at my watch, the small needle was on 4 and the big one was inching its way towards 6. It appeared stuck for an unusually long time on the number 3. It seemed like it was going to be 4:15 for ever.



I looked out of the long windows that Xavier is so famous for and longed to be out there in the sun, to walk along the colourful Colaba causeway that eventually ends on the corner of Nariman Point, beside the Taj.... Tuesday 11th July, was like any other day for me — a day filled with lectures and seminars, a day of fretting and run-

ning around to get an assignment typed and submitted on time, and finally a day to relax by the windy Marine Drive — and yet it was a day that I will never forget because it made me realize more concretely how the Mother's Grace works on her children and that She is constantly there with us.

After the lecture, I left for my paying guest accommodation, which is in Colaba, right behind the Taj. For some unknown reason I noticed an instinctive urgency in my walk. I usually savour my walk home, threading my way nonchalantly through people, tiny shops and hawkers. But that day I was uneasy, as if trying to get away from something. I thought perhaps it was the lecture on Communism and Socialism because I strongly objected to many of the ideas in the presentation. I turned the corner after the causeway and suddenly the full view of the sea surged in front of me. I stood by the Gateway of India, staring at the sea and instead of heading home, decided to go to my sister's apartment in Malad. The uneasiness had already built into a nauseous feeling, and I felt as if someone was hammering my head from within. My sister's spacious apartment in the suburbs and her care would make me feel better. I took a taxi to Churchgate Station. It was 5:10 pm, a peak hour, and there was a confluence of people. I stood in the middle of this flux till I could make my way to the counter. Clutching the first class train ticket tightly I inquired "Which platform for Borivali Slow?" Someone yelled, "Platform Three." I reached there and the train was standing there fully packed. Borivali trains are always full and are famous for having passengers dangling out of doors and windows. The ladies' compartment had been filled and I noticed the men's first class compartment was conspicuously empty. I boarded it, found a seat for myself and settled down. A gentleman approached me and requested that I shift to the adjacent compartment because this one would get so full it would be impossible for me to get down at the desired station — I would have to literally fight and yell my way through all those men to reach the door.

A little irritated that I had to sandwich myself in the adjacent compartment which was a combined ladies' and men's section, I went reluctantly and managed to find a little space to stand. It was 5:15 and I was calculating how much time it would take me to reach home. The train groaned, heaved and gathering speed left the crowded station of Churchgate. After crossing Matunga my headache increased and I felt very nauseous. I tried calling my mother in Pondy but the mobile kept saying "Network busy". It was approximately 5:30 I was fighting within myself on whether I should get down and head back to Colaba, or continue in this condition. Somewhere I felt I should go ahead to Malad, because the next day I had college only at 5:30 pm and could spend some time with my sister; moreover I had to collect some money from her. Two more stations passed, I was nearing my destination. Then, impulsively, I got down at the station after Bandra. My head was reeling. I was surprised at myself because by nature I am a very determined person. Usually I would have reached Malad in this condition and I have done it before. But that day I just felt it was necessary to get down. There were no reasons; I just kept feeling that I have to get down now and head back home.

At around 6:25 I was sitting in a taxi and going to Colaba when my sister called up on my mobile and frantically blurted "Are you on a train?" I wondered why she was so hysterical. "Are you on a train?" she yelled again. Instinctively I said no. "Thank God you did not try to come, because there has been a blast on the Bandra train," her voice crackled, became inaudible and the line got abruptly cut. I was shocked. Suddenly everything went blurred. I could not understand anything. The next second someone on the road was shouting that a bomb in the first class men's compartment of the Borivali-bound slow train had exploded. It was 6:40 pm. I was speechless. Immediately I tried calling my mother but all networks were jammed. Suddenly there was chaos everywhere.

Slowly the idea that I had just been saved sank into me. I had climbed into the first class men's compartment but had come out. I also remembered that I was speculating whether I should take the train to Matunga (the bomb in that train

THE WORKINGS OF GRACE

On the very day that Shraddhaa had the experience she recounts here, the following text was put up on Joseph's quotation board in the Ashram:

You know, I have received hundreds of letters from people thanking me because they had been saved; but it is very, very rarely that someone writes to thank me because nothing has happened, you understand! Let us take an accident, it is already the beginning of a disorder. Naturally when it is a public or collective accident, the atmosphere of each person has its part in the thing, and that depends on the proportion of defeatists and those who, on the contrary, are on the right side.... People are not aware of the workings of grace except when there has been some danger, that is, when there has been the beginning of an accident or the accident has taken place and they have escaped it. Then they become aware. But never are they aware that if, for instance, a journey or anything whatever, passes without any accident, it is an infinitely higher grace. That is, the harmony is established in such a way that nothing can happen. But that seems to them quite natural....

The Mother (CWM 5: 406-07)

blasted at 6:24 pm) and then to Malad, as in this case a break journey is faster, but again for some reason I went against this practical logic and decided for a Borivali train. I immediately knew one thing, that it was only the Mother's Grace which saved me. It was Her all the time protecting me, pulling me away from the bomb.

Although this experience shook me deeply, it became at the same time a source of strength because it further convinced me that no harm can come to Her children and that at all times She is concretely there lovingly looking after us. To feel secure at all times, to know that no matter what happens, She is always there to take you in Her arms, to protect you, brought great confidence and peace in me. I realized how lucky we are just to have Her, because I cannot imagine a life without Her. #

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Unforgettable Advice

V. Jyoti Reddy '73 shares an unusual dream-experience that she had many years ago which brought home to her the advice given by Tehmi-ben.

had a very strange dream-experience, in 1972, Sri Aurobindo's centenary year. I was in the second year of Higher Course then. I cannot find words to express the deep anguish and the wonder of that dream.

I dreamt that I was clinging to the feet of the Mother, weeping inconsolably. It was my soul that was crying out in great anguish. The pain was due to the realisation that without the Divine we cannot exist. I felt that even the physical separation from Her was excruciatingly painful, it was simply unbearable. I cried aloud to the Mother, "Without You I am nothing, I have no existence at all, like without the Sun there is no universe, without air there is no life!"

I realised this truth very concretely, very materially to be precise, that without the Divine, we are nothing, not even specks of dust. In fact I could feel how the Divine Grace breathes life into us, and how His Force keeps all the different elements of our being as well as of the universe together. If That was to withdraw, all things would immediately fall apart, disintegrate and dissolve. So I kept clinging to Her Feet, imploring Her to take me into Her, keep me in Her, to make me one with Her.

Suddenly my experience ended (not my dream), and I found myself sitting, with an open book on my lap, which I had been obviously reading. I turned the cover of the book to see the title, it was "Experiences of Janina." It was then that the realisation dawned on me that the experience I just had was not my own. It was not a first hand experience at all. I understood then the meaning of the expression "living the Word". The experience of Janina put in writing in this case, was communicated to my soul through the identification of our consciousness. It was knowledge through identification.

I remembered, in my dream itself, what Tehmi-ben, who taught us literature, including Sri Aurobindo's poetry, had advised us about reading a few days earlier. She had told us to read good books, books written by great people, because a great soul puts a stamp of his enlightened consciousness upon his work. In fact all writers leave something of them, negative or positive, in their writings. So she urged us to be very vigilant and choose to read only those writers whose consciousness is high. For then we can benefit much through our identification with their consciousness. She ended her advice saying, "What better books will you find than those of the Mother and Sri Aurobindo? They are the Supreme masters whose Divine Consciousness can help you to learn, grow, progress and realise the ultimate Truth. Reading Their works is to be living in Their Consciousness." I thought her advice was simple enough to understand. But it was in my dream that I could experience in a very practical way, the profound truth of her precious advice.

The next day I tried to find out something about Janina. But for the fact that she was a Polish painter who had settled in the Ashram, I couldn't gather much. It was only in 1999 that a publication of her letters and paintings was brought out, under the title of *A Captive of Her Love*, an invaluable aid to anyone who wants to learn to live in the intimacy of the Mother.

After the publication of Janina's book I had the good fortune of meeting Tehmi-ben at Bharatidi's place in 2000. I told her how my dream helped me to experience the truth of her advice, in a most dramatic way. A book I had seen and read in my dream is actually published 27 years later! And if reading in our dream could be so fruitful, what stupendous results could be awaiting us if we could learn to read the Mother's and Sri Aurobindo's books consciously!

That was my last personal meeting with Tehmi-ben. I remember how she smiled at me, gentle, sweet and full of love. ₩

QUEST: 1956-2006

Vikas '02 reports on the events and exhibition that were held to mark the Laboratory's 50th Anniversary.



The entrance of the Laboratory

uestion, Understand, Educate, Stimulate, Transcend or QUEST in brief
— this was the theme chosen for the Golden Jubilee celebrations of our Laboratory. This simple word summarized beautifully the whole process of learning and teaching

science in our eternal quest to understand the world around us.

Whether it was a twelve-year old recounting how Archimedes uncovered the fraud of the gold crown, a 13 year-old inflating marsh-mellows and balloons with a home-made vacuum pump, or a 14 year-old asking you to read a Sardarji joke with a telescope — for a whole week



Vacuum Pump

the Laboratory of SAICE came alive with students of all age-groups demonstrating and explaining the principles of science through experiments.



Visitors going through the archival section (I to r): Jhumur '61, Swadesh '67, Jugal-da, Vishwanath-da, Richard '56, Dilip-da.



Minature model of science at home

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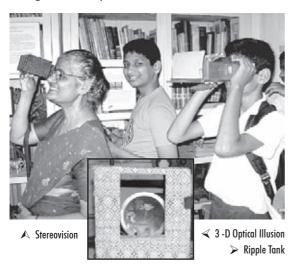


Archimedes Jar

The science exhibition provided a wonderful opportunity for students to enjoy and learn at the same time. For the kindergarten and Avenir children the science experiments were like the trailer of a magic show, giving them a glimpse of their soon-to-unfold student-life in the Lab, and for the students of the third

year higher course it was a walk down the memory lane of science at SAICE.

As soon as one entered the Lab, one met with the sight of instruments seen by the Mother fifty years ago when She visited the Laboratory on its inauguration day.



Moving on to the first room to the right, a variety of archival material traced the evolution of the teaching of science at SAICE. A whole range of pictures beginning with the old Laboratory [see article and photos on the Lab's history] and culminating with the Laboratory of today, took the previous generations of teachers on a nostalgic journey back to their lives as science students. The first science notebooks corrected by Sunil-da,



Richard exploring the rocks with the children

and Mona-da's special monitor's notebook, with records of the mischief of some of our respected teachers and sadhaks (!) were also exhibited.

Any student having gone through Lab would have surely met with two records that have been meticulously kept from 1956 till date — the breakage notebook and the weather charts. Samples of these signed and blessed by the Mother were also on display. Prayers written by the first batch of teachers and students of the Laboratory, also signed and blessed by the Mother, reminded everyone of the true spirit with which the work at the Lab should be undertaken.

As one stepped out of the archives room, one

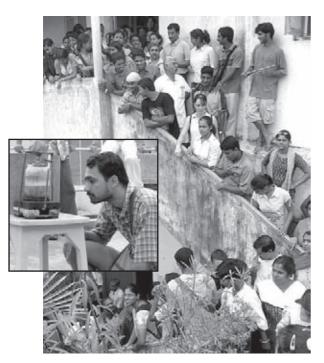


saw the drawings and paintings of various parts of the Lab done by our student artists. En route to the opposite room one met with the majestic elephant skull of "Mohanlal the great" [see note on page 16], along with a miniature clay model of an elephant.



Knowledge students helping the children make their share of ice-cream

The room adjoining the Guest House was abuzz with excitement as the visitors tried their hand at simple games of science that tested their motor skills, and power of concentration. A beautiful miniature model of a home with a garden demonstrated that science isn't limited to labo-



Our own H-bomb: a high-tech squirt gun in which Electrolysis separates water into hydrogen and oxygen, which are collected in a glass jar; the inflammable mixture is sparked to produce a small explosion that sends water flying high through narrow copper pipes.

▲ Visitors eagerly waiting for the imminent explosion!

ratories, but forms an integral part of our everyday life. In fact students were cooking 'khichdi' to demonstrate kitchen chemistry!

In our exploration of Matter, crystals and rocks are the most striking objects we encounter and there was an entire section in the first room and in Richard's room displaying samples of a whole variety of crystals and soils of different colours, sizes and shapes. Students also demonstrated the rainbow colours by testing the acidity of various kinds of solutions with the universal indicator, along with multicoloured chromatograms where colours ran riot.



Solar Water Distillation

From the world of broad daylight, to the dark and mysterious optics room where fascinating optical illusions left everyone rapt with wonder. In this room, morphing of objects was done with a discrete flick of a switch and visitors failed to get hold of floating 'realistic' virtual 3-D images of a piglet and a flower. Students performed simple experiments with light rays, mirrors and lenses and explained how optical instruments such as the kaleidoscope, telescope and the periscope work.

Coming out of the optics room, one saw instruments made by Pavitra-da in his workshop 50 years ago, which are serving us faithfully till today.

At the foot of the flight of stairs, one witnessed children squeezing away gleefully at plastic bags that contained their serving of ice-cream in order to freeze it further by cooling it with ice and salt. While they expected to get their share of ice-

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A clay bust of Pavitra-da made by Habul-da and senior pottery students, welcomed visitors on the first floor

cream, most of the time they ended with a *prasad* of cold salty milk-shake!

As one climbed the stairs, one saw E.A.V.P. 2 students using sunlight to distill water with a simple solar still.

Just beside the solar still, a student from E.A.V.P. 4 was alerting the visitors to witness the impending explosion of a hydrogen bomb their class had made (!). Who said one has to be a nuclear scientist to make one?!

The first floor contained the bulk of experi-



Even 30 horses pulling on either side couldn't pull apart the 'vacuum-filled' Magdebourg hemispheres, so this little girl is trying in vain!

ments in physics. These were distributed on nine tables with each table having two or three experiments. The library room traced the history and evolution of the periodic table of elements and in the chemistry hall real-time chemistry experiments were being performed.



Two of the most fascinating feats of science and engineering downloaded from the following link, http://www.steelcitysfinest.com/FlashIndex.htm (broadband connection required to view streaming

video), were repeatedly shown on a computer in the physics hall.

Throughout the exhibition the students learned to work with their hands by handling different materials and tools and grasped the concepts by explaining the principles often in different ways to a whole variety of visitors.

Besides the demonstrations of experiments at the Laboratory, there were educative and inspiring talks held at the Hall of Harmony which gave the students and teachers a glimpse of the field work being carried out in various branches of science. Manoj-da and Vijay-bhai, who were the first to speak, recalled the early years of the Lab and spoke of the place of Science in our School [see pages



➤ Young and old try in vain to defy the Bernoulli effect, which prevents the Table Tennis balls from being blown apart or out of the funnel.



AUG 2006

The direction of motion, current and magnetic field are mutually perpendicular

Electricity at work

Steam Engine

18 to 26]. Kshem '79, after speaking about his own evolution in the world of science, explained some "Applications of Science"

solar-powered

like

refrigeration and efforts to find alternatives to ozone-depleting CFCs. Brahmanand '79 gave a presentation on "Thermodynamics and Resource Efficiency" and after giving an overview of the subject went on to provide practical examples on ways to increase energy/resource efficiency and reduce wastage. Pratim '85 (Toto) spoke about the ecology and the indigenous tribes of the Nilgiris and the management of water resources in that environment. Chamanlal-ji made a presenta-



Children are fascinated as they light a bulb with the electricity in their bodies!

tion on the latest experiments being done all over India in the application of alternative, eco-friendly energy technologies such as wind energy, biogas, and the use of solar power to cook, to light, to pump etc. He mentioned how Mother was ahead of her times in implementing renewable energy projects and that the Ashram already had a solar water heater, a biogas plant and a

windmill forty years ago. She was very supportive of alternative energy and gave the message: "Bless-

ings for effectivity." Chamanlalji also said that after much reflection and experience he

Namita-di 'seeing' her voice on the oscilloscope



Students trying to understand the physics of musical sound

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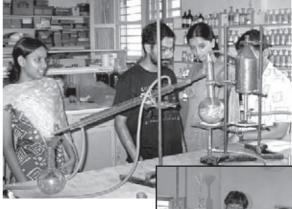
- A student talking about the periodic table of elements
- > Preparation of rosewater
- Chemicals used in perfumery



discovered that effectivity meant doing the right thing in the right way at the right time. Dr. Gopal, who teaches in the Higher Course, spoke on "Obesity: Physiological Perspectives" giving the current views and some practical advice on the

subject. And Shashvat, a final year student, spoke on the fascinating subject of Black Holes.

A quiz organized by the students, for the students



The Soxlet Extractor — an apparatus used for extracting various types of oils.

of School and Knowledge and a magic show by Knowledge students for the Delafon children were also most enjoyable. Finally slide show presentations received by e-mail from our for-

mer students working in the field of science were displayed in the hall of harmony. The presentations were: Binu Mukherjee '58 on "Piezoelectric

> Materials and Low Temperature Physics", Manjula Tiwari '88 on "Conservation of Sea Turtles Around the World", Arabinda Das '88 on "Computer Chip Designing" and Chandresh Patel '79 on "Life, Science, Yoga".

On the whole, the science ex-

hibition generated a lot of interest and enthusiasm among the students, and provided them an ideal platform for innovation and creativity. It was an occasion to re-live the past, celebrate the present and more importantly prepare for the future of science at SAICE. \$\mathbb{E}\$



▲ Delafon children are fascinated by the magic show.

> A Knowledge student performs a magic trick

One of the teams in the quiz



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A SHORT HISTORY OF OUR LABORATORY

Compiled by Suruchi '03, this brief history is based on the texts put up by Swadesh '67 and Dilip '71 during the exhibition, parts of Manoj Das Gupta '58 and Vijay Poddar('64)'s talks, and inputs from Richard '56 and Joshi-bhai.

he year 1956 was a year of profound spiritual significance for the Ashram and the world. It was in this year, on 29th February, that the first manifestation of

the Supramental Light-Force in the earth-atmosphere took place during the evening meditation in the Playground.

From an outward point of view too this year was eventful for the Ashram. Two new departments were opened: the Theatre and the Exhibition Hall. The screening of

35mm films was introduced. The year also saw many special cultural and sports activities including the starting of Decathlon in the Men's Athletics Competitions and the fondly-remembered visit of the famous Soviet gymnasts who performed before the Mother.

Finally, in an important development for the School, it was in 1956, 50 years ago, that the Mother inaugurated the Laboratory which we see today.

MOTHER OPENS THE NEW LAB

It was the afternoon of the 26th of June, 1956. There was a light drizzle. Joshi-bhai, Arati-di, Jugal-da, Richard, Udar-da, Jayanti-bhai, Dikshit-bhai and others waited for the Mother at the new Laboratory. She arrived as scheduled at 4 pm. She proceeded to visit all the rooms on the ground floor where there were exhibits of Natural

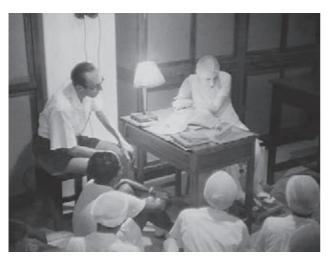
The Laboratory today, white-washed laboriously for 5 hours on the computer by Rajendra '86

Science including a special section on pressed flowers with their significances. Then She came up to the newly constructed first floor. In the Physics hall Joshibhai had arranged one apparatus on each table. She saw the working of a Measuring Microscope, Geiger Counter, a Pressure Vacuum

Pump, a Spectrometer and some other apparatus and then visited the Chemistry hall. After She had completed this tour, on emerging from the first floor, She stopped on the landing and gazed ahead silently at the Playground for a little while, then descended. Finally, before leaving, the Mother, who had taken a keen interest in the exhibits, asked Udar-da, "What about the fire extinguisher?" She never missed important details, especially when it came to the safety of Her children.

The Quarterly Report in the Bulletin of August 1956 summarised the Lab's opening in the following words: "The new laboratory of our University Centre was opened by the Mother on 26th June. This consists of physics and chemistry

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Pavitra-da with the Mother in a class

laboratories and lecture rooms fitted for slide and fixed film projection. The equipment is modern and fairly comprehensive and the students of the University will now have an excellent opportunity for some really good practical work in these subjects."

EARLY YEARS

The opening of this well-equipped Laboratory for the School was the culmination of a gradual development that had been going on for some

time. To know its origins we have to go back to the mid '40s. There was then no laboratory of science as such for the School. The only laboratory in the Ashram was at Ardhendu-da's residence on the first floor of Retraite, the building where Vishwanath-da's department is now situated. Every day he tested water from different wells, and checked whether the mushrooms that were to be cooked for the Mother were poisonous or not. Also, urine and blood tests for the Dispensary were carried out in this laboratory. But although Ardhendu-da accepted an occasional helper, no classes were held there.

The genesis of a lab for students can be traced to Pavitra-da. Trained as an engineer at the reputed Ecole Polytechnique, he had joined the Ashram in 1925 and was the Director of our Centre of Education. He had an atelier (workshop) on the ground floor of the Ashram building — on the right as you enter from the Balcony gate. He set up some equipment there and when the School started, the senior students used to go there to conduct experiments with him.

In those days the Mother encouraged making all our equipment ouselves and the apparatus that Pavitra-da was able to make at the Ashram workshop before 1950 was quite extraordinary. There was a Barlow's Wheel which demonstrated the principles of an electric motor. An electric current passed through the hub of the wheel to a mercury contact on the rim; this was contained in a small trough through which the rim passed. The interaction of the current with the magnetic field of a U-magnet caused the wheel to rotate. There was an Optical Bench, with accessories, used to determine the optical properties of lenses and mirrors. He also constructed a Wheatstone Bridge used to measure an unknown electrical resistance by balancing two 'legs' of a bridge circuit.

OLD LAB AND TEACHERS

The first real laboratory for the School started sometime in the late 40s in the Playground under the guidance of Pavitra-da. It was situated



Jugal-da taking a science class in the old Laboratory. From left to right are: Joshi-bhai, Richard '56, Sumitra '55, Paru '55, Ranajit '57, Jugal-da, Lata '56, Manoj '58, Arati '56



The first international photography exhibition held in the building which became the present Laboratory

where the passage on the road-side leads to the Body-Building Gymnasium. There were just two small rooms and part of the room facing the Playground was also used by the Mother for her interviews. The room behind was used for Physics, the other for Chemistry experiments.

One of the best-loved science teachers of those



Jugal-da and Joshi-bhai: 50 years later

early years was Sunil-da. He had studied chemistry at the Calcutta University, but was also a multifaceted personality with many interests (many of us know him primarily for his music). He had a small lab of his own near his room, with a microscope and other equipment, and did quite a few experiments

on plants for his own study. He taught Botany to the students here and inspired many to take up science seriously.

Then two very competent science teachers came and joined our Centre of Education. In August of 1949, came Jugal-da, who had been a

brilliant physics student at Calcutta University. Then Joshi-bhai, a qualified chemical engineer from Bombay, followed in 1951. They became the two helmsmen of our science classes. Jugal-da dealt with the theoretical aspects of science and Joshi-bhai conducted the practical, experimental, side. So the first teachers of science were Pavitrada, Mrityunjoy-da, Sunil-da, Jugal-da and Joshi-bhai.

CONSTRUCTION OF THE NEW LAB

The place where the Laboratory stands today was bought by the Mother on August 31, 1950. But it was the Ashram's timber godown from the early 1930s to 1956. In the plan of the "Godon de bois" (timber godown) drawn by Chandulal, the Ashram engineer, we see that the entire place was a huge hall with massive pillars and very prominent arches. The godown had no first floor—there was only an open terrace. In 1934-35, Nirod-da was a supervisor of the carpentry work that used to take place in this building, as we read in his correspondence with Sri Aurobindo. After Nirod-da, Dikshit-bhai was in charge of this godown from 1935 to 1956.

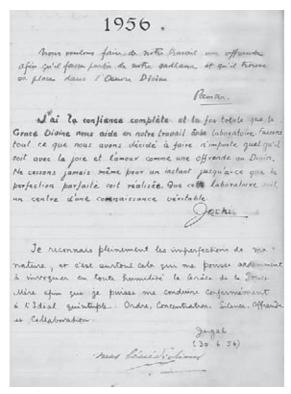
Only two photos of this place prior to 1956 remain today. They were taken some time in 1955 when the first International Photographic Exhibition was held here.



Among the first few science students at the Laboratoire

To change this place into a laboratory, the timber godown was partitioned into the four rooms and the central hall which we see downstairs today. Earlier, it had two small doors and no win-

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Handwritten prayers to the Mother by Pavitra-da, Jugal-da and Joshi-bhai, for the occasion of the inauguration of the Laboratory.

dows at all. The present large door and all the windows downstairs were added later. The entire first floor that we see today was also newly constructed. The first floor, consisting of the Physics and the Chemistry halls had an asbestos roof with a false ceiling.

SPIRIT OF WORK

So with the opening of the new Laboratory, the students had all the facilities they needed for pursuing their scientific quest. But this was not going to be just a well-equipped lab like any other. The spirit in which it was to function was reflected in this message scripted by Pavitra-da for all teachers and students on the occasion of the Laboratory's inauguration:

Let this laboratory be for you a place of concentration. The work you will do here has the valuable advantage of developing both your intelligence and your technical and manual skills. Your progress will be proportionate to your concentration. As long as you are here, avoid all dispersion and all slackness.

If you wish to make good use of the facilities given to you, do not lose sight of the five following principles which should guide your actions.

- 1. ORDER. A place for each thing and each thing in its place. Let there be order, not only in things but also in your thoughts and in your work. Tidiness is an expression of order; and disorder is simply things in the wrong place. Order also implies care of equipment and their right use. Instruments have a consciousness and to feel it one must treat them with respect and understanding.
- 2. CONCENTRATION. Think of what you are doing, and do it as well as you can. You will discover a constantly renewed interest even as you develop the consciousness of your body and the mastery of your movements. Accidents are a sign of inconscience; most of them are caused by a lack of thought and a flagging of the attention.
- 3. SILENCE. Speak as little as possible, and then only to say something worthwhile. Above all, avoid disputes. Economy of words is part of self-mastery.
- 4. OFFERING. You can make of your work here a means of your spiritual progress. Offer it to the Mother and ask Her to help you.
- 5. COLLABORATION. The Mother has not laid this work on you alone. She has given you fellowworkers. To see in these fellow-workers the same Single Consciousness which expresses itself in you, is the basis of a true collaboration.

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Sample entries into the breakage notebook

MEET MOHANLAL

(As recounted by Ajanta-di)

Justice Kumudnath Chowdhuri (Bar-at-Law) from North Bengal (Pabna, Haripur) was a well-known zamindar and hunter in British India. On one of his tiger-hunting trips, he found an elephant calf and brought it home. This elephant calf became the pet of the family and, because he was always eager to go out on hunting expeditions, was named Mohanlal, after a great Indian warrior in the battle of Plassey, 1757. He was a very obedient and



Mohanlal and his clay sibling made by Batti-da!

dutiful pet and especially friendly with children.

When Kalyan Kumar Chowdhuri (Kalyan-da), the eldest son of Kumudnath came and joined the Ashram in 1937, Mohanlal was still alive. He died much later of old age. On hearing of the demise of Mohanlal, Kalyan-da was much saddened and when he told the Mother about it, she asked him to have Mohanlal buried. A few years later, on the Mother's suggestion, the skull with the tusks of Mohanlal were brought to the Ashram.

Two ivory idols of the goddesses, Lakshmi and Saraswati, were made from Mohanlal's tusks. These are kept in bell jars on either side of the sofa in the Meditation Hall on the first floor i.e. in the room in front of the Darshan Room. As for Mohanlal's skull, Pavitra-da had it brought to the laboratory and Mohanlal faithfully guards the lab and fascinates the children to this day.

The Mother signed this message and wrote "Mes bénédictions". The five important points came to be known popularly among the students and teachers as *Panchasheel*. When the Higher Course students went there to work on their own, that was the first thing they read and many will agree that trying to follow these guidelines made the work more fulfilling and more worthwhile.

The first batch of teachers and students of the Laboratory also wrote a prayer each and these were sent to the Mother. The Mother again signed "Mes bénédictions".

Keeping in mind the need to work consciously

and in a disciplined manner, right from the beginning, a notebook was kept to record breakages. The first page of this notebook said: Tout accident, tout bris d'appareil et tout dommage au matériel du laboratoire, sera aussitôt consigné dans ce registre par le professeur responsable pour être soumis à la Mère. Every day whenever anything in the Lab was broken during the experiment or outside it, even if it was a single test tube, it was noted down by Joshibhai or the teacher concerned and the notebook was later sent to the Mother. She saw what had been broken and by whom.

For the next few years Mother was kept constantly informed of all the developments in the Lab. She used to sometimes give her advice — especially if it was something regarding safety. She always took interest in new scientific projects, whether it was the Sun-dial

made by students and erected in the School, or the underwater craft, the Bathyscaphe "Hardie", or the exhibitions held at the Lab in 1968, 1969 and 1970.

PRESENT-DAY LABORATORY

Since the day of the opening 50 years ago, more than two thousand students and eighty teachers have spent time in the Lab, grappling with the concepts of Science, understanding the results of their experiments. It has been a fulfilling journey. During this period the Laboratory has seen many changes, but much has also remained the same.

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When he first came to the Ashram in 1951, Joshi-bhai was given the keys of the old Lab by Pavitra-da. In the years that followed, Joshi-bhai became more and more identified with the functioning of the Lab. This happily continues to this day.

The breakage notebook is still maintained. Also the weather chart, recording every day the minimum and maximum temperature and rainfall, wind direction, pressure and humidity, has been kept almost uninterruptedly for 50 years.

Over the years there has been some improvement in the physical infrastructure. In 1986-87, thirty years after it was inaugurated, major renovation work was taken up on the 1st floor of the Lab — the asbestos roof was changed to a regular concrete roof and the cement flooring was changed to mosaic flooring.

Today the ground floor of the Laboratory consists of: two class rooms, a dark room for experiments in optics, a children's laboratory for natural science, and a museum of stones, minerals, fossils and natural objects. The first floor consists of a physics laboratory, a chemistry laboratory, a balance room and a library.

According to the latest philosophy of science

teaching, science is not "thinking" only, science is not "doing" only, but science is "doing as a result of thinking". To put this new philosophy into practice all the students of science have to come to the Laboratory as science cannot be taught only in a classroom. Our Lab is specially equipped to allow individual experimentation and variation in programme according to the needs of the students. As a result, at any time of the working hours, the Laboratory will be found humming with activity.

There is also a constant effort to improve facilities. Over a period of time some sophisticated equipment has been acquired. Today the Laboratory has a Dual-mode Oscilloscope, Digital Balance, Digital pH-Metre, High Precision Digital Timer, a computer, Helium-neon Lazer, Scaler for radioactivity studies etc.

It is interesting to note that along with the latest equipment, the Laboratory has many of Pavitra-da's very first instruments in fine, functioning condition even today. Their excellent design and workmanship serve to remind us of the contributions of the dedicated individuals that have made the Laboratory what it is today. They serve too as an inspiration for us in our efforts for the future. **



Today's science teachers gather around the instruments made by Pavitra-da. Seated left to right: Vijayendra '62, Arati '56, Swadesh '67, Deshpandeji, Richard '56, Joshi-bhai, Sujata-di, Pratibha-di. Standing left to right: Vikas '02, Suruchi '03, Dilip '71, Datta '84, Jasmin '03, Shanti '90, Amit '98, Tejas '01, Bharg '96.

On the Verge of Something New

Manoj Das Gupta '58 addressed the students on the occasion of the Laboratory's 50th anniversary. The first part of his talk dealt with the teaching of science during the earliest years of the School and the genesis of the Lab. We have incorporated this portion of the talk in the article on the history of the Lab which precedes this piece. We present here edited excerpts from the second part of Manoj-da's talk where he reflects on some of Mother's and Sri Aurobindo's statements on science.

became a teacher when I was still a student. Every year before I started the session I used to give to the Mother the list of students in my classes and the subjects I was to teach. I used to have a small interview with Her. Once, during one such conversation, there was something very interesting that the Mother said to me

about science. She was talking about a student, and She said: Tu sais, c'est un garçon qu'il faut traiter avec beaucoup de soin, avec beaucoup de calme. Il est très intelligent, mais il est aussi extrêmement sensible. Il faut le traiter avec beaucoup de soin. Tu sais, il a une âme très éveillée. Tu dois le traiter avec beaucoup de calme.

En effet lorsque tu commences une classe, il faut que, avant cela, tu arrives à obtenir un calme intérieur, soit dans la région de la tête, soit dans la région du cœur, suivant lequel est le plus facile, mais celle de la région du cœur est plus puissant. On parvient à obtenir ainsi toute l'attention de la classe.... Dans ce calme, où le mental reflète la lumière supéri-

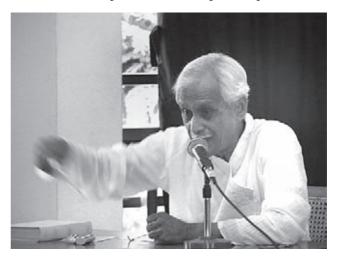
eure, tout devient facile. Pour la science, par exemple, on aperçoit les grandes lignes, les lois générales, et on n'a pas tout le temps à tirer les nerfs, à faire un effort pour retenir les choses.

La science moderne est arrivée à une bordure, je ne sais pas si on va passer de l'autre côté, n'est-ce pas. Ils ont découvert que la matière telle qu'elle est, n'est qu'une forme d'énergie. S'ils font un pas de plus, ils vont s'apercevoir la conscience derrière qui régit tout. Les chemins sont différents mais on peut arriver au même but que celui atteint par les anciens mystiques suivant le chemin de la science.

What the Mother is referring to here is Science's discovery that what we call matter is nothing but a form of energy — Einstein's great formula: E=mc². But Mother says that science should

go one step ahead. That is to say, not only discover matter as energy, but realise that matter and everything else is a form of consciousness. This is yet to be discovered by science.

On another occasion Mother says: Le seul point vraiment important que la science



moderne ait découvert, c'est qu'au point de vue purement extérieur et physique, les choses ne sont pas ce qu'elles semblent être ...la science vous dit: "... C'est la construction de vos organes qui vous met en rapport avec ces choses d'une certaine manière, qui est tout à fait superficielle, extérieure, illusoire et irréelle."

...Et les savants arrivent à cette conclusion — la même que les anciens spiritualistes effrénés — que le monde est une illusion. Cela, c'est une grande découverte, très grande... Un pas de plus et ils entreront dans la vérité... Alors, par des chemins diamétralement opposés, ils sont arrivés au même résultat: le monde tel que vous le voyez est une illusion.

The Mother says that one of the great contributions of science is, it makes us realise that what

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we see, what your senses say, is actually not real, the appearance is not real.

For instance your senses may feel that this table is solid. In reality it is not true. Science has told us that each atom of this "solid" material is mostly empty space. You know that the atom consists of a nucleus, made up of protons and neutrons with electrons going round it. (This may not be the actual picture, but it is good enough for us.) What is the proportion of empty space when compared to the size of the nucleus? If we consider the nucleus to be a ball of, say, 1 cm diametre, then the electron which is circling round it is circling at a radius of 100m! How much emptiness there is in an atom! This solidity then is but a false appearance. This is what science has come to discover.

In fact modern science has upset many of our established notions. For instance in the earlier classical science, there was a clear distinction made between subjectivity and objectivity and it was the "objective" world that science wanted to study. But with Einstein we have come to realise that actually there is no such objective reality. The measurement of Time and Space depends on the state of the observer. When I measure the length of this table and say that it is precisely one metre long, is it the objective absolute reality that the length of this table is one metre? No, the measurement depends on the fact that I'm in a static position. The experiment of somebody who is moving will show that the length is different. This is what is called "length contraction". Then there is "time dilation".... I am not going into the details. But this is where today's science has come. Mother says that science has come to the verge of something, but that there is still some way for science to go.

Some of these ideas are reflected also in Sri Aurobindo's *Thoughts and Aphorisms*. He writes:

To the senses it is always true that the sun moves round the earth; this is false to the reason. To the reason it is always true that the earth moves round the sun; this is false to the supreme vision. Neither earth moves nor sun; there is only a change in the relation of sun-consciousness and earth-consciousness. [SABCL 17: 90]

SECRET OF SUCCESS

Allow me to give you an advice that I have always tried my best to follow, and that is, to remain as long as possible in a subject. In everything the secret of success is in prolonged efforts. By perseverance in research one acquires in the end what I would willingly call the instinct of Truth.

Louis Pasteur

And again:

To see the composition of the sun or the lines of Mars is doubtless a great achievement; but when thou hast the instrument that can show thee a man's soul as thou seest a picture, then thou wilt smile at the wonders of physical Science as the playthings of babies. [SABCL 17: 91]

Then here is an aphorism which was a favourite of the Mother:

Europe prides herself on her practical and scientific organisation and efficiency. I am waiting till her organisation is perfect; then a child shall destroy her. [SABCL 17: 87]

I end with two sonnets on science. This one is "Discoveries of Science (III)":

Our science is an abstract cold and brief That cuts in formulas the living whole. It has a brain and head but not a soul: It sees all things in outward carved relief.

But how without its depths can the world be known?

The visible has its roots in the unseen And each invisible hides what it can mean In a yet deeper invisible, unshown.

The objects that you probe are not their form. Each is a mass of forces thrown in shape. The forces caught, their inner lines escape In a fathomless consciousness beyond mind's norm.

Probe it and you shall meet a Being still Infinite, nameless, mute, unknowable.

[SABCL 5:168]

EVOLUTIONARY CRISIS

The means by which we live have outdistanced the ends for which we live. Our scientific power has outrun our spiritual power. We have guided missiles and misguided men.

Martin Luther King, Jr.

Finally, to conclude on a slightly humourous note, here is Sri Aurobindo's sonnet, "A Dream of Surreal Science". You have to remember that at one time when classical science was in its heyday and there was discovery after discovery, it began to feel that it can know everything about this universe. In fact I think it was Laplace who once said, "God is a hypothesis no longer necessary" believing that we can explain everything. It was felt that everything, including our feelings, emotions, ideas can be explained as scientifically understandable material processes — in this case chemical reactions that take place in our bodies. So Sri Aurobindo, referring to Shakespeare, Homer, Buddha, Napolean, writes in this sonnet:

One dreamed and saw a gland write Hamlet, drink

At the Mermaid, capture immortality; A committee of hormones on the Aegean's brink Composed the Illiad and the Odessey.

A thyroid, meditating almost nude Under the Bo-tree saw the eternal Light And, rising from its mighty solitude, Spoke of the Wheel and eightfold Path all right.

A brain by a disordered stomach driven Thundered through Europe, conquered, ruled and fell,

From St. Helena went, perhaps, to Heaven. Thus wagged on the surreal world, until

A scientist played with atoms and blew out The universe before God had time to shout. [SABCL 5:145]



Pavitra-da enacts the role of the scientist in the play "Le Grand Secret".

LA CONCLUSION DU SAVANT

Le Savant (à la fin de sa carrière scientifique):

Le progrès scientifique n'implique pas le progrès moral. À changer la nature humaine, la connaissance scientifique et intellectuelle est impuissante. Et pourtant cela devient urgent. Si les convoitises et les passions humaines restent ce qu'elles sont aujourd'hui — à peu de choses près ce qu'elles étaient à l'âge de pierre — l'humanité est vouée à disparaître. Nous sommes arrivés à un point où elle dispose d'une puissance telle qu'à moins d'un changement moral, radical et rapide, elle sera l'instrument de sa propre destruction.

...Après tout, que je n'aie sur le monde que des probabilités, pas de certitude, laisse peut-être une lueur d'espoir... c'est que le sort de l'humanité ne soit pas définitivement scellé...

Pavitra-da Extrait du « Le Grand Secret »

Talking about science, I would finally add that Mother and Sri Aurobindo were the greatest scientists. They have done all sorts of experiments. The Ashram has been their laboratory. They have turned a scientist like Sunil-da into the greatest of composers, they have turned a medical man like Nirod-da into a poet, they have turned someone who did not even know how to hold a pencil and draw a line into a big artist — Huta-ben.... We are all guinea pigs in this laboratory and one day we shall turn into something marvellous. We're in the hands of the greatest scientists of all ages.... *#

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THE PLACE OF SCIENCE AT SAICE

Edited excerpts from a talk given by **Vijay Poddar '64** at SAICE on the occasion of the Laboratory's 50th anniversary

ifty years is a long time and as a former student and teacher of maths and science many happy memories come back on this day. In fact some of the happiest times and some of the longest hours that I have spent as a student and as a teacher, have been in the Laboratory.

"I DO AND I UNDERSTAND"

One of my earliest memories is of the old Laboratory in the Playground. We must have been 8 or 9 years old and Mrityunjoy-da, our teacher, took us to show experiments on hydrogen. The person who demonstrated the experiments was our Joshi-bhai. It was such a thrilling experience to create the hydrogen and to fill up balloons which floated up. Joshi-bhai then collected the hydrogen in a small test tube and took it near the alcohol lamp and suddenly a flame shot inside the test-tube and erupted.... Our eyes lighted up, what a beautiful thing had happened!

I remember the early years — studying botany, zoology, geology with Richard — spending most of our time in Nature, in the gardens.... Once we were studying fungi and in an effort to find a type of fungus which nobody else in the class could find (something Richard had encouraged us to do) we visited the most dirty, filthy places. I'm sure I will not go to the same places again, but at that age one does it. When the three of us came with the fungus, the stink of it was so bad that the rest of the class refused to work with us. So Richard shifted us to another room. The bread on which the fungus had been put was covered with a bell jar. We had to take a deep breath, then one person would lift the jar, the two others would cut it and put it on a slide and the jar was quickly put back. How can one forget those days!

I remember Arun-bhai's class and how we used to visit some Ashram department or other. One day, from the Laboratory he took us all next door to the present Guest House where the children play. His cycle was there. He just told us, "Open this cycle entirely and assemble it again." Imagine a class of eight persons, all excited, everybody trying to open the cycle together. Nobody bothered where this bolt was going, where that screw was going. And then afterwards we were stuck — how to re-assemble it? And Arun-bhai would not help. That was his style. You were to struggle for as long as it took. You see, there is in the cycle what is called a freewheel and it has ball-bearings. When we put back the ball-bearings inside the freewheel and tried to fit the freewheel in



place, the ball-bearings would fall out. We were three of us trying to hold it in such a way that the ball-bearings don't drop while putting it in and each time at least one or two would drop. And Arun-bhai was standing there, smiling away, least helpful, only saying, "You know, this entire work is done by one little boy who earns not even five rupees a day, and he does it in two minutes." It not only taught us how a cycle works, it was also a lesson in humility.... It taught us to value the work of those we take for granted.

Then I remember how as a teacher, along with Padmakar who used to help in the Lab, we would try to do experiments which were not in the book, which were not the standard experiments, which

would give a different insight. I remember when, with the students, we tried to measure the speed of a motorcycle using the doppler effect. You know a vehicle while approaching makes a certain sound, and the moment it passes you the pitch drops. By knowing how much the pitch drops you can calculate the speed of the moving vehicle. This principle is used to measure the speed of the smallest of objects as well as the movement of the stars. So here we had our whole team standing on the Beach Road. Not too many students had motorcycles then. So the person with the latest model would come at full speed. Some of the students would be standing with the apparatus to see whether we could measure the frequency, the note. Three persons were put at the different crossings to make sure that no other vehicle came when this person was going at full speed. It was not that we succeeded with the experiment, it was the effort, the process that went into it that was important. And we did so many of these unconventional experiments that Joshi-bhai called us the Bogus Experiment Group. But he was our biggest supporter. Anything we needed, he was there to help.

I remember how we once wanted to extract silver from Hypo, a chemical which was then used to treat photographic film. The silver was present in miniscule amounts. We wanted to extract it and make a symbol for the Mother in silver. For days, in the hot 1 o'clock sun we used to push this cart containing the big cans of Hypo which we had got from this or that photographer, and go on putting the chemical in the tank which was in the Laboratory. And when we had collected enough of it we started treating it. The process went on for hours. Finally the last stage came — we had to put the salt that had been recovered inside the very hot furnace. The salt was in a capsule and it had to be taken out of the furnace at the right time, otherwise we would lose the silver and all our efforts would be in vain. When the time came to remove the capsule, Joshi-bhai was alone in the Lab with none of us to help him. He just tied some cloth pieces round his hand and opening the furnace door himself, he held the capsule with the pincers. The temperature inside the furnace was so high

SCIENCE IN THE EYES OF CHILDREN

The beguiling ideas about science quoted here were gleaned from essays, exams, and class room discussions; most are from fifth and sixth-graders. They illustrate Mark Twain's contention that the "most interesting information comes from children, for they tell all they know and then stop."

- When they broke open molecules, they found they were only stuffed with atoms.
 But when they broke open atoms, they found them stuffed with explosions.
- Most books now say our sun is a star. But it still knows how to change back into a sun in the daytime.
- There are 26 vitamins in all, but some of the letters are yet to be discovered. Finding them all means living forever.
- Many dead animals of the past changed to fossils while others preferred to be oil.
- Vacuums are nothings. We only mention them to let them know we know they're there.
- To most people solutions mean finding the answers. But to chemists solutions are things that are still all mixed up.
- When you breathe, you inspire. When you do not breathe, you expire.
- H2O is hot water, and CO2 is cold water.
- When you smell an odorless gas, it is probably carbon monoxide.
- Blood flows down one leg and up the other.
- The body consists of three parts the brainium, the borax and the abominable cavity. The brainium contains the brain, the borax contains the heart and lungs, and the abominable cavity contains the bowels, of which there are five a, e, i, o and u.

Sourced from the Internet

that the cloth burned, and his hand started burning. But so that we don't lose the silver and the effort that had gone in, without caring for his hand, he took out the capsule, kept it aside and only then took some treatment for his hand. When we came

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LABORATORY WEATHER CHARTS

Right from 1956 the Laboratory has been maintaining a Weather Chart, where the maximum and minimum temperatures, rainfall etc. are noted. This has been done every day for the past fifty years except in 1986 and 1987 when the Laboratory was being renovated. Some interesting findings:

- The **rainfall in the year 1956** (the year the Mother inaugurated the Laboratory), was **1713mm** about **430mm more than the average** rainfall in Pondicherry.
- The average rainfall in Pondicherry in the last 50 years was 1282mm.
- The **highest rainfall** in the last 50 years was in the **Mother's centenary year** i.e. in 1978: **1970mm** about **700mm** (60%) more than the average.
- The **least rainfall** in the last 50 years was in **1968 566mm** only!
- The **highest temperature** recorded in the last 35 years was **43.6°C on May 15, 2001**.
- The lowest temperature recorded in the last 35 years was 17.4°C on 7 February, 1974.
- This year (2006) the highest temperature so far has been 40.5°C, on 21 May.
- On 20 June this year, we had an unexpected rainfall of 55mm. We have had more rain in June this year than we have had in the same month in the last 10 years.

we found the tiny amount of silver at the bottom of the capsule. And we made a small symbol for the Mother — her symbol in silver — and sent it to her as an offering. Knowing that she was happy made all that labour worthwhile.

These are fond, happy memories, but there is also a purpose in telling you these reminiscences. Unlike most other institutions, here from the earliest age, we were taken to show experiments so that we don't just read about things in a book. We actually see them happening. Imagine the classes of Richard and Arun-bhai, imagine the whole year without a book, without a course to be finished, being in the gardens, exploring Nature, spending time in the Ashram departments... education was a part of life. This is what Sri Aurobindo refers to as the third principle of true teaching — going from the near to the far. Not learning about what is happening in the US or England, but learning about what is right here next to us. Making that the starting point to understand the world. There is that beautiful quote in the publications of Unesco that captures this idea — "I hear and I forget, I see and I remember, I do and I understand."

At that age we were learning to work with our own hands. We were learning to work on our own, learning to work as a team... learning to think, plan, execute. How many institutions have this facility? How many have teachers giving so much of their time, so much of their energy, so much of their enthusiasm, just so that we children can learn and grow through it? The Mother has started a new type of institution, a new type of laboratory, a new way of teaching science.

SCIENCE AND THE SPIRIT

The questions we naturally ask on this day are: "What is science? What is its value and what is the purpose of teaching it in our Centre of Education?" The theories of science and its methods keep changing every few years, but there is something called the scientific spirit, the scientific attitude which is extremely important and which does not change. It is interesting to note what Sri Aurobindo once wrote to a sadhak: I think some knowledge of science will be most useful to you that field is quite a blank for most people. [SABCL 24: 1282] So Sri Aurobindo himself is advising a sadhak, not a student mind you, to do some reading and understanding of science. Then again there is the letter where he writes how he and the Mother have worked on their principles of yoga and sadhana more rigorously than any scientist could ever do. This is what Sri Aurobindo writes: Both the Mother and myself have had one side of the mind as positive and as insistent on practical results and more so than any Russell can be....we do not found ourselves on faith alone, but on a

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RICHARD REMEMBERS

AVEC GRATITUDE

Dans le domaine mental, je dois avouer que c'est Sunil-da qui fut à la fois ami, conseiller et professeur, admiré et estimé. Je le suivais comme l'ombre s'attache à la personne: l'accompagnant de l'Ecole quand il rentrait de sa classe, allant chez lui le soir après le groupe pour passer une heure au moins ensemble avant le moment de son dîner.

Mais laissez-moi commencer par le début. Arrivé dans la classe de botanique de Sunil-da — avant de le connaître de près — j'ai été touché par sa façon d'enseigner. Il faisait la leçon en français, mais quand il partait comme une étoile filante à quelque détail intéressant, il racontait en anglais des phénomènes incroyables ou des vies de savants en y ajoutant toujours de petits détails d'observation ou de réflexion qui faisaient de ce qu'il disait... des histoires si charmantes... et quand il nous voyait entièrement pris par l'histoire, il s'arrêtait et avec un léger sourire très modeste — « Mais de quoi est-ce qu'on parlait tout à l'heure ? » ou tout simplement : « Reprenons la leçon! »

Au début de chaque classe, il posait des questions de révision pour voir si nous avions compris la leçon précédente. Si un élève répondait juste, il venait s'asseoir à la première place. Mais comme chaque fois les questions difficiles revenaient au premier élève, celui qui gardait cette place devait être vraiment bien préparé pour pouvoir maintenir sa position!

Une autre chose remarquable : il utilisait le tableau noir pour faire des dessins scientifiques, plutôt que d'écrire des noms à retenir. Quand il dessinait, il était complètement absorbé et nous attendions en silence, respectueux. Ayant fini le croquis, il s'écartait et reprenait sa place et nous commencions à exécuter le dessin aussi bien que possible.

Une autre habitude chez lui était qu'il arrivait souvent un peu en retard, mais nous étions toujours à nos places dès qu'on le voyait arriver : car aucun enfant ne devait être hors de sa place ou hors de la classe quand la cloche avait sonné.

Il grondait très peu, un mot ou deux, mais c'était sa façon de regarder qui lançait des poignards pour trancher nos défauts et nous obliger à décider de ne plus faire ce qui lui déplaisait...

Quand la cloche sonnait à la fin de la classe, il se levait tout de suite, même au milieu d'une explication en disant : « Nous verrons cela la prochaine fois. »

THE NEW LABORATORY

Soon after the change-over of the School to the new building in 1952, I began working — rather helping Joshi-bhai and Jugal-da — in the old Laboratory in the Playground.

great ground of knowledge which we have been developing and testing all our lives. I think I can say that I have been testing day and night for years upon years more scrupulously than any scientist his theory or his method on the physical plane. [SABCL 26: 468-469].

Perhaps combining a scientific approach with the insights and experiences of the Spirit may be the way of the future. One scientist who probably epitomizes this is Acharya Jagdish Chandra Bose. A hundred years ago, in spite of the hostility, opposition and ridicule he had to face, without the aid of proper equipment (in fact he made his own equipment with the help of the silversmiths of Bengal), Dr Bose was able to demonstrate through his experiments that just as in highly evolved animals there is a response to different types of stimuli, so also in plants and even in inanimate matter, like metals, there is life, and a similar response. And he was able to demonstrate this with some amazing experiments at the heart of the scientific establishment in the West,

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The Mother knew without my telling Her that I collected seeds, dry fruits, feathers... in fact, anything beautiful. She told me that when the new Laboratory was ready I would have a room to keep my things and look after Natural History.

As it happened, I helped a Bengali geologist named Hinen Ganguly to put his large collection in our new cupboards. Soon after he had given me a brief idea of how to look after the collection, he left and I was on my own. Besides, we had received a lovely large set of rocks, min-

erals, ores and fossils from Ward's in the United States to help fill up the rest of our cupboards.

Whenever the Mother received pressed flowers or stones from different parts of the world, She would send them to me or give them to Pavitra-da for me to pick up.

For the day of

the inauguration, when the Mother came, we had arranged flower pictures, pressed flowers mounted and covered with cellophane. So, when She came to our room I told Her that I wanted to make a collection of all the flowers that She had named from the Ashram and from abroad. She listened silently. I was a bit surprised

but little did I know at that time that the real contact with the flowers would come by offering to the Mother a particular one in times of real inner need... or by growing plants with the aspiration to express what by Her Grace the flowers held.

WORK IS THE TEACHER

Each discipline has something valuable to offer in our life, in our consciousness, in our development. The practical work in a labora-

tory definitely instills some precious qualities in one who takes this work seriously. First of all exclusive concentration on an experiment can bring a joy equal to that of a discovery. Secondly one is seeking a perfection in method, in order, in beauty and expression through the conscious use of the



Richard showing Delafon children instruments seen by the Mother

instruments which, when handled with care, reveal a consciousness of their own. And finally, while ardently seeking to do one's best to find the methods and secrets of Nature, all vital and emotional and even bodily needs cease altogether. There is just a pure and fulfilling peace, and light and joy. #

the Royal Society of Science in London. J.C. Bose concluded his presentation to the Royal Society thus: I have shown you this evening autographic records of the history of stress and strain in the living and non-living. How similar are the writings! So similar indeed that you cannot tell one apart from the other. Amongst such phenomena, how can we draw a line of demarcation and say, here the physical ends, and there the physiological begins? Such absolute barriers do not exist.

It was when I came upon the mute witness of

these self-made records, and perceived in them one phase of a pervading unity that bears within it all things — the mote that quivers in ripples of light, the teaming life upon our earth, and the radiant suns that shine above us — it was then that I understood for the first time a little of that message proclaimed by my ancestors on the banks of the Ganges 30 centuries ago: "They who see but one, in all the changing manifoldness of this universe, unto them belongs Eternal Truth — unto none else, unto none else!"

At another place Bose says: Thus community through the great ocean of life is seen to outweigh apparent dissimilarity. Diversity swallowed up in unity.

One does not know whether it is a scientist speaking, whether it is a poet speaking or whether it is a Rishi speaking.

The search of science is no doubt the search for reality, the search for the truth, the search for the unity underlying all creation. One major step in this movement towards unity was taken when Einstein showed that matter is nothing but condensed energy. J.C.Bose took the next step. He showed that matter and energy themselves are nothing else but vibrations and

manifestations of life. He brought the whole of science, right on the threshold of the next step — the threshold of consciousness. What awaits us now is the discovery that matter, energy, life themselves are nothing else but vibrations and manifestations of consciousness. And when that discovery is made we shall have arrived once again through the door of science to the truth seen by the ancient Rishis — *Sarvam Khalu Idam Brahmam* — All here is nothing else but the Brahman.

A NEW SCIENCE

If science is to turn her face towards the Divine, it must be a new science not yet developed which deals directly with forces of the life-world and of mind and so arrives at what is beyond mind. Present-day science cannot do that. If science has to move in this direction in the future, it cannot remain at the level of the mind and its thinking. It has to develop new methods of gaining knowledge. Science has to go back to the ancient Rishis where knowledge came not by thinking and by the mind but by becoming one with the object. It was knowledge by identity, knowledge by direct vision. Like Acharya J.C. Bose, the new scientist has to be also the *kavi*, the scientist has to be the

seer, so that he grasps the Truth directly.

This will happen. Sri Aurobindo says that science will cross its boundaries. New sciences, new methods will develop. Science too will seek to explore, to understand, to manifest the Spirit and the working of the Divine.

And how will this new science develop unless our entire teaching of science changes? The Mother was once asked, "How can mathematics, history or science help me to find you?" The Mother answered: If you study science deeply enough, it will teach you the unreality of appearances and thus lead you to the spiritual reality. Then again she says: The study of all the aspects and movements of physical

Nature will bring you into contact with the universal Mother, and so you will be closer to me. [CWM 12: 249] Elsewhere, in answer to another question, the Mother says, "They are taught history or spiritual things, they are taught science or spiritual things. That is the stupidity. In history, the Spirit is there; in science, the Spirit is there — the Truth is everywhere. And what is needed is not to teach it in a false way, but to teach it in a true way." [CWM 12: 403] This is what needs to be done. Science and spirituality are not to be separated. The entire study, learning, teaching of science has to done with a spiritual approach.

Where else can this happen, if not in our institution here, founded by the Divine Mother Herself, and named after Sri Aurobindo Himself? Where else are the circumstances so conducive, the environment so beautiful for this type of search, for the coming together of Matter and Spirit?... As we all know, the Mother once said: I am perfectly sure, I am quite confident, there is not the slightest doubt in my mind, that this University, which is being established here, will be the greatest seat of Knowledge upon earth. [CWM 12: 112] These are the words of the Supreme Divine Mother. Shall we not dream, strive, work together to make this a reality? \$\mathbb{H}\$



Satellite image of the Lab and Playground from Google Earth

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PONDICHERRY IN PARIS

Ashok Panda '77 provides a brief report on the Festival of Pondicherry held in Paris from 17th May to 6th June 2006.

or centuries the history of Pondicherry was very closely linked with that of

France. The rich and unique French architectural and cultural imprint is still visible in the city of Pondicherry.

But today this unique character is under threat and may be lost forever. This is the primary reason why the Pondicherry chapter of INTACH (Indian National Trust for Art and Cultural Heritage) mobilised a group of friends to organise an event

in Paris from 17th May to 6th June 2006 with the theme "Pondichéry — patrimoine et développement durable."

The event was held over a period of three weeks and consisted of an exhibition, confer-

ences, workshops and cultural soirées, conducted by eminent personalities. Its main aims were: to highlight the cultural and architectural heritage of Pondicherry and the importance of preserving it; to explore avenues to improve the urban environment and quality of life in Pondicherry; to showcase the immense tourism and commercial potential of the city; to open a new chapter in strengthening

the historical links between India and France by encouraging regular interactions between Pondicherry and France and other French-speaking



At the inauguration



Mairie du 5ème arrondissement



The photographic exhibition



Inaugural speech

countries; to show Pondicherry as a unique heritage city in India and place it amongst other well-known cities of the world.

THE EVENTS

A dedicated team in Paris headed by Satyakam and Devasmita '81 along with Brahmananda Mohanty '79, Manob Tagore '85, Ashok Panda '77, Ajit Koujalgi and Kalyan Nag, worked out a detailed programme. Separate events were conducted at three different locations:

The photo exhibition: "Et maintenant Pondichéry" — The photographic exhibition, which was at the heart of the event and held in the Mairie du 5ème arrondissement, ran over a period of three weeks. Its aim was to showcase Pondicherry's past, present, and its uncertain future. It presented the influence of French architecture in Pondicherry: the ancient French colonial houses, as well as the rich Tamil quarters where many houses bear the French influence. The exhibition portraved the gradual evolution of the town, from the period of colonial rule to the rapid growth it enjoys presently, at times with a lot of demolition of the heritage structures of the city. The work done by INTACH for heritage conservation and ADEME's efforts to improve Pondicherry's urban environment were also on display. A video presentation on the subject was also shown.

The Handicrafts — The Gallery ARCIMA, situated close to the Town Hall was leased for an

exhibition-cum-sale of handicrafts from Pondicherry. It was organized by Manob '85 of Cottage Industries. He took the overall responsibility of managing the gallery — choosing and despatching all the products from Pondy and displaying and selling them in Paris. Asha Bajpeyi '76 and Sunila '80 also helped in the display of products. There were many products from the Handmade Paper Factory, scarves from the Marbling Department, agarbathies and other gift items from Cottage, garments from Anjali '89, as well as publications from INTACH such as the Pondy maps, Heritage walk leaflets, books and CDs on Pondy's architecture.

Conferences — Four conferences on various aspects of Pondicherry were held at the "Maison de L'Inde" in the "Cité Universitaire" which houses students from all over the world studying in various universities of Paris.



The Handicrafts Gallery

CONTRIBUTION OF FORMER STUDENTS

In addition to the alumni mentioned above, others too came forward to help and participate.

Ajit-da ('60) and Selvi-di ('64) participated in the workshops and conferences. Particularly Ajit-da gave a moving speech on the opening day of the Gallery. He recounted how he came to France, his experiences of living in Paris and how he started his cultural centre called Soleil d'Or. Anuradha Chowdhury '98 conducted a 3-

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day workshop on Sanskrit at the Gallery Arcima. Maitreyi '95 gave a classical Kathak performance at the inauguration of the exhibition-cum-sale of handicrafts.



Conference in progress

Kiran Vyas '66 conducted a workshop on Ayurveda and his team from Tapovan were an immense source of support — providing accommodation for some of the participants from Pondicherry and helping in the day-to-day running of the gallery.

Brahmanand Mohanty '79 organised a conference on "Decentralised co-operation and sustainable development in Pondicherry by ADEME, France and INTACH, Pondicherry."

Many others came to see the exhibition and lent moral support — Krishnakant '77, Charles '73 and Konkona '72, Poorna and Janine Panier, Phurbu '81, Devdutt '81 and Varsha '81, Shantona '78 and her daughter, Jishnu '96 and Priya amongst many others.

For alumni and devotees there was also a small gathering with Janine in the Jardins du Luxembourg, where she recounted some of her early interactions with the Mother.

There was also a memorable moment during the inauguration when a senior official from the Government of Pondicherry in his speech highlighted the contribution of "the Mother of Sri Aurobindo Ashram" to Pondicherry.

CONCLUSION

The word "Pondicherry" has a magical effect on people all over the world, more so in France which left its historical legacy here. Also, India is today "à la mode" in France. There is a realization of its deep cultural roots and an acceptance of India as an economic power-house that has gained its rightful place in the world. So this event happened at the right time at the right place. The exhibition was visited by more than 5000 people and the visitors came from all strata of society — intellectuals, students, tourists, as well as people of Pondicherrian origin. The response was overwhelming.

The handicrafts from Pondicherry were very much appreciated and almost 90% of the products were sold out. The conferences generated a lot of interest and the quiz organized for all the visitors at the exhibition also elicited an enthusiastic response. The winner was given two tickets to Pondicherry via Bangalore and a week's free stay at Pondicherry, courtesy the Department of



Concert by Nadaka and Basavaraj brothers

Tourism, Government of Pondicherry.

The success of the event can be measured not only by the number of visitors to the exhibition and the handicrafts gallery but the enthusiasm shown by people from other cities in France. Many historical towns from all over France have expressed interest and willingness to host the same exhibition. \Re

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EARLY MEDITATIONS

Raman '75 continues his series on Collective Meditation in the Ashram

MEDITATION IN THE MEDITATION HALL UPSTAIRS

In those early times we used to have meditation at 7.30 a.m. in the long room where the Mother, after the passing away of Sri Aurobindo, gave darshan on the four big days of the year. Of course, on those big days she used to sit in a chair, but in the old period she sat on a big seat meant for herself and Sri Aurobindo. During the morning meditation she would be alone there — and Sri Aurobindo was in the background, supporting the meditation going on in the front room. The Mother, wearing a sari, would sit cross-legged, looking radiantly beautiful. She was a picture of supreme repose, but a repose in which there was a

great deal of held-in power, as if she had come and sat there after having gone on a journey through the centuries and finished her job of finding what she had wanted to find. All journeys seemed to come to an end in her, and when we went and knelt down at her feet all journeys of ours also seemed to end there. All our difficulties vanished — except the difficulty of going away and leaving the Mother's feet!

During these early meditations, each of the old sadhaks had his turn to sit throughout with his head on one of the Mother's feet ...

Amal Kiran

Light and Laughter (2004), Talk Four, p. 53



The Meditation Hall Upstairs

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Compiler's Note: Collective meditations were held in the "Meditation Hall" upstairs soon after Sri Aurobindo and the Mother moved from the Library House to the Meditation House on 7 February 1927. This hall described by Amal Kiran as "the long room where the Mother, after the passing away of Sri Aurobindo, gave darshan on the four big days of the year" is adjacent to and west of the Darshan room, where Sri Aurobindo and the Mother gave Darshan from 1928 to 1950. It should not be confused with the "Meditation Hall" downstairs, where at present the Mother's couch is kept on the west and Promode Kumar Chatterjee's painting of Sri Aurobindo and the Mother on the east wall. The Meditation Hall downstairs was used by the Mother for Pranam and meditation in the thirties whereas the Meditation Hall upstairs was used for meditation in the years 1927-1928.

Apart from the morning meditation at 7.30 a.m., there were also night meditations when Amal Kiran came to the Ashram in mid-December 1927. In fact, Haradhan Bakshi and Anilbaran Roy's diary notations mention morning, afternoon and night meditations from December 1926 to April 1927. The timings of these meditations constantly changed in this intense early period of Ashram life when the Mother took up the spiritual responsibility of the sadhaks and sadhikas. There was a tendency for the Mother's programme to get delayed because of her busy schedule, so that midday meditations, after some time, were held in the afternoon, and evening meditations at night. The midday meditations were dropped by the end of 1927. The night meditations were discontinued after the Mother was not well for a few days in May 1928.

There is much overlap between the various collective activities of the Mother, though we have categorised them under different headings for the sake of clarity. For example, there were sometimes meditations (or short concentrations) during the soup ceremony, Prosperity meetings and even outings to the countryside, when the Mother meditated with a few disciples in open air. Similarly, flowers with symbolic significances were distributed not only during Pranam, but also at soup time and Prosperity meetings. In the Prosperity

meetings, flowers were often awarded as prizes in the simple games of skill and intelligence that the Mother played with the sadhaks and sadhikas of the Ashram.

PRANAM IN BULA'S ROOM

The daily march of our life every morning began after bowing down to our Mother and with her blessings. She used to come downstairs at about 6.30 in the morning in one of the rooms on the eastern row of the courtyard. It is here that Bula, the sadhak in charge of the Electric Department, is lodged now. A raised seat with velvet covering was placed for her. Just beside her in a tray were heaped flowers of various kinds. One by one as we approached to bow down to her, she gave each one of us a flower after placing her hand on our heads. It was through these flowers that she gave her directions. We too took the flowers with an ardent effort to divine what she meant. With the flower in hand we used to come out of the room, except a few who sat in meditation there. Every living moment in those days was eked out in an attitude of becoming aware of the reason why life here was bound to something other, never to be forgotten, and why one was here. That which we felt seemed to open out a new line giving a fresh turn to everything – a change of one's point of view, as if we were learning things anew in a new light. Life was stirring to a new dream. Something within seemed to become alive rendering intensely concrete our asking and receiving.

Sahana Devi *Breath of Grace* (1973), pp. 111-12

Compiler's Notes: When Sahana Devi came to the Ashram in November 1928, the morning meditation at 7.30 in the Meditation Hall upstairs had already been replaced by the morning Pranam at 7.00 in the Pranam room downstairs. This room, later occupied by Bula, head of the Ashram Electric Service, is in between A.B. Purani's room on the east of the Meditation House and the staircase which leads to what was Kamalaben's room on the first floor of the same house. The change of venue was apparently due to the repairs carried out in August-November 1928 to the Meditation

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Bula-da's room

Hall upstairs. But the Mother also was not well at the same time and the morning meditation was suspended for a few days from 26 August 1928. Though the morning meditation was resumed temporarily on 6 September 1928 (we don't

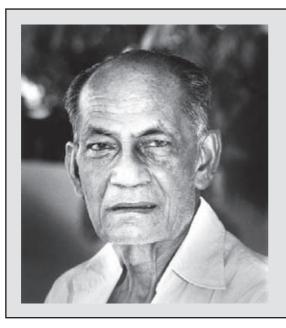
know where because the Meditation Hall upstairs was still being repaired), the Pranam in Bula's room commenced on 17 September 1928, according to the diary notes of Rajangam. Henceforth, the Mother only blessed the disciples and gave them flowers instead of meditating with them. However, a few disciples, such as Rajangam, were allowed to meditate in the room while the others did Pranam to her. The flowers which the Mother gave became a powerful means of spiritual communication and the disciples often noted down their significances in their diaries. Kapali Shastri, for example, wrote on 22 February 1930:

Pranam in the room:

I felt receptive in the middle of the eye-brow and at the back of the head.

Integral Radha through Radha in the Vital.¹ ₩

¹ Collected Works of Kapali Shastri, Vol 3, p 37. The last line seems to be a sentence based on the significances of the flowers which Kapali Shastri received from the Mother.



Nirod-da passed away on 17th July 2006 at the age of 102. His body was laid to rest at Cazanove.

We are planning a feature on Nirodda for our forthcoming issue. If you would like to contribute to it, please send us your articles by the 15th of October.

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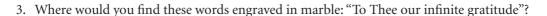
Quiz Time!





Here are the questions for this issue. Send us your answers by email...

- 1. What is the name of Ashwapati's wife in Sri Aurobindo's epic poem Savitri?
- 2. "It is perfect love that is the key to a perfect knowledge". In which book written by Sri Aurobindo would you find this sentence?





- 4. Which sadhak of the early period of the Ashram lived in the room which is just opposite Madhav Pandit's office inside the Ashram Main Building?
- 5. What is the spiritual significance of the white trumpet-shaped flowers which grow on a big bush near the verandah where notices are put up in the Ashram Main Building?

ANSWERS TO THE QUESTIONS OF THE PREVIOUS ISSUE:

1. Why was Rabindranath Tagore so upset when he saw the review of his newly published novel Home and the World in one of the leading newspapers of Calcutta?

The man who had reviewed the book suggested that the character of the revolutionary who runs away at the end (the role played by Soumitra Chatterji in Satyajit Ray's film of the same name) was based on Sri Aurobindo. Rabindranath Tagore was so offended by that bit of the review that he wrote to the newspaper which had published it to not only vehemently deny it but also to state how highly he regarded Sri Aurobindo. [Ref: *Sri Aurobindo — His Life Unique* by Rishabhchand, page 145]

- 2. Sri Aurobindo was arrested from the house where he was staying on Grey Street. The street has since been renamed. What is it called now?
 - That street is now known as 'Sri Aurobindo Sarani'.
- 3. Shortly after he arrived in Pondicherry, Sri Aurobindo wrote a series of short stories which were all based on some occult phenomena. This collection of short stories never got published. What happened to the manuscript?

The manuscript was put along with other papers in a trunk which was hidden in the house of a local disciple when news was received that Sri Aurobindo's house (on St. Louis Street) was going to be searched by the French Police. Several months afterwards when the trunk was brought back it was found that the manuscript had been eaten up by white ants! Only a couple of stories had survived.

- 4. How are Sri Aurobindo's and Shakespareare's names inseparably linked?

 The house in which Sri Aurobindo was born is on a street now called Shakespeare Sarani. The house where he lived in Manchester was also on Shakespeare Street.
- 5. What is the spiritual significance of the marigold flower which is so commonly seen in all religious ceremonies in India?

The spiritual name given to marigold is 'plasticity'. This is a bit of an irony since religion sorely lacks plasticity. Or is religion attacted to plasticity because this is what it lacks?

