

ICTP: Professor Salam's gift to scientists

By Tasneem Zehra Husain

LAHORE: It is a year ago that Professor Salam passed away, on November 20 1996.

It is not my intention here to bring up political issues, though some surrounded his life; it is not the time for that. It is not even the time to scream the thought that has been in my mind ever since I set foot in Trieste: had it not been for the short sightedness and weird priorities of our Govt, the ICTP (International Centre for Theoretical Physics) and all its intellectual richness could have been in Pakistan, as originally planned.

Many know Professor Salam as Pakistan's first Nobel Laureate. Some may also have heard that he set up a Centre for Physics in Italy. It is my intention to give you a glimpse of the Centre — this second, and perhaps even greater, achievement of his. He put the last thirty years of his life into it.

Perhaps, if you can see what sort of place it is, you will see what sort of a man he must have been. What vision, what commitment and what enthusiasm he must have had. He was able to inspire and transfer these emotions to others, and so the Centre carries on his legacy after him.

If I introduce you to the Centre, I am in a sense, introducing you to Professor Salam. I hope once you have read about the contribution of this Pakistani to the world, you will salute him for what he was, and feel proud to call yourself a Pakistani.

But no two people at the ICTP will speak the same language, and none of us will know Italian. How on earth will we communicate? That was one of my biggest worries as I set off a year ago, to the International Centre of Theoretical Physics, in Trieste, Italy.

I have learnt a lot in these past twelve months but perhaps the most important and abiding lesson was that communication goes deeper

than languages and words. It is about people, experiences, feelings and souls—and these are universal.

The ICTP was set up by Professor Abdus Salam over thirty years ago, and is funded by IACE, Unesco, and the Italian government. It is a top class research institute which has brilliant scientists working there through the year, and hosts of others frequent conferences. Every year, thousands of scientists from developing countries are invited to interact with the best people in their fields. Amazing resources are put at their disposal, and endless opportunities are around every corner.

That was what Professor Salam had wanted. He believed the developing countries need to arm themselves with science if they are ever to make it to the top. Science gives you technology and hence resources. It also gives you knowledge, and hence self respect. He believed developing countries, if they came together, could help each other more than anyone else would. The Centre is the one little heaven in this world where, as a scientist from a developing country, you are a first class citizen, and the red carpet is rolled out for you. They will help, almost superhumanly, with passport and visa problems, and do all they can to get you there.

The ICTP is all this and more. To me, for a year, it was home. I was selected, along with 29 other students from across the world to participate in a year long post-graduate diploma programme in one of three areas: condensed matter physics, high energy physics, or mathematics; the point being to expose "promising young scientists from developing countries to top level research early on in their careers". But that's not all they do.

I remember the first day of class. October 1, 96. We were so unsure. The place was foreign to us all. Hardly anyone could speak their native language and be understood; there were just so many nationalities

floating around. The initial introductions were made; everything was, well, so tentative. As we sat having breakfast that first day, we drew a map of the world and filled in the countries we came from. Most of it was shaded by the time we were through.

The eleven people in my group were from eleven different countries and ranged in age from twenty to thirty. Communication was limited to basic English. We really had nothing in common, it seemed. Except

had created or helped create. It was an amazing and awe inspiring experience. It goes without saying that we learnt a lot. What is surprising though is the amount we learnt from each other through long discussions and working together.

Once we started talking we realised how much we had shared without ever knowing it. So many things from our cultures were common; social setups, customs, even certain foods or words. We began talking about our lives at home. We



Professor Salam: creator of a community of scientists

the fact that we all felt so isolated.

Then the assignments started pouring in, and we realised we had a lot in common — the present. The experiences we were going through then, the day to day challenges we faced, the unfolding of a new life. And so we started talking about these things we shared.

Talking to each other was helpful and also fun.

We were taught by world class physicists; those who were trailblazers were showing us the paths they

discussed our religious, political systems, educational systems, the problems our countries faced. So vivid were the pictures thus painted, so clearly could we see a country through a friend's eyes that it became almost home to all of us as well. We saw photographs, heard stories, conjured up images of everyday life, till we might as well have lived there ourselves. These countries were no longer shaded areas on the map, or even headlines in the news; they were just homes

we hadn't visited yet.

Out of this international potpourri we emerged with a common identity; we are the scientists of tomorrow; we share a common direction; to further knowledge and better the lives of people in our own and each other's countries. We evolved a common culture, as we lived the year out. It was based on songs and long walks in the neighbouring Miramare Park, which according to Diploma Course tradition, holds "all the keys and all the answers". The park was a central part of our lives. Feeding the turtles and fish in the pond became a daily ritual. With left-over bread in our hands, a small troop would march down after lunch. Keeping an eye open for the elusive deer became second nature. A walk down to Miramare Castle was magic every-time.....it was just what we needed when equations started chasing each other in our heads. And for times when life really got us down, we'd go up to a special lookout from where we could see the shimmering blue splendour of the Adriatic Sea, spread out in front of us.

Then there were the conferences and workshops. The thrills that came with them. Someone or the other was always running into our room shouting "Guess who I just saw!" Sitting through lectures at these conferences, we went from understanding nothing to the point where we had heard so much that we finally began to see what they were saying. Conferences also meant not knowing whether the person at the next computer was terribly famous or just as confused as you were. They meant getting to the cafeteria before the queue became unbearable. All of a sudden, "our" Centre was overflowing with people who in our mythology were living legends. It was an amazing feeling. We saw these people giving seminars; and we concentrated. We also saw them late in the afternoon, sitting way at the back of the hall, talking to each other, during

someone else's seminar..... and we smiled; to fresh graduates who are wondering how on earth they will ever find the mental stamina to sit through talks from 9 till 5, and concentrate the whole time, that sight was the answer to a prayer.

My one intense year at the Centre just came to an end. Many tears were shed as we parted, each to walk a different path. Yet not one of us feels as if we are travelling alone, and that makes all the difference in the world. E-mails fly back and forth every day. Someone's read a good paper, someone's found a good book someone has a problem, someone just needs to touch base.

Between us we have created something special. The lines on the map that divide our countries seem dark and strong, but our relationships rise above them. Being true to who we are, retaining our identities, we have each been able to love our own country so deeply, that we have made others love it too. We have been able to see through the false barriers that seem to divide us, without compromising on self-respect, or love for our homeland.

Our relationships are between people, but also between future scientists. When one day, comes our turn to make decisions, it will count for a great deal that we have "family" in so many countries all across the world.

A little over a year ago we came together for the first time, as young scientists, united in the quest for knowledge. We discovered we share common problems, common interests and common goals. We fight similar constraints, and dream the same dreams. We stand together today, by choice. What keeps us together is the happiness, the courage and support we find in our mutual friendship. What brought us together was science. What keeps us together is love.

The ICTP is a place that forges such friendships. What more need I say?