VATLY NEWSLETTER

"The fate of our nation must be in the hands of its people."
Chu Hao

CONTENT

This eighteenth issue of the ***VATLY NEWSLETTER*** opens with the traditional ***NEWS FROM THE LABORATORY.*** Tuan Anh and Hoai report on the visit to VATLY of Françoise Combes, Thibaut Le Bertre and Frédéric Boone and the ***ASTROPHYSICS LECTURES*** they gave on this occasion. Nhung, Dong and Thao tell us about their contribution to the USTH master programme on ***SPACE AND APPLICATIONS***. Earlier this year, Diep attended the ***2013 GLOBAL YOUNG SCIENTISTS SUMMIT*** in Singapore: he reports about this experience. Thao reports on the visit to the lab of ***VIET PHUONG AND HOANG TUY*** and the enriching exchanges we had with them. Diep and Nhung have interviewed ***Pr CHU HAO***, a former Deputy Minister of Science and Technology, famous for his actions in favour of better education and research**.** Following tradition, we close the issue with a ***PHOTO ALBUM***.

NEWS FROM THE LABORATORY

Under this heading we review briefly the progress of the work of the team and the main events in its life.

With Tuan Anh and Hoai back in Ha Noi after four months in France working hard for their PhD, and with our radio telescope tirelessly tracking the Sun, the team effort concentrated, more than ever before, on astrophysics.

Our observations of solar oscillations at the percent level and with periods in the 5 to 7 minute range, and the analysis we made in comparison with similar observations by the Australian Learmonth observatory, triggered sufficient interest among experts in the field to justify a publication in Solar Physics. Our paper has now been accepted and will be published shortly. Meanwhile, we keep taking additional data in the hope to clarify the origin of the effect; we feel today that the oscillations are somehow related to solar activity and multipathing in the ionosphere, but we have no solid evidence for it. Diep is in charge of collecting new data and analysing past observations, which he does together with Phuong, one of the two young students who had joined us for their graduation dissertations. She has successfully completed her work and has presented it at the Hanoi University of Sciences, obtaining the highest mark. She will now work with us for her master thesis, under Diep's direction, on the operation and exploitation of our radio telescope, collecting and analysing data from the Sun and other major radio sources.

After Phuong's presentation. From left to right: Diep, Nhung, Phuong's sister, Bac Pierre, Phuong, Cuc, Hoai and Dong.

Her team-mate, Cuc, was less fortunate. While having also completed her work with us, she could not defend it yet: being in a special class of the university having the ambition to reach international standards, she must first pass an English language test, which she failed. This is a prerequisite to the presentation of her dissertation. We wish for her that this will happen soon.

Recently, the harsh tropical weather, with heavy rains and sudden temperature changes,

jammed the telescopic arm of the telescope. Dong and Diep managed to fix it and have it back in operation after only a few days of interruption.

Hoai, together with Nhung, works on a star at the end of its life, a so-called Asymptotic Giant Branch (AGB) star that is releasing in outer space its gigantically expanded atmosphere, pulsating in convulsions of agony. She looks at the CO component, far enough from the star to allow for molecule formation but not too far to avoid dissociation from the interstellar ultra-violet radiation. Evidence for a bipolar outflow, in the form of two jet-like polar winds with velocities approaching 10 km/s, makes this case study particularly interesting. The challenge is to produce a model that describes well what has been observed in the hope to better understand the dynamics.

Tuan Anh is progressing fast on the analysis of interferometer observations of the host galaxy of a gravitationally lensed quasar (z=2.8). Early results have already been published in Astronomy and Astrophysics Letters and Tuan Anh is now polishing his work, fine tuning parameters, evaluating systematic uncertainties, etc, in the tradition of careful thesis work.

Frequent e-mails with Thibaut Le Bertre and Frédéric Boone, their thesis supervisors in France, help us getting initiated to the secrets of their fields as they patiently answer the many questions we may have.

Nhung has been actively following the work of her younger colleagues, providing help, advice and guidance. She contributed closely to Hoai's work and will spend with her the last four months of the year at the Observatoire de Paris, in Thibaut's laboratory, LERMA (Laboratoire d'Etude du Rayonnement et de la Matière en Astrophysique). It will be for her a good opportunity to be embedded in a prestigious research environment and to establish contacts with new colleagues. We received for this financial support from the French CNRS, in relation with the LIA agreement (Laboratoire International Associé), which is deeply acknowledged. In Ha Noi, she has taken an active part in teaching and training by giving a series of lectures on "Introduction to Astrophysics" at the Ha Noi University of Sciences and by assisting Eric Nuss at USTH with his lectures, exercises and examinations (see report below).

The first year in the life of the USTH master "Space and Applications", driven from France by Pierre Encrenaz, Yannick Giraud-Héraud and a host of active and enthusiastic colleagues, has been for us an opportunity to help with the organisation of lab work: Dong and Diep on radio detection, under Alain Maestrini's guidance, Dong and Thao on particle detection, Nhung on interaction of particles with matter. At the same time, it gave us an opportunity to set up a training bench, which could be used by the Institute, as well as by other Institutes of Vinatom, to train young scientists and make them familiar with techniques and methods of particle detection. Dong is in charge of this project, which comes in response to our desire to make ourselves useful for our host institute; he will report about it in August, at the 10th National Conference on Nuclear Science and Technology that will take place in Vung Tau, at the south-most part of the country.

The lectures given by French scientists in the framework of the new USTH master were also for us an opportunity to make new friends and attend their seminars. Catherine Prigent, who is working on satellite observations of the Earth, was one of them and we particularly enjoyed sharing a lunch with her.

Thao presenting her thesis.

Thao has now entered the last straight line in the marathon that the defence of her PhD thesis implies in the exceedingly bureaucratic Vietnamese system. She successfully went through the six preliminary presentations she had to give of her work and her thesis has been printed

and distributed. Last Tuesday, she presented the whole thesis work in front of a panel at the Institute of Physics. This was the last obstacle before the final presentation and she passed it successfully. She must now send copies of her thesis to 50 (sic!) Vietnamese PhD's and collect at least 15 positive reactions from them before having the right to give the final presentation. Such is the rule. The contrast between the complexity of the procedure (even the font size and the line spacing of the thesis are defined by the Ministry of Education!) and the candid hope of the Minister of Education to have 20000 new doctors by 2020 is amazing. Thao has submitted a summary of her thesis work to Communications in Physics (Vietnam) that has now been accepted for publication. With Hiep's paper on the detection of HI in the Galaxy, that has also been accepted, this will make two VATLY papers in the same issue.

Over a month ago, we had the pleasure to have Hoang Tuy and Viet Phuong with us. They had accepted our invitation for lunch and came early in the morning to have a chance to talk with the team. The readers of our Newsletter know how proud we are to count them among our friends and how happy we are to have the honour to listen to them… and to have them listen to our hopes and ambitions. Thao reports about their visit elsewhere in the letter.

We are now preparing for the astrophysics school and the conference that will take place in Quy Nhon next week on the occasion of the inauguration of the International Center for Interdisciplinary Science and Education that Tran Thanh Van is setting up. Diep is active in the organization and will present VATLY to the conference; Nhung will present our solar oscillation results. Pierre published an article in Tia Sang on this occasion.

Astrophysics lectures in May. From left to right: Dong, Tuan Anh, Phuong, Nhung, Frédéric, Hoai, Thanh (who gave the welcome speech), Françoise, Thibaut, Thao, Pierre, Yannick and Diep.

We are very happy to conclude this brief account of our recent life by congratulating Alain Maestrini and Vu Thanh Huyen who married in Paris in June. We send them our most friendly wishes of long lasting happiness.

ASTROPHYSICS LECTURES: A VERY SPECIAL MAY DAY HOLIDAY

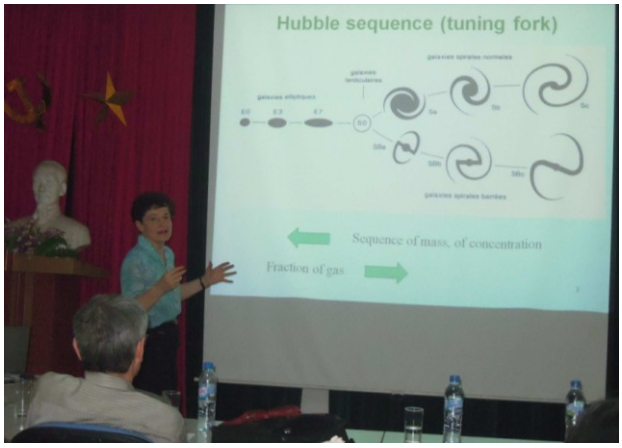
The May Day celebration, which in Vietnam accompanies that of the anniversary of the country's reunification, has been an opportunity to invite in Ha Noi the thesis co-supervisors of Tuan Anh and Hoai, Frédéric Boone and Thibaut Le Bertre, together with Françoise Combes, to give us a series of lectures. They came with their spouses, which was an excuse for us to mix pleasure and business in the organisation of their stay. Hoai and Tuan Anh report on these happy days.

May Day this year was a special day. While everybody else had left Ha Noi for holiday, we stayed at home to enjoy being with our friends astronomers, who had come from France to meet us and give some lectures.

As newcomers to radio astronomy, we very much need guidance, help and support from our mentors. The visit to Ha Noi of our thesis co-supervisors, Thibaut Le Bertre and Frédéric Boone, together with Françoise Combes, a world expert of galaxy evolution and formation who very kindly accepted to join them, had been planned earlier in the year. Their presence has been for us a precious opportunity to learn about the current status of the fields on which we are working, and to strengthen the relationship between our friends and us.

The topics addressed by the lectures were directly related to the subjects of our PhD theses: Thibaut on AGB stars, their formation and properties, and Frédéric on the search for high

redshift galaxies and related techniques; Françoise Combes gave an overview of galaxy formation and dynamics, including the questions related to dark matter. The course was for us an opportunity to present our own work, Hoai on an AGB star, RS Cnc, and Tuan Anh on the gravitationally lensed host galaxy of a z~3 quasar, RXJ0911.



Françoise lecturing on galaxies.

Diep talked on cosmic rays and presented recent results from the Pierre Auger Observatory, while Nhung showed results on solar oscillations from a joint analysis of data of ours, using our radio telescope, and data from an Australian solar observatory. Together with Dong and Thao, we showed our friends around the laboratory and its installations, radio telescope and particle detectors. Thibaut and Frédéric spent an additional full week in Ha Noi, respectively before and after the school, sharing their time between working with us and sightseeing. It was a very useful opportunity for them to understand the working conditions in Vietnamese research and for us to better understand points which had been unclear until then.

During the school, we organized some events aimed at introducing Vietnamese culture and tradition to our friends and we guided them to some sightseeing places: Hoai, Thao and Tuan Anh took Thibaut and Françoise to the Tran Quoc Pagoda, which has a long history dating back to the VIth century and is today the centre of Buddhism in North Vietnam. We also took them to Van Mieu, the Temple of Literature, the first university in Vietnam and an icon of Hanoi. Thao showed her talents as a guide, always having many stories to tell illustrating the tour. We all enjoyed the water puppet show at Thang Long Theater and we had a very good time with Thibaut and his wife, Patricia, when visiting the ancient village of Duong Lam and the Thanh Chuong Palace, where many vestiges of ancient Vietnamese culture and daily life are kept and nicely displayed.

At Tran Quoc pagoda. From left to right: Hoai, Françoise, Thibaut and Thao.

We hope that our guests will keep a good memory of their stay and will be eager to come back some day.

A MASTER ON SPACE AND APPLICATIONS AT USTH: A PROMISING EXPERIENCE

The University of Science and Technology of Ha Noi is a new Vietnamese university being established in Ha Noi with the support of a consortium of French universities. It offers this year for the first time a master programme on "Space and Applications" to which we contribute with tutorials and with the organisation of some lab work. Nhung, Dong, Diep and Thao, who take part in the programme, report about this first experience.

For the first time this year, the University of Science and Technology of Ha Noi (USTH) has offered a master course on "Space and Applications". Pierre Encrenaz and Yannick Giraud Héraud were the main initiators, seconded by a host of lecturers collaborating within a consortium of French universities. On the Vietnamese side, Pham Anh Tuan overviews the

practicals, but the Vietnamese contribution is otherwise minimal; it will hopefully grow quickly with time. Nine students had been recruited around the country by Pierre Lesaffre and Nguyen Luong Quang; it turned out that they did an excellent job in selecting highly motivated students, above the Vietnamese average, some of which are eager to learn and prepared to work hard. However, they come from very different horizons and do not share a common background of basic knowledge; while none of them, as one could expect, masters all the basic topics that are ideally necessary to follow effectively the lectures, several have a solid enough background and show both the ability and the determination to catch quickly. Altogether, the four of us who took part in the training programme, Diep, Nhung, Dong and Thao, got quite a positive impression. Nhung acted as tutor for Eric Nuss' lectures on particles and interactions, Diep, Dong and Thao organized some lab work using our radio telescope and a stack of scintillators that had been assembled for Phuong's dissertation. In addition, Dong gave a hand to Damien Prêle on electronics lab work in USTH premises.

Lab work at USTH. From left to right: Dong, Diep, Damien, another Diep, Long and another Thao.

The experience with lab work has been that the students were very interested but, for most of them, had no previous familiarity with hardware. A few of them had some, however. The result was a rather inhomogeneous class. They were grouped in three teams of three, each team spending six hours on each topic. The VATLY tutors were starting by giving an introduction for some two hours, followed by practical work, first with, and then without, the tutors giving help and advice. The students had to produce a written report at home, one per team, for which they were given marks by the VATLY tutors. Time was obviously much too short for these marks to be very meaningful but there has been a unanimous feeling that the time spent on these lab works, both with the telescope and the scintillator stack, has been extremely useful in making the students familiar with some basic tools and methods of experimental and observational physics. Moreover, for many of them, it triggered interest in practical work which was new to them. It is already clear that some of the students are well prepared to take full advantage and profit from these sessions, while some others will have a hard time to catch and will probably not reach a level sufficient to master the proposed subjects.

The experience with the lectures was similar: a general excellent motivation, a good determination to learn and to work, but very different backgrounds, sometime solid enough for the missing pieces to be quickly put together, sometime not. An additional problem is the extreme condensation of the lectures in time. In only ten days the students were supposed to digest eight very dense lectures, thirty hours in total, which was obviously way above their ability. The more so because, at the same time, they also had to follow another series of equally dense lectures on fluid dynamics. The hope is of course that they will individually study the lectures later on using Eric's PowerPoint presentation. In general, the level of English is quite good, well above average for Vietnam, but many scientific terms are unknown to the students, which may cause problems during the lectures. Nhung helped them in a special session with exercises that Eric had given, much of which they could have mastered if they had been given more preparation time. An examination was held a month later, with much of it closely inspired from these early exercises. Again, marks were given, obviously not very meaningful.

The general impression is very positive and some of the students will undoubtedly benefit from what will turn out to be a master course of very high quality. It has been a pleasure for us to take part in this experience. We are looking

forward pursuing it in the future and we are prepared to play a more active role and to take higher responsibilities in tutoring and teaching.

THE 2013 GLOBAL YOUNG SCIENTISTS SUMMIT IN SINGAPORE

Diep had been selected as one of the five Vietnamese representatives to the 2013 Global Young Scientists Summit that took place in Singapore earlier this year, an international gathering "for bright young researchers from all over the world to be inspired by internationally eminent science and technology leaders that discuss the latest advances in science and technology, and how research could be harnessed to address major global challenges". He reports here about this experience.

In January this year, I attended the *2013 Global Young Scientists Summit* in Singapore, a multi-disciplinary event, covering chemistry, physics, medicine, mathematics, computer science and engineering. The theme this year was "*Advancing Science, Creating Technologies for a Better World*".

We were five Vietnamese, from Ha Noi, Saigon and Tan Tao, among some 300 participants from all over the world.

The five-day program addressed key areas of science and research, technology innovation and society and solutions to global challenges. The first three days included plenary lectures by invited scientific leaders in the morning, followed by informal discussion sessions in small groups, and interaction with the speakers in the afternoon. It has been a very inspiring experience to listen to prestigious scientists and talk to them after their talks or when having lunch. How they overcame difficulties to succeed, their passion for science, their determination and their integrity have been setting for us a good example to progress in our life as scientists.

The summit was an opportunity to meet and make friends and to talk with colleagues from all fields of sciences. We exchanged our experiences and established contacts that might become the seed of future collaboration.

The last two days were devoted to visits to universities, research centres and other research and technology landmarks of Singapore. Cultural events were also organized to illustrate the diversity of Singaporean cultures. We met the President of the Republic of Singapore at Istana Palace and listened to a speech by Deputy Prime Minister Teo Chee Hean on the first day of the Summit.

The event left us with a strong positive impression about Singapore, its potential, its international relations, its responsible leadership and its awareness of the importance of science and technology for the development of the country. This tiny country, which separated from the UK in 1963 and from Malaysia in 1965, is a 700 km^2 island with no natural resources, not even fresh water. It hosts a multiethnic, multilingual community that has successfully overcome the difficulties it had to face for the country to come of age and has now a GDP per capita of about 60'000 USD. At the same time as it hosts many multinational companies, it manages to keep 40% of its territory covered by trees.

Vietnamese participants at the Young Scientists Summit in Singapore. From left to right: P.V. Dong (theoretical physicist), N.T Tao (biologist, snake expert), Diep and Cuong (renewable energies)

A reason for such a success is probably the high respect for people having skills and talents. From top national leadership down to heads of laboratories, leading positions are held by educated and capable people, many of whom graduated abroad at top universities. It is your skill, talent and knowledge that matter, not your passport. A number of incentives are meant to attract talents to the country, including the ease to acquire Singaporean citizenship for skilled people.

A strong determination to develop science and technology, with clear ideas about priorities, materializes in the provision for adequate material and human resources. Particularly strong support is given to fields such as clean water and environmental technology, biomedicine, renewable energies, information technology... but, unfortunately, astrophysics does not belong to the list. Altogether, it was for us, the foreign participants, and in particular those from Vietnam, very instructive to learn about such successes and to think about the lessons that could be learned from their example to accelerate progress and development in our own country.

A VISIT FROM HOANG TUY AND VIET PHUONG: A MEMORABLE ENCOUNTER

Hoang Tuy and Viet Phuong, who are famous in Vietnam for their influence on governmental circles for making the country progress to the better and, in particular, for promoting excellence in education, kindly accepted our invitation for lunch and for spending a morning discussing with the team. Thao reports about this event.

It had been a long time since our last encounter with Hoang Tuy and Viet Phuong, two eminent Vietnamese intellectuals famous for their action in favour of a better Vietnamese education and, more generally, a better Vietnam altogether. They are of the generation who gave their whole life to the country. Their prestige is such that they can freely say what they think. As they are friends of VATLY, we invited them to spend a morning with us before having lunch together.

The conversation started around a teapot on the recent news that the members of the Parliament had been invited to express a vote of confidence on 47 individuals holding key positions in the Vietnamese government; the score of the Minister of Education and Training was among the lowest. On the contrary, the Minister of Science and Technology came out all right. Rather than being a personal attack against the Minister of Education, Hoang Tuy said that this result simply illustrates the general state of despair of the population concerning education. He insisted that better wages are a prerequisite to the promotion of social development in general, and education in particular. He also pointed to the need for a proper management of human resources, allowing, in particular, for an assessment of the achievements implying a fair advancement and promotion policy. Current civil servant salaries are blatantly low compared with the private sector and do not match the cost of living; such a situation forces civil servants to find other resources in order to survive and young students to move away from teaching and research. Moreover, in spite of the issue having been repeatedly discussed for over twenty years and recurrently addressed by the Party in its congresses, wages have increased slower than inflation would have required. The present situation is particularly bad nowadays, in a context of global economic crisis and with the Government having to face the bankruptcy of several state-owned companies.

Viet Phuong and Hoang Tuy in the lab.

Next, in the context of the re-examination of the 1992 Vietnamese Constitution, which will take place around the end of the year and which is triggering ardent debates on the Web, we asked Hoang Tuy and Viet Phuong a few questions to help us having a broader view on these issues. In particular we wondered which fraction of the Vietnamese population really understands what Marxism-Leninism means. Hoang Tuy expressed his views and analysis in full sincerity and open-mindedness, stating that the past twenty years are a most intricate period in the recent history of Viet Nam, which has witnessed many changes and is both difficult to grasp and interesting to analyze.

Interesting and instructive. He said that he did not believe in the universality of political theories, but he trusted that there was a universal dimension in each period of history, with values that change with time and with the context. He had been in Soviet Union at the end of the 1950's. He had seen a healthy social life along with the development of a science and technology of high quality. When he returned, four years later, he found that the landscape had changed. At that time, Soviet Union was no longer receiving the important war reparations that had been granted to it after the war and poverty and corruption were rising, while morality was declining. It was for him an illustration of the fact that it is not the doctrine of Marxism-Leninism that matters but the way in which it is put in practice. He also mentioned his experience with living in Sweden, where he spent two years, a country often considered as an example of democracy, equality and respect of human rights. In the late seventies, he witnessed there the transfer of power, after years of ruling, from the Social Democratic Party to another party, when its policy of social welfare was no longer supported by the people. From his experience, flexibility is important for being able to change and better adapt to new circumstances. We were listening attentively to him. From our short experiences of spending time abroad, we could understand what he meant and share his strong desire to use the lessons of such experiences to progress in our own country. When I shall die, said Hoang Tuy, I would like to know that I have left a better world behind me.

Viet Phuong answered our question in his own style. He remarked that no country in the world had ever succeeded to build socialism in its exact essence and signification; nor has capitalism, in its exact essence and signification, existed in the past 120 years. Very few Vietnamese understand that, most of them do not feel concerned with the question. Who knows where is the world heading today? He said that the United States, it seems to him, stand rather high in terms of democracy, human rights, living conditions, equal opportunities. Yet, their society is not exempt of many bad features of various kinds.

The conversation went on the whole morning and continued at lunch in a pleasant and

From left to right: Viet Phuong, Thao, Pierre, Nhung and Hoang Tuy.

relaxed atmosphere, Hoang Tuy and Viet Phuong putting us at ease to express ourselves openly and frankly. We mentioned many issues that are of current concern for us, such as the difficult problem of the Vietnamese islands being claimed by China and the presence of the US Navy in the region, or the recent imprisonment sentence against two young students who had openly criticized the Government on the Web. Viet Phuong was peppering his talk with rhymes and stories illustrating that what we were talking about was indeed not new. I particularly enjoyed Viet Phuong's answers to my questions concerning what was differentiating Ho Chi Minh's ethic from Buddhism. While mentioning many common points, based on a high respect of humanity, he illustrated how the first puts more emphasis on collective ethics, the second on individual ethics. Listening to him filled up most of our lunchtime and I learned a lot about the major religions of today's world.

We felt deeply grateful to Pierre for having given us the opportunity to meet Hoang Tuy and Viet Phuong. Interacting with them has broadened our views on our country and the society in which we live.

AN INTERVIEW OF Pr CHU HAO

Professor Chu Hao is a former Deputy Minister of Science and Technology, now chairing a publishing house which he created with the ambition to promote higher cultural and intellectual practices in the country. He is famous for his action in favour of a better education and kindly accepted to come to

the laboratory and answer and comment questions from Nhung and Diep. After the interview, we invited him for lunch and could continue our very fruitful interaction with him in a pleasant atmosphere.

VATLY: As you know, we are doing our best to promote teaching and research in astrophysics in Hanoi, but the academic environment is not making our task easy: there is not much support for fundamental research and we have to face a heavy bureaucracy with obsolete rules imposed on us by people who are lacking a deep understanding of what we are after. Which are your views on the Vietnamese situation in both education and research and which advice would you give us to progress toward our goal as efficiently as possible?

Chu Hao: You are lucky to have Bac Pierre with you. He is a true scientist and an intellectual who has a good heart and a sense of responsibility toward science in general and Vietnamese science in particular. Without him, I think that your group could not have come into being and could not have grown. Doing research in Vietnam implies abnegation; it is not easy to attract people who accept self-sacrifice. The current strong decline of the academic environment makes your task difficult. Nowadays, even the phrase "doing research" has lost its meaning. Look at the scientific projects that are proposed each year at national level. The way they are handled and assessed shows how far the whole Vietnamese academic community has been departing from the basic values of science. It might be less surprising to witness such changes in the society in general, but it is saddening to see that even science has been contaminated. This decline goes together with that of general education, which has now reached a very low level. With such an education system, how could we have good science? Science deciders, from the Politburo down to lower levels, think of science in terms of market economy: they only care about how many dongs[1] you get out for each dong that you put in. They are only prepared to invest in science if they see an immediate benefit. They lack a clear view of the respective roles of fundamental research, applied research and technology. One encourages people to make money, but one forgets that without basic sciences, on the long term, one will lack the skills and talents that make it possible for the system not to collapse. Inventions and new patents are good at making the country emerge but without basic science, there cannot be any good applied research or technology. Look around in Japan or South Korea: it is so obvious. One does not measure the value of basic science in dongs, but in the quality of the ability of scientists to think and to create, the depth of their judgement, the sharpness of their critical mind. One cannot ask basic research to result immediately and directly into applications; when it does, it is indirectly and later; may be a century later, or 50 years, or 20 years... or even only two months if you are lucky... but you cannot tell beforehand. What matters is that research is an excellent training ground to shape people having the required skills and abilities. In Vietnam, deciders do not generally understand that. We are a few who feel desperate to see such a decline, such as Professor Pham Duy Hien, Professor Hoang Tuy[2] and myself, but we do not know how to change to the better. For a long time, there will still be difficulties and obstacles along the road you have chosen to take; one can fear that the Vietnamese education system will not significantly improve for decades and you have to cope with it. Backward thinking, bureaucracy and political influences make it difficult to hope for a change

[1] Dong is the unit of Vietnamese currency (20000 dongs~1 US dollar).
[2] Prs Pham Duy Hien and Hoang Tuy are well known to the readers of our Newsletters: see issues number 5, 15 and 17.

on the short range. Yet, there will always be room for some branches of science to develop in spite of this hostile environment. For you to exist, you have to collaborate with foreign research centres, to do research work of high quality, to publish in internationally recognised journals. The latter is very important; it is an objective criterion on which people who are not familiar with your field can assess your success. If you can continue like that, you will keep moving.

There is nothing concrete to hope for. Changing bureaucratic practices has been discussed many times at all levels but the system is still paralysed by bureaucracy and political influences. You have no choice but to accept the situation as it is and to struggle your way through by avoiding or overcoming as well as you can the obstacles which you meet. Fortunately, for basics research, you have the National Foundation for Science and Technology Development (NAFOSTED), which, until now, is a rather clean funding organisation with which you should work as much as possible.

Chu Hao in VATLY.

VATLY: What do you think of the science policy in Vietnam?

Chu Hao: As I just said, it does not encourage basics science and uses wrong standards and scales of values. The recent trend to encourage autonomy in research means to encourage making money, not to produce quality. Science lacks general guidelines. The resources invested in science are so unreasonably low that wages are insufficient to live and equipments are insufficient to work. The working environment is simply inadequate. In such a situation you have to be patient. I repeat, your only way to survive is to look for collaborations abroad and do your utmost to publish in international journals. It is not easy to work in Vietnam. If I look at my own case, I had been working at the Institute of Physics before moving to Hanoi University of Technology where I spent one year before going to France: during that time I did not have any international publication. I just managed to publish in some national journals. But when I went to France, from 1980 to 1985, I published yearly three articles on average and attended several international conferences. Was it because I had become cleverer? Of course, not; my brain was still the same but the environment was different. It is a fact that we have to accept. Yet, working conditions are more favourable today than they were at the time; you enjoy international collaboration, you have internet and if you have published an article you can attend conferences abroad.

VATLY: We know that you have often expressed concerns about the lack of respect for intellectual values and the decline of morality in the country. We share very much your concerns. Could you comment about that?

Chu Hao: The problem of Vietnam is not a problem of economics. If the government gave more freedom to the people and intervened less in their business, the economic situation would develop better, in particular in the private sector. Sooner or later, the problem of economics will be overcome; on the long term, however, our real problem is cultural. The foundation of our culture has unique features, but they are not strong. This is clearly demonstrated by the absence of any notable monument, writer, artist or musician whose fame goes beyond Vietnam's border. In literature, we have Nguyen Du[3], but his work is limited to a specific genre. There are good reasons for that, Vietnam having gone through so many

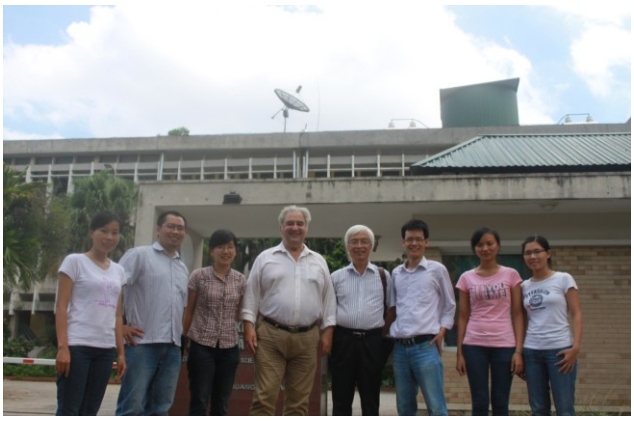
[3] Nguyen Du (1766-1820) is a Vietnamese poet famous for having written the Tale of Kieu, a young woman who had to suffer the worse insults and assaults to save the honor of her parents. The injustice of her fate, her resignation to accept it and her preserved purity in her depravation make her the most popular character in Vietnamese literature.

wars during its history, fighting for its independence, and its culture having been so strongly influenced by China. Yet, Vietnamese culture, while enjoying special features that make it unique and bright, lacks strength. So many wars have caused education to deviate from the general line of humanities. It suffers bureaucracy and political influence, especially for the generation of people who were born in the forties and fifties. The two resistances, against the French and the Americans, had an urgent need of people who were prepared to give their lives for the independence and reunification of the country. They did not need to encourage people to think creatively, I mean with independence of mind. There was creativeness in producing weapons and in fighting, but the priority was not creativeness for science or technology in general; it was not either developing individual personality. During wars, one must first be loyal to an ideal, a policy and a common goal; so much the better if one shows creativeness in fighting. But, generally speaking, after the August Revolution, education has kept suffering many shortcomings that are still with us today. The most important may be its inability at fostering human dignity; it does not encourage people to have a personality but to obey; it does not encourage people to be creative but executive. Since 1954, such shortcomings have kept growing. As a result, our fragile culture is unprotected and rather than progressing has been declining. A same trend has affected the domain of integrity and collective morality. Qualities that were the previous standard have been replaced by new ones. Displaying today the qualities that were common yesterday has become a real achievement: in the past, a kid who found a lost wallet in the street and took it to the police was behaving normally; no one needed to tell him to do so, there was nothing to wonder about; today, such an action is praised as outstanding and related in the media. The same with politeness, words that come from your heart, such as "Thank you" or "Sorry" are no longer very common. The same also with self-esteem, in the past an obvious quality, no point to talk about it; today, no later than this morning, one debates about it on television. In general, the scale of values has changed from praising individuals with a strong personality who give contributions to a better society to admiring those who have money and power. In the old days, shouting at a thief red-handed in the street would have made him run away; but today, witnesses just look at the scene without daring to intervene. These are alarming symptoms of the decline of morality in our society.

I should like to comment on the responsibilities of intellectuals and leaders within the big machinery of our regime. We must recognise today that fraud and corruption are favoured by the current regime, which offers insufficient democracy and does not promote freedom of expression. They are known to be the unavoidable products of totalitarian regimes. One may limit their bad influence but one cannot get rid of them. It would take a sudden awareness of the ruling party to stop corruption and deceit from growing. If the ruling party just cares about maintaining the present status as is, only God can help. Allow me to mention, in this context, the action and ideas of people such as Viet Phuong, Pham Duy Hien, myself, and our friends in Group 72[4]; what we are after is to contribute to a peaceful shift toward democracy in a non-violent way. Encouraging violence, whatever the reason, is a crime against the nation. Blood calls for more blood, violence for more violence. Our nation has already so much suffered of the recent wars, never again! This is why we shall never support any

[4] Group 72 is a group of intellectuals, including a very large fraction of Party members, recently famous for having launched an initiative including seven points and implicitly implying the end of the single party rule and changes to the concept of "sovereignty" and asking for a full recognition and observance of human rights.

action or allegation that would lead to violence, directly or indirectly. The way to a better society is through an increase of public awareness, understanding and knowledge. There may be a million people or so, including hundreds of thousands of internet users, who know what we are doing but others do not. Our newspapers are many, but they speak with a single voice. It even happens, sometimes, that they distort what we have said. But we must keep struggling for a better society where the machinery of the state will transform itself to be able to stop fraud, corruption and moral decline.



Chu Hao with the VATLY team in front of the Institute.

Let me add a few words about intellectuals, their role and their duties. We hear a lot of futile discussions about what it takes to be called an intellectual, but that is not my point. President Ho Chi Minh used to say that anyone with a college degree is an intellectual... of course, times have changed. But my point is that intellectuals must behave as responsible citizens and feel responsible toward the society to make good use of their knowledge. So called intellectuals that lack such a responsible attitude bear responsibility in the degradation of morality in the country. If they just keep quiet and are afraid of speaking up, they simply encourage the growth of deceit and corruption. What disturbs me is that I long thought that my intellectual fellow countrymen who behaved this way, simply feared that to speak up would prevent them from feeding their family, their main and priority struggle. But I found out that such was not the case; it turns out that many of them are indeed obtuse, to the point of not understanding that the country needs more democracy to progress. They bear responsibility for the moral decline; they should refrain from blaming the government, the party and the education system as the only responsible. Criticizing must be constructive, not for overthrowing the present regime but for awaking public awareness of questions such as human rights and improving public knowledge of our institutions, our constitution, and our legislation. We cannot decide on everything but the fate of our nation must be in the hands of its people, not in the hands of a party. We would like intellectuals to first understand what means a healthy civil society to later be able to build it and fight for democracy. Intellectuals can not be simply satisfied by their high academic qualifications, they must have a sense of responsibility toward the society in which they live. Many friends of mine wonder why I spend so much time and effort criticizing what I think is bad for the country: “Chu Hao, they say, why should you loose your time with politics?” I answer that I am not a politician; I do not have the skills – good or bad – that are required to succeed. I am simply trying to have a responsible attitude towards the most burning issues of the present society, towards the fate of the nation. This is, in my view, the duty of intellectuals: to behave as responsible citizens who want the best for their country. Cowardice is the main fault of Vietnamese intellectuals, a result of ideological oppression, which we must get rid of at any price. It takes courage to express criticisms in a way that is constructive. It takes courage to denounce obsolete regulations and laws that are no longer adapted to the reality and context of today: we must obey the laws, but, when they are stupid and become inadequate, we must change them. One should thank those who denounce bad regulations and bad practices, not put them in jail.

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Contact: vatlyhanoi@yahoo.com.vn

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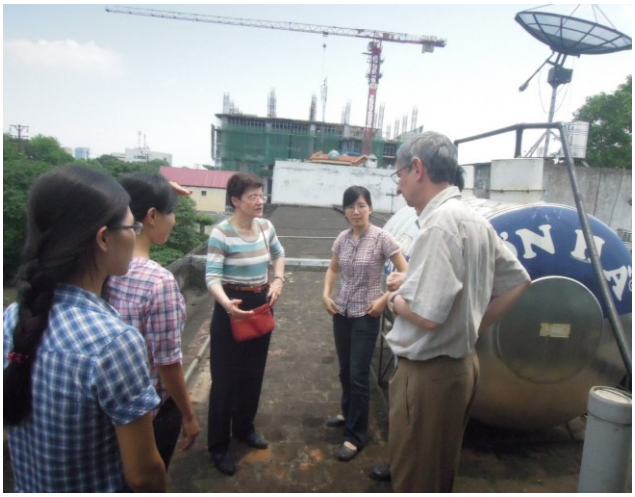
–PHOTO ALBUM –

After Phuong's presentation.



On the roof with Françoise and Thibaut.

USTH practical class with Dong in the middle.

Diep and Nobel laureate Ada Yonath, in Singapore.

At Hoan Kiem lake. From left to right: Hoai, Thibaut, his wife Patricia, Tuan Anh, Françoise and her husband Denis, Diep and Nhung.

At Hoan Kiem lake. From left to right: Phuong, Dong, Frédéric, Thibaut, Françoise, Nhung, Diep, Thao, Son, Hoai, Pierre, Nga, Patricia, Marie and Tuan Anh.

At Hoan Kiem lake, from left to right: Thao, Son, Hoai, Pierre, Nga, Patricia, Marie, Tuan Anh, Phuong, Dong, Frédéric, Thibaut, Françoise, Nhung and Diep.

A weekend in Quan Lan, VATLY and friends.

Thao after having caught oysters and fishes.

In Quan Lan: Phuong and Duy.

Hoang Tuy (2nd from right) at lunch with us.

Viet Phuong (2nd from right) at lunch with us.

Dong's son, Thanh Nam.

Dong's son, Thanh Nam.