

譚 志誠さん

(1987年6月2日～1988年5月31日滞在)

譚志誠 (TAN Zhi-cheng) さんは中国科学院大連化学物理研究所に勤務する研究者で、日本学術振興会の招へいにより1987年6月から1年間にわたり大阪大学理学部に滞在され化学熱学実験施設で研究に従事されました。彼は、大連で既に熱量計の設計と製作、およびそれを用いる研究に永い経験をもっておられ、従って来日直後カルチャーショックから立直ると(中国からの研究者の場合漢字が読めるのでカルチャーショックは永続きしません。実はそれがあつかうか否かもはっきりしません。)すぐに精力的に研究を開始されました。彼が活用した実験装置を挙げると示差熱分析装置、示差走査熱量計、低温用断熱型熱量計、中高温用断熱型熱量計、 $^3\text{H}/^4\text{He}$ 希釈冷凍型極低温熱量計、燃焼熱用



ポンプ熱量計等です。これらの装置で測定した試料の数を次に挙げると第1の装置で8件、第2の装置で6件……等々と限りがありません。標準的研究者の3～4年分を1年で完了させた彼の努力と集中力は今後余程のスーパーマンが現れない限り不滅のレコードとして残るでしょう。上の写真は実験中の譚さんです。しかし働きづめかと言うとそうではなく、1987年に広島大学で行われた熱測定討論会の終了後、山陽新幹線の便利をきらって、院生の助力を得て鈍行の乗継ぎで沿線の風景を楽しみながら帰阪したという余裕の持主でもあります。

下の写真は研究室で奈良へ遠足に行ったとき法隆寺で撮ったものです。このときには正倉院御物の前で漢文のテストをされたり(展示品中の漢語は現代中国人には難解だそうです)、また別の機会には幽玄道士の説明を求められかけたりと、中国からの来訪者ならではの文化交流が学生・院生らとのあいだに生じました。

譚さんはその名の通り誠実な人柄で我々を魅了して帰国しました。彼が大阪の1年を懐しく思い出してくれることを願ってやみません。

(T. M)



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September 23, 1988

Professors H. Suga and M. Sorai
Chemical Thermodynamics Laboratory
Faculty of Science
Toyonaka, Osaka 560
Japan

Dear Professors Suga and Sorai:

I am very pleased and honored that you have asked me for my impressions of the Chemical Thermodynamics Laboratory based on my stay in your laboratory for one year from June 2, 1987 to June 1, 1988.

It is well known that the founding of the Chemical Thermodynamics Laboratory of Osaka University was an important event in the last decade for thermodynamicists, not only in Japan, but also in the whole world, and the day of the opening ceremony of the Laboratory, June 13, 1981 has already stood as a landmark in Chemical Thermodynamic Science worldwide. Since then many scientists have been attracted to this laboratory—one of the first rate laboratories in the world concerned with the study of thermodynamics.

It was a great pleasure for me to be invited by you and JSPS (the Japan Society for the Promotion of Science) for the cooperative research project in your laboratory. Although I had learned something about the work of your laboratory from the " Research Report of Chemical Thermodynamics Laboratory of Osaka University " before I visited your laboratory, indeed, "seeing is believing". When I stayed in your laboratory, I was deeply impressed by the high quality and large quantity of the work of your laboratory. I realize that your laboratory is justly renowned internationally for the creativity, the reliability, and the high accuracy of the work that you have accomplished.

I was very fortunate to have the opportunity to perform many experiments by using various splendid calorimeters built in your laboratory. The use of computer to monitor and control experimentation was particularly pleasing to see. The computerizing of all calorimeters had already been completed, which established your laboratory among the premier calorimetry laboratories in the world. The adiabatic calorimeters, which are workable at very low temperatures, or at high temperatures, or under high pressures, or with small samples, certainly have to be among the best in the world today and you

should be justly proud. The equipment and apparatus available in your laboratory, such as the very low temperature calorimeter with a $^3\text{He}/^4\text{He}$ dilution refrigerator, the Automatic resistance bridges and the Calvet microcalorimeters are quite excellent. The subjects of research work selected by your group, as shown in the " Research Report of Chemical Thermodynamics Laboratory ", are both significant and interesting. Every research project, being carried out completely and carefully in your laboratory, is fruitful. I was particularly impressed by the distinguished and careful thermodynamic studies performed by your group, specifically the study of ordering process of ice for which Professor Suga received the Physical Chemistry Divisional Award of the Chemical Society of Japan for 1986.

During my stay in Japan, I visited some other laboratories in the field of thermodynamics at Tokyo, Tsukuba science city and Hiroshima, and I had intensive discussions with many Japanese scientists. From these visits I have formed the following impressions which are also related to your laboratory.

Thermodynamics is well represented in Japan, and there are many Japanese groups being active in this field. Some of these Japanese groups are well equipped and correspond to highest international standards. One of the leading and best equipped institutes in this field is the Chemical Thermodynamics Laboratory of the Science Faculty at Osaka University. It has been founded by Professor Seki and is now directed by Professor Suga. During the last decade your laboratory succeeded in getting a very high international reputation and concurs with so important thermodynamics centers as those at Marseille, France, Lund, Sweden, or a few places in the U.S. for top quality research in thermodynamics with an accent on calorimetry. This international reputation is demonstrated by the fact that Professor Seki has been and Professor Suga is being a member of the IUPAC Commission on Thermodynamics.

Thermodynamics is of fundamental importance for science and industry. Japan, as one of the leading industrial countries in the world, will have to promote this field that is in rapid development with respect to apparatus, experimental techniques, determination of data, correlation, and molecular theory. In my opinion it will be absolutely necessary to develop your laboratory to become an international thermodynamics research center so as to continue and expand your outstanding work and excellent contribution to worldwide thermodynamics.

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With only a few first rate thermodynamics laboratory in the world, it is very important that good international cooperation between such laboratories be possible. I can certainly attest to the ready and willing cooperation of yourselves and your colleagues in the Chemical Thermodynamics Laboratory of Osaka University with other workers in this field.

I look back on the time spent in your laboratories, even though it was not very long, as extremely productive scientifically and rewarding personally. In addition to your superb scientific endeavors advancing the state of chemical thermodynamics, I had many evidences of your kind hospitality. I enjoyed my stay in Japan very much and I strongly felt that I lived in a warm and friendly atmosphere during the entire period of my stay in Osaka. I have only best wishes for the continued successes of your laboratory in the years to come and I am looking forward to further pleasant and fruitful cooperation.

My best regards to you and your colleagues.

Yours very sincerely,

Tan Zhi-cheng

Tan Zhi-cheng
Associate Professor of Chemistry