Prof. DASCALU, Traian

Dr. Traian Dascalu（トライアン・ダスカル）は、ルーマニア（Romania）ブカレスト大学物理学部を卒業後、同国の原子炉研究所、電気工学研究所を経て、レーザーとプラズマ物理学研究所にて学位を取得された。その後も同研究所に席を置きドイツ（博士研究員）、メキシコ（客員研究員）、そして日本ですが、最初はJST福井地域結集事業客員研究員（2001年4月～2003年3月）として来日、その間、共同研究で分子研に来られた。帰国後2006年1月には1級研究主任に昇進され、2006年10月からは分子研の客員として約半年招聘されることとなった。研究題目は「高効率・高出力フェムト秒小型レーザー発振に関する研究（Study of efficient high power femtoseconds laser emission in compact configuration）」で、分子研レーザーセンターで準備してきたエッジ励起Yb:YAGマイクロチップレーザーを基に、高出力超短パルスレーザーに向けた研究を行う事になっている。研究期間も短く実験的な成果を挙げるのは大変であるが、すでに、レーザーセラミックスが内包する問題について新たな事実を見いだし、その内容で国際会議にも投稿するなどの成果が出つつある。

ところで、先の来日で彼は日本文化に興味を持たれ、特に2004年より岡崎弓道会 < http://www.i-chubu.ne.jp/~okayumi/syoukai.html> にて弓道を始められた。すでに、2005年には初段の試験にも合格されているなどの腕前である。現在も、一週間 に2回、岡崎中央総合公園の一角にある岡崎市弓道場で練習されるなど、大変お気に入りのようである。氏にとって、弓道は自己の能力を伸ばす良い方法（a way of personal development）で、皆さんにも是非弓道をお勧めしたいとのこと。

早いもので３月の初旬には帰国される。残された期間が氏にとって充実したものとなる事と今後のますますの御活躍をお祈りしたい。

（平等拓範　記）

外国人研究職員の 印象記

Wonderful experience in Okazaki

Wen-Ping WANG

It is a pleasure to memory my wonderful experience during my stay at IMS, Okazaki. Arrived at the end of March, 2006, I have been working in IMS for three quarters of a year now. Lots of things about wonderful experience are worthy of being written, although my visit to IMS is short. I recorded only a few main ones of them here.

The first is about the scientific environment of IMS. I think that every foreign researcher working at IMS has a precious opportunity to meet, discuss, and collaborate with the best scientists in their fields. Open seminars held in IMS, provide chances for researchers to freely discuss with others both from and outside of IMS. I have attended more than ten seminars. Among them, seminars such as reported by Dr. Michel Mortier and by Prof. Bonacic-Koutecky were very impressive and broadened my eyeshot. I have also established a new relationship with these research groups now. I hope it will be very useful for future collaboration. The frequently professional exchange established among the research groups in IMS and these outside of IMS is also nice evidence that the level of the research work in IMS is at the top of their fields in the world.

The facilities of IMS are abundant, effective, and are of great benefit to researchers in molecular sciences. During my stay here, I can find the instruments that I need to measure my samples and obtain data just in IMS. The abundant facilities also allow for a nice training in operating various machines.

I find that IMS has a very nice library, where researchers can get on-line papers or literatures they are looking for. The easy access to many key journals and the nice research system enable researchers in IMS exactly and timely updating the progress in the related fields.

The second I would like to say is people and lifestyle in Okazaki. People I met both in IMS and on the streets in Okazaki city are friendly and kind enough. Mild and comfortable expression appears naturally on their faces all the time. Sakura blossoms in spring, fireworks in summer, and red maple leaves in autumn are beautiful and difficult to forget. What a nice and quiet place for research! I will tell my friends that I had a nice experience both of work in IMS and life in Okazaki town,

when I return two months later.

Finally, I would like to thank Dr. Donglin Jiang for helping me to arrange a wonderful opportunity to stay in Japan and work with him at IMS. I have learnt a lot from him, such as the operation of instruments, the techniques of organic synthesis, and the modulation of seminars. I would also like to thank all the members of his group for their kind supports during my stay.

Wonderful experience and research in Okazaki

Suleyman Allakhverdiev

I am Chief (Leading) Research Scientist, at Institute of Basic Biological Problems, Russian Academy of Sciences, Pushchino, Moscow Region, Russia. I obtained my Ph.D. in Physics and Mathematics (specialization: Biophysics and Biochemistry) and Dr.Sci. in Biology and Biochemistry (specialization: Photo- and Biochemistry). Dr.Sci.-Doctor of Science is the highest/top degree in sciences in several countries, including Russia.

It was the greatest oppotunity for me to receive an invitation letter from Prof. T. Nagata to visit to his laboratory as IMS visiting professor. This is not the first visit to Okazaki for me. Actually, almost for 10 years I had engaged in NIBB in the laboratory of Professor Norio Murata and I have very strong collaborations with him.

My research interest is investigation on structure and function of the reaction centers and water oxidizing complex in photosystem II; the function and assembly of oxygen-evolving complex; oxygen evolution; hydrogen evolution; electron transfer in photosynthetic reaction centers and their models; synthetic analogous of water-oxidizing complexes that mimic natural photosynthesis.

Prof. T. Nagata and his laboratory are recognized in the international scientific community as experts in the field of artificial photosynthesis. Numerous articles of Prof. T. Nagata reflect this recognition as guest editor of scientific journals. The scientific productivity of Prof. T. Nagata and his group is very high. The research of this laboratory is aimed to understand the molecular mechanisms of photosynthesis by use of biomimetic nanoscale molecules. In particular, we are now focusing our attention on photochemical water splitting complex in photosystem II, and doing research on synthetic analogues of water-oxidizing complexes. My this visit is fruitful scientifically, and already one research manuscript is accepted for Photosynthesis Research, and I hope this is just the beginning of a very fruitful long-term collaboration with IMS colleagues. I would like to have a more extensive collaboration with Japanese scientists and especially with the laboratory headed by Prof. T. Nagata.

During my visit to Japan I am very impressive by the very high level of research activity in the Prof. T. Nagata`s laboratory which has made a great contribution to our understanding on molecular mechanisms of artificial photosynthesis. It is very important that the experimental work in the laboratory is nicely organized and can be performed using the modern instruments and approaches. In the laboratory well stocked library is available on photochemistry sciences.

Good tradition is the organizing of regular monthly research report seminars in this department. In this seminar members of the department including foreign scientists present his (her) current own results with lively discussions. This is one day seminar which is a way to look more carefully in details, to predict the best development in right direction, and to get faster good results in field of all research work of this department. Scientific discussions on general topic of interest are one of the best ways where one can educate himself. Every week there is a 2-hours Journal Club that is characterized by lively discussion. Papers from the recent literature are presented in this seminar not only by the students or post-docs, but also by the foreign scientists, by the staff people of the laboratory including professors. In addition, people from different laboratories freely visit each other to discuss various scientific matters, to share instruments and to do experiments jointly. This is also a very good tradition for creative research.

I am very impressive by new IMS-Yamate Area. I have visited more than 35 different countries for research work and such facilities I could see only in Sweden, in Umea Plant Research Center. It is great. The IMS visiting professor-program is very helpful for providing collaborative work (especially for us, for

Russian researchers) with Japanese colleagues.

My visit to IMS is very special not only for my research, but also for my son. Since, my son of 9-year-old, Elvin, opened his eyes here in Okazaki and he had been in kindergarten, in Mishima Elementary school. He has many friends in Okazaki and it was his dream to come back to Okazaki. He always says that <He is Japanese>. Japan, is the second mother country for my family.

In Okazaki we enjoy unforgettable, memorable Japanese life. We cannot forget it. Here we have many friends. Some of them already visited us in Russia. We cannot forget the Japanese gardens, sakura, temples and many other things.

Finally, I am deeply indebted to IMS administration for rewarding me by making my research visit, to Prof. Nagata for invitation and support, for his kind help and extreme hospitality and also to his group members for their hospitality and kindness. I should like to take this opportunity and to say many tanks to all the people I met at IMS. I hope that I will visit IMS again and again. I wish you all the best.

NEW STAFF 新人自己紹介01

有　井　秀　和
ありい・ひでかず

錯体化学実験施設　錯体物性研究部門
研究員

平成15年3月に名古屋工業大学大学院工学研究科博士後期課程を修了後、科学技術交流財団研究員、中央大学理工学部任期制助手を経て、本年6月中旬より川口グループでお世話になっています。これまでは主に、二核遷移金属錯体による酸素分子の捕捉・活性化を行ってきましたが、現在は捕捉対象を窒素分子に変え、研究を行っています。

どうぞ宜しくお願い致します。

冨　川　友　秀
ふかわ・ともひで

錯体化学実験施設　錯体物性研究部門
研究員

平成18年3月に筑波大学大学院数理物質科学研究科化学専攻を修了し、同4月から6月まで分子研特別協力研究員を経まして、7月より川口グループでお世話になっています。学生時代は、主にゲルマニウムやスズといった典型元素を扱う化学を行ってきましたが、現在はチタンなど遷移金属を用いた錯体化学を行っています。毎日が新しいことばかりのこの環境を生かして頑張っていきたいと思います。

伏　谷　瑞　穂
ふしたに・みずほ

極端紫外光科学研究系
基礎光化学研究部門　助手

平成14年3月に京都大学大学院理学研究科で博士（理学）を取得後、ドイツのベルリン自由大学実験物理学研究所にて長期博士研究員を勤め、平成18年8月16日より菱川グループでお世話になっております。これまでは、位相固定フェムト秒パルス対などを用い、凝縮相中における分子のコヒーレンスや反応ダイナミクスについて研究してきました。今後は、分子研での恵まれた環境をいかし、アト秒パルスを用いた分子科学に取り組んでいきたいと思います。どうぞよろしくお願いします。

KIMBERG, Victor

極端紫外光科学研究系
基礎光化学研究部門　研究員

I joined the group of Professor Nobuhiro Kosugi (Photochemistry) in August 2006 as a JSPS Postdoctoral fellow. I received my M.S. degree in Physics from Krasnoyarsk State University which is situated in a big scientific center in Russian Siberia. After that, I spent few years doing research in the field of non-linear optics at the Institute of Physics Siberian Branch of Russian Academy of Science. I got my PhD year 2006 from Royal Institute of Technology in Stockholm, Sweden. My thesis was devoted to theoretical study of short pulse propagation in photonic crystals and non-linear media, however other related phenomena were also included (pump-probe spectroscopy, wave packet dynamics, x-ray spectroscopies). My research activity in IMS is basically devoted to ab initio study of x-ray spectroscopies of ultra high resolution.

どうぞよろしくお願いします。