

EPA NEWSLETTER



MAY 2006

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The next EPA Newsletter will appear on December 2006

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EPA European Photochemistry Association

Submission of manuscript : The manuscripts in MS Word form should be directed to members of the Editorial Board of EPA Newsletter who reserve the right to review and edit (or reject) submissions. Preferably, authors should send their text on-line via E.mail to the managing Editor.

EPA Newsletter is not responsible for contents of submitted articles. EPA reserves the right to present contents and selected articles on its official web site.

Type of contributions wanted are the following : letters; opinions; discussions; topical articles; abstracts of thesis in photochemistry; technical report; minireviews; local and national photochemistry report; biographical and anniversary articles; historical articles; announcements; conference and travel reports, contacts and cooperation, obituaries; conference book review and previews, new photochemistry books and review; new instruments; positions open/wanted; new members....

Preparation of Manuscript : Use Times 12 font. The margins of the page must be in standard form : 2.5 cm for the upper margin, 2.5 for the lower one, 2.5 cm for the left margin and 2.5 for the right one. Tables, figures, graphs, symbols, formulae and captions must be inserted into the text.

EPA on the Internet : General photochemistry and EPA information (statues, conference announcements and calendar, membership list, EPA Newsletter contents and articles, membership application and address correction forms) are available at <http://pages.unibas.ch/epa>.

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Chairman's Letter

Dear Colleagues,

It is too long since I have addressed the membership via the Newsletter, for which profuse apologies. I became Chairman at the Granada IUPAC Symposium in June 2004, as a late replacement for Wolfgang Rettig who was unable to take up the position due to ill-health. I had hoped to be able to devote time to EPA Affairs, but I regret to say that other duties in my full-time employment in London have prevented me from this, and I know that the well-being of the Association has suffered in the past two years. The Executive Committee is now taking steps to try to recover the situation; the first of these will be to try to arrange a regular update of the Web-site.

I think it might be useful if I share with you my thoughts on the challenges which face the Association, most of which are not new.

Photochemistry is now a mature subject, and much of the cohesion which was a feature of the subject and its proponents in the heady early days in the 1960's, when the Societies and International Conferences began, is now dissipated into other organisations. Thus for example, Atmospheric Chemistry was a feature of early conferences; this community now has its own associations and conferences. The same is true of much laser-based spectroscopy, nano-science, and other physical and theoretical aspects. I thus believe that the interests of the membership of EPA are now different since many former colleagues now owe allegiance to bodies outside EPA.

Partly as a consequence of this migration, and also because of the ageing of the original enthusiastic supporters, we face a need to find ways of increasing our membership. The health of membership is very patchy across the different nationalities. Some countries, for example France, have maintained a fairly thriving interest; in others, like my own, membership has declined as interest in the subject has become less, or more diffuse. My belief is that the core membership now represents interests in organic photochemistry, and some traditional physico-chemical aspects.

The EPA, like I-APS, has always adopted the policy of charging a low membership fee. However, in recent times, this fee has necessarily increased, for the reason below. The Executive of EPA several years ago took the decision to become part-owners of the then new Royal Society of Chemistry journal, Photochemical and Photobiological Sciences. In return, EPA members received access to the journal. The journal is doing well in terms of quality and number of papers, and the impact factor is rising. The Ownership Board, on which EPA is represented recently was able to appoint Frans de Schryver, Leuven, as Editor, Photochemistry, in place of Frank Wilkinson, who has retired.

I believe having access to PPS is a very positive feature of EPA membership, but there is a down-side. The Royal Society of Chemistry acts in a strictly commercial way in determining its subscription rates, which are based upon volume of subscriptions. The Ownership Board of PPS is well aware of the problem, and has

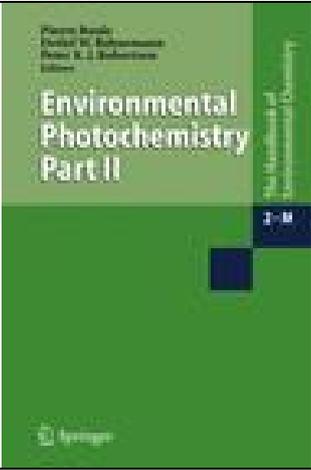
taken several successful steps in increasing the numbers of societies affiliated to the journal. However, PPS subscription rates have nevertheless risen to the point where almost the entire EPA subscription is now taken up by our contribution to PPA, leaving little, if anything, for other activities. The level of EPA membership charge is now a disincentive for young people to join, and for members in E. Europe. We thus have a classic problem. It is only by greatly increasing our numerical membership that we can maintain the subscription price of PPS. If PPS costs rise further, we will lose more EPA members, thus exacerbating the problem. This is the problem the EPA Executive has to wrestle with. We need to initiate a drive to increase EPA membership in all nations. This can only be done by vigorous efforts at national level by the National representatives of EPA, and may I take this opportunity of urging all to do this.

I have decided that since I am now retired from an active research role in Imperial College, I should give up the Chairmanship of EPA, and thus at the ICP conference in Germany in July 2007, we should elect my successor at meetings of EPA Members to be arranged at the ICP. The EPA Executive Committee is currently seeking nominations for my successor; these would be welcomed, and could be sent to any member of the Executive Committee.

David Phillips,
Chairman, EPA

Photochemistry book

Handbook of Environmental Chemistry

	<p>Environmental Photochemistry Part II Series: The Handbook of Environmental Chemistry Vol. 2: Reactions and Processes, Part M Boule, Pierre; Bahnemann, Detlef; Robertson, Peter (Eds.) 2005, XVI, 489 p. 170 illus., Hardcover ISBN: 3-540-00269-3 Online version available</p>
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About this book : Photochemical reactions play a major role in the environment including a wide range of reactions in the atmosphere, natural waters, soil and living organisms. This new volume on Environmental Photochemistry up-dates the previous edition with chapters on basic aspects including concepts of photochemical transformations and mechanistic photochemical processes in the atmosphere and water. In addition a range of applications are also detailed such as advanced photochemical oxidation processes for water and air treatment as well as applications of photocatalysis for surface treatment and nuclear fuel reprocessing. The new edition provides a critical up to date overview of the most important research in the field of environmental photochemistry.

Written for: Scientists, engineers, graduate students in the fields of environmental sciences, risk assessment and risk controlling, toxicology and ecology; decision makers in government, industrial and regulatory bodies.

Keywords: Environment, Environmental Analysis, Environmental Toxicology, Monitoring, Protection of the Environment

Contents :

Basic Concepts of Photochemical Transformations : R.P.Wayne

Environmental Photochemistry in Heterogeneous Media : M.C.González, E.SanRomán

Homogeneous and Heterogeneous Photochemistry in the Troposphere : M.R.Hoffmann

Atmospheric Photooxidation of Gas Phase Air Pollutants : T.J.Wallington, O.J.Nielsen

Mechanisms of Direct Photolysis of Biocides Based on Halogenated Phenols and Anilines : G.Grabner, C.Richard

Recent Developments in the Environmental Photochemistry of PAHs and PCBs in Water and on Solids : R.M.Pagni, R.Dabestani

Reactions Induced in Natural Waters by Irradiation of Nitrate and Nitrite

Ions : D.Vione, V.Maurino·C.Minero, E.Pelizzetti

Role of Iron in Light-Induced Environmental Processes : T.D.Waite

Aquatic Phototransformation of Organic Contaminants Induced by Coloured Dissolved Natural Organic Matter : C.Richard, S.Canonica

Introduction to Photochemical Advanced Oxidation Processes for Water

Treatment : M.I.Litter

Photocatalytic Detoxification of Water and Air : P.K. J. Robertson, D.W. Bahnemann, J.M. C. Robertson · F.Wood

Photocatalytic Active Surfaces and Photo-induced High Hydrophilicity /High Hydrophobicity : H. Irie, K.Hashimoto

The Applications of Photocatalytic Waste Minimisation in Nuclear Fuel Processing:

C.Boxall, G.LeGurun·R.J.Taylor, S.Xiao

Subject Index

THESIS ABSTRACTS

1) Daniel Collado (Spain, University of Malaga)

Ph. D. Thesis (in Spanish), November 2004

Research Advisors: Prof. Rafael Suau, Prof. Ezequiel Pérez-Inestrosa

“Photochemical reactivity and optical properties of acceptor–spacer–donor systems based on benzyl-(iso)quinoline *N*-oxide derivatives”

Oxygen transfer is among the most interesting photochemical reactions of aromatic amine *N*-oxides by virtue of the process also occurring in microsomal oxidation. Therefore, photochemical reactions with *N*-oxides constitute one of the best models for biological oxidation.ⁱ The intramolecular pathway of this reaction has scarcely been studied. Recently, however, intramolecular oxygen transfer in Papaverine *N*-oxide in acid media was found to take place with a high yield.ⁱⁱ

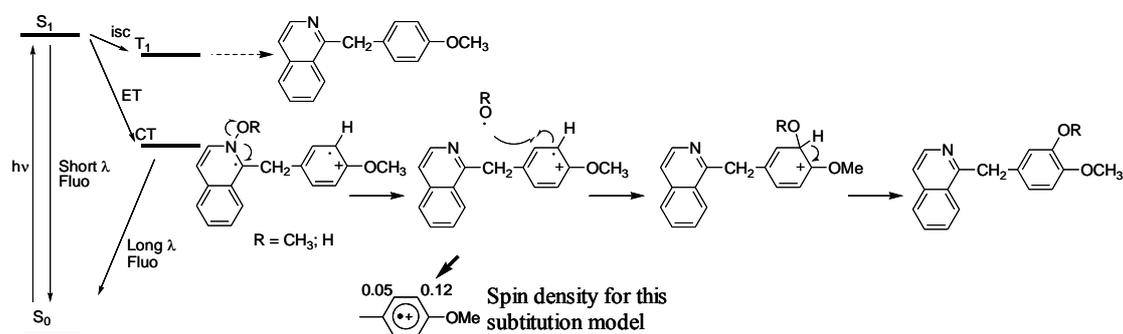
In this doctoral work, we conducted deeper research into oxygen transfer in a series of acceptor–spacer–donor (A–S–D) systems where the acceptor was an isoquinoline or quinoline *N*-oxide derivative, the donor a benzyl derivative, and the bridge a methylene group (see Scheme 1).



Scheme 1

In acid media, the photolysis of these systems starts with an electron transfer from the donor to acceptor moiety that produces a long wavelength fluorescence emission from the charge transfer state (Scheme 2). Examination of the irradiation end products revealed that the regiochemistry of process is governed by the spin density of the intermediate cation radical generated upon the electron transfer.ⁱⁱⁱ Modifying the donor moiety by changing the

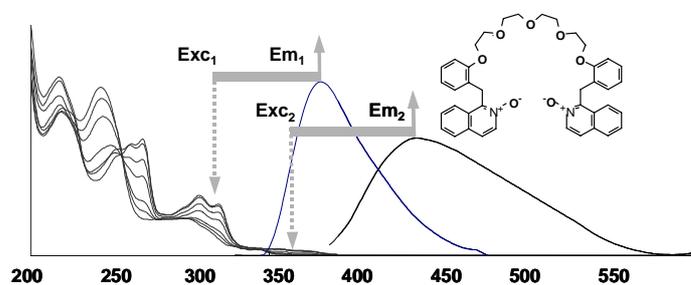
substituent from hydroxyl to methoxy does not alter the overall photochemical process; the outcome is polyhydroxylation with a high to moderate yield.



Scheme 2

Based on the previous results, the photolysis of *N*-methoxyquinolinium and isoquinolinium perchlorates exhibits the same photoreactivity and the underlying mechanism leads to intramolecular methoxylation of the donor component.

The optical properties of these A–S–D systems at the supramolecular level have enabled the design of structures capable of recognizing alkaline-earth cations.^{iv}



i D. M. Jerina, D. R. Boyd, J. W. Daly, *Tetrahedron Lett.* **1970**, 457–460. H. Sako, K. Shimada, Y. Maki, *Tetrahedron Lett.* **1985**, 26, 6493–6496.

ii R. Suau, R. Rico-Gómez, F. A. Souto Bachiller, L. A. Rodríguez-Rodríguez, M. L. Ruíz, *Tetrahedron Lett.* **1985**, 36, 2653–2656. F. A. Souto-Bachiller, E. Perez-Inestrosa, R. Suau, R. Rico-Gómez, L. A. Rodríguez-Rodríguez, M. E. Coronado-Pérez, *Photochem. Photobiol.* **1999**, 70, 875–881.

iii D. Collado, E. Pérez-Inestrosa, R. Suau, *J. Org. Chem.* **2003**, 68, 3574–3584.

iiii Daniel Collado, Ezequiel Pérez-Inestrosa, Rafael Suau, Jean-Pierre Desvergne, Henri Bouas-Laurent, *Org. Lett.* **2002**, 4, 855–858.

2) Wutharath Chin (France, Université Paris XI)

Ph.D. Thesis (in french), October 2005

Research adviser : Dr. Michel Mons, Francis Perrin Laboratory, CEA - CNRS URA 2453.
<http://www-lfp.cea.fr/>

Title : Conformational landscape of small model peptides in the gas phase: UV/IR spectroscopy and theoretical approach

The latest advances in gas-phase laser spectroscopy make it now possible to study complex and flexible molecules such as small peptide chains. Thanks to the very good spectral resolution achieved in the gas phase, this work aims at characterising the intrinsic structural properties of model peptides containing two and three residues, especially in terms of folding properties and hydrogen bonding. The experimental strategy, combining laser vaporisation with supersonic jet, is based on IR-UV double resonance laser spectroscopy. UV spectroscopy enables one to detect the most stable conformers in the jet, while spectroscopy in the near IR region (NH and CO stretches, and NH bends) gives access to their hydrogen bonding network. The final assignment is based on the comparison with DFT calculations on structures whose hydrogen bonding network is compatible with the experimental data. This comparison is also an efficient tool to assess the corresponding quantum chemistry calculations.

Such a synergy between experiment and theory has thus led us to provide evidence for a competition between two main conformational families showing specific spectroscopic signatures. The first family consists of a succession of local conformational preferences on each residue, in which hydrogen bonds link close CO-NH amide groups along the sequence. The second family is composed of secondary structures which are stabilised by hydrogen bonds linking more remote amide groups. By isolating and characterising them for the first time in the gas phase, we have shown that the formation of secondary structures of biology such as beta-turns and 310 helices was an intrinsic property of these molecules.

2006 Porter Medal

The Porter Medal Committee is pleased to announce that the panels of European Photochemistry Association, The Inter-American Photochemistry Society, and the Asian Photochemistry Association have decided upon the winners of the 2006 Porter Medal.

The Medal, named for George Porter, (Nobel Laureate), is awarded to the photochemist who, in the opinion of the Panels, has contributed most to the science of photochemistry.

On this occasion, and unusually, the Panels have decided to award two medals, one each to the individuals below.

Professor **Howard E. Zimmerman**, University of Wisconsin, Madison, USA, one of the founders of modern organic photochemistry, who contributed over a lifetime's work to our understanding of fundamental processes in excited states.

Professor **Hiroshi Masuhara**, Osaka University, Japan, for his pioneering work on the integration of time and spatially resolved measurements on the emerging fields of nanosciences.

The medals were presented at the XXI'st IUPAC Symposium on Photochemistry, Kyoto, Japan, 2nd-7th April 2006 by Professor David Phillips Chairman, Porter Medal Committee 13th February 2006.

European Photochemistry Association

Minutes of EPA Executive Committee Meeting.

27th March 2006, at Imperial College London

Attendees

Professor David Phillips, [Chairman], UK

Professor Silvio Canonica [Treasurer] Switzerland

Professor Eric Vauthey, Switzerland

Professor Helge Lemmetyinen, Finland

Professor Dimitra Markivitsi, France

[NB It was not clear whether or not Professor Sandra Monti should have been present; this will be clarified for future meetings]

Apologies

Professor Nina Gritsan, Russia

AGENDA

- [1] Chairman's report [DP verbal]
- [2] Treasurer's report [SC]
- [3] Nominations for President
- [4] Election of Vice-President
- [5] Identification of Membership Secretary
- [6] Identification of Web-site manager
- [7] Nomination of Newsletter Editor
- [8] Newsletter frequency, on-line, hard copy
- [9] EPA/PPS issues
- [10] Relationship with I-APS, APS
- [11] Establishment of Photochemistry Prize
- [12] Fund-raising
- [13] Increasing membership
- [14] AOB
- [15] Date of next meeting, venue

Minutes

[1] Chairman's report

The Chairman reported that the meeting had been called since there had not been an Executive Committee meeting since the Granada IUPAC, when he had been appointed as Chairman. He had been unable to devote the time necessary to EPA matters due to other unexpected commitments, and as a consequence EPA had lost momentum. It was the purpose of the meeting to reverse this trend. The Chairman thanked the attendees for giving up their valuable time to attend the meeting.

[2] Treasurers report

The Treasurer reported on the expenditures and balances held in the EPA account. This is appended as Appendix 1.

It should be noted that although the balance looks healthy, this is artificially high given that there has not been any expenditure in 2005 on a printed version of the EPA Newsletter. Concern was also expressed about the fact that the entire EPA membership fee was now being taken up in supporting PPS [see below].

[3] Nominations for Chairman

It was agreed that David Phillips should continue as Chairman while the efforts were made to revive EPA, such that an incoming Chairman would inherit a healthier organisation. It was agreed that the handover to a new Chairman should be at the ICP Meeting in Germany in 2007. EPA should seek nominations for the Chairmanship well in advance of the meeting. The Executive Committee were reminded of the statutes of the EPA, reproduced here as Appendix 2, from which it is clear that the organs of the EPA are :

[i] General Council [all members of EPA]

[ii] Standing Committee [up to two members from each country represented on General Council of EPA]

[iii] Executive Committee [nominally elected by Standing Committee]. The Executive Committee consists of Chairman, Vice-Chairman, Treasurer, and at least two Secretaries. **At the ICP meeting in Germany, 2007, it will be necessary to have a meeting of the General Council and Standing Committee in order to elect the new Executive Committee.**

[4] Election of Vice-President

In the absence of a meeting of standing committee, the Executive Committee took executive action to appoint **Helge Lemmetyinen** to the position of Vice-Chairman, effective immediately, and until ICP, 2007.

[5] Membership Secretary

After much discussion, it was decided to leave this position open, pending the results of the work to be carried out by the treasurer and other members of the executive committee to bring records up to date. To this end, a major effort would be made to identify National representatives [members of the Standing Committee], and ask again that up-to-date lists of members be sent to the Treasurer [silvio.canonica@eawag.ch].

[6] Web-site secretary/manager

The committee were pleased to note that **Professor Eric Vauthey** [eric.vauthey@chiphy.unige.ch] would take on the role of web-site manager, effective immediately.

[7] Newsletter Editor/secretary

The role of Newsletter Editor would be taken on by Dimitra Markovitsi [dimitra.markovitsi@cea.fr], assisted by the Vice-Chairman. The Committee recorded its thanks to Dr Mohamed Sarakha, University Blaise-Pascal, Clermont Ferrand, France for his generous assistance in the preparation of the on-line Newsletter produced in 2005. It is hoped he will continue to assist in the preparation of future Newsletters.

[8] Frequency of Newsletter.

It was decided that there should be two Newsletters per year, electronically, one of which [possibly], could be also sent in hard copy. There would be one issue in 2006, in the Autumn.

[9] EPA/PPS issues

It was pointed out that with the increase in subscription costs to PPS, the entire EPA membership fee was now subvented to the Royal Society of Chemistry to cover PPS subscriptions. The only operating budget left to EPA was thus the royalty returned to EPA from RSC/PPS, which for 2005/6 would amount to £11K GB. Any large increase in PPS costs would be unsustainable without an increase in fees for EPA membership. This would need to be addressed at the next meeting of the EPA General Council, but the Chairman promised to write to PPS Ownership Board and to explain the EPA position at the next Ownership Board Meeting [May 2006].

[10] Relationship with I-APS and APS

While the Committee felt it was desirable to foster good relationships with our sister organisations, the most pressing need at present was to revive interest in EPA, and thus this item was shelved until a future meeting. The Chairman reported that there had been considerable interaction recently between himself, and the Executive Committee, and the Presidents of the other photochemistry societies concerning the selection of the winners of the Porter Medal for 2006, and that relationships with the other organisations were very cordial.

[11] Photochemistry Prize

Following a suggestion from Pr. Sylvia Braslavsky, the Committee discussed the desirability of setting up a prize for Ph.D Graduate Students, to be offered annually for the best thesis on a photochemical theme. It was decided that a medal should be awarded, plus a cash prize, but in the name of EPA only, rather than involving I-APS and APS. Eligible students would be from EPA member countries. The competition will be judged by a sub-committee to be announced soon, and it should be arranged that each year's winner should present a paper based upon the Ph.D thesis at the appropriate IUPAC Symposium on Photochemistry or ICP, depending upon the year. The first competition would be held for theses leading to the award of Ph.D or equivalent [e.g. Candidate in E.Europe] in 2006. The judging would thus be expected to take place in Spring 2007, and the first of the prizes then being presented at ICP 2007. Full details will be published on the EPA web-site shortly, together with an invitation to enter the competition.

[12] Fund-raising

It was felt by the committee that a fund-raising exercise, possibly associated with the Photochemistry Prize, should be mounted, but that this should wait until plans were more advanced, and membership issues had been resolved.

[13] Increasing membership

This is clearly desirable, but the Committee noted that the present state of the membership records made it premature for any membership drive. Several attempts had been made by the Treasurer and the Chairman to obtain more up-to-date records from National Treasurers and other representatives, but few of these had been successful. It was clear that whereas some National representatives and Treasurers were very active, and helpful, many others did not respond. This could be because they are no longer active, or no longer the National representatives. The Treasurer, Chairman, Vice-Chairman and Web-master will now make a strenuous effort to up-date EPA records, and publish these on the EPA Web-site. **We ask the co-operation of all members to ensure that the Executive committee is informed of the current national representative/treasurer of EPA to facilitate this process.**

[14] Any other business

There was none.

[15] Next meeting

It was decided that there should be another meeting of the EPA Executive committee late in 2006, in Paris.

Conference report:

The 9th International Conference on Solar Energy and Applied Photochemistry SOLAR '06; 23-27 January 2006, Cairo, Egypt

This meeting, in short called Solar '06, has marked a special occasion: the 10th anniversary of the Photoenergy Center at the Ain Shams University in Cairo. The spirit of this distinguished photochemical laboratory was briefly but poignantly summarized by its founding chairman, Prof. Sabry Abdel-Mottaleb as “putting light to work”. The Solar conference series, which started in 1991, carries the same spirit, while it is recognized that successful photochemical applications go hand in hand with advancement of fundamental understanding of photoinduced processes and excited states. The Solar conferences thus became a place where researchers interested in fundamental and applied aspects of photochemistry can meet and inspire each other.

The Solar '06 meeting was attended by ca. 200 scientists from 40 countries, who have presented 12 plenary and 15 keynote lectures, 20 oral contributions and 71 posters. The limited scope of this report does not allow us to mention all the novel and interesting scientific results and applications presented. Nevertheless, it is still possible to attempt a selection that would represent the scientific topics covered at the meeting and highlight some of the outstanding achievements.

Solar energy was one of the most discussed topics. Out of many important contributions, we may stress the development of new active forms of TiO₂, such as organized mesoporous films (*L. Kavan, Prague*) or inverse opal anatase (*M. Zúkalová, Prague*), and new sensitizers (*T. Bessho, Tokyo, Lausanne*), whose design can be aided with quantum-chemical DFT calculations (*S. Fantacci, Perugia*). Further energy-related contributions focussed on the design and optimization of solar cells. Some newly proposed materials include ZnO (*L. Znaidi, Villetaneuse*) and nanostructured Si with low light reflectivity (*K.-H. Chen, Taipei*). Various novel concepts were used, such as liquid-crystalline organic semiconductors (*T. Tani, Kanagawa-ken*), light-harvesting amphipipe aggregates (*S. Dähne, Berlin*), water-soluble polythiophenes on semiconductor substrates (*J.T. McLeskey, Richmond*), or photorechargeable capacitors (*K. Teshima, Yokohama*).

Environmental photochemistry was another important topic: economically and technologically viable systems for air purification employing photocatalytic membranes (*I.R.*

Bellobono, Milano), photoelectrochemical reduction of pollutants (e.g. metal ions) and destruction of bacteria or H₂ generation (*K. Rajeshwar, Arlington*), combination of photochemical and biological processes to purify wastewater (*M. Mehrvar, Toronto*), or various ways to enhance efficiency of TiO₂ in wastewater purification, including doping with lanthanides (*M.S.A Abdel-Mottaleb, Cairo*). In the field of atmospheric photochemistry, it was shown (*V. Vaida, Boulder*) that sunlight can induce reactions of alcohols and acids by exciting vibrational overtones of OH bonds. Synthesis of special chemicals is another area of photochemical applications, as was demonstrated for diazepine drugs (*C. Wentrup, Brisbane*), while new types of (semi)conducting polymers were proposed for light-emitting diodes (*V. Cimrová, Prague*). The emerging field of nanochemistry has many photochemical and photophysical aspects. This was demonstrated by photovoltaic applications of semiconductor nanoparticles with synthetically controlled shape (*M. Mohamed, Cairo*) and by rich photobehavior exhibited by ~16 nm - sized tubular aggregates of carbocyanines (*J. Knoester, Groningen; C. Spitz, Berlin*). It was also shown that DFT can deal with computationally very demanding tasks of describing molecule-nanoparticle interactions (*F. De Angelis, Perugia*). New aspects of photophysical behavior can be revealed by using non-traditional media such as ionic liquids (*A. Samanta, Hyderabad*). Several talks have focussed on optically induced processes in molecular systems and supramolecules with possible relevance to molecular devices and sensors. Thus, interactions in rotaxanes were studied by a host of spectroscopic methods, including 2-dimensional IR spectroscopy, giving insight into the functioning of possible molecular machines (*W.J. Buma, Amsterdam*) or photodriven molecular shuttles (*H. Tian, Shanghai*). Photochemical bond opening or isomerisation was found to control (switch) molecular conductivity (*M.A. Rampi, Ferrara*) or photophysics of ligand-bridged Ru and Os complexes (*F. Hartl, Amsterdam*). New aspects of the excited state characters, relaxation and reactivity were revealed for transition-metal carbonyl-diimine complexes (*A. Vlček, London*) and organic compounds (*U. Mazzucato, Perugia*), where it was shown that photochemical quantum yield can depend on the particular vibronic level excited (*G. Favaro, Perugia*).

Solar '06 also gave the participants an interesting overview of Egyptian photochemical research, at the Photoenergy Center, as well as other laboratories. High-quality research is carried out, for example, in environmental photochemistry (water purification), photostability of dyes, spectroscopy of drugs, photophysical and spectroscopic effects of various media and supramolecular hosts, or sensitized lanthanide phosphorescence with applications in probes. New, promising, research is being started, which combines in photochemistry, photophysics and nanochemistry. Importantly, there is an emerging young generation of Egyptian scientists

who will carry on and expand this work, contributing to their country's needs and advancing our knowledge in photoscience. This was aptly emphasized in the closing talk by Sabry Abdel-Mottaleb, introducing two of his young coworkers (*S. Mona, H. Hafez, Cairo*), who then gave short talks of various aspects of photocatalytic environmental remediation.

Last, but not least, the social program should be highlighted. The participants had the opportunity to visit the pyramids, admire ancient treasures at the Egyptian Museum, as well as to enjoy the conference banquet, organized as an oriental evening. Cairo is indeed an exciting place to visit, where one can immerse into the contemporary vibrant metropolis, or go back in history through the great medieval city all the way to the Old Kingdom of pyramid builders some five thousand years ago.

A. Vlček, School of Biological and Chemical Sciences, Queen Mary, University of London, London E1 4NS, UK

MEETING REPORT

Claire Richard, Laboratoire de Photochimie, Aubière, France

Edmond Amouyal, Ecole Polytechnique, Palaiseau, France

Spring Meeting of the French Photochemistry Group (GFP) Paris, France, 18-19 May 2006

The French Photochemistry Group GFP organized its traditional biannual meeting (“Journées de Printemps 2006”) in Paris at the Ecole Supérieure de Physique et Chimie Industrielles (ESPCI). The organizing committee consisted of Edmond Amouyal (Chairman, Ecole Polytechnique, Palaiseau), Janine Cossy (ESPCI, Paris) and Anne Zehnacker (Laboratoire de Photophysique Moléculaire LPPM, Orsay).

André Lattes (President of the French Chemistry Society SFC) honoured us by his presence and opened this meeting. The first morning session was dedicated to the memory of Dominique Burget (Département de Photochimie Générale DPG, Mulhouse) who accidentally passed away in march 2006. This happened after an explosion –presumably of an ethylene tank- in another department of the Mulhouse chemistry engineering high school (ENSCMu). Xavier Allonas (Director of DPG, Mulhouse) gave an emotional account of the accident which completely destroyed his laboratory. The whole building has to be rebuilt.

The afternoon session of the first day was devoted to Françoise Lahmani (LPPM, CNRS, Orsay) who retired after a long and fruitful career in photochemistry and photophysics. Abderrazzak Douhal from Toledo (Spain) who has a longstanding collaboration with Françoise and her group gave a nice lecture on fast and ultrafast dynamics of a selected hydrogen-bonded system within a water nanopool. The other speakers were André Tramer who summarized Françoise’s career, Monique Martin (ENS, Paris), Claude Dedonder (LPPM, Orsay), Michel Mons (LFP, Saclay), and Laurent Nahon (SOLEIL, Saint-Aubin). Philippe Bréchnignac (Director of LPPM, Orsay) closed the first day’s afternoon session and invited all the participants to an informal reception.

The second afternoon session was dedicated to the memory of Jean Rigaudy (ESPCI, Paris) who disappeared on last December. He was, with the very much regretted Pierre Courtot, the initiator of these biannual GFP meetings, which in the beginning took place at ESPCI. Jacques Prost (Director of ESPCI) opened this nostalgic session in the presence of Mrs Françoise Rigaudy. His former students, his collaborators, friends and colleagues (Jean-Marie Aubry, Lille; Clotilde Ferroud, CNAM Paris; Janine Cossy, ESPCI Paris; Henri Bouas-

Laurent, Bordeaux; Jean-Claude Gramain, Clermont-Ferrand; Thierry Patrice, Nantes and Charles Taniélian, Strasbourg) remembered Jean Rigaudy's outstanding contribution in photochemical synthesis, particularly his pioneering work on singlet oxygen (see EPA Newsletter, 49, 16-21, November 1993).

Following the spirit of these biannual meetings, the two morning sessions were reserved to young scientists coming from all over France (and Japan) and to their excellent contributions.

As usual, these "Journées" were a very open and informal gathering of scientists working in all areas of photochemistry and photophysics. Many subjects were covered by the various presentations: environmental photochemistry; photoreactivity in organized molecular systems; photomagnetism; photophysics and photochemistry in gaseous and condensed phase; application of photochemistry and photophysics in imaging; photobiology; photochemical synthesis; production, reactivity and use of singlet oxygen; photochemiotherapy.

Conferences

- **16th International Conference on Photochemical Conversion and Storage of Solar Energy (IPS-16)**, Uppsala, Sweden, July 2-7, 2006.

Website : <http://www.akademikonferens.uu.se/IPS16>

- **Environmental Applications of Advanced Oxidation Processes (EAAOP). 1st European Conference on EAAOP**, Chania, 7-9 September 2006. Dept. of Environmental Engineering, Technical University of Crete, Greece

Website : <http://www.enveng.tuc.gr/conf/aaaop.htm>

- **13th Meeting of the International Humic Substances Society. Humic Substances-Linking Structure Functions.** July 30 to August 4, 2006- Karlsruhe, Germany

Website : www.wasserchemie.uni-karlsruhe.de/ihss2006/

- **4th European Meeting on Solar Chemistry and Photocatalysis : Environmental applications (SPEA4)**. University of Las Palmas de Gran Canaria. Edificio Central Parque tecnologico. Capus de Tafira. Las Palmas de Gran Canaria (SPAIN), 8-10 November 2006.

Website : www.cidia.ulpgc.es/spea4



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