

Monday, September 5, (14.00 – 15.30)
Poster session I

Raphaël

- PI1** **Two diastereomeric (6-4) adducts from photoreaction of uracil in frozen aqueous solution**
M.D. Shetlar, V.J. Basus (San Francisco CA, USA)
- PI2** **Time-resolved study of thymine dimer formation**
S. Marguet, D. Markovitsi (Gif-sur-Yvette, FRA)
- PI3** **Photo-induced guanine radical cation in short oligonucleotide is able to cross-link with lysines containing peptide**
S. Perrier¹, J. Hau², D. Gasparutto¹, J. Cadet¹, A. Favier¹, J.-L. Ravanat¹ (¹Grenoble, FRA; ²Lausanne, SUI)
- PI4** **Crystal structure of the d(TpA) thymine-adenine photoadduct**
R.J.H. Davies, J.F. Malone (Belfast, GBR)
- PI5** **Antigenotoxic activity of two essential oils (*Origanum compactum* and *Cinnamomum camphora*) against UV and 8-MOP+UVA induced mutagenic and recombinogenic events in diploid yeast (*Saccharomyces cerevisiae*)**
F. Bakkali^{1,2}, S. Averbeck², D. Averbeck², M. Idaomar¹ (¹Tétouan, MAR; ²Orsay, FRA)
- PI6** **Photochemistry of DNA in spores of *Bacillus subtilis***
T. Douki¹, B. Setlow², P. Setlow² (¹Grenoble, FRA; ²Farmington CT, USA)
- PI7** **Quantification of 4-hydroxy-2-nonenal adduct to glutathione and to DNA in humans cells**
O. Falletti, J. Cadet, A. Favier, T. Douki (Grenoble, FRA)
- PI8** **Study of the photobiological effects of 8-methoxysoralen (8-MOP) and UVA in eukaryotic cells using DNA microarray technology**
M. Dardalhon¹, W. Lin², A. Nicolas², D. Averbeck¹ (¹Orsay, FRA; ²Paris, FRA)
- PI9** **Comparison between 8-oxo-7,8-dihydro-2'-deoxyguanosine and 1,N2-etheno-2'-deoxyguanosine levels in lung DNA of rats exposed to cigarette smoke**
S.A. Marques, A.P.M. Loureiro, O.F. Gomes, C.C. Garcia, P. Di Mascio, M.H.G. Medeiros (São Paulo, BRA)
- PI10** **Reaction of singlet oxygen with 2'-deoxyguanosine and 8-methoxy-2'-deoxyguanosine**
G.R. Martinez¹, J.-L. Ravanat², J. Cadet², M.H.G. Medeiros³, P. Di Mascio³ (¹Curitiba, BRA; ²Grenoble, FRA; ³São Paulo, BRA)
- PI11** **Steady-state and time-resolved studies on ketoprofen-thymine dyads**
C. Paris, N. Belmadoui, M.J. Climent, S. Encinas, M.Á. Miranda (Valencia, ESP)
- PI12** **Photoinduced binding of ruthenium trisbipyrazine on 8-oxoguanine and inhibition of the replicative T4 polymerase**
N. El-Akra, J-P. Souchard, P. Vicendo (Toulouse, FRA)
- PI13** **Photostability of ruthenium complexes in presence of proteins: influence in DNA photosensitization**
L. Bijeire, P. Vicendo (Toulouse, FRA)
- PI14** **Spore photoproduct lyase - characterization of an iron-sulfur DNA repair enzyme**
O. Berteau, S. Ollagnier-de-Choudens, T. Douki, M. Atta, M. Fontecave (Grenoble, FRA)
- PI15** **DNA-DNA crosslinking at guanines: a new and major class of oxidatively generated damage by UV laser biphotonic ionization in DNA**
H. Menoni^{1,2}, D. Gasparutto³, J.-L. Ravanat³, J. Cadet³, S. Dimitrov⁴, D. Angelov^{1,2} (¹Lyon, FRA; ²Sofia, BUL; ³Grenoble, FRA; ⁴La Tronche, FRA)
- PI16** **Ozone induces singlet molecular oxygen generation in the presence of DNA**
S. Miyamoto¹, G.R. Martinez^{1,2}, M.H.G. Medeiros¹, P. Di Mascio¹ (¹São Paulo, BRA, ²Paraná, BRA)

- PI17 Interplay of nitration and oxidation reactions in DNA: insights from laser flash photolysis and oxygen-18 labeling experiments**
R. Misiaszek, C. Crean, N.E. Geacintov, V. Shafirovich (New York NY, USA)
- PI18 Miniaturized instrumentation for the high throughput screening of DNA repair inhibitors**
R. Hara¹, A. North¹, J.E. Hearst^{1,2}, S. Yeung², K. Singh², R.A. Mathies² (¹Concord CA, USA; ²Berkeley CA, USA)
- PI19 Effect of (5'S)-5',8-Cyclo-2'-deoxyadenosine on the conformation of di and trinucleotides**
B. Karwowski, J. Gaillard, A. Grand, J.Cadet (Grenoble, FRA)
- PI20 Study of 8-bromo-2'-deoxyinosine by photochemical and radiolytic methods**
L. Jimenez^{1,2}, S. Encinas¹, M.Á. Miranda¹, M. Russo², M. D'Angelantonio², Q.G. Mulazzani², C. Chatgilialoglu² (¹Valencia, ESP; ²Bologna, ITA)
- PI21 A plasmid biochip for DNA repair measurement, adaptation of HeLa cells to UVB irradiation**
J.-F. Millau, A. Micoud, S. Caillat, A. Favier, S. Sauvaigo (Grenoble, FRA)
- PI22 Formation and biological significance of one-electron oxidation products of 5-hydroxypyrimidine residues**
Ph. Simon¹, D. Gasparutto¹, C. Saint-Pierre¹, J.R. Wagner², A. Favier¹, J. Cadet¹ (¹Grenoble, FRA; ²Sherbrooke, CAN)
- PI23 Modification of the genotoxic effect of UV-irradiation by chemicals**
G. Emri¹, C. Bayerl², E. Remenyik¹, I. Horkay¹ (¹Debrecen, HUN; ²Mannheim, GER)
- PI24 Studies on the photocleavage of nucleic acids by the dibenzo[b,g]quinolizinium salt and its dimer**
D. Otto¹, A. Bergen¹, H. Ihmels¹, G. Viola² (¹Siegen, GER; ²Padova, ITA)
- PI25 Long-time fluorescence components of poly(dA).poly(dT)**
F. Talbot, D. Markovitsi, T. Gustavsson, E. Lazzarotto (Gif-sur-Yvette, FRA)
- PI26 A comparison of solar UV induced DNA-damaging effects between Southern and Central Europe and Arctic high latitudes**
A. Bérces¹, S.A. Chernouss², H. Lammer³, N.K. Belisheva², G. Kovács¹, H.I.M. Lichtenegger³, G. Rontó¹ (¹Budapest, HUN; ²Apatity, RUS; ³Graz, AUT)
- PI27 Ground-based measurement of solar light intensity (illuminance), temperature, and relative humidity from the tropics (Turen, East Java, Indonesia) between 1995 and 2001**
L. Fidhiany, K. Winckler (Berlin, GER)
- PI28 Effects of sublethal (7.4 W/m²) UVA irradiation on activity levels of oxidative defense enzymes (catalases, superoxide dismutases, glutathione reductase) and on protein oxidation and survival after lethal UVA in *Escherichia coli***
J.D. Hoerter, A.A. Arnold, A. Shibuya, D. Kuczynska, C.S. Ward, M.G. Sauer, A.Gizachew, T.M. Hotchkiss, T. Fleming, S. Johnson (Big Rapids MI, USA)
- PI29 The role of Bach-1 and NF-E2-related factor 2 in ultraviolet A (oxidant) mediated activation of heme oxygenase-1 in human skin cells**
G.P. Edwards, C.M. Raval, S.A. Mitchell, R.M. Tyrrell (Bath, GBR)
- PI30 UVB induced sunburn cell formation of human keratinocytes is mediated through the Ask-1-p38MAPK cascade**
A. Van Laethem, M. Garmyn, P. Agostinis (Leuven, BEL)
- PI31 Efficacy of different UV emitting sources in the induction of T cell apoptosis**
Z. Novák¹, A. Bérces², G. Rontó², A. Dobozý¹, L. Kemény¹ (¹Szeged, HUN; ²Budapest, HUN)
- PI32 Induction of CCL21/SLC and dendritic cell activation by photodynamic therapy**
S.O. Gollnick, B. Owczarczak, B.W. Henderson (Buffalo NY, USA)
- PI33 Induction of tolerance by UV-induced, platelet activating factor-stimulated, IL-10 secreting, B cells**
Y. Matsumura, D.X. Nghiem, Y. Miyahara, S.N. Byrne, S.E. Ullrich (Houston TX, USA)

- PI34 The effects of TL01 phototherapy on UVB-induced Langerhans' cell, CD11b+ and iC3b+ cell trafficking in polymorphic light eruption (PLE)**
A. Blackburn, S. Winhoven, M. Brownrigg, L.E. Rhodes, N.K. Gibbs (Manchester, GBR)
- PI35 Directing the immune system by light**
C.H. Self, M.-C. Fawcett, A. Self, J.A. Smith, S. Thompson (Newcastle-upon-Tyne, GBR)
- PI36 Modulation of contact hypersensitivity in mice by photolysis products of psoralens**
A.Ya. Potapenko, L.A. Kozir, Z.I. Moshnina, A.A. Kyagova (Moscow, RUS)
- PI37 Lack of antigen-specific immunity in the very early stage of photocarcinogenesis in an animal model**
É. Remenyik^{1,2}, N.M. Wikonkál^{1,2,3}, W. Zhang¹, V. Paliwal¹, D.E. Brash¹ (¹New Haven CT, USA; ²Debrecen, HUN; ³Budapest, HUN)
- PI38 Effect of UV irradiation on cellular responses and DNA damage of human keratinocytes harboring HPV16**
S. Mouret¹, T. Douki², S. Courdavault², A. Favier², J.C. Beani¹, M.T. Leccia¹ (¹La Tronche, FRA; ²Grenoble, FRA)
- PI39 The UV(B) fingerprint dominates the PTCH mutation spectrum of psoralen plus UVA-associated basal cell carcinomas**
E. Heitzer, A. Lassacher, H. Kerl, P. Wolf (Graz, AUT)
- PI40 Activating c-Kit exon 11 mutation is absent in Merkel cell carcinoma**
A. Lassacher, E. Heitzer, H. Kerl, P. Wolf (Graz, AUT)
- PI41 UVA sensitivity in Smith-Lemli-Opitz syndrome: possible involvement of cholesta-5,7,9(11)-trien-3 β -ol**
C.F. Chignell, B.M. Kukielczak, P.J. Bilski, Y.-Y. He, R.H. Sik (Research Triangle Park NC, USA)
- PI42 Quantitative and temporal differences in UVR dose-dependent skin responses in hairless rodents (mice, rats, and guinea pigs)**
C.P. Sambuco, P.D. Forbes, D.B. Learn, M. Arocena, A.M. Hoberman (Horsham PA, USA)
- PI43 Winter eye protection for ultraviolet radiation**
D.H. Sliney¹, D. Sarkany² (¹Gunpowder MD, USA; ²Whistler, CAN)
- PI44 UV-A irradiance at typical indoor life space**
S. Takeshita, M. Sasaki (Kanagawa, JPN)
- PI45 Efficacy of RGD-porphyrins on murine tumoral melanocytes: preliminary results**
A. Sparsa, K. Faucher, V. Sol, P. Krausz, M. Guilloton, F. Sturtz, C. Bédane (Limoges, FRA)
- PI46 Photodegradation of folic acid during extracorporeal photochemotherapy**
M. Der-Petrossian, M. Födinger, R. Knobler, F. Trautinger (Vienna, AUT)
- PI47 Efficacy of variable pulsed light in the treatment of hypertrichosis in 103 patients**
R. Knobler, H. Nahavandi, R. Neumann (Vienna, AUT)
- PI48 Impact of polymorphic light eruption on quality of life across four seasons and at a range of latitudes in Europe**
T.C. Ling¹, H.I. Richards¹, A.S. Janssens², F. Aubin³, C. Jansen⁴, L. Anastassopoulou⁵, A.J. Stratigos⁵, C. Antoniou⁵, T.I. Diepgen⁶, N.K. Gibbs¹, L.E. Rhodes¹ (¹Manchester, GBR; ²Leiden, NED; ³Besançon, FRA; ⁴Turku, FIN; ⁵Athens, GRE; ⁶Heidelberg, GER)
- PI49 The effects of TL-01 phototherapy on erythema and provocation responses in polymorphic light eruption (PLE)**
S. Winhoven, A. Blackburn, M. Brownrigg, L.E. Rhodes, N.K. Gibbs (Manchester, GBR)
- PI50 Acute UV irradiation and heat shock induced exon 26A mRNA and protein expression of elastin in human skin *in vivo***
J.Y. Seo, Z. Chen, S.R. Lee, Y.K. Kim, J.H. Chung (Seoul, KOR)

- PI51 Photochemical properties of aged human RPE melanosomes**
G. Szewczyk¹, A. Pawlak¹, M. Zareba¹, J.M. Burke², C.M.B. Skumatz², M.B. Rozanowska³, M.E. Boulton³, T. Sarna¹ (¹Krakow, POL; ²Milwaukee WI, USA; ³Cardiff, GBR)
- PI52 Modulation of oxidative damage, MAPK activation and cell death in neuronal cells by the fermented papaya preparation**
O.I. Aruoma¹, R. Colognato², K. Koike³, I. Laurenza², L. Benzi², L. Migliore² (¹London, GBR; ²Pisa, ITA; ³Gifu, JPN)
- PI53 Effect of ageing on the expression of cell defence genes after UVA irradiation of human male cutaneous fibroblasts using cDNA arrays**
F. Hazane¹, K. Valenti², S. Sauvaigo², A. Peinnequin¹, C. Mouret¹, A. Favier², J.-C. Beani^{1,2} (¹La Tronche, FRA; ²Grenoble, FRA)
- PI54 Can broad-spectrum sunscreens prevent the secretion of proinflammatory cytokines in human keratinocytes when exposed to the phototoxic drug lomefloxacin and UVA radiation?**
P. Reinhardt, M. Cybulski, S.M. Miller, C.L. Ferrarotto, R. Wilkins, Y. Deslauriers (Ottawa, CAN)
- PI55 Season of diagnosis is a strong prognostic factor in cancer. A possible role of sun-induced vitamin D**
A.C. Porojnicu, T.E. Robsahm, J. Moan (Oslo, NOR)
- PI56 Reaction of antioxidants with a stable colored free radical as a mean to assess their activity**
O. Friaa, D. Brault (Evry, FRA)
- PI57 Twelve-month topical study to determine the influence of bemotrizinol (Tinosorb® S) on photocarcinogenesis in hairless mice**
D.B. Learn¹, C.P. Sambuco¹, P.D. Forbes¹, A.M. Hoberman¹, J.R. Plautz², U. Osterwalder² (¹Horsham PA, USA; ²Basel, SUI)
- PI58 Twelve-month topical study to determine the influence of bisoctrizole (Tinosorb® M- Active) on photocarcinogenesis in hairless mice**
D.B. Learn¹, C.P. Sambuco¹, P.D. Forbes¹, A.M. Hoberman¹, J.R. Plautz², U. Osterwalder² (¹Horsham PA, USA; ²Basel, SUI)
- PI59 Is it possible to use the photodynamic effect to determine an antioxidant activity?**
M. Bancirova (Olomouc, CZE)
- PI60 Photoinduced DNA cleavage and binding studies of benzophenone-based sunscreen absorbers**
J. Kasavel, A.S. Sewlall, B.S. Martincigh (Durban, RSA)
- PI61 The effect of antioxidants on the *para*-aminobenzoic acid photosensitised formation of singlet oxygen**
A.M. Salim, B.S. Martincigh (Durban, RSA)
- PI62 An investigation of the photostabilisation of sunscreen absorbers by plant polyphenols**
G.J. Mturi, B.S. Martincigh (Durban, RSA)
- PI63 Incorporation of sunscreen-active agents in the nanospaces of layered double hydroxides**
M.K. Rotich, B.S. Martincigh (Durban, RSA)
- PI64 Photostability and photochemical analysis of commercial sunscreens**
T. Bunhu, B.S. Martincigh (Durban, RSA)
- PI65 Computational studies of the photodimerisation of 2-ethylhexyl- *para*-methoxycinnamate**
W. Waudo, H.G. Kruger, B.S. Martincigh (Durban, RSA)
- PI66 The UVB filter, 2-phenylbenzimidazole-5 sulfonic acid, enhances the formation of cyclobutane pyrimidine dimers and oxidative damage following UVA and simulated sunlight irradiation**
N. Bastien¹, M. Rouabchia², R. Drouin¹ (¹Sherbrooke, CAN; ²Quebec City, CAN)
- PI67 On the influence of application amount of sun protection products on their efficacy and photostability**
H. Tronnier¹, B. Garbe¹, U. Heinrich¹, D.Kockott² (¹Witten, GER; ²Hanau, GER)

- PI68 Influence of substitution at the benzylic position on the behavior of stereoisomeric phosphorus compounds as precursors of possible antioxidants**
J. Pérez-Prieto¹, R.E. Galian¹, M.C. Morant-Miñana¹, P.O. Burgos², M.Á. Miranda¹, F. López-Ortiz²
(¹Valencia, ESP; ²Almería, ESP)
- PI69 Antioxidant activity of mycosporine-like amino acids (MAAs) from marine dinoflagellates**
M.R. Flores^{1,2,3}, M.I. Isla^{1,3}, M.E. Farías^{1,3}, E.W. Helbling^{2,3} (¹San Miguel de Tucumán, ARG; ²Playa Unión, ARG;
³CONICET, ARG)
- PI70 Seasonal changes in UV exposure**
S. Wengraitis, D. Sliney (Gunpowder MD, USA)
- PI71 Pulsed radiation studies of natural UV filters extracted from lichens: possible sunscreens**
R. Edge (Keele, GBR)
- PI72 Betamethasone phototoxicity: *in vitro*, *in vivo* and *ex vivo* studies**
G. Miolo¹, F.Galloccchio¹, S. Caffieri¹, F. Baccichetti¹, C. Marzano¹, M.G. Zanirato²,
G. Beyersbergen van Henegouwen¹ (¹Padova, ITA; ²Savigliano, ITA)
- PI73 Effects of aqueous preparations on the phototoxicity of curcumin**
E.M. Bruzell¹, E. Morisbak¹, H.H. Tønnesen² (¹Haslum, NOR; ²Oslo, NOR)
- PI74 Singlet excited state properties of fluoroquinolones: emission of norfloxacin and derivatives in aqueous media**
M.C. Cuquerella, M.Á. Miranda, F. Boscá (Valencia, ESP)
- PI75 Photophysical techniques for the study of drug-protein interactions: flurbiprofen-human serum albumin as model system**
M.C. Jiménez, I. Vayá, M.Á. Miranda (Valencia, ESP)
- PI76 Stereodifferentiation in the interaction between chiral carprofen and human serum albumin: from whole protein to model dyads**
V. Lliaubet-Vallet, F. Boscá, M.Á. Miranda (Valencia, ESP)
- PI77 Singlet oxygen-mediated photodegradation of folic acid and photosensitizing activity of its photoproducts**
P. Vorobey^{1,2}, M.K. Off¹, A. Vorobey^{1,2}, J. Moan¹ (¹Oslo, NOR; ²Minsk, BLR)
- PI78 Effects of buffers, pH, and hydroxylated molecules on fluorescence emission of protein**
A.M. Almehdi, G.A. Ahmed (Al-Ain, UAE)
- PI79 Photosensitizing activity of di- or tetraaryl-porphyrins on HCT116 cells**
S. Banfi, E. Caruso, L. Buccafurni, R. Murano, E. Monti, M.B. Gariboldi, R. Ravizza, F. Terni (Varese, ITA)
- PI80 *In vitro* photodynamic efficacy of emodine bearing porphyrins**
S. Banfi¹, E. Caruso¹, E. Monti¹, M.B. Gariboldi¹, S. Alemani², G. Nasini² (¹Varese, ITA; ²Milano, ITA)
- PI81 Photostabilities of some photoactive organic species common in some sunscreens with different SPF**
M. Tammam^{1,3}, A.M. Molokhia³, M.S.A. Abdel-Mottaleb^{1,2} (Cairo, EGY)