

## Subject Index of Volume 153

- Alkylbenzopyridoporphyrazine**  
Photosensitizer efficacy of non-peripheral substituted alkylbenzopyridoporphyrazines for photodynamic therapy of cancer, 245
- Amino acid**  
Influence of methanol and cyclodextrin cavity size on stoichiometry and binding constant of 3-[2-(9-anthryl)benzoxazol-5-yl]-alanine, 121
- Aminoalcohol**  
Use of 2-(*N*-methyl-*N*-phenylamino)-1-phenylethanol as synergist in UV-curing applications, 129
- Anthracene**  
Photoreactions in clay media: singlet oxygen oxidation of electron-rich substrates mediated by clay-bound dyes, 205
- Antioxidant**  
The photochemistry of dipyridamole, 237
- Arylsulfonamides**  
Photolysis of *N*-(4-benzoyl)benzenesulfonyl]benzenesulfonamide, 109
- Bactericidal activity**  
Bactericidal and photocatalytic activities of TiO<sub>2</sub> thin films prepared by sol–gel and reverse micelle methods, 211
- Benzochromone**  
Fluorescence emission and photooxidation studies with 5,6- and 6,7-benzocoumarins and a 5,6-benzochromone under direct and concentrated sun light, 173
- Benzocoumarin**  
Fluorescence emission and photooxidation studies with 5,6- and 6,7-benzocoumarins and a 5,6-benzochromone under direct and concentrated sun light, 173
- Benzophenone**  
Potentialities of diffuse reflectance laser-induced techniques in solid phase: A comparative study of benzophenone inclusion within *p*-*tert*-butylcalixarenes, silicalite and microcrystalline cellulose, 11
- Biodegradability**  
Biodegradability enhancement of textile dyes and textile wastewater by VUV photolysis, 191
- Calixarenes**  
Potentialities of diffuse reflectance laser-induced techniques in solid phase: A comparative study of benzophenone inclusion within *p*-*tert*-butylcalixarenes, silicalite and microcrystalline cellulose, 11
- Carbendazim**  
Photochemical behavior of the fungicide carbendazim in dilute aqueous solution, 221
- CIDNP**  
Electron transfer mediated geometrical photoisomerization of  $\alpha,\beta$ -unsaturated ketones in the presence of electron donors in solution, 77  
The role of radicals in the phototransformations of  $\beta$ -ionone in the presence of electron donors in solution, 113
- Clay microenvironment**  
Photoreactions in clay media: singlet oxygen oxidation of electron-rich substrates mediated by clay-bound dyes, 205
- Concentrated sulfuric acid**  
Photochemistry of concentrated sulfuric acid in the presence of SO<sub>2</sub> and Fe(II), and implications for the cloud chemistry of Venus, 1
- Coumarin**  
A pulse radiolysis study of coumarin and its derivatives, 163
- Cure monitoring**  
New fluorescent probes for monitoring the polymerization reaction: *p*-vinyliden derivatives of *N,N*-dimethylaminoaryl compounds, 135
- Cyclodextrin**  
Influence of methanol and cyclodextrin cavity size on stoichiometry and binding constant of 3-[2-(9-anthryl)benzoxazol-5-yl]-alanine, 121
- Dichlorovos**  
Photo-oxidative degradation of insecticide dichlorovos by a combined semiconductors and organic sensitizers in aqueous media, 229
- Diffuse reflectance**  
Potentialities of diffuse reflectance laser-induced techniques in solid phase: A comparative study of benzophenone inclusion within *p*-*tert*-butylcalixarenes, silicalite and microcrystalline cellulose, 11
- 2,3-Dihydroxypyridine**  
Ionization effects on the sensitized photooxidation of 2,3-dihydroxypyridine and 2,4-dihydroxypyridine: a kinetic study, 101
- 2,4-Dihydroxypyridine**  
Ionization effects on the sensitized photooxidation of 2,3-dihydroxypyridine and 2,4-dihydroxypyridine: a kinetic study, 101
- Dipole moments**  
Dipole moments of 4'-aminoflavonols determined using electro-optical absorption measurements or molecular Stark-effect spectroscopy, 19
- Dipyridamole**  
The photochemistry of dipyridamole, 237
- Dye sensitisers**  
Photoreactions in clay media: singlet oxygen oxidation of electron-rich substrates mediated by clay-bound dyes, 205
- Dye sensitization**  
Visible light induced photodegradation of organic pollutants on dye adsorbed TiO<sub>2</sub> surface, 199
- Dye–mixture**  
Energy transfer in Rh 6G:Rh B system in PMMA matrix under cw laser excitation, 145
- Dyes**  
Environmental remediation by an integrated microwave/UV-illumination method. II. Characteristics of a novel UV–VIS–microwave integrated irradiation device in photodegradation processes, 185  
Biodegradability enhancement of textile dyes and textile wastewater by VUV photolysis, 191
- E. coli***  
Bactericidal and photocatalytic activities of TiO<sub>2</sub> thin films prepared by sol–gel and reverse micelle methods, 211
- Electron transfer**  
Direct and sensitized (energy and electron transfer) geometric isomerization of stilbene within zeolites: a comparison between solution and zeolite as reaction media, 41

- Electron transfer mediated geometrical photoisomerization of  $\alpha,\beta$ -unsaturated ketones in the presence of electron donors in solution, 77
- Electron-rich phenols  
Photoreactions in clay media: singlet oxygen oxidation of electron-rich substrates mediated by clay-bound dyes, 205
- Electro-optical absorption method  
Dipole moments of 4'-aminoflavonols determined using electro-optical absorption measurements or molecular Stark-effect spectroscopy, 19
- Energy transfer  
Energy transfer in Rh 6G:Rh B system in PMMA matrix under cw laser excitation, 145
- Excited state  
Investigation of excited-state proton transfer in 2-naphthol derivatives containing a carboxyl group in organic solvents and in methanol-water mixtures, 89
- Flash photolysis  
Potentialities of diffuse reflectance laser-induced techniques in solid phase: A comparative study of benzophenone inclusion within *p*-*tert*-butylcalixarenes, silicalite and microcrystalline cellulose, 11
- Flavonols  
Dipole moments of 4'-aminoflavonols determined using electro-optical absorption measurements or molecular Stark-effect spectroscopy, 19
- Fluorescence  
Photophysical properties of novel [1,2,3]triazolo[4,5-d] pyridazine derivatives, 83
- Fluorescence lifetime  
Fluorescence emission and photooxidation studies with 5,6- and 6,7-benzocoumarins and a 5,6-benzochromone under direct and concentrated sun light, 173
- Fluorescent probes  
Dipole moments of 4'-aminoflavonols determined using electro-optical absorption measurements or molecular Stark-effect spectroscopy, 19  
New fluorescent probes for monitoring the polymerization reaction: *p*-vinyliden derivatives of *N,N*-dimethylaminoaryl compounds, 135
- Free radicals  
Kinetic and spectral properties of rhodamine 6G free radicals: a pulse radiolysis study, 153
- Fungicide  
Photochemical behavior of the fungicide carbendazim in dilute aqueous solution, 221
- Geometric isomerization  
Direct and sensitized (energy and electron transfer) geometric isomerization of stilbene within zeolites: a comparison between solution and zeolite as reaction media, 41
- Halocarbons  
Visible light induced photodegradation of organic pollutants on dye adsorbed TiO<sub>2</sub> surface, 199
- Hydrogen bonding  
Photophysical properties of novel [1,2,3]triazolo[4,5-d] pyridazine derivatives, 83
- Inclusion complexes  
Potentialities of diffuse reflectance laser-induced techniques in solid phase: A comparative study of benzophenone inclusion within *p*-*tert*-butylcalixarenes, silicalite and microcrystalline cellulose, 11
- Internal conversion  
Photophysical properties of novel [1,2,3]triazolo[4,5-d] pyridazine derivatives, 83
- Intersystem crossing  
Photophysical properties of novel [1,2,3]triazolo[4,5-d] pyridazine derivatives, 83
- $\beta$ -Ionone  
The role of radicals in the phototransformations of  $\beta$ -ionone in the presence of electron donors in solution, 113
- Isomerization  
Electron transfer mediated geometrical photoisomerization of  $\alpha,\beta$ -unsaturated ketones in the presence of electron donors in solution, 77  
The role of radicals in the phototransformations of  $\beta$ -ionone in the presence of electron donors in solution, 113
- Kinetics  
Kinetics of thermal decoloration of a photomerocyanine in mixtures of protic and nonpolar solvents, 25  
A pulse radiolysis study of coumarin and its derivatives, 163
- Laser flash photolysis  
Laser flash photolysis study of nicotinic acid in water, 33  
Photosensitizer efficacy of non-peripheral substituted alkylbenzopyridodorphyrazines for photodynamic therapy of cancer, 245
- Lasers  
Kinetic and spectral properties of rhodamine 6G free radicals: a pulse radiolysis study, 153
- Methanol  
Influence of methanol and cyclodextrin cavity size on stoichiometry and binding constant of 3-[2-(9-anthryl)benzoxazol-5-yl]-alanine, 121
- Methylene blue  
Visible light induced photodegradation of organic pollutants on dye adsorbed TiO<sub>2</sub> surface, 199
- Microcrystalline cellulose  
Potentialities of diffuse reflectance laser-induced techniques in solid phase: A comparative study of benzophenone inclusion within *p*-*tert*-butylcalixarenes, silicalite and microcrystalline cellulose, 11
- Micropolarity  
New fluorescent probes for monitoring the polymerization reaction: *p*-vinyliden derivatives of *N,N*-dimethylaminoaryl compounds, 135
- Microviscosity  
New fluorescent probes for monitoring the polymerization reaction: *p*-vinyliden derivatives of *N,N*-dimethylaminoaryl compounds, 135
- Microwave  
Environmental remediation by an integrated microwave/UV-illumination method. II. Characteristics of a novel UV-VIS-microwave integrated irradiation device in photodegradation processes, 185
- Microwave plasma  
Environmental remediation by an integrated microwave/UV-illumination method. II. Characteristics of a novel UV-VIS-microwave integrated irradiation device in photodegradation processes, 185
- Naphthol  
Investigation of excited-state proton transfer in 2-naphthol derivatives containing a carboxyl group in organic solvents and in methanol-water mixtures, 89
- Olefins  
Cation controlled singlet oxygen mediated oxidation of olefins within zeolites, 55
- Oxidation  
Cation controlled singlet oxygen mediated oxidation of olefins within zeolites, 55
- Photochemical transformation  
Photochemical behavior of the fungicide carbendazim in dilute aqueous solution, 221
- Photochemistry  
Photochemistry of concentrated sulfuric acid in the presence of SO<sub>2</sub> and Fe(II), and implications for the cloud chemistry of Venus, 1

- Photodegradation  
 Environmental remediation by an integrated microwave/UV-illumination method. II. Characteristics of a novel UV-VIS-microwave integrated irradiation device in photodegradation processes, 185
- Photo-degradation  
 Biodegradability enhancement of textile dyes and textile wastewater by VUV photolysis, 191
- Photodegradation  
 Visible light induced photodegradation of organic pollutants on dye adsorbed TiO<sub>2</sub> surface, 199  
 The photochemistry of dipyridamole, 237
- Photodynamic therapy of cancer  
 Photosensitizer efficacy of non-peripheral substituted alkylbenzopyrindoporphyrazines for photodynamic therapy of cancer, 245
- Photoinitiators  
 Use of 2-(*N*-methyl-*N*-phenylamino)-1-phenylethanol as synergist in UV-curing applications, 129
- Photoionisation  
 Laser flash photolysis study of nicotinic acid in water, 33
- Photolysis  
 Photolysis of *N*-(4-benzoyl)benzenesulfonylbenzenesulfonamide, 109
- Photomerocyanine  
 Kinetics of thermal decoloration of a photomerocyanine in mixtures of protic and nonpolar solvents, 25
- Photooxidation  
 Ionization effects on the sensitized photooxidation of 2,3-dihydroxypyridine and 2,4-dihydroxypyridine: a kinetic study, 101  
 Fluorescence emission and photooxidation studies with 5,6- and 6,7-benzocoumarins and a 5,6-benzochromone under direct and concentrated sun light, 173  
 Environmental remediation by an integrated microwave/UV-illumination method. II. Characteristics of a novel UV-VIS-microwave integrated irradiation device in photodegradation processes, 185  
 Photoreactions in clay media: singlet oxygen oxidation of electron-rich substrates mediated by clay-bound dyes, 205
- Photopolymerization  
 New fluorescent probes for monitoring the polymerization reaction: *p*-vinyliden derivatives of *N,N*-dimethylaminoaryl compounds, 135
- Photosensitization  
 Ionization effects on the sensitized photooxidation of 2,3-dihydroxypyridine and 2,4-dihydroxypyridine: a kinetic study, 101
- Phototransformation  
 The role of radicals in the phototransformations of  $\beta$ -ionone in the presence of electron donors in solution, 113
- Poly methyl methacrylate  
 Energy transfer in Rh 6G:Rh B system in PMMA matrix under cw laser excitation, 145
- Poly(vinyl alcohol) coating  
 Photosensitizer efficacy of non-peripheral substituted alkylbenzopyrindoporphyrazines for photodynamic therapy of cancer, 245
- Protic solvents  
 Ground and excited state proton transfer reaction of two new *o*-hydroxy Schiff bases in some protic solvents at room temperature and 77 K, 67
- Proton transfer  
 Ground and excited state proton transfer reaction of two new *o*-hydroxy Schiff bases in some protic solvents at room temperature and 77 K, 67  
 Investigation of excited-state proton transfer in 2-naphthol derivatives containing a carboxyl group in organic solvents and in methanol-water mixtures, 89
- Pulse radiolysis  
 Kinetic and spectral properties of rhodamine 6G free radicals: a pulse radiolysis study, 153  
 A pulse radiolysis study of coumarin and its derivatives, 163
- Pyridine-3-carboxylic acid  
 Laser flash photolysis study of nicotinic acid in water, 33
- Quenching of fluorescence emission  
 Fluorescence emission and photooxidation studies with 5,6- and 6,7-benzocoumarins and a 5,6-benzochromone under direct and concentrated sun light, 173
- Radicals  
 The role of radicals in the phototransformations of  $\beta$ -ionone in the presence of electron donors in solution, 113
- Reverse micelle method  
 Bactericidal and photocatalytic activities of TiO<sub>2</sub> thin films prepared by sol-gel and reverse micelle methods, 211
- Rhodamine B  
 Visible light induced photodegradation of organic pollutants on dye adsorbed TiO<sub>2</sub> surface, 199  
 Bactericidal and photocatalytic activities of TiO<sub>2</sub> thin films prepared by sol-gel and reverse micelle methods, 211
- Rhodamine 6G  
 Kinetic and spectral properties of rhodamine 6G free radicals: a pulse radiolysis study, 153
- Rhodamine-B  
 Environmental remediation by an integrated microwave/UV-illumination method. II. Characteristics of a novel UV-VIS-microwave integrated irradiation device in photodegradation processes, 185
- Room temperature phosphorescence  
 Potentialities of diffuse reflectance laser-induced techniques in solid phase: A comparative study of benzophenone inclusion within *p*-*tert*-butylcalixarenes, silicalite and microcrystalline cellulose, 11
- Rose Bengal  
 Ionization effects on the sensitized photooxidation of 2,3-dihydroxypyridine and 2,4-dihydroxypyridine: a kinetic study, 101
- Schiff bases  
 Ground and excited state proton transfer reaction of two new *o*-hydroxy Schiff bases in some protic solvents at room temperature and 77 K, 67
- Semiconductors  
 Photo-oxidative degradation of insecticide dichlorovos by a combined semiconductors and organic sensitizers in aqueous media, 229
- Sensitizers  
 Photo-oxidative degradation of insecticide dichlorovos by a combined semiconductors and organic sensitizers in aqueous media, 229
- Silicalite  
 Potentialities of diffuse reflectance laser-induced techniques in solid phase: A comparative study of benzophenone inclusion within *p*-*tert*-butylcalixarenes, silicalite and microcrystalline cellulose, 11
- Singlet molecular oxygen  
 Ionization effects on the sensitized photooxidation of 2,3-dihydroxypyridine and 2,4-dihydroxypyridine: a kinetic study, 101
- Singlet oxygen  
 The photochemistry of dipyridamole, 237
- Sol-gel method  
 Bactericidal and photocatalytic activities of TiO<sub>2</sub> thin films prepared by sol-gel and reverse micelle methods, 211
- Steady-state irradiation  
 Laser flash photolysis study of nicotinic acid in water, 33
- Stilbene  
 Direct and sensitized (energy and electron transfer) geometric isomerization of stilbene within zeolites: a comparison between solution and zeolite as reaction media, 41
- Superoxide radical  
 The photochemistry of dipyridamole, 237

## Surfactants

Visible light induced photodegradation of organic pollutants on dye adsorbed TiO<sub>2</sub> surface, 199

## Synergist

Use of 2-(*N*-methyl-*N*-phenylamino)-1-phenylethanol as synergist in UV-curing applications, 129

 $\alpha$ -Terpinene

Fluorescence emission and photooxidation studies with 5,6- and 6,7-benzocoumarins and a 5,6-benzochromone under direct and concentrated sun light, 173

## Textile wastewater

Biodegradability enhancement of textile dyes and textile wastewater by VUV photolysis, 191

## Thermal decoloration

Kinetics of thermal decoloration of a photomerocyanine in mixtures of protic and nonpolar solvents, 25

TiO<sub>2</sub> semiconductor

Visible light induced photodegradation of organic pollutants on dye adsorbed TiO<sub>2</sub> surface, 199

TiO<sub>2</sub> thin films

Bactericidal and photocatalytic activities of TiO<sub>2</sub> thin films prepared by sol-gel and reverse micelle methods, 211

## Titanium dioxide

Environmental remediation by an integrated microwave/UV-illumination method. II. Characteristics of a novel UV-VIS-microwave integrated irradiation device in photodegradation processes, 185

## Transient absorption spectra

A pulse radiolysis study of coumarin and its derivatives, 163

## Triplet

Laser flash photolysis study of nicotinic acid in water, 33

## Triplet state

The role of radicals in the phototransformations of  $\beta$ -ionone in the presence of electron donors in solution, 113

## Unsaturated ketones

Electron transfer mediated geometrical photoisomerization of  $\alpha,\beta$ -unsaturated ketones in the presence of electron donors in solution, 77

## UV

Photochemical behavior of the fungicide carbendazim in dilute aqueous solution, 221

## UV-curing

Use of 2-(*N*-methyl-*N*-phenylamino)-1-phenylethanol as synergist in UV-curing applications, 129

## Venus

Photochemistry of concentrated sulfuric acid in the presence of SO<sub>2</sub> and Fe(II), and implications for the cloud chemistry of Venus, 1

## Visible light

Visible light induced photodegradation of organic pollutants on dye adsorbed TiO<sub>2</sub> surface, 199

## VUV photolysis

Biodegradability enhancement of textile dyes and textile wastewater by VUV photolysis, 191

## Zeolites

Cation controlled singlet oxygen mediated oxidation of olefins within zeolites, 55

## Zinc phthalocyanine derivatives

Photosensitizer efficacy of non-peripheral substituted alkylbenzopyridoporphyrazines for photodynamic therapy of cancer, 245