





European Journal of Medicinal Chemistry 41 (2006) 1507–1521



http://www.elsevier.com/locate/ejmech

# **Keyword index**

- $\alpha$ , β-Unsaturated-δ-lactones Synthesis and biological properties of new  $\alpha$ -methylene- $\gamma$ -butyrolactones and  $\alpha$ , β-unsaturated δ-lactones, 192
- α-Glucosidase inhibitor α-Glucosidase inhibition of natural curcuminoids and curcumin analogs, 213
- **α-Methylene-γ-butyrolactones** Synthesis and biological properties of new α-methylene-γ-butyrolactones and  $\alpha$ , $\beta$ -unsaturated δ-lactones, 192
- $\alpha_1$ -Adrenoreceptor QSAR study for a novel series of *ortho* disubstituted phenoxy analogues of  $\alpha_1$ -adrenoceptor antagonist WB4101, 1025
- $\alpha_v \beta_3$  Novel potent and selective  $\alpha_v \beta_3 / \alpha_v \beta_5$  integrin dual antagonists with reduced binding affinity for human serum albumin, 847
- $\alpha_v \beta_5$  Novel potent and selective  $\alpha_v \beta_3 / \alpha_v \beta_5$  integrin dual antagonists with reduced binding affinity for human serum albumin, 847
- β-Carboline Syntheses of new substituted triazino tetrahydroisoquinolines and β-carbolines as novel antileishmanial agents, 106 – Design of β-carboline derivatives as DNA-targering antitumor agents, 1167
- β-Keto esters Synthesis of a new series of heterocyclic scaffolds for medicinal purposes, 1017
- **β-Lapachone** Synthesis of naphthofuranquinones with activity against *Trypanosoma cruzi*, 526
- **β-Santalol** Syntheses and odor of "bulky group"-modified sandalwood odorants: isophorono-β-santalol analogues, 905
- μ Opioid agonists QSAR study of 4-phenylpiperidine derivatives as μ opioid agonists by neural network method, 226
- σ Receptor ligands Synthesis and receptor binding studies of 3-substituted piperazine derivatives, 387
- (E)-stilbenes Synthesis and antimicrobial activity of new (E)-4-[piperidino (4'-methylpiperidino-, morpholino-) N-alkoxy] stilbenes, 519
- 1β-Methylcarbapenem Synthesis and biological evaluation of 1β-methylcarbapenems having cyclic thiourea moieties and their related compounds, 825 Synthesis and in vitro activity of a series 1β-methylcarbapenem derivatives, 1201 Synthesis and antibacterial activities of new 1β-methylcarbapenems having ami-nopyrimidinylthioether moiety, 1347
- 1H-Benzimidazol-2-ylthioacetylpiperazines Antihelminthic activity of some newly synthesized 5(6)-(un)substituted-1H-benzimidazol-2-ylthioacetylpiperazine derivatives, 1412

- **1,2,3,4-Tetrahydroisoquinoline** Synthesis, antibacterial activity and QSAR studies of 1,2-disubstituted-6,7-dimethoxy-1,2,3,4-tetrahydroisoquinolines, 40 Synthesis and in vitro cytotoxicity of 1,2,3,4-tetrahydroisoquinoline derivatives, 241
- 1,2,3,4-Tetrazol Synthesis and in vitro antibacterial activity of novel heterocyclic derivatives of 18-nor-equilenin, 891
- 1,2,4-Triazole Structural-activity relationship study on C-4 carbon atom of the CB<sub>1</sub> antagonist SR141716: synthesis and pharmacological evaluation of 1,2,4-triazole-3-carboxamides, 114 Synthesis, characterization and biological studies of Co(II), Ni(II), Cu(II) and Zn(II) complexes with bidentate Schiff bases derived by heterocyclic ketone, 147 Synthesis and studies on some new fluorine containing triazolothiadiazines as possible antibacterial, antifungal and anticancer agents, 657
- **1,2,4-Triazolo-1,3,4-thiadiazole** Synthesis of pharmaceutically important condensed heterocyclic 4,6-disubstituted-1,2,4-triazolo-1,3,4-thiadiazole derivatives as antimicrobials, 531
- **1,2-Anellated piperazines** Synthesis and receptor binding studies of 3-substituted piperazine derivatives, 387
- **1,3,4-oxadiazoles** Synthesis and antimicrobial studies of a new series of 2-{4-[2-(5-ethylpyridin-2-yl)ethoxy]phenyl}-5-sub-stituted-1,3,4-oxadiazoles, 841
- **1,3,4-Thiadiazines** Synthesis and studies on some new fluorine containing triazolothiadiazines as possible antibacterial, antifungal and anticancer agents, 657
- **1,3,4-Thiadiazole** Synthesis, antibacterial and antitubercular activities of some 7-[4-(5-amino-[1,3,4]thiadiazole-2-sulfonyl)-piperazin-1-yl] fluoroquinolonic derivatives, 918
- **1,3,4-Triazole** Synthesis and in vitro antibacterial activity of novel heterocyclic derivatives of 18-nor-equilenin, 891
- **1,4-Benzoxazine-3-one** Synthesis, antimicrobial activity and QSARs of new benzoxazine-3-ones, 1398
- **1-(4-X-phenyl)-N'-[(4-Y-phenyl)methyl-ene]-1***H***-pyrazole-4-carbohydrazides** Synthesis and leishmanicidal activities of 1-(4-X-phenyl)-N'-[(4-Y-phenyl)methyl-ene]-1*H*-pyrazole-4-carbohydrazides, 80
- 1-(Imidazol-2-yl and pyrimidin-2-yl)-3pyrazolin-5-ones synthesis – Nonsteroi-dal antiinflammatory agents-part 2 antiin-flammatory, analgesic and antipyretic activity of some substituted 3-pyrazolin-5-ones and 1,2,4,5,6,7-3*H*-hexahydroindazol-3-ones, 155

- **1-aryl-2-hydrazono-imidazolidine** Synthesis, crystal structure and anticancer activity of novel derivatives of ethyl 1-(4-oxo-8-aryl-4,6,7,8-tetrahydroimidazo[2,1-*c*][1,2,4]tri-azin-3-yl)formate, 539
- <sup>1</sup>H NMR Synthesis, characterization and biological studies of Co(II), Ni(II), Cu(II) and Zn(II) complexes with bidentate Schiff bases derived by heterocyclic ketone, 147
- **2,4-Diamino-1,3,5-triazine derivatives** Synthesis, structure and anticancer activity of novel 2,4-diamino-1,3,5-triazine derivatives, 219
- **2-(2,4-Dihydroxyphenyl)-1,3,4-thiadiazoles** Synthesis and antiproliferative activity of some 5-substituted 2-(2,4-dihydroxyphenyl)-1,3,4-thiadiazoles, 475
- 2-(Imidazol-2-yl and pyrimidin-2-yl)-1,2,4,5,6,7-hexahydro-3*H*-indazol-3-ones synthesis Nonsteroidal antiinflammatory agents—part 2 antiinflammatory, analgesic and antipyretic activity of some substituted 3-pyrazolin-5-ones and 1,2,4,5,6,7-3*H*-hexahydroindazol-3-ones, 155
- 2-(Substituted phenyl)-benzimidazoles Substituted 2-phenyl-benzimidazole derivatives: novel compounds that suppress key markers of allergy, 950
- 2-Aminobenzamide-containing HDAC inhibitor Synthesis and cancer antiproliferative activity of new histone deacetylase inhibitors: hydrophilic hydroxamates and 2-aminobenzamide-containing derivatives, 697
- **2-aminobenzimidazole derivatives** Synthesis and QSAR studies of novel 1-substituted-2-aminobenzimidazoles derivatives, 1080
- **2-Aminopyridine** Synthesis of a new series of heterocyclic scaffolds for medicinal purposes, 1017
- **2-anilinophenylacetamides** Design, synthesis and in vivo anticonvulsant screening in mice of Novel phenylacetamides, 786
- **2-Azaspiro[4.4]nonane- and [4.5]decane- 1,3-diones** Synthesis, anticonvulsant activity and 5-HT<sub>1A</sub>, 5-HT<sub>2A</sub> receptor affinity of new *N*-[(4-arylpiperazin-1-yl)-alkyl] derivatives of 2-azaspiro[4.4]nonane and [4.5]decane-1,3-dione, 874
- **2-Benzylthio-4-chlorobenzenesulfonamides** Synthesis and in vitro antitumor activity of novel series 2-benzylthio-4-chlorobenzenesulfonamide derivatives, 1180
- **2-Phenylsulfinyl-3-arylthio-1,4-dihydron- aphtalenes** Synthesis and evaluation of antifungal activity of naphthoquinone derivatives, 773

doi: 10.1016/S0223-5234(06)00419-3

- 3-Aminopyrazole Exploring QSAR on 3-aminopyrazoles as antitumor agents for their inhibitory activity of CDK2/cyclin A, 1190
- **3-Substituted piperazines** Synthesis and receptor binding studies of 3-substituted piperazine derivatives, 387
- 3D QSAR 3D QSAR for GSK-3β inhibition by indirubin analogues, 373 – Understanding the antitumor activity of novel tricy-clicpiperazinyl derivatives as farnesyltrans-ferase inhibitors using CoMFA and CoMSIA, 1279
- 3D-QSAR Three-dimensional quantitative structure–activity relationship studies on diverse structural classes of HIV-1 integrase inhibitors using CoMFA and CoMSIA, 1359
- **4-**(*E*)-ethenyl-6-alkylamino-1,3,5-triazin-2-ylamines Synthesis, structure and anti-cancer activity of novel alkenyl-1,3,5-triazine derivatives, 611
- **4-Amino triazoles** Heterocyclic system containing bridgehead nitrogen atom: synthesis and pharmacological activities of some substituted 1,2,4-triazolo[3,4-b]-1,3,4-thiadiazoles, 1048
- **4-Aminobicyclo[2.2.2]octane derivatives** Synthesis of new esters and oximes with 4-aminobicyclo[2.2.2]octane structure and evaluation of their antitrypanosomal and antiplasmodial activities, 970
- **4-Arylpiperazine derivatives** Synthesis, anticonvulsant activity and 5-HT<sub>1A</sub>, 5-HT<sub>2A</sub> receptor affinity of new *N*-[(4-arylpiperazin-1-yl)-alkyl] derivatives of 2-azaspiro[4.4] nonane and [4.5]decane-1,3-dione, 874
- **4-Hydroxycoumarin derivatives** Synthesis, structure, toxicological and pharmacological investigations of 4-hydroxy-coumarin derivatives, 882
- 4-Phenylpiperidine derivatives QSAR study of 4-phenylpiperidine derivatives as μ opioid agonists by neural network method, 226
- **4-Thiazolidinone** Synthesis and biological activity of 4-thiazolidinones, thiosemicarbazides derived from diflunisal hydrazide, 353
- **5,6-Dihydropyran-2-ones** Trypanocidal activity of **5,6-dihydropyran-2-ones** against free trypomastigotes forms of *Trypanosoma cruzi*, 1210
- 5-[2-(2-methylprop1-enyl)-1*H* benzimi dazol-1yl]-4,6-diphenyl- pyrimidin-2-(5*H*)-thiones Synthesis and QSAR studies on 5-[2-(2-methylprop1-enyl)-1*H* benzimidazol-1yl]-4,6-diphenyl-pyrimidin-2-(5*H*)-thione derivatives as antibacterial agents, 833
- 5-HT<sub>1A</sub> receptor QSAR study for a novel series of *ortho* disubstituted phenoxy analogues of α<sub>1</sub>-adrenoceptor antagonist WB4101, 1025
- 5-HT<sub>1A</sub> receptor ligand Synthesis of new hexahydro- and octahydropyrido[1,2-c] pyrimidine derivatives with an arylpiperazine moiety as ligands for 5-HT<sub>1A</sub> and 5-HT<sub>2A</sub> receptors. Part 4, 125
- 5-HT<sub>1A</sub>, 5-HT<sub>2A</sub> receptor affinity Synthesis, anticonvulsant activity and 5-HT<sub>1A</sub>, 5-HT<sub>2A</sub> receptor affinity of new *N*-[(4-arylpiperazin-1-yl)-alkyl] derivatives of

- 2-azaspiro[4.4]nonane and [4.5]decane-1,3-dione, 874
- 5-HT<sub>2A</sub> receptor ligand Synthesis of new hexahydro- and octahydropyrido [1,2-c] pyrimidine derivatives with an arylpiperazine moiety as ligands for 5-HT<sub>1A</sub> and 5-HT<sub>2A</sub> receptors. Part 4, 125
- **5-HT**<sub>4</sub> Optimization of a pharmacophore model for 5-HT<sub>4</sub> agonists using CoMFA and receptor based alignment, 16
- 5-Hydroxytryptamine Optimization of a pharmacophore model for 5-HT<sub>4</sub> agonists using CoMFA and receptor based alignment, 16
- 5-nitrofuryl derivatives New potent 5-nitrofuryl derivatives as inhibitors of *Trypanosoma cruzi* growth. 3D-QSAR (CoMFA) studies, 457
- 6-Fluoro-8-methoxy-quinolone Design, synthesis and activity against *Toxoplasma* gondii, *Plasmodium* spp., and *Myco*bacterium tuberculosis of new 6-fluoroquinolones, 1478
- [<sup>3</sup>H]-flunitrazepam binding Interaction of novel condensed triazine derivatives with central and peripheral type benzodiazepine receptors: synthesis, in vitro pharmacology and modelling, 445
- [3H]-PK 11195 binding Interaction of novel condensed triazine derivatives with central and peripheral type benzodiazepine receptors: synthesis, in vitro pharmacology and modelling, 445

## Δ

- A1 Adenosine receptor modelling. A<sub>1</sub>/A<sub>2a</sub> selectivity, 321
- A<sub>2a</sub> Adenosine receptor modelling. A<sub>1</sub>/A<sub>2a</sub> selectivity, 321
- $\begin{array}{lll} \textbf{A}_{\textbf{2A}} & \textbf{adenosine receptors agonists} \text{Radial} \\ & \text{distribution function descriptors: an alternative for predicting } \textbf{A}_{2A} & \text{adenosine receptors agonists, } 56 \end{array}$
- A<sub>2A</sub> adenosine receptor Synthesis and evaluation of 7-amino-2-(2(3)-furyl)-5phenylethylamino-oxazolo[5,4-d]pyrimidines as potential A<sub>2A</sub> adenosine receptor antagonists for positron emission tomography (PET), 7
- **Ab initio** QSAR models based on quantum topological molecular similarity, 862
- ABCB1 In silico modelling of the interaction of flavonoids with human P-glycoprotein nucleotide-binding domain, 285
- **Abyssinone II** Synthesis of Abyssinone II and related compounds as potential chemopreventive agents, 263
- ACE inhibition Glycosides and amino acyl esters of carbohydrates as potent inhibitors of angiotensin converting enzyme, 1059
- **AChE** Synthesis and biological evaluation of new 4*H*-pyrano[2,3-*b*]quinoline derivatives that block acetylcholinesterase and cell calcium signals, and cause neuroprotection against calcium overload and free radicals, 1464
- Acridine Synthesis and biological evaluation of modified acridines: the effect of N-and O- substituent in the nitrogenated ring on antitumor activity, 340 Synthesis and SAR study of acridine, 2-methylquinoline

- and 2-phenylquinazoline analogues as antiprion agents, 1124
- Acute toxicity Synthesis and QSAR studies of novel 1-substituted-2-amino-benzimidazoles derivatives, 1080 – Synthesis and anticonvulsant activity of some potential thiazolidinonyl 2-oxo/thio-barbituric acids, 1223
- **Acylation** Synthesis and anti-bacterial activity of some novel 2-(6-fluorochroman-2-yl)-1-alkyl/acyl/aroyl- 1*H*-benzimidazoles, 599
- **Adenosine receptor** Adenosine receptor modelling. A<sub>1</sub>/A<sub>2a</sub> selectivity, 321
- ADME Synthesis, pharmacology and molecular modeling of N-substituted 2-phenyl-indoles and benzimidazoles as potent GA-BA<sub>A</sub> agonists, 985
- **Aeromonas hydrophila** Synthesis and evaluation of new quinazolone derivatives of nalidixic acid as potential antibacterial and antifungal agents, 256
- **Affinity** Synthesis and binding studies of epibatidine analogues as ligands for the nicotinic acetylcholine receptors, 640
- Affinity index Nuclear magnetic resonance for studying recognition processes between anandamide and cannabinoid receptors, 1117
- **Agonist** Optimization of a pharmacophore model for 5-HT<sub>4</sub> agonists using CoMFA and receptor based alignment, 16
- Air-blood Air to brain, blood to brain and plasma to brain distribution of volatile organic compounds: linear free energy analyses, 494
- **Air-blood** Air to fat and blood to fat distribution of volatile organic compounds and drugs: Linear free energy analyses, 1430
- Air-brain Air to brain, blood to brain and plasma to brain distribution of volatile organic compounds: linear free energy analyses, 494
- Air-fat Air to fat and blood to fat distribution of volatile organic compounds and drugs: Linear free energy analyses, 1430
- **Albumine** Novel potent and selective  $\alpha_{\nu}\beta_{3}/\alpha_{\nu}\beta_{5}$  integrin dual antagonists with reduced binding affinity for human serum albumin, 847
- Alkylating properties In vivo antitumor, in vitro antibacterial activity and alkylating properties of phosphorohydrazine derivatives of coumarin and chromone, 1301
- **Alkylation** Synthesis and anti-bacterial activity of some novel 2-(6-fluorochroman-2-yl)-1-alkyl/acyl/aroyl-1*H*-benzimidazoles, 599
- Alzheimer's disease Synthesis and biological evaluation of new 4*H*-pyrano[2,3-*b*]quinoline derivatives that block acetylcholinesterase and cell calcium signals, and cause neuroprotection against calcium overload and free radicals, 1464
- Amidoxime Synthesis, ocular effects, and nitric oxide donation of imidazole amidoximes, 1073
- Amino acids Synthesis and antiproliferative activities of indolin-2-one derivatives bearing amino acid moieties, 709
- Amino acyl esters of carbohydrates Glycosides and amino acyl esters of carbohydrates as potent inhibitors of angiotensin converting enzyme, 1059

- Amino side chain Synthesis, DNA binding and cytotoxicity of new pyrazole emodin derivatives, 1041
- Amino-basic chain Synthesis and biological activity of 6*H*-isoindolo[2,1-*a*]indol-6-ones, analogues of batracylin, and related compounds, 379
- Amino-sulfinylnaphthoquinone Synthesis and evaluation of antifungal activity of naphthoquinone derivatives, 773
- Aminolysis Convenient synthesis of novel 4-substitutedamino-5-trifluoromethyl-2,7-disubstituted pyrido[2,3-d] pyrimidines and their antibacterial activity, 1011
- Aminopyrimidinylthioether Synthesis and antibacterial activities of new 1β-methyl-carbapenems having aminopyrimidinylthioether moiety, 1347
- Analgesic Synthesis, analgesic, anti-inflammatory, ulcerogenic index and antibacterial activities of novel 2-methylthio-3-substituted-5,6,7,8-tetrahydrobenzo (b) thieno[2,3-d] pyrimidin-4(3H)-ones, 1293
- Analgesic activity Nonsteroidal antiinflammatory agents–part 2 antiinflammatory, analgesic and antipyretic activity of some substituted 3-pyrazolin-5-ones and 1,2, 4,5,6,7-3*H*-hexahydroindazol-3-ones, 155
- Anandamide Nuclear magnetic resonance for studying recognition processes between anandamide and cannabinoid receptors, 1117
- Antagonist Synthesis and evaluation of 7-amino-2-(2(3)-furyl)-5-phenylethyl-aminooxazolo[5,4-d]pyrimidines as potential A<sub>2A</sub> adenosine receptor antagonists for positron emission tomography (PET), 7
- Anthrapyrazole Synthesis, DNA binding and cytotoxicity of new pyrazole emodin derivatives, 1041
- **Anti-amoebic activity** Synthesis and antiamoebic activity of new 1-*N*-substituted thiocarbamoy1-3,5-diphenyl-2-pyrazoline derivatives and their Pd(II) complexes, 63
- Anti-Helicobacter pylori activity Synthesis and in vitro selective anti-Helicobacter pylori activity of N-substituted-2-oxo-2H-1-benzopyran-3-carboxamides, 208
- **Anti-HIV activity** Synthesis and biological activity of 4-thiazolidinones, thiosemicarbazides derived from diflunisal hydrazide, 353
- Anti-inflammatory Synthesis, analgesic, anti-inflammatory, ulcerogenic index and antibacterial activities of novel 2-methylthio-3-substituted-5,6,7,8-tetrahydrobenzo (b) thieno[2,3-d]pyrimidin-4(3H)-ones, 1293
- **Anti-malaria compounds** New syntheses and potential antimalarial activities of new 'retinoid-like chalcones', 142
- Anti-microbial Synthesis, characterization and in vitro biological activity studies of Cu–M (M=Cu<sup>2+</sup>, Co<sup>2+</sup>, Ni<sup>2+</sup>, Mn<sup>2+</sup>, Zn<sup>2+</sup>) bimetallic complexes, 1494
- Anti-T. cruzi compounds New potent 5-nitrofuryl derivatives as inhibitors of Trypanosoma cruzi growth. 3D-QSAR (CoMFA) studies, 457
- Anti-trypanosomal activity Nitrofurylsemicarbazone Rhenium and Ruthenium Complexes as Anti-trypanosomal Agents, 1231

- Antiamoebic activity Cyclooctadiene Ru(II) complexes of thiophene-2-carbox-aldehyde-derived thiosemicarbazones: synthesis, characterization and antiamoebic activity, 592
- Antibacterial 3-Bromo-4-(1H-3-indolyl)-2,5-dihydro-1H-2,5-pyrroledione derivatives as new lead compounds for antibacterially active substances, 176 Convenient synthesis of novel 4-substitutedamino-5-trifluoromethyl–2,7-disubstituted pyrido [2,3-d] pyrimidines and their antibacterial activity, 1011 Synthesis of a new series of heterocyclic scaffolds for medicinal purposes, 1017 Synthesis, characterization, antimicrobial and single crystal X-ray crystallographic studies of some new sulfonyl, 4-chloro phenoxy benzene and dibenzoaze-pine substituted benzamides, 1262
- Antibacterial Design, synthesis and activity against *Toxoplasma gondii*, *Plasmodium* spp., and *Mycobacterium tuberculosis* of new 6-fluoroquinolones, 1478
- Antibacterial activity Novel derivatives of methyl and ethyl 2-(4-oxo-8-aryl-2*H*-3,4,6,7-tetrahydroimidazo[2,1-*c*][1,2,4]triazin-3-yl)acetates from biologically active 1-aryl-2-hydrazinoimidazolines: Synthesis, crystal structure and antiproliferative activity, 1373 Synthesis, antimicrobial activity and QSARs of new benzoxazine-3-ones, 1398
- Antibacterial activity Synthesis, antibacterial activity and QSAR studies of 1,2-disubstituted-6,7-dimethoxy-1,2,3,4-tetrahydroisoquinolines, 40 - Synthesis and biological evaluation of 1\u03b3-methyl-carbapenems having guanidino moieties, 50 - Synthesis, characterization and biological studies of Co(II), Ni(II), Cu(II) and Zn(II) complexes with bidentate Schiff bases derived by heterocyclic ketone, 147 - Synthesis, antibacterial and antifungal activity of some new thiazolylhydrazone derivatives containing 3-substituted cyclobutane ring, 201 - Synthesis and in vitro selective anti-Helicobacter pylori activity of N-substituted-2-oxo-2H-1-benzopyran-3-carboxamides, 208 - Synthesis and in vitro microbiological evaluation of imidazo(4,5-b) pyridinylethoxypiperidones, 268 - Synthesis, crystal structure and anticancer activity of novel derivatives of ethyl 1-(4-oxo-8-aryl-4,6,7,8-tetrahydroimidazo[2,1-c][1,2,4]triazin-3-yl)formate, 539 - Synthesis and anti-bacterial activity of some novel 2-(6fluorochroman-2-yl)-1-alkyl/acyl/aroyl-1H-benzimidazoles, 599 - Synthesis and biological activity of new 2-amino-8-chloro-5,5-dioxo[1,2,4]tria-zolo[2,3-*b*][1,4,2] benzodithiazines, 633 - Synthesis, stereochemistry, and antimicrobial evaluation of substituted piperidin-4-one oxime ethers, 683 Synthesis and biological evaluation of 1βmethylcarbapenems having cyclic thiourea moieties and their related compounds, 825 -Synthesis, antibacterial and antitubercular activities of some 7-[4-(5-amino-[1,3,4]thiadiazole-2-sulfonyl)-piperazin-1-yl] fluoroquinolonic derivatives, 918 -Antibacterial and antifungal activity of acyclic and macrocyclic uracil derivatives with quaternized nitrogen atoms in spacers, 1093 - Synthesis and in vitro activity of a series 1\beta-methyl-

- carbapenem derivatives, 1201 -Synthesis and antibacterial activity of various substituted *s*-triazines, 1240 In vivo anti-tumor, in vitro antibacterial activity and alkylating properties of phosphorohydrazine derivatives of coumarin and chromone, 1301 Synthesis and antibacterial activities of new 1β-methylcarbapenems having aminopyrimidinylthioether moiety, 1347
- Antibacterial agents Synthesis and studies on some new fluorine containing triazolothiadiazines as possible antibacterial, antifungal and anticancer agents, 657
- Anticancer activity Synthesis, characterization and boilogical studies of Co(II), Ni(II), Cu(II) and Zn(II) complexes with bidentate Schiff bases derived by heterocyclic ketone, 147 Synthesis, crystal structure and anticancer activity of novel derivatives of ethyl 1-(4-oxo-8-aryl-4,6,7,8-tetrahydroimidazo[2,1-c][1,2,4]triazin -3-yl)formate, 539 Synthesis, characterisation, activities, cell uptake and DNA binding of a trinuclear complex: [{trans-PtCl(NH<sub>3</sub>)}<sub>2</sub>µ- {trans-Pd(NH<sub>3</sub>)(2-hydroxy-pyridine)-(H<sub>2</sub>N(CH<sub>2</sub>)<sub>6</sub>NH<sub>2</sub>)<sub>2</sub>|Cl<sub>4</sub>, 896
- **Anticancer agents** Synthesis and biological activity of some new 5'-O-acyl tiazofu-rin derivatives, 503
- Anticancer drug Synthesis and cancer antiproliferative activity of new histone deacetylase inhibitors: hydrophilic hydroxamates and 2-aminobenzamide-containing derivatives, 697 Synthesis and antiproliferative activity of novel sugiol β-amino alcohol analogs, 1327
- Anticancer screening Synthesis and studies on some new fluorine containing triazolothiadiazines as possible antibacterial, antifungal and anticancer agents, 657
- Anticonvulsant activity Synthesis, anticonvulsant activity and 5-HT<sub>1A</sub>, 5-HT<sub>2A</sub> receptor affinity of new *N*-[(4-arylpiperazin-1-yl)-alkyl] derivatives of 2-azaspiro [4.4]nonane and [4.5]decane-1,3-dione, 874—Synthesis and anticonvulsant activity of some potential thiazolidinonyl 2-oxo/thiobarbituric acids, 1223
- Anticonvulsants Synthesis of some new substituted triazolo [4,3-a][1,4] benzodiazepine derivatives as potent anticonvulsants, 417 Design, synthesis and in vivo anticonvulsant screening in mice of Novel phenylacetamides, 786
- Antiepileptic New highly potent GABA uptake inhibitors selective for GAT-1 and GAT-3 derived from (*R*)- and (*S*)-proline and homologous pyrrolidine-2-alkanoic acids. 809
- Antifungal Synthesis of a new series of heterocyclic scaffolds for medicinal purposes, 1017 Synthesis, characterization, antimicrobial and single crystal X-ray crystallographic studies of some new sulfonyl, 4-chloro phenoxy benzene and dibenzoazepine substituted benzamides, 1262
- Antifungal activity Synthesis, antibacterial and antifungal activity of some new thiazolylhydrazone derivatives containing 3-substituted cyclobutane ring, 201 Synthesis and in vitro microbiological evaluation of imidazo(4,5-b)pyridinylethoxypiperidones,

- 268 Synthesis and antifungal activities of some aryl [3-(imidazol-1-yl/triazol-1-ylmethyl) benzofuran-2-yl] ketoximes, 651 Synthesis, stereochemistry, and antimicrobial evaluation of substituted piperidin-4-one oxime ethers, 683 Synthesis and evaluation of antifungal activity of naphthoquinone derivatives, 773 Antibacterial and antifungal activity of acyclic and macrocyclic uracid derivatives with quaternized nitrogen atoms in spacers, 1093-Synthesis and antibacterial activity of various substituted s-triazines, 1240
- Antifungal activity Synthesis, antimicrobial activity and QSARs of new benzoxazine-3ones, 1398
- Antifungal agents Synthesis and studies on some new fluorine containing triazolothiadiazines as possible antibacterial, antifungal and anticancer agents, 657
- Antifungal potential Synthesis and antifungal potential of Co(II) complexes of 1 -(2'-hydroxyphenyl) ethylideneanilines, 253
- Antiinflammatory activity Nonsteroidal antiinflammatory agents–part 2 antiinflammatory, analgesic and antipyretic activity of some substituted 3-pyrazolin-5-ones and 1,2,4,5,6,7-3*H*-hexahydroindazol-3-ones, 155 Synthesis and antiinflammatory activity of 4-amino-2-aryl-5-cyano-6-{3- and 4-(*N*-phthalimidophenyl)} pyrimidines, 276
- Antileishmania activity Synthesis and leishmanicidal activities of 1-(4-X-phenyl)-N'-[(4-Y-phenyl)methylene]-1*H*-pyrazole-4-carbohydrazides, 80
- Antileishmanial Synthesis of oxysterols and nitrogenous sterols with antileishmanial and trypanocidal activities, 1109
- Antileishmanial activity Syntheses of new substituted triazino tetrahydroisoquinoli-nes and β-carbolines as novel antileishmanial agents, 106 Chemotherapy of leishmaniasis part III: synthesis and bioevaluation of novel aryl substituted terpenyl pyrimidines as antileishmanial agents, 779
- Antimalarial compounds Non-stochastic quadratic fingerprints and LDA-based QSAR models in hit and lead generation through virtual screening: theoretical and experimental assessment of a promising method for the discovery of new antimalarial compounds, 483
- Antimicrobial activity Synthesis, antibacterial and antifungal activity of some new pyridazinone metal complexes, 101 Syntheses and antimicrobial activities of a series of new bis-quaternary ammonium compounds, 437 Synthesis and antimicrobial activity of new (E)-4-[piperidino (4'-methylpiperidino-, morpholino-) N-alkoxy] stilbenes, 519 Synthesis and antimicrobial studies of a new series of 2-{4-[2-(5-ethylpyridin-2-yl)ethoxy]phenyl}-5-substituted-1,3,4-oxadiazoles, 841 Synthesis and antimicrobial activity of pyranobenzo-quinones related to the pyranonaphthoquinone antibiotics, 1333
- Antimicrobials Synthesis of pharmaceutically important condensed heterocyclic 4,6-disubstituted-1,2,4-triazolo-1,3,4-thia-diazole derivatives as antimicrobials, 531
- Antimicrobics Synthesis and antimicrobial activity of new bromine-rich pyrrole

- derivatives related to monodeoxypyoluteorin, 1439
- Antimycobacterial activity A duplicated nitrotienyl derivative with antimycobacterial activity: synthesis, X-ray crystallography, biological and mutagenic activity tests, 1196
- **Antinematode activity** Antihelminthic activity of some newly synthesized 5(6)-(un)substituted-1*H*-benzimidazol-2-ylthioacetylpiperazine derivatives, 1412
- Antioxidant Dihydropyrimidin-(2*H*)-ones obtained by ultrasound irradiation: a new class of potential antioxidant agents, 513 Synthesis and oxidant properties of novel (5-bromobenzofuran-2-yl)(3-methyl-3-mesitylcyclobutyl)ketonethiosemicar-bazone, 664
- Antiparasitical Design, synthesis and activity against *Toxoplasma gondii*, *Plasmodium* spp., and *Mycobacterium tuberculosis* of new 6-fluoroquinolones, 1478
- Antiproliferative activity Synthesis and antiproliferative activities of diversely substituted glycosyl-isoindigo derivatives, 88 -Synthesis and biological properties of new  $\alpha$ -methylene- $\gamma$ -butyrolactones and  $\alpha,\beta$ unsaturated δ-lactones, 192 - Synthesis of compounds with antiproliferative activity as analogues of prenylated natural products existing in Brazilian propolis, 401 - Synhesis and antiproliferative activity of some 5-substituted 2-(2,4-dihydroxyphenyl)-1,3,4-thiadiazoles, 475 – Synthesis and antiproliferative activity of benzo[d]isothia-zole hydrazones, 624 - Synthesis and antiproliferative activities of indolin-2-one derivatives bearing amino acid moieties, 709 - Antiproliferative effect of Baylis-Hillman adducts and a new phthalide derivative on human tumor cell lines, 738
- Antiproliferative activity Novel derivatives of methyl and ethyl 2-(4-oxo-8-aryl-2*H*-3,4,6,7-tetrahydroimidazo[2,1-*c*][1,2,4]triazin-3-yl)acetates from biologically active 1-aryl-2-hydrazinoimidazolines: Synthesis, crystal structure and antiproliferative activity, 1373
- Antiproliferative agents Novel 5,7-disubstituted 6-amino-5H-pyrrolo[3,2-b]pyrazine-2,3-dicarbonitriles, the promising protein kinase inhibitors with antiproliferative activity, 727
- **Antipyretic activity** Nonsteroidal antiinflammatory agents–part 2 antiinflammatory, analgesic and antipyretic activity of some substituted 3-pyrazolin-5-ones and 1,2,4,5,6,7-3*H*–hexahydroindazol-3-ones, 155
- Antitrichinellosis activity Antihelminthic activity of some newly synthesized 5(6)-(un)substituted-1*H*-benzimidazol-2-ylthioacetylpiperazine derivatives, 1412
- Antitubercular activity Synthesis, antibacterial and antitubercular activities of some 7-[4-(5-amino-[1,3,4]thiadiazole-2-sulfonyl)-piperazin-1-yl] fluoroquinolonic derivatives, 918
- Antituberculosis activity Synthesis of 1-[3-(4-benzotriazol-1/2-yl-3-fluorophenyl)-2-oxo-oxazolidin-5-ylmethyl]-3-substituted-thiourea derivatives as

- antituberculosis agents, 423 Synthesis and characterization of novel hydrazide–hydrazones and the study of their structure-antituberculosis activity, 1253
- Antitumor Psoralen analogues: synthesis, inhibitory activity of growth of human tumor cell lines and computational studies, 367 Comparison of the anti-neoplastic effects of dirhodium(II) tetrapropionate and its adducts with nicotinate and isonicotinate anions in mice bearing Ehrlich tumors, 1214
- Antitumor activity Synthesis, structure and anticancer activity of novel alkenyl-1,3,5-triazine derivatives, 611 Synthesis and antitumor activity of *cis*-dichloro-platinum(II) complexes of 1-(2-aminophenyl)-1,2,3,4-tetra-hydroisoqui-nolines, 940 Synthesis and crystal structure of some transition metal complexes with a novel bis-Schiff base ligand and their antitumor activities, 1090 In vivo antitumor, in vitro antibacterial activity and alkylating properties of phosphorohydrazine derivatives of coumarin and chromone, 1301
- **Antitumor agents** Synthesis and biological evaluation of modified acridines: the effect of *N* and *O* substituent in the nitrogenated ring on antitumor activity, 340
- **Antitumor agents** Synthesis, in vitro antiproliferative activities, and Chk1 inhibitory properties of indolylpyrazolones and indolylpyridazinedione, 1470
- Antitumor effect Synthesis, structure and anticancer activity of novel 2,4-diamino-1,3,5-triazine derivatives, 219 Synthesis and in vitro antitumor activity of novel series 2-benzylthio-4-chlorobenzene-sulfonamide derivatives, 1180
- Antitumor substances Synthesis, photochemical synthesis, DNA binding and antitumor evaluation of novel cyano- and amidino-substituted derivatives of naphthafurans, naphtho-thiophenes, thieno-benzofurans, benzo-dithiophenes and their acyclic precursors, 925
- Antitumour lactones Synthesis and antitumour activity of new muricatacin and goniofufurone analogues, 1217
- **Apoptosis** Synthesis and biological activity of some new 5'-O-acyl tiazofurin derivatives, 503 Cytotoxic 5-aryl-1-(4-nitrophenyl)-3-oxo-1,4-pentadienes mounted on alicyclic scaffolds, 577
- **Aromatic aldehydes** Synthesis, structure, toxicological and pharmacological investigations of 4-hydroxycoumarin derivatives, 882
- Aromatic esters Synthesis of new esters and oximes with 4-aminobicyclo [2.2.2]octane structure and evaluation of their antitry-panosomal and antiplasmodial activities, 970
- Aryl [3-(imidazol-1-yl/triazol-1-ylmethyl) benzofuran-2-yl] ketoximes Synthesis and antifungal activities of some aryl [3-(imidazol-1-yl/triazol-1-ylmethyl) benzofuran-2-yl] ketoximes, 651
- **Aryl heterocyclic** Quantitative structure activity relationship studies of aryl heterocycle-based thrombin inhibitors, 1339
- **Aryl substituted terpenyl pyrimidines** Chemotherapy of leishmaniasis part III: synthesis

- and bioevaluation of novel aryl substituted terpenyl pyrimidines as antileishmanial agents, 779
- Arylethenylchromone Synthesis and anticancer activity of lavendustin A derivatives containing arylethenylchromone substituents, 991
- **Arylfurans** Synthesis and evaluation of cytotoxic activity of arylfurans, 756
- Arylidenemalononitrile Nonsteroidal antiinflammatory agents–part 2 antiinflammatory, analgesic and antipyretic activity of some substituted 3-pyrazolin-5-ones and 1,2,4,5, 6,7-3H-hexahydroindazol-3-ones, 155
- Atoms in molecules QSAR models based on quantum topological molecular similarity, 862
- **Azapyranoxanthenones** Design, synthesis and antiproliferative activity of some new azapyranoxanthenone aminoderivatives, 71
- Azasteroid Synthesis and in vitro antibacterial activity of novel heterocyclic derivatives of 18-nor-equilenin, 891
- Aziridinium ions Synthesis and receptor binding studies of 3-substituted piperazine derivatives, 387

#### R

- Batracylin Synthesis and biological activity of 6*H*-isoindolo[2,1-*a*]indol-6-ones, analogues of batracylin, and related compounds, 379
- **Baylis-Hillman adducts** Antiproliferative effect of Baylis–Hillman adducts and a new phthalide derivative on human tumor cell lines, 738
- Benzamide Synthesis, characterization, antimicrobial and single crystal X-ray crystallographic studies of some new sulfonyl, 4-chloro phenoxy benzene and dibenzoazepine substituted benzamides, 1262
- **Benzanilide** Structural modifications of benzanilide derivatives, effective potassium channel openers. X, 1421
- Benzanilides Heterocyclic analogs of benzanilide derivatives as potassium channel activators. IX, 761
- Benzimidazole Synthesis and antiproto-zoal activity of some 2-(trifluoromethyl)-1*H*-benzimidazole bioisosteres, 135 Synthesis and anti-bacterial activity of some novel 2-(6fluorochroman-2-yl)-1 -alkyl/acyl/aroyl-1*H*-benzimidazoles, 599 Synthesis, pharmacology and molecular modeling of *N*-substituted 2-phenyl-indoles and benzimidazoles as potent GABA<sub>A</sub> agonists, 985 Synthesis and in vitro antitumor activity of novel series 2-benzylthio-4-chloro-benzenesulfonamide derivatives, 1180
- **Benzimidazoles** Antihelminthic activity of some newly synthesized 5(6)-(un)substituted-1*H*-benzimidazol-2-ylthioacetylpiperazine derivatives, 1412
- **Benzo[***d***]isothiazole hydrazones** Synthesis and antiproliferative activity of benzo[*d*] isothiazole hydrazones, 624
- **Benzopsoralens** Psoralen analogues: synthesis, inhibitory activity of growth of human tumor cell lines and computational studies, 367

- **Benzopyrans** QSAR studies on benzopy-ran potassium channel activators, 360
- **Benzothiazoles** Synthesis and in vitro antitumor activity of novel series 2-benzylthio-4chlorobenzenesulfonamide derivatives, 1180
- **Benzotriazole substituent** Synthesis of 1-[3-(4-benzotriazol-1/2-yl-3-fluoro-phenyl)-2-oxo-oxazolidin-5-ylmethyl]-3-substituted-thiourea derivatives as antitu-berculosis agents, 423
- Benzoxazoles Synthesis and in vitro antitumor activity of novel series 2-benzylthio-4-chlorobenzenesulfonamide derivatives, 1180
- **Benzylation** Synthesis, stereochemistry, and antimicrobial evaluation of substituted piperidin-4-one oxime ethers, 683
- **Biflavones** Natural biflavones as novel inhibitors of cathepsin B and K, 1247
- **Biginelli** Dihydropyrimidin-(2*H*)-ones obtained by ultrasound irradiation: a new class of potential antioxidant agents, 513
- **Bimetallic complexes** Synthesis, characterization and in vitro biological activity studies of Cu–M (M=Cu<sup>2+</sup>, Co<sup>2+</sup>, Ni<sup>2+</sup>, Mn<sup>2+</sup>, Zn<sup>2+</sup>) bimetallic complexes, 1494
- **Binding** New ligands at the melatonin binding site *MT*<sub>3</sub>, 306
- **Binding affinity** QSAR study for a novel series of *ortho* disubstituted phenoxy analogues of α<sub>1</sub>-adrenoceptor antagonist WB4101, 1025
- **Bioisostere** Synthesis and antitumour activity of new muricatacin and goniofufurone analogues, 1217
- **Bioisosteric replacement** Synthesis and antiprotozoal activity of some 2-(trifluoromethyl)- 1*H*-benzimidazole bioisosteres, 135
- **Biological activity** 4-Substituted anilino imidazo[1,2-a] and triazolo[4,3-a]quino-xalines. Synthesis and evaluation of in vitro biological activity, 1102
- Bioreducible compounds Design and evaluation of "3 + 1" mixed ligand oxorhe-nium and oxotechnetium complexes bearing a nitroaromatic group with potential application in nuclear medicine oncology, 1144
- **Bis-coumarins** New zirconium (IV) complexes of coumarins with cytotoxic activity,
- **Bis-quaternary ammonium compounds** Syntheses and antimicrobial activities of a series of new bis-quaternary ammonium compounds, 437
- **Bisnitriles** Synthesis and antiinflammatory activity of 4-amino-2-aryl-5-cyano-6-{3-and 4-(*N*-phthalimidophenyl)} pyrimidines, 276
- **BK-activator** Structural modifications of benzanilide derivatives, effective potassium channel openers. X, 1421
- BK-activators Heterocyclic analogs of benzanilide derivatives as potassium channel activators. IX, 761
- **BK channel** Structural modifications of benzanilide derivatives, effective potassium channel openers. X, 1421
- **Blood-brain** Air to brain, blood to brain and plasma to brain distribution of volatile organic compounds: linear free energy analyses, 494

- Blood/plasma-fat Air to fat and blood to fat distribution of volatile organic compounds and drugs: Linear free energy analyses, 1430
- **Brazilian propolis** Synthesis of compounds with antiproliferative activity as analogues of prenylated natural products existing in Brazilian propolis, 401
- **Bromopyrroles** Synthesis and antimicrobial activity of new bromine-rich pyrrole derivatives related to monodeoxypyoluteorin, 1439
- **Bronchodilator** Synthesis and bronchodilator activity of new quinazolin derivative, 429
- **Broth dilution assay method** Synthesis, antibacterial and antitubercular activities of some 7-[4-(5-amino-[1,3,4]thiadiazole-2-sulfonyl)-piperazin-1-yl] fluoroquinolonic derivatives, 918
- **BuChE** Synthesis and biological evaluation of new 4*H*-pyrano[2,3-*b*]quinoline derivatives that block acetylcholinesterase and cell calcium signals, and cause neuroprotection against calcium overload and free radicals, 1464

## $\mathbf{C}$

- C-seco limonoids Synthesis and cytotoxicity of novel isomeric C-seco limonoids, 997
- Campholene homologues Syntheses and odor of "bulky group"-modified sandal-wood odorants: isophorono-β-santalol analogues, 905
- Cancer Antiproliferative effect of Baylis— Hillman adducts and a new phthalide derivative on human tumor cell lines, 738
- Cancer cells Synthesis and evaluation of cytotoxic activity of arylfurans, 756
- Cancer chemoprevention Cyclic and branched acyl chain galactoglycerolipids and their effect on anti-tumor-promoting activity, 1456
- Candida albicans Synthesis and evaluation of new quinazolone derivatives of nalidixic acid as potential antibacterial and antifungal agents, 256
- Cannabinoid Structural-activity relationship study on C-4 carbon atom of the CB<sub>1</sub> antagonist SR141716: synthesis and pharmacological evaluation of 1,2,4-triazole-3-carboxamides, 114
- Cannabinoid receptors Nuclear magnetic resonance for studying recognition processes between anandamide and cannabinoid receptors, 1117
- $\begin{array}{ll} \textbf{Carbapenems} & \text{ Synthesis} \text{ and biological} \\ \text{evaluation of } 1\beta\text{-methylcarbapenems having guanidino moieties}, 50 \end{array}$
- Carboxylate Comparison of the anti-neoplastic effects of dirhodium(II) tetrapropionate and its adducts with nicotinate and isonicotinate anions in mice bearing Ehrlich tumors, 1214
- Catalyst Synthesis, pharmacology and molecular modeling of *N*-substituted 2-phenyl-indoles and benzimidazoles as potent GABA<sub>A</sub> agonists, 985
- Catalyst/HIPHOP Structure-based pharmacophore of COX-2 selective inhibitors and

- identification of original lead compounds from 3D database searching method, 1446
- **Cathepsin B** Natural biflavones as novel inhibitors of cathepsin B and K, 1247
- **Cathepsin K** Natural biflavones as novel inhibitors of cathepsin B and K, 1247
- CD23 Substituted 2-phenyl-benzimidazole derivatives: novel compounds that suppress key markers of allergy, 950
- CDK2 3D-QSAR CoMFA study on indenopyrazole derivatives as cyclin dependent kinase 4 (CDK4) and cyclin dependent kinase 2 (CDK2) inhibitors, 1310
- CDK2/cyclin A inhibitor Exploring QSAR on 3-aminopyrazoles as antitumor agents for their inhibitory activity of CDK2/cyclin A 1190
- CDK4 3D-QSAR CoMFA study on indenopyrazole derivatives as cyclin dependent kinase 4 (CDK4) and cyclin dependent kinase 2 (CDK2) inhibitors, 1310
- Cell culture Synthesis, characterisation, activities, cell uptake and DNA binding of a trinuclear complex: [{trans-PtCl(NH<sub>3</sub>)}}<sub>μ</sub>- {trans-Pd(NH<sub>3</sub>)(2-hydroxypyridine)-(H<sub>2</sub>N (CH<sub>2</sub>)<sub>6</sub>NH<sub>2</sub>)<sub>2</sub>]Cl<sub>4</sub>, 896
- **Cell-cycle effect** Design, synthesis and antiproliferative activity of some new azapyra-noxanthenone aminoderivatives, 71
- Chagas' disease Synthesis of naphthofuranquinones with activity against *Trypano*soma cruzi, 526
- Chain-substituted analogues Arylmethyl substituted derivatives of Fosmidomycin: Synthesis and antimalarial activity, 1385
- Chalcone Synthesis and antiamoebic activity of new 1-*N*-substituted thiocarbamoyl-3,5-diphenyl-2-pyrazoline derivatives and their Pd(II) complexes, 63 New syntheses and potential antimalarial activities of new 'retinoid-like chalcones', 142
- Chemoprevention Cancer chemopreventive activity of sulforamate derivatives, 121 Synthesis of Abyssinone II and related compounds as potential chemopreventive agents, 263
- Chemotherapy Synthesis of naphthofuranquinones with activity against *Trypano*soma cruzi, 526
- Chk1 inhibitors Synthesis, in vitro antiproliferative activities, and Chk1 inhibitory properties of indolylpyrazolones and indolylpyridazinedione, 1470
- **Chloramine-T** Synthesis and antimicrobial studies of a new series of 2-{4-[2-(5-ethylpyridin-2-yl)ethoxy]phenyl} -5-substituted-1,3,4-oxadiazoles, 841
- Chromone In vivo antitumor, in vitro antibacterial activity and alkylating properties of phosphorohydrazine derivatives of coumarin and chromone, 1301
- Ciprofloxacin Convenient synthesis of novel 4-substitutedamino-5-trifluoro-methyl-2,7-disubstituted pyrido[2,3-d] pyrimidines and their antibacterial activity, 1011
- cis-Jasmone Microwave assisted synthesis
   of fragrant jasmone heterocyclic analogues,
- Claisen rearrangement Synthesis of compounds with antiproliferative activity as analogues of prenylated natural products existing in Brazilian propolis, 401

- Coagulase negative Staphylococcus Synthesis and evaluation of new quinazolone derivatives of nalidixic acid as potential antibacterial and antifungal agents, 256
- Coagulation Synthesis, structure, toxicological and pharmacological investigations of 4-hydroxycoumarin derivatives, 882
- Cobalt complexes Synthesis and antifungal potential of Co(II) complexes of 1-(2'-hydroxyphenyl) ethylideneanilines, 253
- Combinatorial chemistry Synthesis, pharmacology and molecular modeling of *N*-substituted 2-phenyl-indoles and benzimidazoles as potent GABA<sub>A</sub> agonists, 985
- CoMFA Optimization of a pharmacophore model for 5-HT<sub>4</sub> agonists using CoMFA and receptor based alignment, 16 3D QSAR for GSK-3β inhibition by indirubin analogues, 373 New potent 5-nitrofuryl derivatives as inhibitors of *Trypanosoma cruzi* growth. 3D-QSAR (CoMFA) studies, 457 Understanding the antitumor activity of novel tricyclicpiperazinyl derivatives as farnesyltransferase inhibitors using CoMFA and CoMSIA, 1279 3D-QSAR CoMFA study on indenopyrazole derivatives as cyclin dependent kinase 4 (CDK4) and cyclin dependent kinase 2 (CDK2) inhibitors, 1310
- CoMFA Three-dimensional quantitative structure–activity relationship studies on diverse structural classes of HIV-1 integrase inhibitors using CoMFA and CoMSIA, 1359
- Computational studies Psoralen analogues: synthesis, inhibitory activity of growth of human tumor cell lines and computational studies, 367
- CoMSIA 3D QSAR for GSK-3β inhibition by indirubin analogues, 373 – Understanding the antitumor activity of novel tricyclicpiperazinyl derivatives as farnesyltransferase inhibitors using CoMFA and CoMSIA, 1279
- CoMSIA Three-dimensional quantitative structure–activity relationship studies on diverse structural classes of HIV-1 integrase inhibitors using CoMFA and CoMSIA, 1359
- Condensed triazine derivatives Interaction of novel condensed triazine derivatives with central and peripheral type benzodiazepine receptors: synthesis, in vitro pharmacology and modelling, 445
- **Conformational analysis** Synthesis and antiproliferative activity of benzo[*d*]isothiazole hydrazones, 624
- Conjugated unsaturated ketones Cytotoxic 5-aryl-1-(4-nitrophenyl)-3-oxo-1,4-pentadienes mounted on alicyclic scaffolds, 577
- Coronavirus Synthesis of stilbene derivatives with inhibition of SARS coronavirus replication, 1084
- Coumarin Synthesis and in vitro selective anti-Helicobacter pylori activity of N-substituted-2-oxo-2H-1-benzopyran-3-carboxamides, 208 In vivo antitumor, in vitro antibacterial activity and alkylating properties of phosphorohydrazine derivatives of coumarin and chromone, 1301

- COX Synthesis, characterization and in vitro biological activity studies of Cu–M (M=Cu<sup>2+</sup>, Co<sup>2+</sup>, Ni<sup>2+</sup>, Mn<sup>2+</sup>, Zn<sup>2+</sup>) bimetallic complexes, 1494
- COX-2 selective inhibitor Structure-based pharmacophore of COX-2 selective inhibitors and identification of original lead compounds from 3D database searching method, 1446
- Crystal structure Novel derivatives of methyl and ethyl 2-(4-oxo-8-aryl-2*H*-3,4,6,7-tetrahydroimidazo[2,1-*c*][1,2,4]triazin-3-yl)acetates from biologically active 1-aryl-2-hydrazinoimidazolines: Synthesis, crystal structure and antiproliferative activity, 1373
- Crystal structure Synthesis of pharmaceutically important condensed heterocyclic 4,6-disubstituted-1,2,4-triazolo-1,3,4-thiadiazole derivatives as antimicrobials, 531 Synthesis, crystal structure and anticancer activity of novel derivatives of ethyl 1-(4-oxo-8-aryl-4,6,7,8-tetrahydro-imidazo [2,1-c] [1,2,4]triazin-3-yl)formate, 539 Synthesis and crystal structure of some transition metal complexes with a novel bis-Schiff base ligand and their antitumor activities, 1090
- **Cu(II) complexes** Synthesis, characterization and in vitro biological activity studies of Cu–M (M=Cu<sup>2+</sup>, Co<sup>2+</sup>, Ni<sup>2+</sup>, Mn<sup>2+</sup>, Zn<sup>2+</sup>) bimetallic complexes, 1494
- Curcumin analogs  $\alpha$ -Glucosidase inhibition of natural curcuminoids and curcumin analogs, 213
- Curcuminoids α-Glucosidase inhibition of natural curcuminoids and curcumin analogs, 213
- **Cyanoethylation** Synthesis and in vitro microbiological evaluation of imidazo(4,5-b)pyridinylethoxypiperidones, 268
- Cyclic GMP Synthesis, ocular effects, and nitric oxide donation of imidazole amidoximes. 1073
- **Cyclin-dependent kinase** Synthesis and biological activity of 8-azapurine and pyrazolo[4,3-d]pyrimidine analogues of myoseverin, 1405
- **Cyclobutane** Synthesis, antibacterial and antifungal activity of some new thiazolylhydrazone derivatives containing 3-substituted cyclobutane ring, 201
- Cyclocondensation Interaction of novel condensed triazine derivatives with central and peripheral type benzodiazepine receptors: synthesis, in vitro pharmacology and modelling, 445
- CYP inducers Computational approaches for predicting CYP-related metabolism properties in the screening of new drugs, 795
- CYP inhibitors Computational approaches for predicting CYP-related metabolism properties in the screening of new drugs, 795
- CYP regioselectivity Computational approaches for predicting CYP-related metabolism properties in the screening of new drugs, 795
- CYP substrates Computational approaches for predicting CYP-related metabolism properties in the screening of new drugs, 795

- **Cytoskeleton** Synthesis and biological activity of 8-azapurine and pyrazolo[4,3-d] pyrimidine analogues of myoseverin, 1405
- Cytostatic agents Novel 5,7-disubstituted 6-amino-5H-pyrrolo[3,2-b]pyrazine-2,3-dicarbonitriles, the promising protein kinase inhibitors with antiproliferative activity, 727
- Cytotoxic Synthesis of a new series of heterocyclic scaffolds for medicinal purposes, 1017
- Cytotoxic activity Design, synthesis and antiproliferative activity of some new azapyranoxanthenone aminoderivatives, 71 -Synthesis and biological properties of new  $\alpha$ -methylene- $\gamma$ -butyrolactones and  $\alpha,\beta$ unsaturated δ-lactones, 192 - Synthesis and cytotoxic activity of substituted 2-phenyl-3hydroxy-4(1H)-quinolinones-7-carboxylic acids and their phenacyl esters, 467 -Synthesis and biological activity of new 2-amino-8-chloro-5,5-dioxo[1,2,4] triazolo[2,3-b][1,4,2]benzodithiazines, 633 – New zirconium (IV) complexes of coumarins with cytotoxic activity, 717 - Synthesis and evaluation of cytotoxic activity of arylfurans, 756
- Cytotoxicity Synthesis and leishmanicidal activities of 1-(4-X-phenyl)-N'-[(4-Yphenyl)methylene]-1H-pyrazole-4-carbohydrazides, 80 - Synthesis and in vitro cytotoxicity of 1,2,3,4-tetrahydroisoquinoline derivatives, 241 - Synthesis and biological evaluation of modified acridines: the effect of N- and O- substituent in the nitrogenated ring on antitumor activity, 340 - Synthesis and biological activity of some new 5'-Oacyl tiazofurin derivatives, 503 – Cytotoxic 5-aryl- 1-(4-nitrophenyl)-3-oxo-1,4-pentadienes mounted on alicyclic scaffolds, 577 -Synthesis and antiproliferative activity of benzo[d]isothiazole hydrazones, 624 -Synthesis and anticancer activity of lavendusin A derivatives containing arylethenylchromone substituents, 991 - Synthesis and cytotoxicity of novel isomeric C-seco limonoids, 997 - Synthesis, DNA binding and cytotoxicity of new pyrazole emodin derivatives, 1041

## D

- Daunomycin-d(TGATCA)<sub>2</sub> complex Structure of daunomycin complexed to d-TGATCA by two-dimensional nuclear magnetic resonance spectroscopy, 27
- DEGMA copolymers New perfluoroalkylated amphiphilic methacrylates bearing sulfinyl group as monomers for biomedical applications: water content and oxygen permeability of their copolymers with DEGMA, 1320
- **DFT** A density functional study of flavonoid compounds with anti-HIV activity, 616
- **Diazepine** Synthesis of a new series of heterocyclic scaffolds for medicinal purposes, 1017
- **Diflunisal** Synthesis and biological activity of 4-thiazolidinones, thiosemicarbazides derived from diflunisal hydrazide, 353
- **Dihydropyrimidinones** Dihydropyrimidin-(2*H*)-ones obtained by ultrasound irradiation:

- a new class of potential antioxidant agents, 513
- Dimethyl acetonedicarboxylate Nonsteroidal antiinflammatory agents-part 2 antiinflammatory, analgesic and antipyretic activity of some substituted 3-pyrazolin-5-ones and 1,2,4,5,6,7-3*H*-hexahydro-indazol-3-ones, 155
- Dimethyl-β-cyclodextrin Physico-chemical characterization of disoxaril–dimethyl-β-cyclodextrin inclusion complex and in vitro permeation studies, 233
- **Dimroth rearrangement** Convenient synthesis of novel 4-substitutedamino-5-trifluoromethyl-2,7-disubstituted pyrido [2,3-d] pyrimidines and their antibacterial activity, 1011
- Disoxaril Physico-chemical characterization of disoxaril–dimethyl-β-cyclodextrin inclusion complex and in vitro permeation studies, 233
- **Disubstituted piperazines** Synthesis of new hexahydro- and octahydropyrido[1,2-c] pyrimidine derivatives with an arylpiperazine moiety as ligands for 5-HT<sub>1A</sub> and 5-HT<sub>2A</sub> receptors. Part 4, 125
- **DMF, dimethylformamide** New ligands at the melatonin binding site  $MT_3$ , 306
- **DMSO, dimethylsulfoxide** New ligands at the melatonin binding site  $MT_3$ , 306
- DNA binding Synthesis, characterisation, activities, cell uptake and DNA binding of a trinuclear complex: [{trans-PtCl(NH<sub>3</sub>)}<sub>2</sub> μ- {trans-Pd(NH<sub>3</sub>)(2-hydroxypyridine)-(H<sub>2</sub>N(CH<sub>2</sub>)<sub>6</sub>NH<sub>2</sub>)<sub>2</sub>]Cl<sub>4</sub>, 896 Synthesis, DNA binding and cytotoxicity of new pyrazole emodin derivatives, 1041
- DNA intercalator Design of β-carboline derivatives as DNA-targeting antitumor agents, 1167
- DNA cleavage Synthesis, characterization and in vitro biological activity studies of Cu–M (M=Cu<sup>2+</sup>, Co<sup>2+</sup>, Ni<sup>2+</sup>, Mn<sup>2+</sup>, Zn<sup>2+</sup>) bimetallic complexes, 1494
- DNA repair Polar, functionalized guanine-O6 derivatives resistant to repair by O6-alkylguanine–DNA alkyltransferase: implications for the design of DNA-modifying drugs, 330
- Docking Adenosine receptor modelling. A<sub>1</sub>/A<sub>2a</sub> selectivity, 321 – Novel 5,7-disubstituted 6-amino-5H-pyrrolo[3,2-b]pyrazine-2,3-dicarbonitriles, the promising protein kinase inhibitors with antiproliferative activity, 727 – Natural biflavones as novel inhibitors of cathepsin B and K, 1247
- DOXP Arylmethyl substituted derivatives of Fosmidomycin: Synthesis and antimalarial activity, 1385
- DOXP-pathway Arylmethyl substituted derivatives of Fosmidomycin: Synthesis and antimalarial activity, 1385
- Drug carrier Dendrimers as potential drug carriers. Part II. Prolonged delivery of ketoprofen by in vitro and in vivo studies, 670
- Drug design Polar, functionalized guanine-O6 derivatives resistant to repair by O6-alkylguanine–DNA alkyltransf erase: implications for the design of DNA–modifying drugs, 330 Synthesis and antiproliferative activity of novel sugiol β-amino alcohol analogs, 1327

- **Drug–DNA interactions** Structure of daunomycin complexed to d-TGATCA by two-dimensional nuclear magnetic resonance spectroscopy, 27
- Drugs Air to fat and blood to fat distribution of volatile organic compounds and drugs: Linear free energy analyses, 1430

#### $\mathbf{E}$

- Ehrlich tumors Comparison of the antineoplastic effects of dirhodium(II) tetrapropionate and its adducts with nicotinate and isonicotinate anions in mice bearing Ehrlich tumors, 1214
- **Electron density** QSAR models based on quantum topological molecular similarity, 862
- Electrotopological state atom index -Exploring QSAR on 3-aminopyrazoles as antitumor agents for their inhibitory activity of CDK2/cyclin A, 1190
- **Emodin derivatives** Synthesis, DNA binding and cytotoxicity of new pyrazole emodin derivatives, 1041
- Enaminones New syntheses and potential antimalarial activities of new 'retinoid-like chalcones', 142
- Entamoeba histolytica Cyclooctadiene Ru(II) complexes of thiophene-2-carbox-aldehyde-derived thiosemicarbazones: synthesis, characterization and antiamoebic activity, 592
- **Enzymatic synthesis** Glycosides and amino acyl esters of carbohydrates as potent inhibitors of angiotensin converting enzyme, 1059
- **Epibatidine analogues** Synthesis and binding studies of epibatidine analogues as ligands for the nicotinic acetylcholine receptors, 640
- **Epstein–Barr virus** Cyclic and branched acyl chain galactoglycerolipids and their effect on anti-tumor-promoting activity, 1456
- Ester Pharmacological activity and hydrolysis behavior of novel ibuprofen glucopyranoside conjugates, 1352
- **Ethoxymethylene-2-phenyl-2-oxazolin-5one** – Nonsteroidal antiinflammatory agents –part 2 antiinflammatory, analgesic and antipyretic activity of some substituted 3-pyrazolin-5-ones and 1,2,4,5,6,7-3*H*-hexahydroindazol-3-ones, 155
- **Ethyl arylidenecyanoacetate** Nonsteroidal antiinflammatory agents–part 2 antiinflammatory, analgesic and antipyretic activity of some substituted 3-pyrazolin-5-ones and 1,2,4,5,6,7-3*H*-hexahydroindazol-3-ones, 155
- **Everted intestinal sacs (EIS)** Prediction of human absorption of natural compounds by the non-everted rat intestinal sac model, 605

## F

- Farnesyl protein transferase Understanding the antitumor activity of novel tricyclicpiperazinyl derivatives as farnesyltransferase inhibitors using CoMFA and CoMSIA, 1279
- Farnesyl transferase Isothiazoles. Part XV. A mild and efficient synthesis of new anti-proliferative 5-sulfanylsubstituted 3-alkyl-aminoisothiazole 1,1-dioxides,

- 675 Solid-phase synthesis and pharmacological evaluation of a library of peptidomimetics as potential farnesyltransferase inhibitors: an approach to new lead compounds, 745
- Filtering Medicinal chemistry tools: making sense of HTS data, 166
- Flavonoid Synthesis of Abyssinone II and related compounds as potential chemopreventive agents, 263 In silico modelling of the interaction of flavonoids with human P-glycoprotein nucleotide-binding domain, 285 A density functional study of flavonoid compounds with anti-HIV activity, 616
- Fluoroquinolone Design, synthesis and activity against *Toxoplasma gondii*, *Plasmodium* spp., and *Mycobacterium tuberculosis* of new 6-fluoroquinolones, 1478
- **Fosmidomycin** Arylmethyl substituted derivatives of Fosmidomycin: Synthesis and antimalarial activity, 1385
- Fragrance compounds Microwave assisted synthesis of fragrant jasmone heterocyclic analogues, 586
- **Frequency distribution** Medicinal chemistry tools: making sense of HTS data, 166
- **Furocoumarins** Psoralen analogues: synthesis, inhibitory activity of growth of human tumor cell lines and computational studies, 367

#### G

- GABA uptake inhibitors New highly potent GABA uptake inhibitors selective for GAT-1 and GAT-3 derived from (*R*)- and (*S*)-proline and homologous pyrrolidine-2-alkanoic acids, 809
- **GABA-A receptor** Synthesis, pharmacology and molecular modeling of *N*-substituted 2-phenyl-indoles and benzimidazoles as potent GABA<sub>A</sub> agonists, 985
- GAT-1 New highly potent GABA uptake inhibitors selective for GAT-1 and GAT-3 derived from (*R*)- and (*S*)-proline and homologous pyrrolidine-2-alkanoic acids, 800
- GAT-3 New highly potent GABA uptake inhibitors selective for GAT-1 and GAT-3 derived from (*R*)- and (*S*)-proline and homologous pyrrolidine-2-alkanoic acids, 809
- Gel electrophoresis Synthesis, characterisation, activities, cell uptake and DNA binding of a trinuclear complex: [{trans-PtCl(NH<sub>3</sub>)} 2μ- {trans-Pd(NH<sub>3</sub>)(2-hydroxypyridine)-(H<sub>2</sub>N(CH<sub>2</sub>)<sub>6</sub>NH<sub>2</sub>)<sub>2</sub>]Cl<sub>4</sub>, 896
- Genetic function approximation Quantitative structure activity relationship of benzoxazinone derivatives as neuropeptide Y Y5 receptor antagonists, 552 Quantitative structure activity relationship studies of aryl heterocycle-based thrombin inhibitors, 1339
- **Glucopyranoside** Pharmacological activity and hydrolysis behavior of novel ibuprofen glucopyranoside conjugates, 1352
- Glycoglycerolipids Cyclic and branched acyl chain galactoglycerolipids and their effect on anti-tumor-promoting activity, 1456

- Glycosides Glycosides and amino acyl esters of carbohydrates as potent inhibitors of angiotensin converting enzyme, 1059
- Glycosphingolipid Induction of promotive rather than suppressive immune responses from a novel NKT cell repertoire  $V\alpha 19$  NKT cell with  $\alpha$ -mannosyl ceramide analogues consisting of the immunosuppressant ISP-I as the sphingosine unit, 569
- Goniothalamin analogue Trypanocidal activity of 5,6-dihydropyran-2-ones against free trypomastigotes forms of *Trypanosoma cruzi*, 1210 Synthesis and antitumour activity of new muricatacin and go-niofufurone analogues, 1217
- Graph of atomic orbitals (GAO) Comparison of QSPR models of octanol/water partition coefficient for vitamins and non vitamins, 1271
- GSK-3β 3D QSAR for GSK-3β inhibition by indirubin analogues, 373
- Guinea pig tracheal chain Synthesis and bronchodilator activity of new quinazolin derivative, 429

#### Η

- **Harmine** Design of β-carboline derivatives as DNA-targeting antitumor agents, 1167
- HCT-15 Synthesis and anticancer activity of lavendustin A derivatives containing arylethenylchromone substituents, 991
- **Hepatotoxicity** Antihelminthic activity of some newly synthesized 5(6)-(un)substituted-1*H*-benzimidazol-2-ylthioacetylpiperazine derivatives, 1412
- Heterocyclic Synthesis of a new series of heterocyclic scaffolds for medicinal purposes, 1017
- **Heterocyclic amides** Heterocyclic analogs of benzanilide derivatives as potassium channel activators. IX, 761
- Heterocyclic analog of 18-nor-equilenin Synthesis and in vitro antibacterial activity of novel heterocyclic derivatives of 18-norequilenin, 891
- Heterocyclic analogues Microwave assisted synthesis of fragrant jasmone heterocyclic analogues, 586
- **Heterosteroid** Synthesis and in vitro antibacterial activity of novel heterocyclic derivatives of 18-nor-equilenin, 891
- High throughput screening Medicinal chemistry tools: making sense of HTS data, 166
- **Histone deacetylase inhibitor** Synthesis and cancer antiproliferative activity of new histone deacetylase inhibitors: hydrophilic hydroxamates and 2-aminobenzamide-containing derivatives, 697
- **Hit identification** Structure-based pharmacophore of COX-2 selective inhibitors and identification of original lead compounds from 3D database searching method, 1446
- HIV A density functional study of flavonoid compounds with anti-HIV activity, 616
- HIV-1 integrase inhibition Three-dimensional quantitative structure–activity relationship studies on diverse structural classes of HIV-1 integrase inhibitors using CoMFA and CoMSIA, 1359

- HIV-1 integrase inhibitors An approach to the stereo-controlled synthesis of polycyclic derivatives of L-4-thiazo-lidinecarboxylic acid active against HIV-1 integrase, 914
- Homology modelling In silico modelling of the interaction of flavonoids with human P-glycoprotein nucleotide-binding domain, 285
- HTS Medicinal chemistry tools: making sense of HTS data, 166
- **Human fraction absorbed** Prediction of human absorption of natural compounds by the non-everted rat intestinal sac model, 605
- **Hydrazide-hydrazones** Synthesis and characterization of novel hydrazide-hydrazones and the study of their structure-antituberculosis activity, 1253
- Hydrazino group Novel derivatives of methyl and ethyl 2-(4-oxo-8-aryl-2*H*-3,4,6,7-tetrahydroimidazo[2,1-*c*][1,2,4]triazin-3-yl)acetates from biologically active 1-aryl-2-hydrazinoimidazolines: Synthesis, crystal structure and antiproliferative activity, 1373
- Hydrolytic stability A phosphonamidate containing aromatic N-terminal amino group as inhibitor of leucine amino–peptidase-design, synthesis and stability, 768
- Hydrophilic hydroxamate HDAC inhibitor Synthesis and cancer antiproliferative activity of new histone deacetylase inhibitors: hydrophilic hydroxamates and 2-aminobenzamide-containing derivatives, 697
- Hydrophobic moiety Syntheses and odor of "bulky group"-modified sandalwood odorants: isophorono-β-santalol analogues, 905
- Hypoxia imaging Design and evaluation of "3 + 1" mixed ligand oxorhenium and oxotechnetium complexes bearing a nitroaromatic group with potential application in nuclear medicine oncology, 1144

## I

- **Ibuprofen** Pharmacological activity and hydrolysis behavior of novel ibuprofen glucopyranoside conjugates, 1352
- IC<sub>50</sub> values Glycosides and amino acyl esters of carbohydrates as potent inhibitors of angiotensin converting enzyme, 1059
- **IgE** Substituted 2-phenyl-benzimidazole derivatives: novel compounds that suppress key markers of allergy, 950
- IL-4 Substituted 2-phenyl-benzimidazole derivatives: novel compounds that suppress key markers of allergy, 950
- IL-5 Substituted 2-phenyl-benzimidazole derivatives: novel compounds that suppress key markers of allergy, 950
- Imidazo(4,5-b)pyridine Synthesis and in vitro microbiological evaluation of imidazo(4,5-b)pyridinylethoxypiperidones, 268
- Imidazo[1,2-a]quinoxalines 4-Substituted anilino imidazo[1,2-a] and triazolo[4,3-a] quinoxalines. Synthesis and evaluation of in vitro biological activity, 1102
- Imidazo[2,1-c][1,2,4]triazines Novel derivatives of methyl and ethyl 2-(4-oxo-8-aryl-2*H*-3,4,6,7-tetrahydroimidazo[2,1-c] [1,2,4]triazin-3-yl)acetates from biologically active 1-aryl-2-hydrazinoimidazolines:

- Synthesis, crystal structure and antiproliferative activity, 1373
- Imidazo[2,1-c][1,2,4]triazines Synthesis, crystal structure and anticancer activity of novel derivatives of ethyl 1-(4-oxo-8-aryl-4,6,7,8-tetrahydroimidazo[2,1-c][1,2,4]tri-azin-3-yl)formate, 539
- Imidazole Synthesis, ocular effects, and nitric oxide donation of imidazole amidoximes, 1073
- Imidazolines Novel derivatives of methyl and ethyl 2-(4-oxo-8-aryl-2*H*-3,4,6,7-tetrahydroimidazo[2,1-*c*][1,2,4]triazin-3-yl) acetates from biologically active 1-aryl-2-hydrazinoimidazolines: Synthesis, crystal structure and antiproliferative activity, 1373
- **Imino-ether** Convenient synthesis of novel 4-substitutedamino-5-trifluoromethyl-2,7-disubstituted pyrido[2,3-d] pyrimidines and their antibacterial activity, 1011
- Iminoamino-2-oxo/thiobarbituric acid Synthesis and anticonvulsant activity of some potential thiazolidinonyl 2-oxo/ thiobarbituric acids, 1223
- Immunomodulation Induction of promotive rather than suppressive immune responses from a novel NKT cell repertoire  $V\alpha 19$  NKT cell with  $\alpha$ -mannosyl ceramide analogues consisting of the immunosuppressant ISP-I as the sphingosine unit, 569
- In vitro Chemotherapy of leishmaniasis part III: synthesis and bioevaluation of novel aryl substituted terpenyl pyrimidines as antileishmanial agents, 779
- In vitro antitumour activity Synthesis of phenanthridinium-bis-nucleobase conjugates, interactions with poly U, nucleotides and in vitro antitumour activity of monoand bis-nucleobase conjugates, 1153
- In vitro assays Synthesis of new esters and oximes with 4-aminobicyclo[2.2.2]octane structure and evaluation of their antitry-panosomal and antiplasmodial activities, 970
- In vitro studies Synthesis and antiproliferative activity of some 5-substituted 2-(2,4-dihydroxyphenyl)-1,3,4-thiadiazoles, 475
- Inclusion complex Physico-chemical characterization of disoxaril-dimethyl-β-cyclodextrin inclusion complex and in vitro permeation studies, 233
- Indenopyrazoles 3D-QSAR CoMFA study on indenopyrazole derivatives as cyclin dependent kinase 4 (CDK4) and cyclin dependent kinase 2 (CDK2) inhibitors, 1310
- Indigoids Synthesis and antiproliferative activities of diversely substituted glycosylisoindigo derivatives, 88
- Indiplon Synthesis, pharmacology and molecular modeling of N-substituted 2phenyl-indoles and benzimidazoles as potent GABA<sub>A</sub> agonists, 985
- **Indirubins** 3D QSAR for GSK-3β inhibition by indirubin analogues, 373
- **Indole** Synthesis and biological activity of 6H-isoindolo[2,1-a]indol-6-ones, analogues of batracylin, and related compounds, 379 Novel potent and selective  $\alpha_v \beta_3 / \alpha_v \beta_5$  integrin dual antagonists with reduced binding affinity for human serum albumin, 847 Synthesis, pharmacology and molecular modeling of N-substituted 2-phenyl-indoles

- and benzimidazoles as potent  $GABA_A$  agonists, 985
- **Indole derivatives** 3-Bromo-4-(1*H*-3-indolyl)-2,5-dihydro-1*H*-2,5-pyrroledione derivatives as new lead compounds for antibacterially active substances, 176
- Indolin-2-ones Synthesis and antiproliferative activities of indolin-2-one derivatives bearing amino acid moieties, 709
- Indolinone Synthesis of 3-substituted-2oxoindole analogues and their evaluation as kinase inhibitors, anticancer and antiangiogenic agents, 296
- **Indolyl-pyridazin-3,6-dione** Synthesis, in vitro antiproliferative activities, and Chk1 inhibitory properties of indolylpyrazolones and indolylpyridazinedione, 1470
- Indolylpyrazolones Synthesis, in vitro antiproliferative activities, and Chk1 inhibitory properties of indolylpyrazolones and indolylpyridazinedione, 1470
- Inhibitors Solid-phase synthesis and pharmacological evaluation of a library of peptidomimetics as potential farnesyltransferase inhibitors: an approach to new lead compounds, 745 Natural biflavones as novel inhibitors of cathepsin B and K, 1247
- Inhibitors Synthesis and biological evaluation of new 4H-pyrano[2,3-b]quinoline derivatives that block acetylcholinesterase and cell calcium signals, and cause neuroprotection against calcium overload and free radicals, 1464
- **Integrin** Novel potent and selective  $\alpha_{\nu}\beta_3/\alpha_{\nu}\beta_5$  integrin dual antagonists with reduced binding affinity for human serum albumin, 847
- Intercalative binding Structure of daunomycin complexed to d-TGATCA by two-dimensional nuclear magnetic resonance spectroscopy, 27
- Intercalators Synthesis, photochemical synthesis, DNA binding and antitumor evaluation of novel cyano- and amidino-substituted derivatives of naphtho-furans, naphtho-thiophenes, thieno-benzofurans, benzo-dithiophenes and their acyclic precursors, 925
- Interproton distance constraints Structure of daunomycin complexed to d-TGATCA by two-dimensional nuclear magnetic resonance spectroscopy, 27
- Intra/inter-molecular hydrogen bonds -Synthesis of pharmaceutically important condensed heterocyclic 4,6-disubstituted-1,2,4-triazolo-1,3,4-thiadiazole derivatives as antimicrobials, 531
- **Intramolecular Wittig reaction** Synthesis and biological activity of 6*H*-isoindolo[2,1-*a*]indol-6-ones, analogues of batracylin, and related compounds, 379
- Intraocular pressure Synthesis, ocular effects, and nitric oxide donation of imidazole amidoximes, 1073
- In vitro study Novel derivatives of methyl and ethyl 2-(4-oxo-8-aryl-2*H*-3,4,6,7-tetrahydroimidazo[2,1-*c*][1,2,4]triazin-3-yl)acetates from biologically active 1-aryl-2-hydrazinoimidazolines: Synthesis, crystal structure and antiproliferative activity, 1373
- **Iodo-quinazolinone derivative of nalidixic acid** (IQN) – Synthesis and evaluation of new quinazolone derivatives of nalidixic

- acid as potential antibacterial and antifungal agents, 256
- Ionones Chemotherapy of leishmaniasis part III: synthesis and bioevaluation of novel aryl substituted terpenyl pyrimidines as antileishmanial agents, 779
- **IR- and NMR-spectra** New zirconium (IV) complexes of coumarins with cytotoxic activity, 717
- **Isoindigos** Synthesis and antiproliferative activities of diversely substituted glycosylisoindigo derivatives, 88
- **Isoindolo[2,1-α]indole** Synthesis and biological activity of 6*H*-isoindolo[2,1-*a*] indol-6-ones, analogues of batracylin, and related compounds, 379
- **Isomerisation** Synthesis and cytotoxicity of novel isomeric C-seco limonoids, 997
- **Isophorone** Syntheses and odor of "bulky group"-modified sandalwood odorants: isophorono-β-santalol analogues, 905
- **Isoquinoline** Synthesis and antitumor activity of *cis*-dichloroplatinum(II) complexes of 1-(2-aminophenyl)-1,2,3,4-tetrahydroisoquinolines, 940
- Isothiazoles Isothiazoles. Part XV. A mild and efficient synthesis of new antiproliferative 5-sulfanylsubstituted 3-alkylaminoisothiazole 1,1-dioxides, 675

## K

- **Ketoprofen** Dendrimers as potential drug carriers. Part II. Prolonged delivery of ketoprofen by in vitro and in vivo studies, 670
- **Kinase inhibitor** Novel 5,7-disubstituted 6-amino-5H-pyrrolo[3,2-b]pyrazine-2,3-dicarbonitriles, the promising protein kinase inhibitors with antiproliferative activity, 727
- Kinase inhibitors Synthesis of 3-substituted-2-oxoindole analogues and their evaluation as kinase inhibitors, anticancer and antiangiogenic agents, 296

## L

- L-4-thiazolidinecarboxylic acid An approach to the stereo-controlled synthesis of polycyclic derivatives of L-4-thiazolidine-carboxylic acid active against HIV-1 integrase, 914
- L. donovani Chemotherapy of leishmaniasis part III: synthesis and bioevaluation of novel aryl substituted terpenyl pyrimidines as antileishmanial agents, 779
- **LAP inhibitors** A phosphonamidate containing aromatic N-terminal amino group as inhibitor of leucine aminopeptidase–design, synthesis and stability, 768
- **Lavendustin A** Synthesis and anticancer activity of lavendustin A derivatives containing arylethenylchromone substituents, 991
- LDA Non-stochastic quadratic fingerprints and LDA-based QSAR models in hit and lead generation through virtual screening: theoretical and experimental assessment of a promising method for the discovery of new antimalarial compounds, 483
- **Licochalcone** A New syntheses and potential antimalarial activities of new 'retinoid-likechalcones', 142
- **Ligands** New ligands at the melatonin binding site *MT*<sub>3</sub>, 306

- **Linear free energy relationship** Air to brain, blood to brain and plasma to brain distribution of volatile organic compounds: linear free energy analyses, 494
- Linear free energy relationship Air to fat and blood to fat distribution of volatile organic compounds and drugs: Linear free energy analyses, 1430
- **Linear free energy relationship (LFER)** Synthesis, antibacterial activity and QSAR studies of 1,2-disubstituted-6,7-dimethoxy-1,2,3,4-tetrahydroisoquinolines, 40

#### М

- Malaria Design, synthesis and activity against *Toxoplasma gondii*, *Plasmodium* spp., and *Mycobacterium tuberculosis* of new 6-fluoroquinolones, 1478
- Mass spectrommetry In vitro mutagenicity of anti-inflammatory parsalmide analogues PA7, PA10, and PA31 triggered by biotransformation into hydroxy derivatives, 408
- MDA Synthesis and oxidant properties of novel (5-bromobenzofuran-2-yl)(3-methyl-3-mesitylcyclobutyl)ketonethiosemicarbazone, 664
- MDR modulators Correlation of calculated molecular orbital energies of some phenothiazine compounds with MDR reversal properties, 548
- **Melatonin** New ligands at the melatonin binding site  $MT_3$ , 306
- MEP Arylmethyl substituted derivatives of Fosmidomycin: Synthesis and antimalarial activity, 1385
- MES test Design, synthesis and in vivo anticonvulsant screening in mice of Novel phenylacetamides, 786
- Metabolites In vitro mutagenicity of antiinflammatory parsalmide analogues PA7, PA10, and PA31 triggered by biotransformation into hydroxy derivatives, 408
- Metal complexes Synthesis, characterization and biological studies of Co(II), Ni(II), Cu(II) and Zn(II) complexes with bidentate Schiff bases derived by heterocyclic ketone, 147
- MIC Novel derivatives of methyl and ethyl 2-(4-oxo-8-aryl-2*H*-3,4,6,7-tetrahydroimidazo[2,1-*c*][1,2,4]triazin-3-yl)acetates from biologically active 1-aryl-2-hydrazinoimidazolines: Synthesis, crystal structure and antiproliferative activity, 1373
- MIC Synthesis, antibacterial and antifungal activity of some new thiazolylhydrazone derivatives containing 3-substituted cyclobutane ring, 201
- **Microwave synthesis** Microwave assisted synthesis of fragrant jasmone heterocyclic analogues, 586
- MK-801 Affinity of 1-aryl-1,2,3,4-tetrahydroisoquinoline derivatives to the ion channel binding site of the NMDA receptor complex, 1003
- MLR A density functional study of flavonoid compounds with anti-HIV activity, 616
- Molecular docking 3D QSAR for GSK-3 $\beta$  inhibition by indirubin analogues, 373 Action mechanisms and structure-activity relationships of PI3K $\gamma$  inhibitors on the enzyme: a molecular modeling study, 558

- Molecular modeling Novel 5,7-disubstituted 6-amino-5H-pyrrolo[3,2-b]pyrazine-2,3dicarbonitriles, the promising protein kinase inhibitors with antiproliferative activity, 727
- Molecular modelling Structural modifications of benzanilide derivatives, effective potassium channel openers. X, 1421
- Molecular modelling Cytotoxic 5-aryl-1-(4-nitrophenyl)-3-oxo-1,4-pentadienes mounted on alicyclic scaffolds, 577
- Molecular orbital energies Correlation of calculated molecular orbital energies of some phenothiazine compounds with MDR reversal properties, 548
- Monoclinic Synthesis, characterization, antimicrobial and single crystal X-ray crystallographic studies of some new sulfonyl, 4-chloro phenoxy benzene and dibenzoazepine substituted benzamides, 1262
- **Monofunctional inducer** Cancer chemo-preventive activity of sulforamate derivatives, 121
- Morpholines Synthesis and antimicrobial activity of new (E)-4-[piperidino (4'-methylpiperidino-, morpholino-) N-alkoxy] stilbenes, 519
- Mouse vas deferens Structural-activity relationship study on C-4 carbon atom of the CB<sub>1</sub> antagonist SR141716: synthesis and pharmacological evaluation of 1,2,4-triazole-3-carboxamides, 114
- MT3 binding site New ligands at the melatonin binding site  $MT_3$ , 306
- MTT Chemotherapy of leishmaniasis part III: synthesis and bioevaluation of novel aryl substituted terpenyl pyrimidines as antileishmanial agents, 779
- Multipotent drugs Synthesis and biological evaluation of new 4*H*-pyrano[2,3-*b*]quinoline derivatives that block acetylcholinesterase and cell calcium signals, and cause neuroprotection against calcium overload and free radicals, 1464
- Muricatacin analogues Synthesis and antitumour activity of new muricatacin and goniofufurone analogues, 1217
- Mutagenicity In vitro mutagenicity of antiinflammatory parsalmide analogues PA7, PA10, and PA31 triggered by biotransformation into hydroxy derivatives, 408 – A duplicated nitrotienyl derivative with antimycobacterial activity: synthesis, X-ray crystallography, biological and mutagenic activity tests, 1196
- Mycobacterium smegmatis 3-Bromo-4-(1H-3-indolyl)-2,5-dihydro-1H-2,5-pyrroledione derivatives as new lead compounds for antibacterially active substances, 176
- Mycobacterium tuberculosis Design, synthesis and activity against Toxoplasma gondii, Plasmodium spp., and Mycobacterium tuberculosis of new 6-fluoroquinolones, 1478
- **Myoseverin** Synthesis and biological activity of 8-azapurine and pyrazolo[4,3-d] pyrimidine analogues of myoseverin, 1405

## N

N-Methyl-D-aspartate receptor – Affinity of 1-aryl-1,2,3,4-tetrahydroisoquinoline derivatives to the ion channel binding site of the NMDA receptor complex, 1003

- N-sulfonyl fluoroquinolones Synthesis, antibacterial and antitubercular activities of some 7-[4-(5-amino-[1,3,4]thiadiazole-2-sulfonyl)-piperazin-1-yl] fluoroquinolonic derivatives, 918
- Nalidixic acid hydrazide (NAH) Synthesis and evaluation of new quinazolone derivatives of nalidixic acid as potential antibacterial and antifungal agents, 256
- Naphthoimidazoles Synthesis of naphthofuranquinones with activity against *Trypanosoma cruzi*, 526
- **Naphthoquinone derivative** Synthesis and evaluation of antifungal activity of naphthoquinone derivatives, 773
- Naphthoquinones Synthesis of naphthofuranquinones with activity against Trypanosoma cruzi, 526
- Nasal mucosa Physico-chemical characterization of disoxaril–dimethyl-β-cyclodextrin inclusion complex and in vitro permeation studies. 233
- Natural compounds Prediction of human absorption of natural compounds by the non-everted rat intestinal sac model, 605
- **Negentropy** QSAR studies on benzopyran potassium channel activators, 360
- Neural network QSAR study of 4-phenylpiperidine derivatives as μ opioid agonists by neural network method, 226
- Neuropeptide Y Y5 receptor antagonists Quantitative structure activity relationship of benzoxazinone derivatives as neuropeptide Y Y5 receptor antagonists, 552
- Neuroprotection Synthesis and biological evaluation of new 4*H*-pyrano[2,3-*b*]quinoline derivatives that block acetylcholinesterase and cell calcium signals, and cause neuroprotection against calcium overload and free radicals, 1464
- Nicotinic acetylcholine receptors (nAChRs)—Synthesis and binding studies of epibatidine analogues as ligands for the nicotinic acetylcholine receptors, 640
- Nitric oxide Synthesis, ocular effects, and nitric oxide donation of imidazole amidoximes, 1073
- Nitro-quinazolinone derivatives of nalidixic acid (NIQNA) Synthesis and evaluation of new quinazolone derivatives of nalidixic acid as potential antibacterial and antifungal agents, 256
- Nitrogenous sterols Synthesis of oxysterols and nitrogenous sterols with antileishmanial and trypanocidal activities, 1109
- Nitrotienyl derivative A duplicated nitrotienyl derivative with antimycobacterial activity: synthesis, X-ray crystallography, biological and mutagenic activity tests, 1196
- NKT cell Induction of promotive rather than suppressive immune responses from a novel NKT cell repertoire Vα19 NKT cell with α-mannosyl ceramide analogues consisting of the immunosuppressant ISP-I as the sphingosine unit, 569
- NMR Nuclear magnetic resonance for studying recognition processes between anandamide and cannabinoid receptors, 1117
- **Non-benzodiazepinic** Synthesis, pharmacology and molecular modeling of *N*-substituted

- 2-phenyl-indoles and benzimidazoles as potent GABA<sub>A</sub> agonists, 985
- Non-everted intestinal sac model (NEIS) Prediction of human absorption of natural compounds by the non-everted rat intestinal sac model, 605
- Non-steroidal anti-inflammatory drugs (NSAIDs) Pharmacological activity and hydrolysis behavior of novel ibuprofen glucopyranoside conjugates, 1352
- Non-stochastic quadratic index Non-stochastic quadratic fingerprints and LDAbased QSAR models in hit and lead generation through virtual screening: theoretical and experimental assessment of a promising method for the discovery of new antimalarial compounds, 483
- **NSAIDs** Nonsteroidal antiinflammatory agents–part 2 antiinflammatory, analgesic and antipyretic activity of some substituted 3-pyrazolin-5-ones and 1,2,4,5,6,7-3*H*-hexahydroindazol-3-ones, 155
- Nuclear magnetic resonance spectroscopy-Structure of daunomycin complexed to d-TGATCA by two-dimensional nuclear magnetic resonance spectroscopy, 27
- Nucleophilic addition Isothiazoles. Part XV. A mild and efficient synthesis of new antiproliferative 5-sulfanylsubstituted 3-alkylaminoisothiazole 1,1-dioxides, 675
- Nucleotide-binding domain In silico modelling of the interaction of flavonoids with human P-glycoprotein nucleotide-binding domain, 285
- Nucleotides Synthesis of phenanthridiniumbis-nucleobase conjugates, interactions with poly U, nucleotides and in vitro antitumour activity of mono- and bis-nucleobase conjugates, 1153

## 0

- o-Hydroxy-acetophenone Synthesis of compounds with antiproliferative activity as analogues of prenylated natural products existing in Brazilian propolis, 401
- O-methyloximes Synthesis of new esters and oximes with 4-aminobicyclo[2.2.2] octane structure and evaluation of their antitrypanosomal and antiplasmodial activities, 970
- O6-alkylguanine-DNA alkyltransferase -Polar, functionalized guanine-O6 derivatives resistant to repair by O6-alkylguanine-DNA alkyltransferase: implications for the design of DNA-modifying drugs, 330
- Obesity Quantitative structure activity relationship of benzoxazinone derivatives as neuropeptide Y Y5 receptor antagonists, 552
- Octanol/water partition coefficient Comparison of QSPR models of octanol/water partition coefficient for vitamins and non vitamins, 1271
- Odor evaluation Microwave assisted synthesis of fragrant jasmone heterocyclic analogues, 586
- **Optimization** Medicinal chemistry tools: making sense of HTS data, 166
- Oxasteroid and antibacterial activity Synthesis and in vitro antibacterial activity of novel heterocyclic derivatives of 18-norequilenin, 891

- Oxazolidinone derivatives Synthesis of 1-[3-(4-benzotriazol-1/2-yl-3-fluoro-phenyl)-2-oxo-oxazolidin-5-ylmethyl]-3-substituted-thiourea derivatives as antituberculosis agents, 423
- Oxazolo[5,4-d]pyrimidines Synthesis and evaluation of 7-amino-2-(2(3)-furyl)-5-phenylethylamino-oxazolo[5,4-d]pyrimidines as potential A<sub>2A</sub> adenosine receptor antagonists for positron emission tomography (PET), 7
- Oxotechnetium, Oxorhenium complexes Design and evaluation of "3 + 1" mixed ligand oxorhenium and oxotechnetium complexes bearing a nitroaromatic group with potential application in nuclear medicine oncology, 1144
- Oxygen permeability of fluorinated polymers New perfluoroalkylated amphiphilic methacrylates bearing sulfinyl group as monomers for biomedical applications: water content and oxygen permeability of their copolymers with DEGMA, 1320
- Oxysterols Synthesis of oxysterols and nitrogenous sterols with antileishmanial and trypanocidal activities, 1109

#### P

- Palladium Synthesis, characterisation, activities, cell uptake and DNA binding of a trinuclear complex: [{trans-PtCl(NH<sub>3</sub>)}<sub>2</sub> μ- {trans-Pd(NH<sub>3</sub>)(2-hydroxypyridine)-(H<sub>2</sub>N (CH<sub>2</sub>)<sub>6</sub>NH<sub>2</sub>)<sub>2</sub>]Cl<sub>4</sub>, 896
- Palladium(II) complexes Synthesis and antiamoebic activity of new 1-N-substituted thiocarbamoyl-3, 5-diphenyl-2-pyrazoline derivatives and their Pd(II) complexes, 63
- PAMAM Dendrimers as potential drug carriers. PartII. Prolonged delivery of ketoprofen by in vitro and in vivo studies, 670
- Parkinson's disease Synthesis and in vitro cytotoxicity of 1,2,3,4-tetrahydroiso-quino-line derivatives, 241
- Parsalmide analogues In vitro mutagenicity of anti-inflammatory parsalmide analogues PA7, PA10, and PA31 triggered by biotransformation into hydroxy derivatives, 408
- **PBMC** Synthesis and evaluation of cytotoxic activity of arylfurans, 756
- PCBs Air to fat and blood to fat distribution of volatile organic compounds and drugs: Linear free energy analyses, 1430
- PCP binding site Affinity of 1-aryl-1,2,3,4tetrahydroisoquinoline derivatives to the ion channel binding site of the NMDA receptor complex, 1003
- Peptidomimetics Solid-phase synthesis and pharmacological evaluation of a library of peptidomimetics as potential farnesyltransferase inhibitors: an approach to new lead compounds, 745
- Permeability Prediction of human absorption of natural compounds by the non-everted rat intestinal sac model, 605
- Permeation Physico-chemical characterization of disoxaril-dimethyl-β-cyclodextrin inclusion complex and in vitro permeation studies, 233
- **PET** Synthesis and evaluation of 7-amino-2-(2(3)-furyl)-5-phenylethylamino-oxazolo[5,4-d]pyrimidines as potential A<sub>2A</sub>

- adenosine receptor antagonists for positron emission tomography (PET), 7
- **Pharmacological** Dihydropyrimidin-(2*H*)ones obtained by ultrasound irradiation: a
  new class of potential antioxidant agents,
  513
- Pharmacological activities Heterocyclic system containing bridgehead nitrogen atom: synthesis and pharmacological activities of some substituted 1,2,4-triazolo[3,4-b]-1,3,4-thiadiazoles, 1048
- **Pharmacophore** Action mechanisms and structure-activity relationships of PI3K $\gamma$  inhibitors on the enzyme: a molecular modeling study, 558
- **Phase II enzymes** Cancer chemopreventive activity of sulforamate derivatives, 121
- **Phase transfer catalysis** Synthesis and QSAR studies on 5-[2-(2-methylprop1-enyl)-1*H* benzimidazol-1yl]-4, 6-diphenyl-pyrimidin-2-(5*H*)-thione derivatives as antibacterial agents, 833
- Phenanthridinium-bis-nucleobase conjugates Synthesis of phenanthridinium-bis-nucleobase conjugates, interactions with poly U, nucleotides and in vitro antitumour activity of mono- and bis-nucleobase conjugates, 1153
- Phenothiazines Correlation of calculated molecular orbital energies of some phenothiazine compounds with MDR reversal properties, 548
- Phenylacetamides Design, synthesis and in vivo anticonvulsant screening in mice of Novel phenylacetamides, 786
- Phosphonamidate A phosphonamidate containing aromatic N-terminal amino group as inhibitor of leucine amino-peptidase—design, synthesis and stability, 768
- Phosphorohydrazine In vivo antitumor, in vitro antibacterial activity and alkylating properties of phosphorohydrazine derivatives of coumarin and chromone, 1301
- Phosphorous oxychloride Heterocyclic system containing bridgehead nitrogen atom: synthesis and pharmacological activities of some substituted 1,2,4-triazolo[3,4-b]-1,3,4-thiadiazoles, 1048
- Photocyclization Synthesis, photochemical synthesis, DNA binding and antitumor evaluation of novel cyano-and amidino-substituted derivatives of naphtho-furans, naphthothiophenes, thieno-benzofurans, benzo-dithiophenes and their acyclic precursors, 925
- Phthalide Antiproliferative effect of Baylis— Hillman adducts and a new phthalide derivative on human tumor cell lines, 738
- Physico-chemical characterization Physico-chemical characterization of disoxaril–dimethyl-β-cyclodextrin inclusion complex and in vitro permeation studies, 233
- **Physicochemical parameters** Synthesis and QSAR studies on 5-[2-(2-methylprop1-enyl)-1*H* benzimidazol- 1yl]-4,6-diphenyl-pyrimidin-2-(5*H*)-thione derivatives as antibacterial agents, 833
- PI3Kγ Action mechanisms and structure– activity relationships of PI3Kγ inhibitors on the enzyme: a molecular modeling study, 558
- **Piperidin-4-one** Synthesis and in vitro microbiological evaluation of imidazo(4,5-b)pyridinylethoxypiperidones, 268

- **Piperidin-4-one oxime ethers** Synthesis, stereochemistry, and antimicrobial evaluation of substituted piperidin-4-one oxime ethers, 683
- Piperidines Synthesis and antimicrobial activity of new (E)-4-[piperidino (4'-methylpiperidino-, morpholino-) N-alkoxy] stilbenes, 519
- **pKa** QSAR models based on quantum topological molecular similarity, 862
- Plasma stability Synthesis and cancer antiproliferative activity of new histone deacetylase inhibitors: hydrophilic hydroxamates and 2-aminobenzamide-containing derivatives, 697
- Plasma-brain Air to brain, blood to brain and plasma to brain distribution of volatile organic compounds: linear free energy analyses, 494
- Plasmodium falciparum New syntheses and potential antimalarial activities of new 'retinoid-like chalcones', 142
- Plasmodium falciparum Synthesis of new esters and oximes with 4-aminobicyclo [2.2.2]octane structure and evaluation of their antitrypanosomal and antiplasmodial activities, 970
- Plasmodium falciparum Arylmethyl substituted derivatives of Fosmidomycin:
   Synthesis and antimalarial activity, 1385
- Plasmodium spp. Design, synthesis and activity against Toxoplasma gondii, Plasmodium spp., and Mycobacterium tuberculosis of new 6-fluoroquinolones, 1478
- Platinum Synthesis, characterisation, activities, cell uptake and DNA binding of a trinuclear complex: [{trans-PtCl(NH<sub>3</sub>)}<sub>2</sub> μ-{trans-Pd(NH<sub>3</sub>)(2-hydroxypyridine)-(H<sub>2</sub>N (CH<sub>2</sub>)<sub>6</sub>NH<sub>2</sub>)<sub>2</sub>]Cl<sub>4</sub>, 896
- PLS QSAR study of 4-phenylpiperidine derivatives as μ opioid agonists by neural network method, 226 QSAR models based on quantum topological molecular similarity, 862
- Poly(fluoroalkylsulfinyl methacrylates) New perfluoroalkylated amphiphilic methacrylates bearing sulfinyl group as monomers for biomedical applications: water content and oxygen permeability of their copolymers with DEGMA, 1320
- **Polyamidoamine dendrimers** Dendrimers as potential drug carriers. Part II. Prolonged delivery of ketoprofen by in vitro and in vivo studies, 670
- **Polycyclic systems** Synthesis and biological evaluation of modified acridines: the effect of *N* and *O* substituent in the nitrogenated ring on antitumor activity, 340
- Polyhydroxychalcone Synthesis of Abyssinone II and related compounds as potential chemopreventive agents, 263
- Polynucleotides Synthesis of phenan-thridinium-bis-nucleobase conjugates, interactions with poly U, nucleotides and in vitro antitumour activity of mono- and bis-nucleobase conjugates, 1153
- **Potassium channel activators** QSAR studies on benzopyran potassium channel activators, 360
- **Potassium channel openers** Heterocyclic analogs of benzanilide derivatives as potassium channel activators. IX, 761

- **Potassium channels** Heterocyclic analogs of benzanilide derivatives as potassium channel activators. IX, 761
- Potential antimycobacterial agent A duplicated nitrotienyl derivative with antimycobacterial activity: synthesis, X-ray crystallography, biological and mutagenic activity tests, 1196
- Predictive models Computational approaches for predicting CYP-related metabolism properties in the screening of new drugs, 795
- Prenylated chalcone Synthesis of Abyssinone II and related compounds as potential chemopreventive agents, 263
- Prenylation Synthesis of Abyssinone II and related compounds as potential chemopreventive agents, 263 Synthesis of compounds with antiproliferative activity as analogues of prenylated natural products existing in Brazilian propolis, 401
- Prion protein Synthesis and SAR study of acridine, 2-methylquinoline and 2-phenylquinazoline analogues as antiprion agents, 1124
- Prodrug Synthesis and biological activity of some new 5'-O-acyl tiazofurin derivatives, 503 Design of β-carboline derivatives as DNA-targeting antitumor agents, 1167 Pharmacological activity and hydrolysis behavior of novel ibuprofen glucopyranoside conjugates, 1352
- Prodrugs Arylmethyl substituted derivatives of Fosmidomycin: Synthesis and antimalarial activity, 1385
- **Proteasome inhibitors** Synthesis and biological evaluation of new vinyl ester pseudotripeptide proteasome inhibitors, 978
- **Protein binding** Novel potent and selective  $\alpha_{\nu}\beta_3/\alpha_{\nu}\beta_5$  integrin dual antagonists with reduced binding affinity for human serum albumin, 847
- **Proteus vulgaris** Synthesis and evaluation of new quinazolone derivatives of nalidixic acid as potential antibacterial and antifungal agents, 256
- Proton spin-lattice relaxation rate Nuclear magnetic resonance for studying recognition processes between anandamide and cannabinoid receptors, 1117
- **Pummerer-type cyclization** Synthesis and in vitro cytotoxicity of 1,2,3,4-tetrahydro-isoquinoline derivatives, 241
- Purine Polar, functionalized guanine-O6 derivatives resistant to repair by O6-alkylguanine-DNA alkyltransferase: implications for the design of DNA-modifying drugs, 330
- **Purine** Synthesis and biological activity of 8-azapurine and pyrazolo[4,3-d]pyrimidine analogues of myoseverin, 1405
- **Pyoluteorin analogs** Synthesis and antimicrobial activity of new bromine-rich pyrrole derivatives related to monodeoxypyolute-orin, 1439
- Pyranobenzoquinones Synthesis and antimicrobial activity of pyranobenzoquinones related to the pyranonaphthoquinone antibiotics, 1333
- Pyranonaphthoquinone analogs Synthesis and antimicrobial activity of pyranobenzoquinones related to the pyranonaphthoquinone antibiotics, 1333

- Pyrano[2,3-b]quinolines Synthesis and biological evaluation of new 4*H*-pyrano[2,3-*b*]quinoline derivatives that block acetylcholinesterase and cell calcium signals, and cause neuroprotection against calcium overload and free radicals, 1464
- **Pyrazolines** Synthesis and antiamoebic activity of new 1-*N*-substituted thiocarbamoyl-3,5-diphenyl-2-pyrazoline derivatives and their Pd(II) complexes, 63
- **Pyridazinone complexes** Synthesis, antibacterial and antifungal activity of some new pyridazinone metal complexes, 101
- Pyrido[1,2-c]pyrimidine Synthesis of new hexahydro- and octahydropyrido[1,2c]pyrimidine derivatives with an arylpiperazine moiety as ligands for 5-HT<sub>1A</sub> and 5-HT<sub>2A</sub> receptors. Part 4, 125
- **Pyrido[2,3-d]pyrimidines** Convenient synthesis of novel 4-substitutedamino-5-trifluoromethyl-2,7-disubstituted pyrido [2,3-d] pyrimidines and their antibacterial activity, 1011
- **Pyrimidine** Synthesis and antiinflammatory activity of 4-amino-2-aryl-5-cyano-6-{3- and 4-(*N*-phthalimidophenyl)} pyrimidines, 276 Synthesis, analgesic, anti-inflammatory, ulcerogenic index and antibacterial activities of novel 2-methylthio-3-substituted-5,6,7,8-tetra-hydrobenzo (*b*) thieno[2,3-*d*] pyrimidin-4(3*H*)-ones, 1293
- Pyrimidinophanes Antibacterial and antifungal activity of acyclic and macrocyclic uracil derivatives with quaternized nitrogen atoms in spacers, 1093
- **Pyrrolidines** New highly potent GABA uptake inhibitors selective for GAT-1 and GAT-3 derived from (*R*)- and (*S*)-proline and homologous pyrrolidine-2-alkanoic acids, 809
- Pyrrolo[2,3-b]pyrazine Novel 5,7-disubstituted 6-amino-5H-pyrrolo[3,2-b]pyrazine-2,3-dicarbonitriles, the promising protein kinase inhibitors with antiproliferative activity, 727

Q

QSAR - Synthesis, antibacterial activity and OSAR studies of 1,2-disubstituted-6,7dimethoxy-1,2,3,4-tetrahydroisoquino-lines, 40 - Radial distribution function descriptors: an alternative for predicting  $A_{2A}$  adenosine receptors agonists, 56 - QSAR study of 4-phenylpiperidine derivatives as μ opioid agonists by neural network method, 226 -QSAR studies on benzopyran potassium channel activators, 360 - Non-stochastic quadratic fingerprints and LDA-based QSAR models in hit and lead generation through virtual screening: theoretical and experimental assessment of a promising method for the discovery of new antimalarial compounds, 483 - Quantitative structure activity relationship of benzoxazinone derivatives as neuropeptide Y Y5 receptor antagonists, 552 - A density functional study of flavonoid compounds with anti-HIV activity, 616 - QSAR models based on quantum topological molecular similarity, 862 - QSAR study for a novel series of

- $\it ortho$  disubstituted phenoxy analogues of  $\alpha_{I}\text{-}adrenoceptor}$  antagonist WB4101, 1025 Synthesis and QSAR studies of novel 1-substituted-2-amino-benzimidazoles derivatives, 1080 Quantitative structure activity relationship studies of aryl heterocycle-based thrombin inhibitors, 1339
- QSAR Synthesis, antimicrobial activity and QSARs of new benzoxazine-3-ones, 1398 Design, synthesis and activity against *Toxoplasma gondii*, *Plasmodium* spp., and *Mycobacterium tuberculosis* of new 6-fluoroquinolones, 1478
- QSPR QSAR models based on quantum topological molecular similarity, 862 Comparison of QSPR models of octanol/water partition coefficient for vitamins and non vitamins, 1271
- Quantitative structure-activity relationship

   Exploring QSAR on 3-aminopyrazoles as
  antitumor agents for their inhibitory activity
  of CDK2/cyclin A, 1190
- Quantitative structure-activity relationship (QSAR) Synthesis and QSAR studies on 5-[2-(2-methylprop1-enyl)-1*H* benzimidazol-1yl]-4,6-diphenyl-pyrimidin-2-(5*H*)-thione derivatives as antibacterial agents, 833
- Quantum chemical topology QSAR models based on quantum topological molecular similarity, 862
- **Quaternization** Antibacterial and antifungal activity of acyclic and macrocyclic uracil derivatives with quaternized nitrogen atoms in spacers, 1093
- **Quinazolin** Synthesis and bronchodilator activity of new quinazolin derivative, 429
- Quinazoline Synthesis and SAR study of acridine, 2-methylquinoline and 2-phenylquinazoline analogues as anti-prion agents, 1124
- Quinazolinone derivative of nalidixic acid (QN) Synthesis and evaluation of new quinazolone derivatives of nalidixic acid as potential antibacterial and antifungal agents, 256
- Quinoline Synthesis and SAR study of acridine, 2-methylquinoline and 2-phenylquinazoline analogues as anti-prion agents, 1124
- **Quinolinone** Synthesis and cytotoxic activity of substituted 2-phenyl-3-hydroxy-4(1*H*)-quinolinones-7-carboxylic acids and their phenacyl esters, 467
- Quinone oxidoreductase (QR) Cancer chemopreventive activity of sulforamate derivatives, 121
- **Quinone reductase 2** New ligands at the melatonin binding site  $MT_3$ , 306

## R

- Rate of metabolism Computational approaches for predicting CYP-related metabolism properties in the screening of new drugs, 795
- RDF descriptors Radial distribution function descriptors: an alternative for predicting A<sub>2 A</sub> adenosine receptors agonists, 56
- **Reactive oxygen species** Dihydropyrimidin-(2*H*)-ones obtained by ultrasound irradiation: a new class of potential antioxidant agents, 513

- **Receptor** Optimization of a pharmacophore model for 5-HT<sub>4</sub> agonists using CoMFA and receptor based alignment, 16
- **Receptor modelling** Adenosine receptor modelling. A<sub>1</sub>/A<sub>2a</sub> selectivity, 321
- Refractotopological state atom index Exploring QSAR on 3-aminopyrazoles as antitumor agents for their inhibitory activity of CDK2/cyclin A, 1190
- **Resistant** *Staphylococcus aureus* 3-Bromo-4-(1*H*-3-indolyl)-2,5-dihydro-1*H*-2,5-pyrroledione derivatives as new lead compounds for antibacterially active substances, 176
- Restrained molecular dynamics Structure of daunomycin complexed to d-TGATCA by two-dimensional nuclear magnetic resonance spectroscopy, 27
- Rhenium complexes Nitrofurylsemicarbazone Rhenium and Ruthenium Complexes as Anti-trypanosomal Agents, 1231
- Rhodium Comparison of the anti-neoplastic effects of dirhodium(II) tetrapropionate and its adducts with nicotinate and isonicotinate anions in mice bearing Ehrlich tumors, 1214
- Ring closure Interaction of novel condensed triazine derivatives with central and peripheral type benzodiazepine receptors: synthesis, in vitro pharmacology and modelling, 445
- Rodent toxicity Cytotoxic 5-aryl-1-(4-nitrophenyl)-3-oxo-1,4-pentadienes mounted on alicyclic scaffolds, 577
- Ru(II) Complexes Cyclooctadiene Ru(II) complexes of thiophene-2-carboxaldehydederived thiosemicarbazones: synthesis, characterization and antiamoebic activity, 592
- Ruthenium complexes Nitrofurylsemicarbazone Rhenium and Ruthenium Complexes as Anti-trypanosomal Agents, 1321

## S

- s-Triazine derivatives Synthesis and antibacterial activity of various substituted s-triazines, 1240
- **Salbutamol** Synthesis and bronchodilator activity of new quinazolin derivative, 429
- **SAR-study** 3-Bromo-4-(1*H*-3-indolyl)-2,5-dihydro- 1*H*-2,5-pyrroledione derivatives as new lead compounds for antibacterially active substances, 176
- Schiff bases Synthesis, characterization and biological studies of Co(II), Ni(II), Cu(II) and Zn(II) complexes with bidentate Schiff bases derived by heterocyclic ketone, 147 Synthesis and antifungal potential of Co(II) complexes of 1-(2'-hydroxyphenyl) ethylideneanilines, 253 Synthesis and crystal structure of some transition metal complexes with a novel bis-Schiff base ligand and their antitumor activities, 1090
- ScPTZ test Design, synthesis and in vivo anticonvulsant screening in mice of Novel phenylacetamides, 786
- Severe acute respiratory syndrome Synthesis of stilbene derivatives with inhibition of SARS coronavirus replication, 1084

- Smooth muscle cell Isothiazoles. Part XV. A mild and efficient synthesis of new anti-proliferative 5-sulfanylsubstituted 3-alkylaminoisothiazole 1,1-dioxides, 675
- Solid phase synthesis Solid-phase synthesis and pharmacological evaluation of a library of peptidomimetics as potential farnesyltransferase inhibitors; an approach to new lead compounds, 745
- Solid tumors Synthesis and antiproliferative activity of novel sugiol β-amino alcohol analogs, 1327
- Solution structure Structure of daunomycin complexed to d-TGATCA by two-dimensional nuclear magnetic resonance spectroscopy, 27
- Spectral characterization Heterocyclic system containing bridgehead nitrogen atom: synthesis and pharmacological activities of some substituted 1,2,4-triazolo[3,4-b]-1,3,4-thiadiazoles, 1048
- SR141716 Structural-activity relationship study on C-4 carbon atom of the CB<sub>1</sub> antagonist SR141716: synthesis and pharmacological evaluation of 1,2,4-triazole-3carboxamides, 114
- Stability to DHP-I Synthesis and antibacterial activities of new 1β-methyl-carbapenems having aminopyrimidinyl-thioether moiety, 1347
- Statistical significance Medicinal chemistry tools: making sense of HTS data, 166
- **Stereochemistry** Synthesis, stereochemistry, and antimicrobial evaluation of substituted piperidin-4-one oxime ethers, 683
- Stilbene derivatives Synthesis of stilbene derivatives with inhibition of SARS coronavirus replication, 1084
- Streptococcus pyogenes Synthesis and evaluation of new quinazolone derivatives of nalidixic acid as potential antibacterial and antifungal agents, 256
- Structure Synthesis, structure and anticancer activity of novel alkenyl-1,3,5-triazine derivatives, 611
- Structure activity relationship Synthesis and in vitro cytotoxicity of 1,2,3,4-tetrahydroisoquinoline derivatives, 241 Action mechanisms and structure–activity relationships of PI3Kγ inhibitors on the enzyme: a molecular modeling study, 558–Cytotoxic 5-aryl-1-(4-nitrophenyl)-3-oxo- 1,4-pentadienes mounted on alicyclic scaffolds, 577 Synthesis and cytotoxicity of novel isomeric C-seco limonoids, 997 Synthesis and characterization of novelhydrazide-hydrazones and the study of their structure–antituberculosis activity, 1253 Synthesis and antiproliferative activity of novel sugiol β-amino alcohol analogs, 1327
- Structure-based pharmacophore Structure-based pharmacophore of COX-2 selective inhibitors and identification of original lead compounds from 3D database searching method, 1446
- Structure–odor-relationship Syntheses and odor of "bulky group"-modified sandal-wood odorants: isophorono-β-santalol analogues, 905
- Styrylchromone Synthesis and anticancer activity of lavendustin A derivatives containing arylethenylchromone substituents, 991

- Substituent effects Synthesis and biological evaluation of 1β-methylcarbapenems having guanidino moieties, 50 Synthesis and biological evaluation of 1β-methylcarbapenems having cyclic thiourea moieties and their related compounds, 825–Synthesis and in vitro activity of a series1β-methylcarbapenem derivatives, 1201
- Sugiol Synthesis and antiproliferative activity of novel sugiol  $\beta$ -amino alcohol analogs, 1327
- **Sulforamate** Cancer chemopreventive activity of sulforamate derivatives, 121
- Synthesis Synthesis and leishmanicidal activities of 1-(4-X-phenyl)-N'-[(4-Yphenyl)methylene]-1H-pyrazole-4-carbohydrazides, 80 - Synthesis, structure and anticancer activity of novel 2,4-diamino-1,3,5-triazine derivatives, 219 - Synthesis of some new substituted triazolo [4,3a][1,4] benzodiazepine derivatives as potent anticonvulsants, 417 - Synthesis of 1-[3-(4benzotriazol-1/2-yl-3-fluoro-phenyl)-2oxo-oxazolidin-5 -ylmethy 1] -3 - substituted-thiourea derivatives as antituberculosis agents, 423 - Syntheses and antimicrobial activities of a series of new bis-quaternary ammonium compounds, 437 - Synthesis and antiproliferative activity of some 5-substituted 2-(2,4-dihydroxyphenyl)-1,3,4-thiadiazoles, 475 - Synthesis, structure and anticancer activity of novel alkenyl-1,3,5triazine derivatives, 611 - Synthesis and antiproliferative activity of benzo[d]isothiazole hydrazones, 624 - Synthesis and antimicrobial studies of a new series of 2-{4-[2-(5-ethylpyridin-2-yl)ethoxy] phenyl\-5-substituted-1,3,4-oxadiazoles, 841 - Synthesis and biological evaluation of new vinyl ester pseudotripeptide proteasome inhibitors, 978 - Synthesis and QSAR studies of novel 1-substituted-2-aminobenzimidazoles derivatives, 1080 - Synthesis and in vitro antitumor activity of novel series 2-benzylthio-4-chlorobenzene-sulfonamide derivatives, 1180 - Synthesis and antibacterial activity of various substituted s-triazines, 1240

## Т

- **Tacrine** Synthesis and biological evaluation of new 4*H*-pyrano[2,3-*b*]quinoline derivatives that block acetylcholinesterase and cell calcium signals, and cause neuroprotection against calcium overload and free radicals, 1464
- **Tandem mass spectrometry** Synthesis and cancer antiproliferative activity of new histone deacetylase inhibitors: hydrophilic hydroxamates and 2-aminobenzamide-containing derivatives, 697
- **Tautomerism** In vivo antitumor, in vitro antibacterial activity and alkylating properties of phosphorohydrazine derivatives of coumarin and chromone, 1301
- **Tetrahydroisoquinoline** Syntheses of new substituted triazino tetrahydroisoquinolines and β-carbolines as novel antileishmanial agents, 106
- **Tetrahydroisoquinolines** Affinity of 1-aryl-1,2,3,4-tetrahydroisoquinoline derivatives

- to the ion channel binding site of the NMDA receptor complex, 1003
- **Theophylline** Synthesis and bronchodilator activity of new quinazolin derivative, 429
- **Thiasteroid** Synthesis and in vitro antibacterial activity of novel heterocyclic derivatives of 18-nor-equilenin, 891
- Thiazolidinonylamino-2-oxo/thiobarbituric acid – Synthesis and anticonvulsant activity of some potential thiazolidinonyl 2-oxo/thiobarbituric acids, 1223
- Thiazolothiazepines An approach to the stereo-controlled synthesis of polycyclic derivatives of L-4-thiazolidinecarboxylic acid active against HIV-1 integrase, 914
- **Thienopyrimidine** Synthesis, analgesic, anti-inflammatory, ulcerogenic index and antibacterial activities of novel 2-methylthio-3-substituted-5,6,7,8-tetrahydrobenzo (*b*) thieno[2,3-*d*]pyrimidin-4(3*H*)-ones, 1293
- **Thiocarbamoyl** Synthesis and antiamoebic activity of new 1-*N*-substituted thiocarbamoyl-3,5-diphenyl-2-pyrazoline derivatives and their Pd(II) complexes, 63
- Thiophene-2-carboxaldehyde Cyclooctadiene Ru(II) complexes of thiophene-2-carboxaldehyde-derived thiosemicarbazones: synthesis, characterization and antiamoebic activity, 592
- **Thiosemicarbazide** Synthesis and biological activity of 4-thiazolidinones, thiosemicarbazides derived from diflunisal hydrazide, 353
- Thiosemicarbazone Synthesis, antibacterial and antifungal activity of some new thiazolylhydrazone derivatives containing 3-substituted cyclobutane ring, 201 Cyclooctadiene Ru(II) complexes of thiophene-2-carboxaldehyde-derived thiosemicarbazones: synthesis, characterization and antiamoebic activity, 592
- Thiosemicarbazone-substituted benzofuran Synthesis and oxidant properties of novel (5-bromobenzofuran-2-yl)(3-methyl-3-mesitylcyclobutyl)ketonethiosemicarbazone. 664
- **Thioureas** Synthesis, analgesic, anti-inflammatory, ulcerogenic index and antibacterial activities of novel 2-methylthio-3-substituted-5,6,7,8-tetrahydrobenzo (*b*) thieno[2,3-*d*]pyrimidin-4(3*H*)-ones, 1293
- **Thrombin inhibitors** Quantitative structure activity relationship studies of aryl heterocycle-based thrombin inhibitors, 1339
- **Tiazofurin derivatives** Synthesis and biological activity of some new 5'-O-acyl tiazofurin derivatives, 503
- TOMOCOMD-CARDD software Non-stochastic quadratic fingerprints and LDAbased QSAR models in hit and lead generation through virtual screening: theoretical and experimental assessment of a promising method for the discovery of new anti-malarial compounds, 483
- **Topological indices** QSAR studies on benzopyran potassium channel activators, 360
- **Topology** QSAR models based on quantum topological molecular similarity, 862
- Toxicity Antibacterial and antifungal activity of acyclic and macrocyclic uracil derivatives with quaternized nitrogen atoms in spacers, 1093

- Toxoplasma gondii Design, synthesis and activity against Toxoplasma gondii, Plasmodium spp., and Mycobacterium tuberculosis of new 6-fluoroquinolones, 1478
- **Toxoplasmosis** Design, synthesis and activity against *Toxoplasma gondii*, *Plasmodium* spp., and *Mycobacterium tuberculosis* of new 6-fluoroquinolones, 1478
- **Trans influence** Synthesis and antitumor activity of *cis*-dichloroplatinum(II) complexesof1-(2-aminophenyl)-1,2,3,4-tetrahydroisoquinolines, 940
- **Triazolo benzodiazepine** Synthesis of some new substituted triazolo [4,3-*a*][1,4] benzodiazepine derivatives as potent anticonvulsants, 417
- **Triazolo thiadiazoles** Heterocyclic system containing bridgehead nitrogen atom: synthesis and pharmacological activities of some substituted 1,2,4-triazolo[3,4-b]-1,3,4-thiadiazoles, 1048
- Triazolo[2,3-*b*] [1,4,2]benzodithiazines Synthesis and biological activity of new 2-amino-8-chloro-5,5-dioxo[1,2,4]triazolo [2,3-*b*][1,4,2]benzodithiazines, 633
- **Triazolo[4,3-a]quinoxalines** 4-Substituted anilino imidazo[1,2-a] and triazolo[4,3-a]quinoxalines. Synthesis and evaluation of in vitro biological activity, 1102
- *Trichomonas vaginalis* Synthesis and antiprotozoal activity of some 2-(trifluoromethyl)-1*H*-benzimidazole bioisosteres, 135
- Triclinic Synthesis, characterization, antimicrobial and single crystal X-ray crystallographic studies of some new sulfonyl, 4-chloro phenoxy benzene and dibenzoazepine substituted benzamides, 1262
- **Trypanocidal** Synthesis of oxysterols and nitrogenous sterols with antileishmanial and trypanocidal activities, 1109
- **Trypanocidal Activity** Trypanocidal activity of 5,6-dihydropyran-2-ones against free trypomastigotes forms of *Trypanosoma cruzi*, 1210
- **Trypanosoma b. rhodesiense** Synthesis of new esters and oximes with 4-amino-bicyclo[2.2.2]octane structure and evaluation of their antitrypanosomal and antiplasmodial activities, 970
- Trypanosoma cruzi Synthesis of naphthofuranquinones with activity against Trypanosoma cruzi, 526
- **Trypsin-like activity** Synthesis and biological evaluation of new vinyl ester pseudotripeptide proteasome inhibitors, 978
- TSE Synthesis and SAR study of acridine, 2-methylquinoline and 2-phenylquinazoline analogues as anti-prion agents, 1124
- **Tuberculosis** Synthesis of 1-[3-(4-benzotri-azol-1/2-yl-3-fluoro-phenyl)-2-oxo-oxazolidin-5-ylmethyl]-3-substituted-thiourea derivatives as antituberculosis agents, 423
- **Tubulin** Synthesis and biological activity of 8-azapurine and pyrazolo[4,3-d]pyrimidine analogues of myoseverin, 1405
- Tumor cell lines Synthesis, photochemical synthesis, DNA binding and antitumor evaluation of novel cyano- and amidino-substituted derivatives of naphtho-furans, naphtho-thiophenes, thieno-benzofurans, benzo-dithiophenes and their acyclic precursors, 925

**Tumor cells** – Synthesis, DNA binding and cytotoxicity of new pyrazole emodin derivatives, 1041

#### U

- Ulceration Pharmacological activity and hydrolysis behavior of novel ibuprofen glucopyranoside conjugates, 1352
- Uracils Antibacterial and antifungal activity of acyclic and macrocyclic uracil derivatives with quaternized nitrogen atoms in spacers, 1093
- **Urinary tract infections** Synthesis and evaluation of new quinazolone derivatives of nalidixic acid as potential antibacterial and antifungal agents, 256

#### V

- Vasicine Synthesis and bronchodilator activity of new quinazolin derivative, 429
- vCJD Synthesis and SAR study of acridine, 2-methylquinoline and 2-phenylquinazoline analogues as anti-prion agents, 1124
- Vinyl ester pseudopeptides Synthesis and biological evaluation of new vinyl ester pseudotripeptide proteasome inhibitors, 978
- Virtual screening Structure-based pharmacophore of COX-2 selective inhibitors and identification of original lead compounds from 3D database searching method, 1446

- Vitamins Comparison of QSPR models of octanol/water partition coefficient for vitamins and non vitamins, 1271
- Volatile organic compounds Air to brain, blood to brain and plasma to brain distribution of volatile organic compounds: linear free energy analyses, 494
- Volatile organic compounds Air to fat and blood to fat distribution of volatile organic compounds and drugs: Linear free energy analyses, 1430
- **Volsurf** Synthesis, pharmacology and molecular modeling of *N*-substituted 2-phenyl-indoles and benzimidazoles as potent GA-BA<sub>A</sub> agonists, 985
- Voltage-dependent calcium channels (VDCC) Synthesis and biological evaluation of new 4*H*-pyrano[2,3-*b*]quinoline derivatives that block acetylcholinesterase and cell calcium signals, and cause neuroprotection against calcium overload and free radicals. 1464

#### W

- WB4101 analogues QSAR study for a novel series of *ortho* disubstituted phenoxy analogues of α<sub>1</sub>-adrenoceptor antagonist WB4101, 1025
- Wettability of fluoroalkyl methacrylate copolymers – New perfluoroalkylated amphiphilic methacrylates bearing sulfinyl group as monomers for biomedical applications: water content and oxygen permeability of their copolymers with DEGMA, 1320

Wittig reaction – Synthesis and antitumour activity of new muricatacin and goniofufurone analogues, 1217

#### $\mathbf{X}$

- X-ray crystal structure analysis Synthesis, structure, toxicological and pharmacological investigations of 4-hydroxy-coumarin derivatives, 882
- **X-ray structure** Synthesis and cytotoxic activity of substituted 2-phenyl-3-hydroxy-4(1*H*)-quinolinones-7-carboxylic acids and their phenacyl esters, 467
- X-ray structure determination A duplicated nitrotienyl derivative with antimycobacterial activity: synthesis, X-ray crystallography, biological and mutagenic activity tests, 1196

#### $\mathbf{Z}$

- Zaleplon Synthesis, pharmacology and molecular modeling of N-substituted 2-phenyl-indoles and benzimidazoles as potent GABA<sub>A</sub> agonists, 985
- **Zirconium (IV) complexes** New zirconium (IV) complexes of coumarins with cytotoxic activity, 717
- **Zolpidem** Synthesis, pharmacology and molecular modeling of *N* substituted 2-phenyl-indoles and benzimidazoles as potent GABA<sub>A</sub> agonists, 985