

142. The cytotoxicity and antitumor activity of some tetrahedral bis(phosphine)gold(I) chelates
S.J. Berners Price, G.R. Girard, D.T. Hill, B.M. Sutton, P.S. Jarrett, L.F. Faucette, R.K. Johnson, C.K. Mirabelli and P.J. Sadler
J. Med. Chem. **1990**, *33*, 1386-1392.
143. Gold(I) complexes of 1-diphosphino-2-diphenylarsinoethane (appe): solution studies, X-ray crystal structures and cytotoxicity of [(AuCl)₂(appe)].0.5 DMA and [Au(appe)₂]Cl.H₂O.
O.M. Ni Dhubhghaill, R. Kuroda and P.J. Sadler
JCS Dalton, **1990**, 2913-2921.
144. NMR Studies of a bacterial cell culture medium (LB broth): cyclic nucleosides in yeast extracts.
M.H. Rayner, P.J. Sadler and M.D. Scawen
FEMS Microbiol. Lett. **1990**, *68*, 217-222.
145. Precipitation of cadmium in a bacterial culture medium: Luria-Bertani (LB) broth.
M.H. Rayner and P.J. Sadler
FEMS Microbiol. Lett. **1990**, *71*, 253-257.
146. NMR and CD Spectroscopic studies of copper complexation in blood plasma
S.W.A. Bligh, A.F. Drake and P.J. Sadler
Biochem. Soc. Trans. **1990**, *18*, 999-1000.
147. ¹H NMR Studies of serum albumin: assignment of resonances for N-terminal amino acids
A. Tucker and P.J. Sadler
Biochem. Soc. Trans. **1990**, *18*, 923-4.
148. Effects of diet and aging on proton NMR spectra of rat urine
J.D. Bell, P.J. Sadler, V.C. Morris and O.A. Levander
Magn. Res. Med. **1991**, *17*, 414-422.
149. Use of paramagnetic chelated metal derivatives of polysaccharides and spin-labelled polysaccharides as contrast agents in magnetic resonance imaging.
S.W.A. Bligh, C.T. Harding, P.J. Sadler, R.A. Bulman, G.M. Bydder, J.M. Pennock, J.D. Kelly, I.A. Latham and J.A. Marriott

- Magn. Res. Med.* **1991**, *17*, 516-532.
150. Inorganic drugs: a periodic table of pharmaceutical and diagnostic agents
P.J. Sadler in *Lectures in Bioinorganic Chemistry*, (M. Nicolini and L. Sindellari, Eds.)
Cortina Int./Raven, Verona/NY, **1991**, 1-24.
151. Nuclear magnetic resonance studies of blood plasma and urine from subjects with
chronic renal failure: identification of trimethylamine-N-oxide.
J.D. Bell, H.A. Lee, J.A. Lee, P.J. Sadler, D.R. Wilkie and R.H. Woodham
Biochim. Biophys. Acta **1991**, *1096*, 101-107.
152. Ni(II) Bisphosphine complexes.
P.S. Jarrett and P.J. Sadler
Inorg. Chem. **1991**, *30*, 2098-2104.
153. Inorganic chemistry and drug design
P.J. Sadler
Advances in Inorg. Chem. **1991**, *36*, 1-48.
154. Studies of the *cis-trans* isomerism of some square-planar platinum(II) nitroimidazole
complexes
F.M. Macdonald and P.J. Sadler
Polyhedron, **1991**, *10*, 1443-1448.
155. ¹H NMR Studies of human urine :urinary elimination of the anticancer drug carboplatin
J.D. Ranford, P.J. Sadler, K. Balmanno and D.R. Newell
Magn. Res. Chem. **1991**, *29*, S125-129.
156. Multinuclear MR studies of platinum(II) nitroimidazole complexes: ¹⁵N-labelling and
reactions with nucleotides
F.M. Macdonald and P.J. Sadler
Magn. Res. Chem. **1991**, *29*, S52-59.
157. Uraemia: is urea more important than we think ?
J.A. Lee, H.A. Lee and P.J. Sadler
The Lancet, **1991**, *338*, 1438-1440
158. The structure and reactivity of arsenic compounds: biological activity and drug design

- O.M. Ni Dhubhghaill and P.J. Sadler
Structure and Bonding **1991**, 78, 129-190.
159. ¹H NMR Studies of reactions of copper complexes with human blood plasma and urine
S.W.A. Bligh, H.A. Boyle, A.B. McEwen, P.J. Sadler and R.H. Woodham
Biochem. Pharm. **1992**, 43, 137-145.
160. Drug-induced reactions of bovine serum albumin: ¹H NMR studies of gold binding and cysteine release
O.M. Ni Dhubhghaill, P.J. Sadler and A. Tucker
J. Amer. Chem. Soc. **1992**, 114, 1118-1120.
161. Studies of Pt(II) methionine complexes: metabolites of cisplatin
R.E. Norman, J.D. Ranford and P.J. Sadler
Inorg. Chem. **1992**, 31, 877-888.
162. Effect of gold(I) antiarthritic drugs and related compounds on *Pseudomonas putida*
M.D. Rhodes, M.D. Scawen, P.J. Sadler and S. Silver
J. Inorg. Biochem., **1992**, 46, 129-142.
163. Sequential binding of Al³⁺ to the C- and N-lobes of human serum transferrin detected by ¹H NMR spectroscopy.
G. Kubal, P.J. Sadler and R.W. Evans
J. Amer. Chem. Soc. **1992**, 114, 1117-1118.
164. Proton NMR studies of bovine serum albumin: assignment of spin systems.
P.J. Sadler and A. Tucker
Eur. J. Biochem., **1992**, 205, 631-643.
165. Inorganic chemistry and medicine.
P.J. Sadler
Educ. in Chem. **1992**, 29, 80-83.
166. Hydrolysis products of cisplatin: pK_a determinations via [¹H, ¹⁵N] NMR spectroscopy
S.J. Berners Price, T.A. Frenkiel, U. Frey, J.D. Ranford and P.J. Sadler
JCS Chem. Comm. **1992**, 789-791.
167. Metallodrugs: the rôle of thiolate proteins and metal-thiolate complexes in metal

binding.

M. D. Rhodes, J. D. Ranford and P. J. Sadler in *Metallothioneins : Synthesis, Structure and Properties of Metallothioneins, Phytochelatins and Metal-thiolate Complexes*. (M.J. Stillman, C.F. Shaw III and K.T. Suzuki, eds.) VCH Publishers, **1992**, Ch. 16, pp 408 - 435.

168. Nuclear magnetic resonance studies of N-H bonds in platinum anticancer complexes: detection of reaction intermediates and hydrogen bonding in guanosine 5'-monophosphate adducts of [PtCl₂(NH₃)₂]
S.J. Berners Price, T.A. Frenkiel, J.D. Ranford and P.J. Sadler
JCS Dalton, **1992**, 2137-2139.
169. Uptake of Al³⁺ into the N-lobe of human serum transferrin
G. Kubal, A.B. Mason, P.J. Sadler, A. Tucker, and R.C. Woodworth
Biochem. J. **1992**, 285, 711-714.
170. Aldehydes from metal ion and lipoxygenase-induced lipid peroxidation: detection by ¹H N.M.R. spectroscopy.
J.K. Lodge, S.U. Patel and P.J. Sadler
Biochem. J. **1993**, 289, 149-153
171. Detection of Al³⁺ binding to citrate in human blood plasma by ¹H NMR spectroscopy.
J.D. Bell, G. Kubal, S. Radulovic, P.J. Sadler and A. Tucker
The Analyst, **1993**, 118, 241-244.
172. pH-Induced structural transitions of bovine serum albumin. Histidine pK_a values and unfolding of the N-terminus during the N to F transition
P.J. Sadler and A. Tucker
Eur. J. Biochem., **1993**, 212, 811-817.
173. Ring-opening reactions of the anticancer drug Carboplatin: NMR characterization of cis-[Pt(NH₃)₂(CBDCA-*O,O*')(5'-GMP-*N7*)] in solution.
U. Frey, J. D. Ranford and P. J. Sadler
Inorg. Chem., **1993**, 32, 1333-1340.
174. Gold complexes in cancer chemotherapy
O.M. Ni Dhubhghaill and P.J. Sadler in *Metal Complexes in Cancer Chemotherapy*, (B.K. Keppler, Ed.), VCH Publ., Weinheim, **1993**, pp221-248.

175. Oxalate- and Ga³⁺-induced structural changes in human serum transferrin and its recombinant N- lobe. ¹H NMR detection of preferential C-lobe binding.
G. Kubal, A.B. Mason, S.U. Patel, P.J. Sadler and R.C. Woodworth
Biochemistry, **1993**, 32, 3387-3395.
176. Amphiphilic bithiolato nickel(II), palladium(II) and platinum(II) complexes with bisphosphine or phosphinoarsine ligands
O.M. Ni Dhubhghaill, P.S. Jarrett and P.J. Sadler
J. Chem.Soc. Dalton Trans., **1993**, 1863-1870.
177. Cis-trans isomerization of [Pt(L-methionine)₂]: metabolite of the anticancer drug cisplatin
P. d. S. Murdoch, J.D. Ranford, P.J. Sadler and S.J. Berners-Price
Inorg. Chem., **1993**, 32, 2249-2255.
178. NMR - A clinical approach
J.D. Bell and P.J. Sadler
Chemistry in Britain, **1993**, 29, 597-600.
179. Stereospecific hydrogen-bonding in mononucleotide adducts of platinum anticancer complexes
S.J. Berners-Price, U. Frey, J.D. Ranford and P.J. Sadler
J. Am. Chem. Soc., **1993**, 115, 8649-8659.
180. Direct detection of albumin in human blood plasma by ¹H NMR spectroscopy.
Complexation of nickel²⁺.
S.U. Patel, P.J. Sadler, A. Tucker and J.H. Viles
J. Am. Chem. Soc., **1993**, 115, 9285-9286.
181. Cytotoxicity and antiviral activity of transition metal salicylato complexes and X-ray crystal structure of bis(diisopropylsalicylato)(1,10-phenanthroline)Cu(II)
J.D. Ranford P.J. Sadler and D.A. Tocher
JCS Dalton Trans., **1993**, 3393-3399.
- 181a ¹¹³Cd NMR Spectra of human transferrin
W. Kiang, P.J. Sadler and D.G. Reid
Magn. Res. Chem. **1993**, 31, S110-S112.

182. [Pd(CBDCA-*O,O*)(NH₃)₂]: the Pd(II) analogue of a platinum anticancer drug (CBDCA = cyclobutane-1,1-dicarboxylate)
K.J. Barnham, M.I. Djuran, U. Frey, M.A. Mazid and P.J. Sadler
J. Chem. Soc. Chem. Commun. **1994**, 65-66.
183. Involvement of a lysine residue in the N-terminal Ni²⁺ and Cu²⁺ binding site of serum albumin. Comparisons with Co²⁺, Cd²⁺ and Al³⁺.
P.J. Sadler, A. Tucker and J.H. Viles
Eur. J. Biochem. **1994**, 220, 193-200.
184. Unusually strong binding of Ca²⁺ ions by the novel antibiotic squalestatin-1.
W. Bal, A.F. Drake, M. Jezowska-Bojczuk, H. Kozlowski, L.D. Pettit
and P.J. Sadler
J. Chem.Soc. Chem. Commun. **1994**, 555-556.
185. pH-Induced structural changes in human serum apotransferrin: pK_a's of histidine residues and N- terminal amino group determined by ¹H NMR spectroscopy.
G. Kubal, P.J. Sadler and A. Tucker
Eur. J. Biochem. **1994**, 220, 781-787.
186. Synthesis, characterization and comparative study of aminophosphonate chelates of gadolinium(III) ions as magnetic resonance imaging contrast agents
A.S.W. Bligh, A.B. McEwen, C.T. Harding, P.J. Sadler, J.D. Kelly and J.A. Marriott
Polyhedron **1994**, 13, 1937-1943.
187. Intramolecular displacement of S-bound L-methionine on platinum(II) by 5'-guanosine monophosphate: implications for the mechanism of action of anticancer drugs.
K.J. Barnham, M.I. Djuran, P. del S. Murdoch and P.J. Sadler
J. Chem.Soc. Chem. Commun. **1994**, 721-722.
188. Multi-metal binding site on serum albumin.
W. Bal, J. Christodoulou, P.J. Sadler and A. Tucker
Metal Ions in Biology and Medicine, Eds. Ph. Collery, N.A. Littlefield, J.C. Etienne
John Libby Eurotext, Paris, **1994**, 43-45.
189. Ga³⁺-induced structural changes in human serum transferrin: [¹H, ¹³C] NMR studies of methionine residues in the N-lobe.

- E.J. Beatty, M.C. Cox, T.A. Frenkiel, G. Kubal, A.B. Mason, P.J. Sadler and R.C. Woodworth
Metal Ions in Biology and Medicine, Eds. Ph. Collery, N.A. Littlefield, J.C. Etienne
John Libby Eurotext, Paris, **1994**, 315-320.
190. Dioxygen-induced decarboxylation and hydroxylation of [Ni(II)(Glycyl-Glycyl-L-Histidine)] occurs via Ni(III): X-ray crystal structure of [Ni(II)(Glycyl-Glycyl- α -hydroxy-D,L-Histamine).3H₂O)].
W. Bal, M.I. Djuran, D.W. Margerum, E.T. Gray, Jr., M.A. Mazid, R.T. Tom, E. Nieboer and P.J. Sadler
J. Chem. Soc. Chem. Commun. **1994**, 1889-1890.
191. The chemistry of gold drugs
P.J. Sadler and R.E. Sue
Metal-Based Drugs **1994**, *1*, 107-144.
192. The mystery of the disappearing bases
A. Lepre, P. del S. Murdoch and P.J. Sadler
The Biochemist, **1994**, *16*, 28-34
193. Aquation of the anticancer complex trans-[Ru(III)Cl₄(Imidazole)₂]
O.M. Ni Dhubhghaill, W.R. Hagen, B.K. Keppler, K.-G. Lipponer and P.J. Sadler
JCS Dalton Trans. **1994**, 3305-3310.
194. A new structural transition of serum albumin dependent on the state of Cys34. Detection by NMR spectroscopy
J. Christodoulou, P.J. Sadler and A. Tucker
Eur. J. Biochem. **1994**, *225*, 363-368.
195. [¹H, ¹⁵N] NMR Investigations of Pt-NH hydrogen bonding in d(GpG), d(pGpG) and d(TpGpG)-N7,N7 adducts of [Pt(en)]²⁺ in aqueous solution
S.J. Berners-Price, J.D. Ranford and P.J. Sadler
Inorg. Chem., **1994**, *33*, 5842-5846.
196. [Pt(CBDCA-O)(NH₃)₂(L-Methionine-S)]: Ring-opened adduct of the anticancer drug carboplatin ("Paraplatin"). Detection of a similar complex in urine by NMR spectroscopy.
K.J. Barnham, U. Frey, P. del S. Murdoch, J.D. Ranford, P.J. Sadler and D.R. Newell

- J. Am. Chem. Soc.* **1994**, *116*, 11175-11176.
197. Cytotoxic phosphinoarsino and diphosphino Pd(II) complexes of thiolate amino acids and glutathione
O.M. Ni Dhubhghaill, P.J. Sadler and E. Garcia Fernandez
Metal-Based Drugs **1995**, *2*, 19-36.
198. Ranitidine bismuth citrate
P.J. Sadler and H. Sun
JCS Dalton Trans. **1995**, 1395-1401.
199. Copper-induced LDL peroxidation investigated by ¹H NMR spectroscopy
J.K. Lodge, P.J. Sadler, M.L. Kus and P.G. Winyard
Biochim Biophys. Acta, **1995**, *1256*, 130-140.
200. [Ag(I)(Et₂PCH₂CH₂PPh₂)₂]NO₃: An antimitochondrial silver complex
S.J. Berners-Price, D.C. Collier, M.A. Mazid, P.J. Sadler, R.E. Sue and D. Wilkie
Metal-Based Drugs, **1995**, *2*, 111-122.
201. Outer-sphere macrochelation in [Pd(en)(5'-GMP-N7)₂].9H₂O and [Pt(en)(5'-GMP-N7)₂].9H₂O : X-ray crystallography and NMR spectroscopy in solution
K.J. Barnham, C.J. Bauer, M.I. Djuran, M.A. Mazid, T. Rau and P.J. Sadler
Inorg. Chem. **1995**, *34*, 2826-2832.
202. Investigations of glutathione conjugation *in vitro* by ¹H NMR spectroscopy. Uncatalyzed and glutathione-transferase-catalyzed reactions
G. Kubal, P.J. Sadler and R.E. Norman
Chem. Res. Toxicol. **1995**, *8*, 780-791.
203. Platination pathways for reactions of cisplatin with GG single-stranded and double-stranded decamer oligonucleotides
K.J. Barnham, S.J. Berners-Price, T.A. Frenkiel, U. Frey and P.J. Sadler
Angew. Chemie, **1995**, *107*, 2040-2043; *Angew. Chemie Int. Ed.*, **1995**, *34*, 1874-1877.
204. Immobilization of small proteins in carbon nanotubes: high-resolution transmission electron microscopy study and catalytic activity
S.C. Tsang, J.J. Davis, M.L.H. Green, H.A.O. Hill, Y.C. Leung and P.J. Sadler
J. Chem. Soc. Chem. Commun. **1995**, 1803-1804.

205. Gold drugs
P.J. Sadler and R.E. Sue
in *Handbook of Metal-Ligand Interactions in Biological Fluids, Bioinorganic Chemistry*,
vol. 2
G. Berthon, Ed., Marcel Dekker Inc, New York, **1995**, pp 1039-1051.
206. L-Methionine increases the rate of reaction of 5'-guanosine monophosphate with the anticancer drug cisplatin: mixed ligand adducts and reversible methionine binding
K.J. Barnham, M.I. Djuran, P. del S. Murdoch, J.D. Ranford and P.J. Sadler
JCS Dalton Trans., **1995**, 3721-3726.
207. ¹H NMR of albumin in human blood plasma: drug binding and redox reactions at Cys34
J. Christodoulou, P.J. Sadler and A. Tucker
FEBS Lett. **1995**, 376, 1-5.
208. Body fluid spectroscopic studies
J.D. Bell and P.J. Sadler in *Encyclopedia of Nuclear Magnetic Resonance*, D.M. Grant
and R.K. Harris, Eds., J. Wiley & Sons, Chichester, **1996**, vol 2, pp 989-1001.
209. X-ray crystal structure determination and spectroscopic characterization of trans-diamminedihydroxoplatinum(II) dihydrate
J. Arpalahti, R. Sillanpää, K.J. Barnham and P.J. Sadler
Acta Chem Scand., **1996**, 50, 181-184.
210. Towards meeting the Paracelsus Challenge - the design, synthesis and characterisation of Paracelsin-43, an α -helical protein with over 50% sequence identity to an all- β protein
D.T. Jones, C.M. Moody, J. Uppenbrink, J.H. Viles, P.M. Doyle, C.J. Harris, L.H. Pearl,
P.J. Sadler and J.M. Thornton
Proteins, **1996**, 24, 502-513.
211. Ring-opened adducts of the anticancer drug carboplatin with sulfur amino acids
K.J. Barnham, M.I. Djuran, P. del S. Murdoch, J.D. Ranford and P.J. Sadler
Inorg. Chem. **1996**, 35, 1065-1072.
212. NMR Spectroscopy of platinum drugs: from DNA to body fluids
K.J. Barnham, S.J. Berners-Price, Z. Guo, P. del S. Murdoch and P.J. Sadler
Platinum and Other Metal Coordination Compounds in Cancer Chemotherapy, 2,

- H.M. Pinedo and J.H. Schornagel, Eds., Plenum Press, New York, **1996**, 1-16.
213. Solution structure of a biologically-active cyclic LDV peptide analogue containing a type II' β -turn mimetic
P.M. Doyle, J. Harris, C.M. Moody, P.J. Sadler, M. Sims, J.M. Thornton, J. Uppenbrink and J.H. Viles
Int. J. Peptide Protein Res. **1996**, 47, 427-436.
214. Stabilization of monofunctional platinum-nucleotide adducts: reactions of N-acetyl-L-methionine [Pt(ethylenediamine)]²⁺ complexes with guanosine 5'-monophosphate and guanylyl(3'-5')guanosine
K.J. Barnham, Z. Guo and P.J. Sadler
JCS Dalton Trans. **1996**, 2867-2876.
215. Unexpectedly strong binding of a large metal ion (Bi³⁺) to human serum transferrin
H. Li, P.J. Sadler and H. Sun
J. Biol. Chem. **1996**, 271, 9483-9489.
216. Axial hydrophobic fence in highly-stable Ni(II) complex of des-angiotensinogen N-terminal peptide
W. Bal, G.N. Chmurny, B.D. Hilton, P.J. Sadler and A. Tucker
J. Am. Chem. Soc. **1996**, 118, 4727-4728.
217. Copper(I) glutathione complexes: ¹H, ¹³C NMR and X-ray absorption studies
A. Corazza, I. Harvey and P.J. Sadler
Eur. J. Biochem. **1996**, 236, 697-705.
218. Solid-state carbon-13 nuclear magnetic resonance investigations of bismuth citrate complexes and crystal structure of Na₂[Bi₂(cit)₂].7H₂O
P.J. Barrie, M.I. Djuran, M.A. Mazid, M. McPartlin, P.J. Sadler, I.J. Scowen and H. Sun
J. Chem. Soc. Dalton Trans. **1996**, 2417-2422.
219. Bismuth(III) complexes of the tripeptide glutathione (γ -L-Glu-L-Cys-Gly)
P.J. Sadler, H. Sun and H. Li
Chem. Eur. J. **1996**, 2, 701-708.

220. The purification and characterization of biological 6-sulphatoxymelatonin and comparison with synthetic 6-sulphatoxymelatonin
C.A. Street, W.L. Di, J.F. Peniston-Bird, S. Patel, P. Sadler and R.E. Stilman
J. Pineal Res. **1996**, *20*, 98-114.
221. Observation of albumin resonances in proton nuclear magnetic resonance spectra of human blood plasma: N-terminal assignments aided by the use of modified recombinant albumin
R. Harris, P.J. Sadler, S.U. Patel and J.H. Viles
The Analyst **1996**, *121*, 913-922.
222. Inter-lobe communication in ^{13}C -methionine-labeled human transferrin
E.J. Beatty, M.C. Cox, T.A. Frenkiel, B.M. Tam, A.B. Mason, R.T.A. MacGillivray, P.J. Sadler, and R.C. Woodworth
Biochemistry **1996**, *35*, 7635-7642.
223. Design of chelate ring-opening platinum anticancer complexes: reversible binding to guanine
A. Habtemariam and P.J. Sadler
JCS Chem. Commun. **1996**, 1785-1786.
224. Coordination chemistry of metallodrugs: insights from NMR spectroscopy
S.J. Berners-Price and P.J. Sadler
Coord. Chem. Rev. **1996**, *151*, 1-40.
225. ^1H and ^{113}Cd NMR investigations of Cd^{2+} and Zn^{2+} binding sites on serum albumin: competition with Ca^{2+} , Ni^{2+} , Cu^{2+} and Zn^{2+}
P.J. Sadler and J.H. Viles
Inorg. Chem. **1996**, *35*, 4490-4496.
226. Kinetic analysis of the stepwise platination of single- and double-stranded GG oligonucleotides with cisplatin and $\text{cis-}[\text{PtCl}(\text{H}_2\text{O})(\text{NH}_3)_2]^+$
S.J. Berners-Price, K.J. Barnham, U. Frey, and P.J. Sadler
Chem. Eur. J., **1996**, *2*, 1283-1291.
227. Gold drugs: mechanism of action and toxicity
S.L. Best and P.J. Sadler
Gold Bulletin **1996**, *29*, 87-93.

228. Determination of gold and platinum in the presence of blood plasma proteins using inductively coupled plasma mass spectrometry with direct injection nebulization
J. Christodoulou, M. Kashani, B.M. Keohane and P.J. Sadler
J. Anal. At. Spectrom., **1996**, *11*, 1031-1035.
229. Multiple solution conformations of the integrin-binding cyclic pentapeptide cyclo[-Ser-D- Leu-Asp-Val-Pro]. Analysis of the (ϕ, ψ) space available to cyclic pentapeptides
J.H. Viles, J.B.O. Mitchell, S.L. Gough, P.M. Doyle, C.J. Harris, P.J. Sadler and J.M. Thornton
Eur. J. Biochem., **1996**, *242*, 352-362.
230. Rationalization of the strength of metal binding to human serum transferrin
H. Li, P.J. Sadler and H. Sun
Eur. J. Biochem., **1996**, *242*, 387-394.
231. Structural transitions of a GG-platinated DNA duplex induced by pH, temperature and box A of high-mobility-group protein 1
S.J. Berners-Price, A. Corazza, Z. Guo, K.J. Barnham, P.J. Sadler, Y. Ohyama, M. Leng and D. Locker
Eur. J. Biochem., **1997**, *243*, 782-791.
232. Recognition of Pt(II) amine complexes by nucleotides: role of phosphate and carbonyl groups in $[\text{Pt}(^{15}\text{N-diethylenetriamine})(\text{guanosine } 5'\text{-monophosphate})]^{2+}$
Z. Guo, P.J. Sadler and E. Zang
JCS Chem. Commun., **1997**, 27-28.
233. Chelate-ring-opened adducts of $[\text{Pt}(\text{en})(2\text{-methylmalonate-O,O}')]]$ with methionine derivatives: relevance to the biological activity of platinum anticancer agents
Z. Guo, T.W. Hambley, P. del S. Murdoch and P.J. Sadler
JCS Dalton Trans., **1997**, 469-478.
234. Reactions of the antiarthritic drug aurothiomalate with phenylmercury(II) compounds: NMR studies
G.G. Graham, D. Gordon and P.J. Sadler
Metal-Based Drugs, **1997**, *3*, 269-276.

235. A convenient synthesis of ^{15}N -labelled diethylenetriamine and ethylenediamine
E. Zang and P.J. Sadler
Synthesis, **1997**, 410-412.
236. The biological and medicinal chemistry of bismuth
H. Sun, H. Li and P.J. Sadler
Chem. Ber./Recueil, **1997**, 130, 669-681.
237. Strong, rapid binding of a platinum complex to thymine and uracil under physiological conditions
N. Margiotta, A. Habtemariam and P.J. Sadler
Angew. Chem., **1997**, 109, 1233-1236; *Angew. Chem. Int Ed.* **1997**, 36, 1185-1187.
238. Trp128Tyr mutation in the N-lobe of recombinant human transferrin: ^1H , ^{15}N and metal binding studies
E.J. Beatty, M.C. Cox, T.A. Frenkiel, Q.-Y. He, A.B. Mason, P.J. Sadler, A. Tucker and R.C. Woodworth
Protein Engineering, **1997**, 10, 583-591.
239. Synthesis of hexamine ligands using trityl as an N-blocking group
E. Zang and P.J. Sadler
Synthetic Comm., **1997**, 27, 3145-3150.
240. Nickel contamination of gold salts; link with gold-induced skin rash
E.H.S. Choy, L. Gambling, S.L. Best, R.E. Jenkins, E. Kondeatis, R. Vaughan, M.M. Black, P.J. Sadler and G.S. Panayi
Br. J. Rheumatol. **1997**, 36, 1054-1058.
241. Rationalisation of metal binding to transferrin: prediction of metal-protein stability constants
H. Sun, M.C. Cox, H. Li and P.J. Sadler
Structure and Bonding, **1997**, 88, 71-102.
242. Gold(III) and palladium(II) complexes of glycyglycyl-L-histidine: crystal structures of $[\text{Au}^{\text{III}}(\text{Gly-Gly-L-His-H}_2)]\text{Cl}\cdot\text{H}_2\text{O}$ and $[\text{Pd}^{\text{II}}(\text{Gly-Gly-L-His-H}_2)]\cdot 1.5\text{H}_2\text{O}$ and His ϵ NH deprotonation
S. Best, T.K. Chattopadhyay, M.I. Djuran, R.A. Palmer, P.J. Sadler, I. Sóvágó and K.

Varnagy

JCS Dalton Trans., **1997**, 2587-2596.

243. Determination of bismuth in serum and urine by direct injection nebulization inductively coupled plasma mass spectrometry
H. Li, B.M. Keohane, H. Sun and P.J. Sadler
J. Anal. At. Spectrom., **1997**, *12*, 1111-1114.
244. Interaction of tin(IV) with doxorubicin
E. Balestrieri, L. Bellugi, A. Boicelli, M. Giomini, A.-M. Giuliani, M. Giustini, L. Marciani and P.J. Sadler
JCS Dalton Trans. **1997**, 4099-4105.
245. Immobilization of platinated and iodinated DNA oligomers on carbon nanotubes
S.C. Tsang, Z. Guo, Y.K. Chen, M.L.H. Green, H.A.O. Hill, T.W. Hambley and P.J. Sadler
Angew. Chem. **1997**, *109*, 2292-2294, *Angew. Chem. Int. Ed.* **1997**, *36*, 2197-2200.
246. Platination of a GG site on single-stranded and double-stranded forms of a 14-base oligonucleotide with diaqua cisplatin followed by NMR and HPLC. Influence of the platinum ligands and base sequence on 5'-G versus 3'-G platination selectivity.
F. Reeder, Z. Guo, P. del S. Murdoch, A. Corazza, T.W. Hambley, S.J. Berners-Price, J.-C. Chottard and P.J. Sadler
Eur. J. Biochem. **1997**, *249*, 370-382.
247. [¹H, ¹⁵N] NMR studies of [Pt(dien)Cl]⁺: hydrolysis and reactions with nucleotides
Z. Guo, Y. Chen, E. Zang and P.J. Sadler
J. Chem. Soc., Dalton Trans. **1997**, 4107-4111.
248. Chelate ring-opening ruthenium complexes: X-ray crystal structure and solution studies of *cis,trans*-bis(2-dimethyl-aminoethyl)diphenylphosphino(dichloro)ruthenium(II)
Z. Guo, A. Habtemariam, P.J. Sadler and B.R. James
Inorg. Chim. Acta **1998**, *273*, 1-7.
249. pK_a Values of aqua ligands on platinum anticancer complexes: [¹H, ¹⁵N] and ¹⁹⁵Pt NMR studies of *cis*- and *trans*-[PtCl₂(NH₃)(cyclohexylamine)]
S.J. Barton, K.J. Barnham, A. Habtemariam, R.E. Sue and P.J. Sadler
Inorg. Chim. Acta **1998**, *273*, 8-13.

250. Stereospecific and kinetic control over hydrolysis of a sterically-hindered platinum picoline anticancer complex
Y. Chen, Z. Guo, S. Parsons and P.J. Sadler
Chem. Eur. J. **1998**, *4*, 672-676.
251. Conformational flexibility within the chelate rings of [Pt(en)(CBDCA-O,O⁻)], an analogue of the antitumour drug carboplatin: X-ray crystallographic and solid-state NMR studies
Z. Guo, A. Habtemariam, P.J. Sadler, R. Palmer and B.S. Potter
New J. Chem. **1998**, 11-14.
252. The immobilisation of proteins in carbon nanotubes
J.J. Davis, M.L.H. Green, H.A.O. Hill, Y.C. Leung, P.J. Sadler, J. Sloan, A.V. Xavier and S.C. Tsang
Inorg. Chim. Acta **1998**, *272*, 261-266.
253. Multimetal binding site of serum albumin
W. Bal, J. Christodoulou, P.J. Sadler and A. Tucker
J. Inorg. Biochem., **1998**, *70*, 33-39.
254. [¹H, ¹³C] Determination of the order of lobe loading of human transferrin with iron: comparison with other metal ions
H. Sun, M.C. Cox, H. Li, A.B. Mason, R.C. Woodworth and P.J. Sadler
FEBS Lett. **1998**, *422*, 315-320.
255. ¹H NMR structure of an antifungal γ -thionin protein SI α 1: similarity to scorpion toxins
C. Bloch Jr, S.U. Patel, F. Baud, M.J.J.M. Zvelebil, M.D. Carr, P.J. Sadler and J.M. Thornton
Proteins, **1998**, *32*, 334-349.
256. New approach to the solution chemistry of bismuth citrate antiulcer complexes
J.A. Parkinson, H. Sun and P.J. Sadler
Chem. Commun. **1998**, 881-882.
257. The first specific Ti(IV) protein complex: potential relevance to anticancer activity

- H. Sun, H. Li, R.A. Weir and P.J. Sadler
Angew. Chem. **1998**, *110*, 1622-1625; *Angew. Chem. Int. Ed.* **1998**, *37*, 1577-1579.
258. Zinc finger with an artificial β -turn
J.H. Viles, S.U. Patel, J.B.O. Mitchell, C.M. Moody, D.E. Justice, J. Uppenbrink, P.M. Doyle, C.J. Harris, P.J. Sadler and J.M. Thornton
J. Mol. Biol. **1998**, *279*, 973-986.
259. Cisplatin binding sites on human albumin
A.I. Ivanov, J. Christodoulou, J.A. Parkinson, K.J. Barnham, A. Tucker, J. Woodrow and P.J. Sadler
J. Biol. Chem. **1998**, *273*, 14721-14730.
260. Interconversion between S-bound and N-bound L-methionine adducts of $\{\text{Pt}(\text{dien})\}^{2+}$ (dien = diethylenetriamine) via dien ring-opened intermediates
Y. Chen, Z. Guo, P. del S. Murdoch, E. Zang and P.J. Sadler
J. Chem. Soc., Dalton Trans. **1998**, 1503-1508.
261. Different metals cause presentation of identical cryptic peptides
P. Griem, C. von Vultee, K. Panthel, S.L. Best, P.J. Sadler, and C. F. Shaw III
Eur. J. Immunol. **1998**, *28*, 1941-1947.
262. Coordination of Zn^{2+} (and Cd^{2+}) by prokaryotic metallothionein. Involvement of His- imidazole
M.J. Daniels, J.S. Turner-Cavet, R. Selkirk, H. Sun, J.A. Parkinson, P.J. Sadler and N.J. Robinson
J. Biol. Chem. **1998**, *273*, 22957-22961.
263. Metal complexes in medicine: design and mechanism of action
P.J. Sadler and Z. Guo
Pure & Appl. Chem. **1998**, *70*, 863-871.
264. Immobilization and visualization of DNA and proteins on carbon nanotubes
Z. Guo, P.J. Sadler and S.C. Tsang
Adv. Mater. **1998**, *10*, 1-3.

265. Electron-transfer-driven trans-ligand labilization: a novel activation mechanism for Pt(IV) anticancer complexes
N.A. Kratochwil, Z. Guo, P. del. S. Murdoch, J.A. Parkinson, P.J. Bednarski and P.J. Sadler
J. Am. Chem. Soc. **1998**, *120*, 8253-8254.
266. Kinetic control of reactions of a sterically-hindered platinum picoline anticancer complex with guanosine 5'-monophosphate and glutathione
Y. Chen, Z. Guo, J.A. Parkinson and P.J. Sadler
J. Chem. Soc. Dalton Trans., **1998**, 3577-3586.
267. Template synthesis of square-planar nickel(II) and copper(III) complexes based on hydrazide ligands
I.O. Fritsky, H. Kozlowski, P.J. Sadler, O.P. Yefetova, J. Swatek-Kozlowska, V. Kalibabchuk and T. Glowiak
J. Chem. Soc. Dalton **1998**, 3269-3274.
268. Chelate ring-opening of Pd(II) triphos complexes: ligand exchange, selective phosphine oxidation, and X-ray crystal structure of [Pd(Ph₂P(CH₂)₂PPh(CH₂)₂P(O)Ph₂Br)]Br
P. Sevilano, A. Habtemariam, A. Castiñeiras, M.E. Garcia and P.J. Sadler
Polyhedron **1999**, *18*, 383-389.
269. ¹⁹⁵Pt and ¹⁵N NMR spectroscopic studies of cisplatin reactions with biomolecules
Y. Chen, Z. Guo and P.J. Sadler
In B. Lippert (ed): *Cisplatin - chemistry and biochemistry of a leading anticancer drug*
Verlag Helvetica Chimica Acta, Zürich, **1999**, 293-318.
270. Kinetics of formation and stability of {Pt(dien)}²⁺ complexes with octamer and 14-mer DNA oligonucleotides containing a GG sequence
P. del S. Murdoch, Z. Guo, J.A. Parkinson and P.J. Sadler
J. Biol. Inorg. Chem. **1999**, *4*, 32-38.
271. N-Lobe versus C-lobe complexation of bismuth by human transferrin
H. Sun, H. Li, A.B. Mason, R.C. Woodworth and P.J. Sadler
Biochem. J. **1999**, *337*, 105-111.

272. Metals in Medicine
Z. Guo and P.J. Sadler
Angew. Chem. **1999**, *111*, 1610-1630; *Angew. Chem. Int. Ed.*, **1999**, *38*, 1512-1531.
273. [^1H , ^{15}N] NMR kinetic studies of reactions of *cis* and *trans*-[PtCl $_2$ ($^{15}\text{NH}_3$)(*c*-C $_6$ H $_{11}$ $^{15}\text{NH}_2$)] with guanosine-5'-monophosphate
S.J. Barton, K.J. Barnham, U. Frey, A. Habtemariam, R.E. Sue and P.J. Sadler
Aust. J. Chem., **1999**, *52*, 173-177.
274. Simultaneous determination of Pt and I by ICP-MS for studies of the mechanism of reaction of diiodo platinum anticancer complexes
M. Patriarca, N.A. Kratochwil and P.J. Sadler
JAAS, **1999**, *14*, 633-637.
275. DNA interactions of new antitumor aminophosphine platinum(II) complexes
K. Nephlechová, J. Kaspárková, O. Vrána, O. Nováková, A. Habtemariam, B. Watchman, P.J. Sadler and V. Brabec
Mol. Pharm., **1999**, *56*, 20-30.
276. Nucleotide platination induced by visible light
N.A. Kratochwil, J.A. Parkinson, P.J. Bednarski and P.J. Sadler
Angew. Chem. **1999**, *111*, 1566-1569; *Angew. Chem. Int. Ed.*, **1999**, *38*, 1460-1463.
277. A new platinum anticancer drug forms highly stereoselective adduct with duplex DNA
Y. Chen, J.A. Parkinson, Z. Guo, T. Brown and P.J. Sadler
Angew. Chem. **1999**, *111*, 2192-2196; *Angew. Chem. Int. Ed.*, **1999**, *38*, 2060-2063.
278. Gold-induced oxidation of glycine
J. Zou, Z. Guo, J.A. Parkinson, Y. Chen and P.J. Sadler
Chem. Comm. **1999**, 1359-1360.
279. Surprising reactions of iodo Pt(IV) and Pt(II) complexes with human albumin: detection of Cys34 sulfenic acid
N.A. Kratochwil, A.I. Ivanov, M. Patriarca, J.A. Parkinson, A. Gouldsworthy, P. del S. Murdoch and P.J. Sadler
J. Am. Chem. Soc., **1999**, *121*, 8193-8203.
280. Coordination chemistry of metals in medicine: target sites for bismuth

- P.J. Sadler, H. Li and H. Sun
Coord. Chem. Rev. **1999**, 185-186, 689-709.
281. Transferrin as a metal ion mediator
H. Sun, H. Li and P.J. Sadler
Chem. Rev. **1999**, 99, 2817-2842.
282. Gold(I)-induced chelate-ring opening of palladium(II) and platinum(II) triphos complexes
P. Sevilano, A. Habtemariam, S. Parsons, A. Castiñeiras, M.E. García and P.J. Sadler
J. Chem. Soc. Dalton Trans. **1999**, 2861-2870.
283. Interactions of bismuth complexes with metallothionein(II)
H. Sun, H. Li, I. Harvey and P.J. Sadler
J. Biol. Chem. **1999**, 274, 29094-29101.
284. Application of ICP-MS to the investigation of chemical reactions of candidate metallodrugs with biomolecules
M. Patriarca, N.A. Kratochwil and P.J. Sadler
in *Plasma Source Mass Spectrometry*, G. Holland and S.C. Tanner, eds.
Roy. Soc. Chem., Cambridge, **1999**, pp199-207.
285. A novel dinuclear diaminoplatinum(II) glutathione macrochelate
P. del S. Murdoch, N.A. Kratochwil, J.A. Parkinson, M. Patriarca and P.J. Sadler
Angew. Chem. **1999**, 111, 3062-3065; *Angew. Chem. Int. Ed.* **1999**, 38, 2949-2951.
286. Identification of platination sites on human serum transferrin using ^{13}C and ^{15}N NMR spectroscopy
M.C. Cox, K.J. Barnham, T.A. Frenkiel, J.D. Hoeschele, A.B. Mason, Q.-Y. He, R.C. Woodworth and P.J. Sadler
J. Biol. Inorg. Chem. **1999**, 4, 621-631.
287. Inorganic chemistry and medicine
Z. Guo and P.J. Sadler
Chemistry in Australia, **1999**, 66, 6-11.
289. $[\text{Au}(\text{dien})\text{Cl}]\text{Cl}_2$: exchange phenomena observed by ^1H and ^{13}C NMR spectroscopy
S.L. Best, Z. Guo, M.I. Djuran and P.J. Sadler

Metal-Based Drugs, **1999**, 6, 261-269.

290. Different coordination modes of a tripod phosphine in gold(I) and silver(I) complexes
P. Sevillano, M.E. Gracia, A. Habtemariam, S. Parsons and P.J. Sadler
Metal-Based Drugs, **1999**, 6, 211-221.