

Professor Robert D. Gillard: Transition Metal Chemist 1936–2013: Supplementary Information

John Burgess

Department of Chemistry, University of Leicester, Leicester LE1 7RH, UK

Martyn V. Twigg*

Twigg Scientific & Technical Ltd, Caxton, Cambridge CB23 3PQ, UK

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Table S1. Publications in the Series "Adducts of Coordination Compounds"

Part ^a	Title	Citation
1	Some Adducts of Hydrogen Halides	D. Dollimore, R. D. Gillard and E. D. McKenzie, <i>J. Chem. Soc.</i> , 1965, 4479-4482.
2	Compounds of Nitric Acid and Trans-Dihalogenotetra-Pyridinemetals(III) Nitrates	R. D. Gillard and R. Ugo, <i>J. Chem. Soc. A</i> , 1966, 549-552
3	Nitric Acid Adducts of Some Ethylenediamine Complexes of Cobalt(III)	K. Garbett, R. D. Gillard and R. Ugo, <i>J. Chem. Soc. A</i> , 1966, 1137-1139.
4	Nitric Acid Adducts of Ammine Complexes of Trivalent Metals	R. Ugo and R. D. Gillard, <i>Inorg. Chim. Acta</i> , 1967, 1 , 311-314.
5	Intermediate in Acid-Catalyzed Aquation of a Nitro-Complex	R. Ugo and R. D. Gillard, <i>J. Chem. Soc. A</i> , 1967, 2078-2081.
6	Thermal Decomposition of Some Protonic Acid Adducts	D. Dollimore, R. D. Gillard, E. D. McKenzie and R. Ugo, <i>J. Inorg. Nucl. Chem.</i> , 1968, 30 , 2755-2758.
7	Acetic Acid Adducts of Complex Isothiocyanates	W. O. Davies, R. D. Gillard and N. C. Payne, <i>J. Inorg. Nucl. Chem.</i> , 1968, 30 , 2759-2764.
8	Two Unusual Adducts of Bispyridinato-Copper(II)	R. D. Gillard and S. H. Laurie, <i>J. Inorg. Nucl. Chem.</i> , 1971, 33 , 947-951.
9	Halogenocarbon Solvates of Trihalogeno-Tripyridinerhodium(III)	A. W. Addison and R. D. Gillard, <i>J. Chem. Soc., Dalton Trans.</i> , 1973, 2002-2009
10	Solvates and Adducts of Dihalogeno-Tetrapyridinerhodium(III) Salts	A. W. Addison and R. D. Gillard, <i>J. Chem. Soc., Dalton Trans.</i> , 1973, 2009-2012.
11	Isomerism and Solvation of Dichloro-Bistriphenylphosphine)platinum(II)	R. D. Gillard and M. F. Pilbrow, <i>J. Chem. Soc., Dalton Trans.</i> , 1974, 2320-2325
12	New Hydrogen Dinitrates and Their Structures	N. S. Al-Zamil, E. H. M. Evans, R. D. Gillard, D. W. James, T. E. Jenkins, R. J. Lancashire and P. A. Williams, <i>Polyhedron</i> , 1982, 1 , 525-534
13	Nitrates, Hydrogen and Silver Dinitrates, and Polysilver Nitrates of <i>trans</i> -Dihalotetrakis-	R. D. Gillard and S. H. Mitchell, <i>Polyhedron</i> , 1987, 6 , 1885-1899

	pyridinerhodium(III) and Iridium(III) ions	
14	The Nature of Poulenc Silver Bromide, $[\text{Rh}(\text{py})_4\text{Br}_2\text{Ag}]\text{Br}_2$	R. D. Gillard, S. H. Mitchell and D. J. Thomas, <i>Polyhedron</i> , 1989, 8 , 211-214
15	The Structure of <i>trans</i> - $[\text{Rh}(\text{py})_4\text{Cl}_2][\text{Ag}(\text{ONO}_2)_2]$, a Salt of the Dinitrato-argentate(I) ion, $[\text{Ag}(\text{ONO}_2)_2]$	R. D. Gillard, L. R. Hanton and S. H. Mitchell, <i>Polyhedron</i> , 1990, 9 , 2127-2133

^a The numbers in this column, and in the corresponding columns in subsequent Tables, are the Part Numbers assigned (occasionally retrospectively) by Gillard or his co-authors.

Table S2. The First Seven and Final Two Publications in the Series "Optically-active Coordination Compounds"^a

Part	Title	Citation
1	The Optical Configurations of Bisethylenediamine Complexes of Cobalt(III)	K. Garbett and R. D. Gillard, <i>J. Chem. Soc.</i> , 1965, 6084.
2	The Isomers of Tris-L(+)-Alanine Complexes with Cobalt(III) and Rhodium(III)	J. H. Dunlop and R. D. Gillard, <i>J. Chem. Soc.</i> , 1965, 6531-6541.
3	Acid-Catalyzed Aquations of Resolved Complexes of Cobalt(III)	K. Garbett, R. D. Gillard and P. J. Staples, <i>J. Chem. Soc. A</i> , 1966, 201-204.
4	Aquations of Resolved Halo-Complexes	K. Garbett and R. D. Gillard, <i>J. Chem. Soc. A</i> , 1966, 204-206.
5	The Method of Less Soluble Diastereoisomers and Relative Configurations	K. Garbett and R. D. Gillard, <i>J. Chem. Soc. A</i> , 1966, 802-805.
6	Stereoselective Effects in Alkaline Tartrato-complexes of Transition Metals	J. H. Dunlop, D. F. Evans, R. D. Gillard and G. Wilkinson, <i>J. Chem. Soc. A</i> , 1966, 1260-1264.
7	Tris complexes of (+)-Hydroxymethylenecamphor	J. H. Dunlop, R. D. Gillard and R. Ugo, <i>J. Chem. Soc. A</i> , 1966, 1540-1547.
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50	4-Fold Symmetry Axes in Optically-Active Complex-Ions from Natural Nicotine	R. D. Gillard and J. D. Pedrosa de Jesus, <i>Croat. Chem. Acta</i> , 1989, 62 , 151-163.
51	The Circular Dichroism of <i>fac</i> -Tris-(<i>S</i> -alaninato)-rhodium(III)	R. D. Gillard and M. M. Shoukry, <i>Polyhedron</i> , 1995, 14 , 757-759; 1996, 15 , 1913.

^a Parts 5 and 6 of the series 'Sulphides of the Platinum Group Elements' are identical to Parts 43 and 45 of 'Optically-Active Coordination-Compounds'.

Table S3. Publications in the Series "Isomers of α -Amino acids with Copper(II)"^a

Part	Title	Citation
1	The Isomers of Complexes of α -Amino-acids with Copper(II)	R. D. Gillard, H. Irving, R. M. Parkins, N. C. Payne and L. D. Pettit, <i>J. Chem. Soc. A</i> , 1966, 1159-1164.
2	Crystal and Molecular Structure of <i>cis</i> -Bis-[D-alaninato]copper(II)	R. D. Gillard, R. Mason, N. C. Payne and G. B. Robertson, <i>J. Chem. Soc. Dalton</i> , 1969, 1864-1871.
3	Novel Mechanisms in Activation of L-Alanine by Copper(II)	R. D. Gillard, P. O'Brien, P. R. Norman and D. A. Phipps, <i>J. Chem. Soc. Dalton</i> , 1978, 1988-1993.
4	Catalysis of Racemization of Optically-Active Alanine by Copper(II) and Pyruvate in Alkaline Solution	R. D. Gillard and P. O'Brien, <i>J. Chem. Soc. Dalton</i> , 1978, 1444-1447.
5	Cis and Trans Isomers of Bis-(glycinato)copper(II), and their Novel Thermal-Isomerization	B. W. Delf, R. D. Gillard and P. O'Brien, <i>J. Chem. Soc. Dalton</i> , 1979, 1301-1305.
6	Novel Equilibria at High pH in Copper(II) - Amino-Acid Solutions	R. D. Gillard, R. J. Lancashire and P. O'Brien, <i>Transition Met. Chem.</i> , 1980, 5 , 340-345.

^a The paper entitled "*cis-trans*-Isomerism of Bis(α -alaninato)copper(II)" – R. D. Gillard, R. Mason, N. C. Payne and G. B. Robertson, *Chem. Commun.*, 1966, 155-156 – is very closely related to Parts 1 and 2 of this series.

Table S4. Publications in the Series "Reactions of Complex Compounds of Cobalt"

Part	Title	Citation
1	A Possible Mechanism for Base Hydrolysis and Other Reactions of Cobalt(III) Complexes	R. D. Gillard, <i>J. Chem. Soc. A</i> , 1967, 917-922
2	Degradation of Coordinated Salicylate	K. Garbett and R. D. Gillard, <i>J. Chem. Soc. A</i> , 1968, 979-987
3	The Racemization of <i>cis</i> -Hydroxo-aquobis(ethylenediamine) Cobalt(III) Salts	R. D. Gillard, <i>J. Chem. Soc. A</i> , 1968, 1945-1946
4	Green Products of Nitration of Salicylatotetrammine Complexes	A. G. Beaumont and R. D. Gillard, <i>J. Chem. Soc. A</i> , 1968, 2400-2403
5	Studies on Mechanism of Oxidative Degradation of Co-ordinated Salicylic Acid	A. G. Beaumont and R. D. Gillard, <i>J. Chem. Soc. A</i> , 1970, 1757-1761
6	Detection of Peroxo-Cobalt(III) Complexes by Chemiluminescence	R. D. Gillard and A. Spencer, <i>J. Chem. Soc. A</i> , 1970, 1761-1763
7	Studies of Mechanism of Degradation of Co-ordinated Salicylic Acid	A. G. Beaumont, R. D. Gillard and J. R. Lyons, <i>J. Chem. Soc. A</i> , 1971, 1361-1365
8	Synthesis, Protonation, and Oxidative Degradation of Salicylatocobalt Complexes	R. D. Gillard, J. R. Lyons and P. R. Mitchell, <i>J. Chem. Soc. Dalton</i> , 1973, 233-238
9	Ammonia Exchange during Base Hydrolysis of Chloropentamminecobalt(III) Ion in Concentrated Aqueous Ammonia	I. G. Browning, R. D. Gillard, J. R. Lyons and P. R. Mitchell, <i>J. Chem. Soc. Dalton</i> , 1974, 373-377
10	Mixed Complexes of Cobalt(III) containing 3-Azapentane-1,5-Diamine and an Amino-Acid	L. F. Vilas Boas, R. D. Gillard and P. R. Mitchell, <i>J. Chem. Soc. Dalton</i> , 1977, 1215-1218
11	Mechanism of Oxidative-Degradation of Coordinated Salicylate	L. F. Vilas Boas, R. D. Gillard and P. R. Mitchell, <i>Transition Met. Chem.</i> , 1977, 2 , 80-83.

Table S5. Publications in the Series "Coordination Compounds and Micro-organisms"

Part	Title	Reference
1	Growth of Microorganisms in the Presence of Transition Metal Complexes: the Antibacterial Activity of <i>trans</i> -Dihalogenotetrapyridine-rhodium(III) Salts	R. J. Bromfield, R. H. Dainty, R. D. Gillard and B. T. Heaton, <i>Nature</i> , 1969, 223 , 735-736.
2	Stereoselective Decomposition of an Octahedral Complex during Bacterial Growth	R. D. Gillard and C. Thorpe, <i>Chem. Commun.</i> , 1970, 997-998.
3	Some Advances in Rhodium Chemistry	R. D. Gillard, <i>Rec. Chem. Prog.</i> , 1971, 32 , 17-28. ^a
4	Resolution of 1,2,4-Triglycinato-cobalt(III) by a Bacterial Method and Determination of Its Optical Purity by Isotope Dilution	R. D. Gillard, J. R. Lyons and C. Thorpe, <i>J. Chem. Soc. Dalton</i> , 1972, 1584-1586. ^b
5	Bacterial Resolution of Bis(ethylenediamine)-1,10-phenanthroline-cobalt(III) Chloride, 2,2'-Bipyridylbis(ethylenediamine)cobalt(III) Chloride, and Potassium (Ethylenediaminetetraacetato)cobaltate(III)	L. S. Dollimore, R. D. Gillard and I. H. Mather, <i>J. Chem. Soc. Dalton</i> , 1974, 518-522. ^c
6	Bis(ethylenediamine)-1,10-phenanthroline-cobalt(III) Bromide and Ligand Ethylene-diamine as Sources of Nitrogen for Bacterial Growth	L. S. Dollimore, I. H. Mather and R. D. Gillard, <i>Can. J. Microbiol.</i> , 1974, 20 , 1748-1751.
7	Inhibition of Growth and Cell Division in <i>Escherichia coli</i> by Compounds containing Rhodium and some Comments on the Related Effects of Compounds containing Platinum	R. D. Gillard, K. Harrison and I. H. Mather, in <i>Platinum Coordination Complexes in Cancer Chemotherapy</i> , ed. T. A. Connors and J.J. Roberts, Springer Verlag, 1974
8	Stereoselective Reduction of Cobalt(III) Complexes by Bacteria	C. T. Thorpe and R. D. Gillard, <i>Biochim. Biophys. Acta</i> , 1975, 392 , 175-183.
9	Metal Complexes and Bacteria	R. D. Gillard, <i>Kemiai Kozlomenyek (Acta Chim. Acad. Sci. Hung.)</i> , 1977, 47 , 107-118. ^d
10	The Effects of Some Rhodium Complexes on Bacterial Growth	R. D. Gillard, Abstract A8, Int. Conf. Chem. Platinum Metals, Royal Society of Chemistry, Bristol (UK), 1981.

11	Inhibition of Bacterial Growth by Some Werner Complex Anions of Cobalt(III)	A. Y. Ali-Mohamed, R. D. Gillard and D. E. Hughes, <i>Transition Met. Chem.</i> , 1989, 14 , 185-189.
12	Rhodium Compounds of S-Nicotine and Their Bacterial Activity	R. D. Gillard, J. D. Pedrosa de Jesus and A. Y. Ali Mohamed, <i>Transition Met. Chem.</i> , 1989, 14 , 258-260

^a This is also Part 3 of the series "Oxidants Containing Rhodium" (Table S6).

^b This is also Part 29 of the series "Optically-active Coordination-compounds".

^c This is also Part 33 of the series "Optically-active Coordination-compounds".

^d This paper is based on a lecture given at the Hungarian Academy of Sciences, Budapest, in March 1976, in which Gillard covered topics such as stereospecific effects of cobalt complexes on bacterial growth and inhibition of cell growth and division by rhodium complexes (mainly with an RhN₄Cl₂ centre). He reported redox potentials and water-octanol distribution coefficients (K_D) for over thirty such complexes. Log₁₀ K_D values, characterising lipophilicities, ranged from -2.7 for *trans*-[Rh(4-tBupy)₄Cl₂]Cl to +3.6 for [Rh(phen)₃](ClO₄)₃; effects of alkyl substitution in ligands can be exemplified by comparing the former value with log₁₀ K_D = +1.7 for *trans*-[Rh(py)₄Cl₂]Cl, while the marked hydrophilicity of the latter compound may be attributed to the counterion. The distribution coefficients had been measured to probe their possible correlation with cell division – in general the more lipophilic complexes led to increasingly filamentous growth.

Table S6. Papers Published^{a,b} in the Series "Oxidants Containing Rhodium"

Part ^c	Title	Authors
1	Superoxide-bridged Binuclear Complexes of Rhodium(III).	A. Addison and R. D. Gillard, <i>J. Chem. Soc.</i> , 1970, 2523-2526.
2	Electrochemical Reduction of <i>trans</i> -Rh(en) ₂ Cl ₂ ⁺ and Subsequent Reactions with Oxygen.	R. D. Gillard, B. T. Heaton and D. H. Vaughan, <i>J. Chem. Soc. A</i> , 1970, 3126-3130.
3	Some Advances in Rhodium Chemistry ^d	R. D. Gillard, <i>Rec. Chem. Prog.</i> , 1971, 32 , 17-28.
4	Some Aspects of Catalytic Syntheses in Rhodium Chemistry	R. D. Gillard and B. T. Heaton, <i>Coord. Chem. Rev.</i> , 1972, 8 , 149-157.
5	Stable Monomeric Compound with a Superoxo Ligand – Formation of [Rh(ethylenediamine) ₂ (NO ₂)(O ₂)] ⁺	R. D. Gillard, J. D. Pedrosa de Jesus and L. R. H. Tipping, <i>J. Chem. Soc., Chem. Commun.</i> , 1977, 58-59.
7	Paramagnetic Dioxygen Complexes of Rhodium	J. B. Raynor, R. D. Gillard and J. D. Pedrosa de Jesus, <i>J. Chem. Soc., Dalton Trans.</i> , 1982, 1165-1166.
8	Photochemically-generated Superoxides of Rhodium(III)	R. D. Gillard and J. D. P. de Jesus, <i>J. Chem. Soc., Dalton Trans.</i> , 1984, 1895-1896.
9	Photolytic Products containing μ-Superoxo-hexakispyridinedirhodium-(III,III) Units	R. D. Gillard, <i>Polyhedron</i> , 1992, 11 , 1737-1741.
10	Ammonia-stabilized Superoxo-rhodium Species	I. J. Ellison, R. D. Gillard and J. P. Maher, <i>Polyhedron</i> , 1992, 11 , 2757-2758.
11	X-Ray Photoelectron Spectra of Dicesium Hexachlororhodate(IV), Claus' Blue and Model Compounds.	A. N. Buckley, J. A. Busby, I. J. Ellison and R. D. Gillard, <i>Polyhedron</i> , 1993, 12 , 247-253.

^a Neither title nor abstract are now available for Part 6, R. D. Gillard and J. D. P. de Jesus, *Proceedings of the 2nd National Meeting for Chemistry, Portuguese Chem. Soc., University of Porto (1979)*, Abstract 5854.

^b Part numbers are not included in titles until Part 9, where Parts 1 to 8 are listed in the second endnote; a paper entitled "Oxidants Containing Rhodium" (I. J. Ellison and R. D. Gillard, *J. Chem. Soc., Chem. Commun.*, 1992, 851-853) was not included in this series.

^c This is also Part 3 of the series "Coordination Compounds and Micro-Organisms" (Table S5).

Table S7. The Series "Metal Complexes as Indicators for Solvent Structure"^a

Title	Reference
Nickel(II) Complexes of Meso-Stilbenediamine or Triethylenetetramine in Mixed Aqueous Media	R. D. Gillard and H. M. Sutton, <i>J. Chem. Soc. A</i> , 1970, 1309-1312.
Nickel(II) Complexes of Meso-Stilbenediamine in Mixtures of Water with Alcohols, Ketones, or Amides	R. D. Gillard and H. M. Sutton, <i>J. Chem. Soc. A</i> , 1970, 2172-2174.
Nickel(II) Complexes of Meso-Stilbenediamine in Mixtures of Water with some Glycol Ethers and with Poly(ethylene Oxide)	R. D. Gillard and H. M. Sutton, <i>J. Chem. Soc. A</i> , 1970, 2175-2176.
The Effect of Solvation on the Interaction between Tris-1,2-Diaminoethanecobalt(III) and Anions in Aqueous Solution	R. D. Gillard, <i>Transition Met. Chem.</i> , 1989, 14 , 295-297.

^a R. D. Gillard and H. M. Sutton, *Chem. Commun.*, 1969, 937-938 – entitled "Nickel (II) Complexes as Possible Indicators for Structure in Alcohol-Water Mixtures" – is clearly a trailer for this series, while the 2003 paper entitled "New biomimetic chemistry in water: the anomalous 'salting-in' of neutral compounds of natural amino acids with transition metals" (H. O. Davies, J.-H. Park and R. D. Gillard, *Inorg. Chim. Acta*, 2003, **356**, 69-84) is a late example of his continuing interest in this area.

Table S8. The Series "Sulphides of the Platinum Group Elements"^a

Part	Title	Authors
1	Inorganic Optical Activity ^b	R. D. Gillard and F. L. Wimmer, <i>J. Chem. Soc., Chem. Commun.</i> , 1978, 936-937.
3	Inorganic Six-membered Ring Inversion. The Inversion Barrier in the Tris(pentasulphane-1,5-diyl)-platinate(IV) Anion	R. D. Gillard, F. G. Riddell and F. L. Wimmer, <i>J. Chem. Soc., Chem. Commun.</i> , 1982, 332-333.
4	Stinking Rich – Platinum Polysulfides	R. D. Gillard, <i>Chem. Brit.</i> , 1984, 1022-1024.
5	Polysulfide Complexes of Platinum(IV) ^c	R. D. Gillard, F. L. Wimmer and J. P. G. Richards, <i>J. Chem. Soc., Dalton Trans.</i> , 1985, 253-258.
6	Dimorphism of Tris(pentasulfido)platinate(IV) Salts and the Crystal and Molecular-Structure of a New Form of the Racemic Ammonium Salt Dihydrate ^d	E. H. M. Evans, J. P. G. Richards, R. D. Gillard and F. L. Wimmer <i>Nouv. J. Chim.</i> 1986, 19 , 783-791.
7	2p Electron-Binding Energies for the Sulfur Atoms in Metal Polysulfides ^e	S. C. Termes, A. N. Buckley and R. D. Gillard, <i>Inorg. Chim. Acta</i> , 1987, 126 , 79-82.
8	Tris-Pentasulfidorhodates(III) – X-Ray Structure of (NH ₄) ₃ [Rh(S ₅) ₃](H ₂ O) ₂	P. Cartwright, R. D. Gillard, R. Sillanpaa and J. Valkonen, <i>Polyhedron</i> , 1987, 6 , 1775-1779.
9	Core Electron Binding Energies of Platinum and Rhodium Polysulfides	A. N. Buckley, H. J. Wouterlood, P. S. Cartwright and R. D. Gillard,, <i>Inorg. Chim. Acta</i> , 1988, 143 , 77-80.
10	The Tris(hexasulphido)platinate(IV) Ion – 7-Membered Chelate Rings	R. Sillanpaa, P. S. Cartwright and R. D. Gillard, <i>Polyhedron</i> , 1988, 7 , 1801-1806.
12	Bis(tetraphenylphosphoniumpentakaidekakissulphido)platinate(IV) ^f	P. S. Cartwright, R. D. Gillard, E. R. J. Sillanpaa and J. Valkonen, <i>Polyhedron</i> , 1991, 10 , 2501-2509.
13	An Unusual Lability of 2,2-Bipyridyl Chelated to Platinum(II)	J. Collins, R. D. Gillard and M. B. Hursthouse <i>Polyhedron</i> , 1993, 12 , 255-257.

^a This series, numbered retrospectively in footnote 1 of Part 12, contains two abstracts in addition to the published papers detailed above, viz. Part 2: R. D. Gillard and F. L. Wimmer, *XIII Mendeleev Congress of the Russian Chemical Society, Baku*, p. 42 (1981) and Part 11: R. D. Gillard and E. R. J. Sillanpaa, *Stability of Minerals* (Mineralogical Society's Winter Meeting), London (1989), Abstract volume, p. 30.

^b A brief report of the preparation of only the third example of an optically-active carbon-free molecular species, viz. (NH₄)₂[Pt(S₅)₃].

^c This is also Part 43 of the series "Optically-active Coordination-compounds".

^d This is also Part 45 of the series "Optically-active Coordination-compounds".

^e Specifically $[\text{Pt}(\text{S}_5)_3]^{2-}$ and $[\text{Cu}_3(\text{S}_4)_3]^{3-}$.

^f Pentakaidekakis-sulphido platinate(IV) = $[\text{Pt}(\text{S}_5)_3]^{2-}$.

Table S9. The First Six and Last Four Publications, Plus Intervening PGM-Relevant Papers, of the Series "Equilibria in Complexes of *N*-Heterocyclic Molecules"

Part	Title	Authors
1	Equilibria in Complexes of Heterocyclic Ligands	R. D. Gillard and J. R. Lyons, <i>J. Chem. Soc., Chem. Commun.</i> , 1973, 585-586.
2	Explanation for Anomalies among Complexes of <i>N</i> -Heterocyclic Ligands	R. D. Gillard, <i>Inorg. Chim. Acta</i> , 1974, 11 , L21-L22.
3	Explanation for Classical Anomalies among Complexes of 1,10-Phenanthrolines and 2,2'-Bipyridyls	R. D. Gillard, <i>Coord. Chem. Rev.</i> , 1975, 16 , 67-94.
4	Complexes of Platinum(II) in Basic Solution	E. Bielli, R. D. Gillard and D. W. James, <i>J. Chem. Soc., Dalton Trans.</i> , 1976, 1837-1842.
5	Spectroscopic Studies on Some Compounds of Iron(II) with 1,10-Phenanthroline, 2,2'-Bipyridyl, and 5,5'-Dimethyl-2,2'-Bipyridyl	R. D. Gillard, C. T. Hughes, L. A. P. Kane-Maguire and P. A. Williams, <i>Transition Met. Chem.</i> , 1976, 1 , 114-118.
6	Pseudo-base formation in <i>N</i> -heterocycles coordinated to metal ions	R. D. Gillard, C. T. Hughes and P. A. Williams, <i>Transition Met. Chem.</i> , 1976, 1 , 51-2.
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7	Kinetics of Reaction of Tris-(5-Nitro-1,10-Phenanthroline)-ruthenium(II) Ion with Cyanide	R. D. Gillard, C. T. Hughes, L. A. P. Kane-Maguire and P. A. Williams, <i>Transition Met. Chem.</i> , 1976, 1 , 226-228
8	Reaction of Tris(5-nitro-1,10-phenanthroline)-ruthenium(II) Cation with Methoxide and Ethoxide Ions	R. D. Gillard, L. A. P. Kane-Maguire and P. A. Williams, <i>J. Chem. Soc., Dalton Trans.</i> , 1977, 1039-1044
9	Circular-Dichroism Study of Nucleophilic-Attack at Tris-(5-nitro-1,10-phenanthroline)-ruthenium(II)	R. D. Gillard, L. A. P. Kane-Maguire and P. A. Williams, <i>Transition Met. Chem.</i> , 1977, 2 , 12-13.
12	Reaction of Hydroxide and Alkoxide Ions with Platinum(II) Complexes of 5-Nitro-1,10-Phenanthroline and 2,2'-Bipyridyl	K. H. Al-Obaidi, R. D. Gillard, L. A. P. Kane Maguire, and P. A. Williams, <i>Transition Met. Chem.</i> , 1977, 2 , 64-66.

15	Intermediates in Reaction of Cyanide with Transition-Metal Tris Complexes of 1,10-Phenanthroline, 5-Nitro-1,10-Phenanthroline and 2,2'-Bipyridyl	R. D. Gillard and P. A. Williams, <i>Transition Met. Chem.</i> , 1977, 2 , 247-251.
18	Covalently Hydrated Iridium(III) Complex, Bis(2,2'-Bipyridyl)(2,2'-Bipyridyl-Water)Iridium(III) Trichloride Trihydrate	R. D. Gillard, R. J. Lancashire, and P. A. Williams, <i>J. Chem. Soc., Dalton Trans.</i> , 1979, 190-192.
19	Reactions of Tris(2,2'-Bipyridyl), Tris(1,10-Phenanthroline), and Bis(2,2'-Bipyridyl)-dicyano-ruthenium(III) in Aqueous-Solution	J. A. Arce Sagüés, R. D. Gillard, R. J. Lancashire, and P. A. Williams, <i>J. Chem. Soc., Dalton Trans.</i> , 1979, 193-198.
20	The Reaction of Hydroxide Ion with Bis-[2,4,6-Tri-(2-Pyridyl)-1,3,5-Triazine]Iron(II) and Ruthenium(II)	V. M. S. Gil, R. D. Gillard, P. A. Williams, R. S. Vagg and E. C. Watton, <i>Transition Met. Chem.</i> , 1979, 4 , 14-17.
21	Kinetics of Reaction of Hydroxide with Bis[2,4,6-Tri (2-Pyridyl)-1,3,5-Triazine]Iron(II) and Ruthenium(II)	R. D. Gillard and P. A. Williams, <i>Transition Met. Chem.</i> , 1978, 3 , 334-336.
24	Reaction of Nucleophiles with Tris-(2,2'-Bipyrimidine)Iron(II) Ion and Its Ruthenium(II) Analog	R. D. Gillard, R. J. Lancashire and P. A. Williams, <i>Transition Met. Chem.</i> , 1979, 4 , 115-118.
25	Kinetics of Pseudo-Base Formation in Metal-Complexes and Quaternized Organic-Molecules Derived from 5-Nitro-1,10-Phenanthroline	R. D. Gillard, C. T. Hughes, W. S. Walters and P. A. Williams, <i>J. Chem. Soc., Dalton Trans.</i> , 1979, 1769-1775.
33	Ruthenium(II) Complex-Ions with Chelating Pyridyl-Imidazoles	J. G. D. M. Atton and R. D. Gillard, <i>Transition Met. Chem.</i> , 1981, 6 , 351-355.
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48	Iron-Binding by Caerulomycins	S. Dholakia and R. D. Gillard, <i>J. Chem. Soc., Dalton Trans.</i> , 1984, 2245-2248.
49	Additions of Cyanide and Hydroxide to Ruthenium(II) Complexes in Aqueous-Solution	J. A. Arce Sagüés, R. D. Gillard, and P. A. Williams, <i>Transition Met. Chem.</i> , 1989, 14 , 110-114.
50	The Structure of a Racemic Tris-1,10-Phenanthroline-nickel(II) Iodide Trihydrate	R. D. Gillard, S. H. Mitchell, and W. T. Robinson, <i>Polyhedron</i> , 1989, 8 , 2649-2655.

50 bis	The Formation and Properties in Solution of the 1 : 1 Adducts of Bis(2,2'-bipyridine)-platinum(II) and Related Ions with Hydroxide	A. M. F. Gameiro, R. D. Gillard, N. H. Rees, J. Schulte and A. Sengül, <i>Croatica Chemica Acta</i> , 2001, 74 , 641-665.
51	Synergic Solubility and X-Ray Crystal-Structure Analysis of <i>mer</i> -Chloro-oxalato-tris-pyridine-iridium(III), [IrCl(py) ₃ (C ₂ O ₄)]	N. S. A. Edwards, R. D. Gillard, M. B. Hursthouse, H. F. Lieberman and K. M. Abdul Malik, <i>Polyhedron</i> , 1993, 12 , 2925-2928.

Table S10. Publications Concerned with Medical Aspects, Mobilisation of Aluminium from Cookware and Accumulation of Aluminium by Tea Plants Which Led to Gillard's Article "Beware The Cups That Cheer"^a

Topic	Title	Citation
Dialysis encephalopathy	Metabolism and toxicity of aluminum in renal failure	A. C. Alfrey, A. Hegg and P. Craswell, <i>American Journal of Clinical Nutrition</i> , 1980, 33 , 1509-1516.
Osteomalacia	Fracturing dialysis osteodystrophy and dialysis encephalopathy. An epidemiological survey	I. S. Parkinson, D. N. S. Kerr, T. G. Feest, M. K. Ward, and R. W. P. Fawcett and, <i>Lancet i</i> , 1979, 313 , 406-409.
Alzheimer's disease	Aluminosilicates and senile plaque formation in Alzheimer's disease	J. M. Candy, J. Klinowski, R. M. Perry, E.K. Perry, A. Fairbairn, A. E. Oakley, T. A. Carpenter, J. R. Atack, G. Blessed and J.A. Edwardson, 1986, <i>Lancet ii</i> , 354-356.
Alzheimer's disease	Aluminum in human brain disease - an overview.	D. R. Crapper, S. McLachlan and U. de Boni, <i>Neurotoxicity</i> ^a , 1980, 1 , 3-16.
Uptake of aluminium from cookware ^b	Aluminium från kokkåsar	P. Mattsson, <i>Vår Foda</i> ^c , 1981, 33 , 231-236.
Accumulation of aluminium by the tea bush	Tea	R. T. Ellis, <i>Biologist</i> , 1983, 30 , 247-258.
Use of alum as fertilizer for tea plants	Tea ^d	T. Eden, <i>Tea</i> , Longmans Green, London, 1958 ^e .
Aluminum uptake by the leaves of the tea plant	Effect of aluminium on growth of tea (<i>Camellia sinensis</i>) and its uptake of potassium and phosphorus	S. Sivasubramaniam and O. Talibudeen, <i>J. Sci. Food Agric.</i> , 1971, 22 , 325-329.

^a A. M. Coriat and R. D. Gillard, *Nature*, 1986, (6070), **321**, 570

^b *Neurotoxicity* should read *Neurotoxicology*.

^c Mattsson reported modest uptakes of aluminium on cooking liver casserole, spinach, orange marmalade, rice pudding, or rhubarb soup (highest uptake) in aluminium saucepans.

^d Although his interest seems to have been prompted by this article in an obscure Scandinavian journal he could equally well have picked the idea up from rather more accessible sources. There are numerous earlier articles, going back at least as far as 1913, in such journals as *the Lancet*, *the Analyst*, and *the New England Journal of Medicine*, on the possibility of health hazards arising from the use of aluminium vessels in food preparation.

^e The cultivation, varieties, and attributes of the tea plant and its infusions

^f Second and third editions (also Longman) appeared in 1965 and 1976.

Table S11 The Series "Oxovanadium(IV) – Amino-Acids"

Part	Ligands	Reference
1	L-Alanine	J. Costa Pessoa, L. F. Vilas Boas, R. D. Gillard and R. J. Lancashire,, <i>Polyhedron</i> , 1988, 7 , 1245-1262.
2	L-Serine, L-Threonine	J. Costa Pessoa, L. F. Vilas Boas and R. D. Gillard, <i>Polyhedron</i> , 1989, 8 , 1173-1199.
3	L-Aspartic acid	J. Costa Pessoa, R. L. Marques, L. F. Vilas Boas and R. D. Gillard, <i>Polyhedron</i> , 1990, 9 , 81-98.
4	L-Cysteine, D-Penicillamine	J. Costa Pessoa, L. F. Vilas Boas and R. D. Gillard, <i>Polyhedron</i> , 1990, 9 , 2101-2125.
5	L-Glutamic acid	J. Costa Pessoa, J. L. Antunes, L. F. Vilas Boas and R. D. Gillard, <i>Polyhedron</i> , 1992, 11 , 1449-1461.
6	Glycylglycine, Glycylglycylglycine	J. Costa Pessoa, S. M. Luz, R. Duarte, J. J. G. Moura and R. D. Gillard, <i>Polyhedron</i> , 1993, 12 , 2857-2867.
7	L-Histidine	J. Costa Pessoa, S. M. Luz, I. Cavaco and R. D. Gillard, <i>Polyhedron</i> , 1994, 13 , 3177-3198; 1995, 14 , 827.
8	Derivatives of L-Histidine	J. Costa Pessoa, S. M. Luz, and R. D. Gillard, <i>Polyhedron</i> , 1995, 14 , 1495-1515.

According to the Introduction to Part 7, J. Costa Pessoa, L. F. Vilas Boas and R. D. Gillard, *Polyhedron*, 1989, **8**, 1745-1747 is to be considered part of Part 4. Both parts of Part 4 stem from two conference presentations (R. D. Gillard, R. J. Lancashire, J. Costa Pessoa and L. F. Vilas Boas, Comunicacgo 3Al1, 2" Encontro Nacional de Quimica, Porto (1979); J. Costa Pessoa and L. Vilas Boas, 1980 Autumn Meeting- Chemical Society, University College, Cardiff (1980).) *Polyhedron*, 1989, **8**, 1745-1747 seems to be a preliminary contribution (3 pages), a trailer for *Polyhedron*, 1990, **9**, 2101-2125 (25 pages).

Table S12 Reports on Conference Proceedings in the *Journal of Inorganic Biochemistry* Related to the Series "Oxovanadium(IV) – Amino-Acids" ^a

Year	Ligand(s)	Reference
1991	L-glutamic acid	J. Costa Pessoa, J. A. Antunes, L. F. Vilas Boas and R. D. Gillard, <i>J. Inorg. Biochem.</i> , 1991, 43 , 414.
1993	L-histidine	J. Costa Pessoa, R. D. Gillard, S. M. Luz, R. Duarte and J. J. G. Moura, <i>J. Inorg. Biochem.</i> , 1993, 51 , 156
	Salicylideno-aminoacids	I. Cavaco, J. Costa Pessoa, D. Costa, M. T. Duarte, R. D. Gillard and P. M. Matias, <i>J. Inorg. Biochem.</i> , 1993, 51 , 157.
1995	Salicylideno-L-asn	I. Cavaco, J. Costa Pessoa, M. T. Duarte, P. M. Matias, and R. D. Gillard, <i>J. Inorg. Biochem.</i> , 1995, 59 , 605.
	Salicylideno-L-val	I. Cavaco, J. Costa Pessoa, M. T. Duarte, P. M. Matias and R. D. Gillard, <i>J. Inorg. Biochem.</i> , 1995, 59 , 606.
	Peptides	J. Costa Pessoa, S. M. Luz and R. D. Gillard, <i>J. Inorg. Biochem.</i> , 1995, 59 , 607.
1997	Salicylideno-L-trp	J. Costa Pessoa, M. T. Duarte, J. J. R. Fraústo da Silva, R. D. Gillard, C. Madiera, P. M. Matias and I. Tomaz, <i>J. Inorg. Biochem.</i> , 1997, 67 , 389.

^a Other conference-derived articles include those mentioned in the footnote to Table S11 and J. Costa Pessoa, I. Cavaco, C. Madeira, M. T. Duarte, P. M. Matias, R. D. Gillard, 3rd GIPS Meeting in Inorganic Chemistry, SL 11, Senigallia, Italy, June 1995.