

JOURNAL OF THE CHEMICAL SOCIETY

Chemical Communications

**Number 11
1992**

CONTENTS

Paul Margaretha, Stefan Reichow, William C. Agosta	797	Tetrasubstituted Furans from Photocycloaddition of Alkenes to 2-(1-Alkynyl)-cyclohexenones
Luis A. Sarandeses, Antonio Mouríño, Jean-Louis Luche	798	Sonochemistry of Epoxyalkylhalides in the Presence of a Zinc–Copper Couple
Allison K. Newell, James H. P. Utley	800	2-(2-Arylvinyl)-9,10-anthraquinones: Combined Electro- and Photo-chromic Properties for Molecular Switching
Pawel Jankowski, Jerzy Wicha	802	Regioselective β -Addition of Sulfonyl Anions to an α,β -Epoxy silane. Use of Triphenylsilyloxirane for Synthesis of Stable Cyclopropene Derivatives
Martin J. Snowden	803	The Use of Poly(<i>N</i> -isopropylacrylamide) Latices as Novel Release Systems
J. L. Carpenter, P. Camilleri, D. Dhanak, D. Goodall	804	A Study of the Binding of Vancomycin to Dipeptides using Capillary Electrophoresis
Dave T. Ferrughelli, István T. Horváth	806	Hydrodechlorination of Chloroaromatics: the Use of a Bifunctional Homogeneous Rhodium Catalyst for the Conversion of Chloroaromatics into Saturated Hydrocarbons
De-Bao Su, Jian-Xing Duan, Qing-Yun Chen	807	A Simple, Novel Method for the Preparation of Trifluoromethyl Iodide and Diiododifluoromethane
Partha Basu, Animesh Chakravorty	809	A Manganese Tris Quinone Oximato Pair revealing New Structures and Magnetic Properties in Mn ^{III,II} Chemistry
Tony K. M. Shing, Hon-chung Tsui, Zhao-hui Zhou	810	Total Synthesis of Antitumour Agent (+)-Goniofufurone
James DeYoung, Hajima Kawa, Richard J. Lagow	811	Selective Direct Fluorination of Organolithium and Organomagnesium Compounds
J. Savrda, M. Wakselman	812	<i>N</i> -Alkoxy carbonyl Amino Acid <i>N</i> -Carboxyanhydrides and <i>N,N</i> -Dialkoxy carbonyl Amino Acid Fluorides from <i>N,N</i> -Diprotected Amino Acids
Shiro Hikichi, Masako Tanaka, Yoshihiko Moro-oka, Nobumasa Kitajima	814	Phosphate Ester Cleavage with a Zinc Hydroxide Complex. Formation and Crystal Structure of a Dinuclear Zinc Complex Bridged with a Phosphate Monoester
Thomas Bjørnholm, Tommy Geisler, Jan Larsen, Mikkel Jørgensen	815	Nonlinear Optical Phenomena due to Donor–Acceptor Interfaces Created in Langmuir–Blodgett Films
Raymond Baker, Graham A. Showell, Leslie J. Street, John Saunders, Karst Hoogsteen, Stephen B. Freedman, Richard J. Hargreaves	817	Synthesis, Physicochemical and Conformational Properties of (3 <i>R</i> ,4 <i>R</i>)-3-(3-Cyclopropyl-1,2,4-oxadiazol-5-yl)-1-azabicyclo[2.2.1]heptane, a Novel M ₁ Selective Muscarinic Partial Agonist
Lothar Weber, Ralf Kirchhoff, Hans-Georg Stammler, Beate Neumann	819	The First 3-Methanediyl-1,3,5,6-tetraphosphabicyclo[3.1.0]hex-2-ene. Evidence for a [3 + 2] Cycloaddition of a 2,4,5,6-Tetraphosphahexta-1,3,6-triene
Dipakranjan Mal, Ranjan Pal, Kadiyala V. S. N. Murty	821	Thiophthalides, a Novel Class of Arene-annulating Agents: Synthesis of Polynuclear Hydroaromatic Compounds
Margarita Crespo, Manuel Martinez, Joaquim Sales	822	Intramolecular Activation of a C–F Bond at Platinum(II) in the Presence of Weaker C–X Bonds (X = H, Cl and Br)
M. Anthony McKervey, Tao Ye	823	Asymmetric Synthesis of Substituted Chromanones via C–H Insertion Reactions of α -Diazoketones Catalysed by Homochiral Rhodium(II) Carboxylates
David M. Gange, E. Adam Kallel	824	The Structure and Conformation of Hydroxylamine and its Methylated Derivatives
Peter D. Battle, Stuart W. Carr, Francis A. Copplestone, Simon A. Almaer	826	Oxidative Coupling of Methane over Ba ₂ Sb(La _{0.5} Bi _{0.5})O ₆ and other Perovskite Oxide Catalysts
Yijun Li, Shaojun Dong	827	Electrochemically Controlled Release of Adenosine 5'-Triphosphate from Polypyrrole Film
Izumi Matsuura, Taisei Ueda, Nobutoshi Murakami, Shin-ichi Nagai, Jinsaku Sakakibara, Yukihisa Kurono, Keiichiro Hatano	828	Electrochemical Transformation of 5-Aminopyrimidin-4(3 <i>H</i>)-one: Indirect Anodic Oxidation Mediated by Electrochemically Generated Chlorine

James Barker, Stephen L. Cook, M. Elena Lasterra-Sánchez, Susan E. Thomas	830	Surprising Reactivity of (Methyl 2-Acetamidoacrylate)tricarbonyliron(0) leading to the Synthesis of β,β,β -Trialkyl α -Amino Acids
C. V. Krishnamohan Sharma, Kaliyamoorthy Panneerselvam, Tullio Pilati, Gautam R. Desiraju	832	Molecular Recognition <i>via</i> C–H \cdots O Hydrogen Bonding. Crystal Structure of the 1:1 Complex 4-Nitrobenzoic Acid–4-(<i>N,N</i> -Dimethylamino)benzoic Acid
Roland Schäfer, Wolfgang Kaim, Michael Moscherosch, Michael Krejčík	834	Tetrathiorhenate(vi), ReS_4^{2-} . Spectroelectrochemical Characterization (UV–VIS–IR) of a Small New d ¹ System and of its Tetrakis(2,2'-bipyridine)diruthenium(II) Complex (EPR)
Masahito Kodera, Finian J. Leeper, Alan R. Battersby	835	Biosynthesis of Vitamin B ₁₂ : the Fate of 8-H as Precorrin-2 is Enzymically converted into Cobyrinic Acid
Armin Pfeil, Jean-Marie Lehn	838	Helicate Self-organisation: Positive Cooperativity in the Self-assembly of Double-helical Metal Complexes
Satinder Vir Kessar, Anil K. Singh Mankotia, Gurjeet Gujral	840	Photoreactivity of Conjugated Bichromophoric Molecules; Photoreaction of <i>o</i> -Vinylbenzaldehyde with Secondary Amines
Catherine E. Housecroft, Dorn M. Matthews, Arnold L. Rheingold, Xuejing Song	842	The First Trigonal Prismatic Discrete Transition-metal Boride Cluster: Preparation and Molecular Structure of [PPN][Ru ₆ (H) ₂ (CO) ₁₈ B] [PPN = (Ph ₃ P) ₂ N ⁺]
Seturam B. Katti, Pravin K. Misra, Wahajul Haq, Krishna B. Mathur	843	A New Base-labile Linker for Solid-phase Peptide Synthesis
Martin H. Hedberg, Anette M. Johansson, Uli Hacksell	845	Facile Syntheses of Aporphine Derivatives
Nathaniel W. Alcock, David A. Brown, S. Mark Roe, Malcolm G. H. Wallbridge	846	Synthesis of New Titanium–Oxo Cluster Compounds: X-Ray Structure of the Tetranuclear Oxide [Ti ₄ Cl ₆ (μ ₂ -O ₂ CPh) ₆ (μ ₃ -O) ₂]
Alexander J. Blake, Robert M. Christie, Yvonne V. Roberts, Martin J. Sullivan, Martin Schröder, Lesley J. Yellowlees	848	Heteronuclear Cluster Formation: The Synthesis and Structure of the Chloro-bridged Tetranuclear Complex [TiCl ₂ Ru(PPh ₃) ₂ [9]aneS ₃] ₂ (PF ₆) ₂ Incorporating a [RuCl ₂ Tl ₂ Cl ₂ Ru] Ladder ([9]aneS ₃ = 1,4,7-Trithiacyclononane)
Marta Airoldi, Giulio Deganello, Giuseppe Gennaro, Massimo Moret, Angelo Sironi	850	Synthesis, Fluxional Behaviour and X-Ray Crystal Structure of [Fe(CO) ₃ (μ-η ³ :η ² -C ₇ H ₇)Pd(η ⁵ -C ₅ H ₅)]
Ian J. Ellison, R. D. Gillard	851	Oxidants Containing Rhodium
Anurag Srivastava, You-an Ma, Ratnadevi Pankayatselvan, Warren Dinges, Kenneth M. Nicholas	853	Molybdenum-catalysed Allylic Amination
Angela F. Danil de Namor, María T. Garrido Pardo, Luis Muñoz, David A. Pacheco Tanaka, Felix J. Sueros Velarde, Mercedes C. Cabaleiro	855	First Report on Electrochemical, Thermodynamic and Structural Aspects of the Interaction of <i>p</i> - <i>tert</i> -Butylcalix[8]arene and Cryptands in Benzonitrile
Henri Arzoumanian, Carolina Corao, Heinz Krentzien, Rafael Lopez, Helena Teruel	856	Cyanosilylation of a Molybdenum(vi) Dioxo Complex
Szilárd Törös, Ilona Gémes-Pécsi, Bálint Heil, Sándor Mahó, Zoltán Tuba	858	Synthesis of New Formyl and Aminomethyl Steroids <i>via</i> Homogeneous Catalysis
A. V. Rama Rao, S. Prahlada Rao, Manjunath N. Bhanu	859	Asymmetric Synthesis of Chloramphenicol
Takehiko Yamato, Yoshiyuki Saruwatari, Souichiro Nagayama, Kenji Maeda, Masashi Tashiro	861	Preparation and Conformational Properties of Tetrahydroxy[3.1.3.1]-metacyclophanes

Additions and Corrections

Raphael C. Mordi, Roy Fields, John Dwyer	862	Gasoline Range Chemicals from Zeolite-catalysed Thermal Degradation of Polypropylene
---	------------	--

AUTHOR INDEX

- Agosta, William C., 797
 Airoldi, Marta, 850
 Alcock, Nathaniel W., 846
 Almaer, Simon A., 826
 Arzoumanian, Henri, 856
 Baker, Raymond, 817
 Barker, James, 830
 Basu, Partha, 809
 Battersby, Alan R., 835
 Battle, Peter D., 826
 Bhanu, Manjunath N., 859
 Bjørnholm, Thomas, 815
 Blake, Alexander J., 848
 Brown, David A., 846
 Cabaleiro, Mercedes C., 855
 Camilleri, P., 804
 Carpenter, J. L., 804
 Carr, Stuart W., 826
 Chakravorty, Animesh, 809
 Chen, Qing-Yun, 807
 Christie, Robert M., 848
 Cook, Stephen L., 830
 Copplestone, Francis A., 826
 Corao, Carolina, 856
 Crespo, Margarita, 822
 Danil de Namor, Angela F., 855
 Deganello, Giulio, 850
 Desiraju, Gautam R., 832
 De Young, James, 811
 Dhanak, D., 804
 Dinges, Warren, 853
 Dong, Shaojun, 827
 Duan, Jian-Xing, 807
 Dwyer, John, 862
 Ellison, Ian J., 851
 Ferrughelli, Dave T., 806
 Fields, Roy, 862
 Freedman, Stephen B., 817
 Gange, David M., 824
 Garrido Pardo, Maria T., 855
 Geisler, Tommy, 815
 Gémes-Pécsi, Ilona, 858
 Gennaro, Giuseppe, 850
 Gillard, R. D., 851
 Goodall, D., 804
 Gujral, Gurjeet, 840
 Hacksell, Uli, 845
 Haq, Wahajul, 843
 Hargreaves, Richard J., 817
 Hatano, Keiichiro, 828
 Hedberg, Martin H., 845
 Heil, Bálint, 858
 Hikichi, Shiro, 814
 Hoogsteen, Karst, 817
 Horváth, István T., 806
 Housecroft, Catherine E., 842
 Jankowski, Paweł, 802
 Johansson, Anette M., 845
 Jørgensen, Mikkel, 815
 Kaim, Wolfgang, 834
 Kallel, E. Adam, 824
 Katti, Seturam B., 843
 Kawa, Hajima, 811
 Kessar, Satinder Vir, 840
 Kirchhoff, Ralf, 819
 Kitajima, Nobumasa, 814
 Kodera, Masahito, 835
 Krejčík, Michael, 834
 Krentzien, Heinz, 856
 Kurono, Yukihisa, 828
 Lagow, Richard J., 811
 Larsen, Jan, 815
 Lasterra-Sánchez, M. Elena, 830
 Leeper, Finian J., 835
 Lehn, Jean-Marie, 838
 Li, Yijun, 827
 Lopez, Rafael, 856
 Luche, Jean-Louis, 798
 Ma, You-an, 853
 McKervey, M. Anthony, 823
 Maeda, Kenji, 861
 Mahó, Sándor, 858
 Mal, Dipakranjan, 821
 Mankotia, Anil K. Singh, 840
 Margaretta, Paul, 797
 Martinez, Manuel, 822
 Mathur, Krishna B., 843
 Matsuuwa, Izumi, 828
 Matthews, Dorn M., 842
 Misra, Pravin K., 843
 Mordi, Raphael C., 862
 Moret, Massimo, 850
 Moro-oka, Yoshihiko, 814
 Moscherosch, Michael, 834
 Mourão, Antonio, 798
 Muñoz, Luis, 855
 Murakami, Nobutoshi, 828
 Murty, Kadiyala V. S. N., 821
 Nagai, Shin-ichi, 828
 Nagayama, Souichiro, 861
 Neumann, Beate, 819
 Newell, Allison K., 800
 Nicholas, Kenneth M., 853
 Pacheco Tanaka, David A., 855
 Pal, Ranjan, 821
 Pankayat selvan, Ratnadevi, 853
 Panneerselvam, Kaliyamoorthy, 832
 Pfeil, Armin, 838
 Pilati, Tullio, 832
 Rao, A. V. Rama, 859
 Rao, S. Prahlada, 859
 Reichow, Stefan, 797
 Rheingold, Arnold L., 842
 Roberts, Yvonne V., 848
 Roe, S. Mark, 846
 Sakakibara, Jinsaku, 828
 Sales, Joaquim, 822
 Sarandees, Luis A., 798
 Saruwatari, Yoshiyuki, 861
 Saunders, John, 817
 Savrda, J., 812
 Schäfer, Roland, 834
 Schröder, Martin, 848
 Sharma, C. V. Krishnamohan, 832
 Shing, Tony K. M., 810
 Showell, Graham A., 817
 Sironi, Angelo, 850
 Snowden, Martin J., 803
 Song, Xuejing, 842
 Srivastava, Anurag, 853
 Stammier, Hans-Georg, 819
 Street, Leslie J., 817
 Su, De-Bao, 807
 Sucros Velarde, Felix J., 855
 Sullivan, Martin J., 848
 Tanaka, Masako, 814
 Tashiro, Masashi, 861
 Teruel, Helena, 856
 Thomas, Susan E., 830
 Törös, Szilárd, 858
 Tsui, Hon-chung, 810
 Tuba, Zoltán, 858
 Ueda, Taisei, 828
 Utley, James H. P., 800
 Wakselman, M., 812
 Wallbridge, Malcolm G. H., 846
 Weber, Lothar, 819
 Wicha, Jerzy, 802
 Yamato, Takehiko, 861
 Ye, Tao, 823
 Yellowlees, Lesley J., 848
 Zhou, Zhao-hui, 810

**Scan the contents page, below, of the latest issue of 'Mendeleev Communications'.
It speaks volumes for what you'll find when you read the journal itself...**

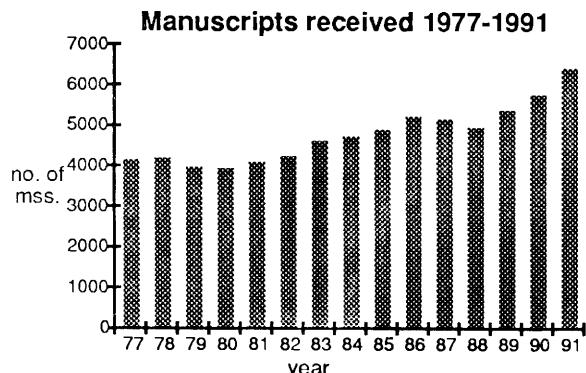
1992, Issue 2

Mikhail M. Korobov, Yuliya V. Pervova and Lev N. Sidorov	41	Electron Affinity of Iron(III) Chloride
Vladimir N. Steblin, Eugene D. Shchukin, Vasiliy V. Yaminsky and Igor V. Yaminsky	42	Hydrodynamic Interaction of Surfaces in Electrolyte Solution. A New Method of Investigation of Surface Forces using a Capacitor Ultrodynamometer
Antonina D. Grishina, Marine G. Tedoradze and Anatoli V. Vannikov	44	Photodissociation of Charge Transfer Complexes based on Aromatic Amines and Bromine-containing Electron Acceptors
Valentin A. Tertykh, Ludmila A. Belyakova and Aleksey V. Simurov	46	A Prospective Route for the Conversion of Si—O—C Bonds into Si—C in Chemisorbed Compounds
Alevtina M. Turuta, Aleksei V. Kamernitsky, Tat'yana M. Fadeeva and Luu Duc Huy	47	Transformation of Androsta-4,9-diene-3,17-dione into 16 α ,17 α -Epoxycorticosterone
Emmanuil I. Troyansky, Dmitrii V. Demchuk, Margarita I. Lazareva, Vyacheslav V. Samoshin, Yurii A. Strelenko and Gennadii I. Nikishin	48	Macrocyclization with Participation of Thiyil Radicals: Construction of 18- and 9-Membered Crown Thioethers
Vladimir F. Rudchenko, Sergei M. Ignatov, Ivan I. Chervin, Abil E. Aliev and Remir G. Kostyanovsky	50	Synthesis and Properties of 2,3-Dimethoxy-1,4,2,3-dioxadiazinane and Dialkoxydiazene Oxides
Kirill A. Lukin, Sergei I. Kozhushkov, Andrei A. Andrievski, Bogdan I. Ugrak and Nikolai S. Zefirov	51	Synthesis of Pentaspiro[2.0.0.2.0.2.0.0.2.0]tridecane
Oleg A. Luk'yanov, Yurii B. Salamonov, Yurii T. Struchkov, Yurii N. Burtsev and Vladimir S. Kuz'min	52	Aryl-NNO-azoxy- α -nitro- and - α,α -dinitro-alkanes
Aleksander G. Tolstikov, Radik Kh. Yamilov, Nina V. Khakhalina, Elena E. Savateeva, Leonid V. Spirikhin and Genrikh A. Tolstikov	53	Enantiospecific Synthesis of (4S,5S)-5-Hydroxydecan-4-olide (<i>t</i> -Factor)
Sergei M. Fomin, Svetlana A. Makarova, Irina A. Volegova, Elena V. Pastyshenka, Alla N. Flerova and Eduard N. Teleshov	54	New Comb-like Polyamides and Polyesters
Usein M. Dzhemilev, Ravil' I. Khusnutdinov, Damir Kh. Galeev, Alexander I. Malikov, Oleg M. Nefedov and Yuri V. Tomilov	56	The First Synthesis of Norbornadiene Tetramers
Alexander M. Khenkin and Marina L. Stepanova	57	Activation of Dioxygen by Catecholate Binuclear Iron Complexes for Alkane Hydroxylation. A Chemical Model for Methane Monooxygenase
Svetlana Yu. Ryabova and Vladimir G. Granik	59	New Synthesis of Pyrrolo[1,2- <i>a</i>]indole Derivatives
Valery N. Kalinin, Dmitrii N. Pashchenko and Fan Min She	60	Palladium-catalysed Synthesis of 4-Heteroaryl and 4-Alkynyl-substituted Sydrones. 5-Oxido-3-phenyl-1,2,3-oxadiazol-3-ium-4-ylzinc Chloride
Pavel F. Vlad, Nicon D. Ungur and Nguen Van Tuen	61	Superacidic Cyclization of Bicyclogeranyl farnesic and Geranyl farnesic Acids and their Esters
Anatolii V. Vannikov, Antonina D. Grishina and Marine G. Tedoradze	62	Dry Photochemical Etching of Metallic Films
Alexander R. Kudinov, Alexei A. Filchikov and Margarita I. Rybinskaya	64	Deprotonation and Subsequent Functionalization of Methyl Groups in Cationic Ruthenium Triple-decker Complexes
Alexander F. Sviridov, Alexander S. Kuz'min, Dmitrii V. Yashunskii and Nikolai K. Kochetkov	65	Novel Stereoselective Synthesis of the C-1-C-7 Segment of Oleandonolide and Lankanolide
Oleg M. Nefedov, Victor A. Korolev, László Zanathy, Bahman Solouki and Hans Bock	67	The Selective Thermal Fragmentation of 2,2'-Dipropynyl Sulfide to Propynethial and Allene
Alois Haas, Yurii L. Yagupolskii and Christiane Klare	70	Preparation and Pyrolysis of Phenyl diazonium Bis(trifluoromethylsulfonyl)amide
Dmitrij N. Rassokhin, Georgij V. Kovalev, Lenar T. Bugaenko and Aleksandr V. Rudnev	71	Catalytic Oxidation of Sulfur Dioxide by Oxygen in an Aqueous Solution of Sulfuric Acid in the presence of Bivalent Manganese Ions under Ultrasound Irradiation

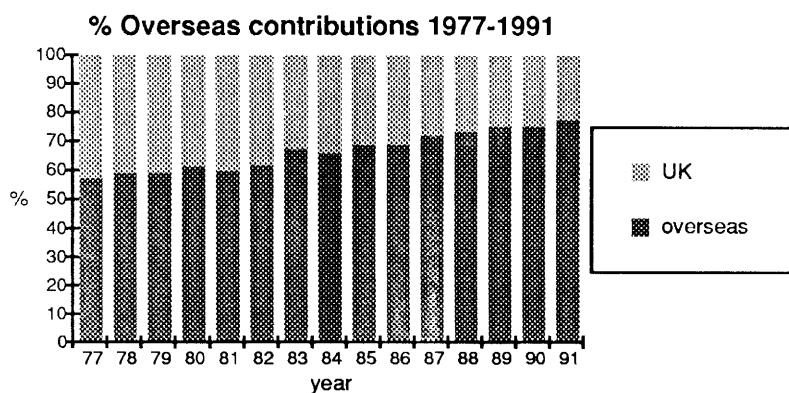
ROYAL SOCIETY OF CHEMISTRY JOURNALS 1991

In 1991, the Royal Society of Chemistry's Journals Department

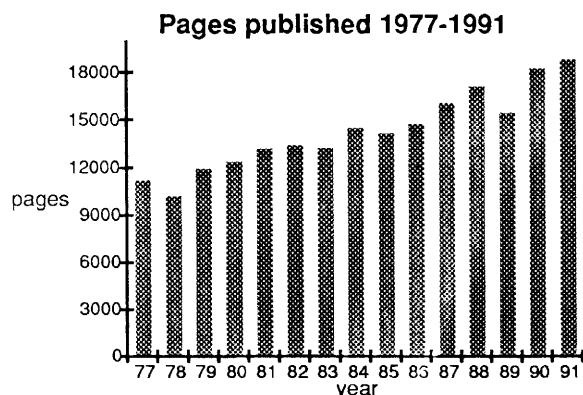
- received more manuscripts than in any previous year



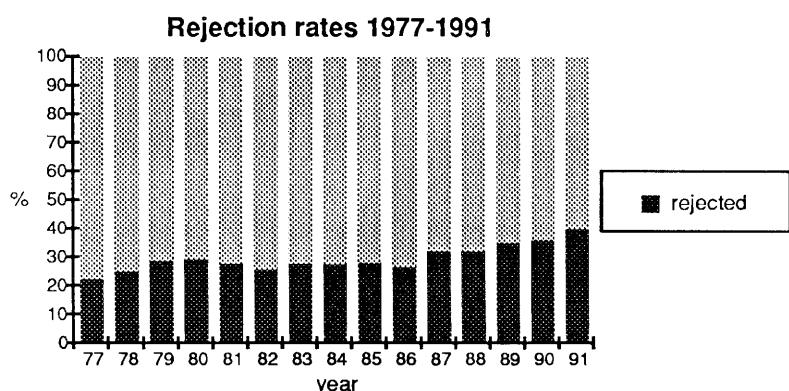
- received a higher proportion from outside the UK than in any previous year



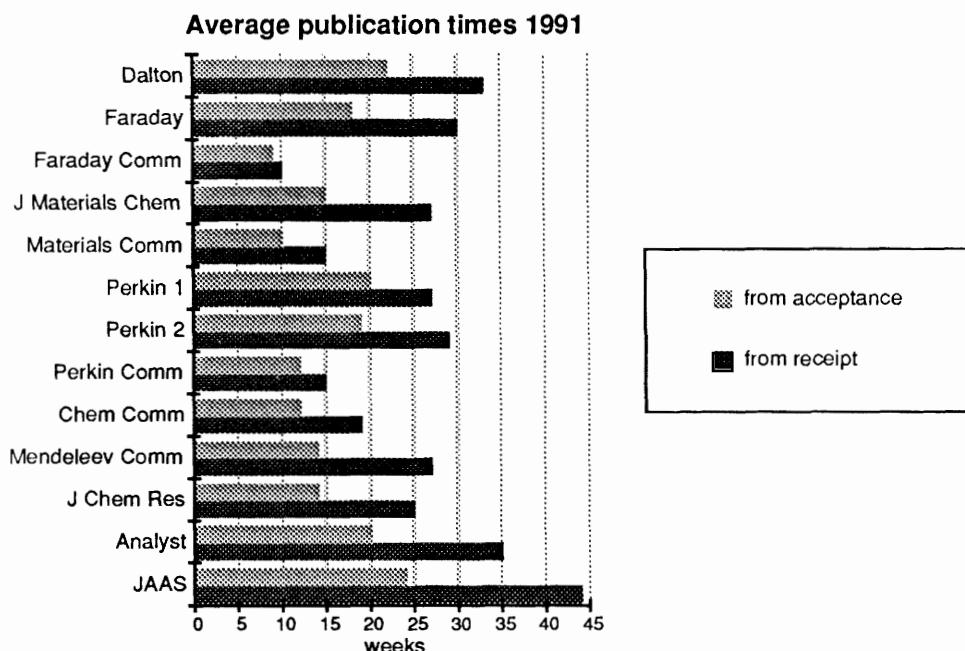
- published more pages than in any previous year



- ensured the high quality of material published by applying a higher rejection rate than in any previous year



- published two new journals: *Journal of Materials Chemistry* and *Mendeleev Communications*
- further reduced times to publication for papers and communications



- celebrated RSC's sesquicentenary and Faraday's 200th birthday by publishing
 - a sesquicentenary issue of *Dalton Transactions*
 - a sesquicentenary issue of *The Analyst*, containing an article on Faraday
 - a birthday issue of *Faraday Transactions*
 - twenty-four sesquicentenary papers in *Perkin Transactions*

In 1992

- *Journal of Materials Chemistry* has expanded from six to twelve issues a year
- *Dalton Transactions* and *Perkin Transactions 1* have expanded from twelve to twenty-four issues a year
- *Dalton Transactions* has introduced Communications, and a review section (Perspectives)
- *Perkin Transactions 2* has introduced Communications
- *Journal of Analytical Atomic Spectrometry* is to produce a disk-based file of *Atomic Spectrometry Updates* references

Alan McNaught
Manager, RSC Journals