

# Annual Report and Accounts

for the year ended 31st December 2009

## **The Operational Research Society**

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A registered charity No 313713. A company limited by guarantee No 663819

# **Preamble**

- (1) The Operational Research Society is a company limited by guarantee (no. 663819). It is also a charity registered in accordance with the provisions of the Charities Act 1993 (registration no. 313713)
- (2) The objects of the Society are given in its Memorandum and Articles, and can be summarised as:
  - (a) the advancement of knowledge by fostering, promoting and furthering interest in Operational Research: and
  - (b) the advancement of education by providing facilities for, and by subsidising it; endowing, organising or supporting scholarships or educational or training schemes; and conducting examinations or advising on their content.
- (3) The Society is empowered to do all proper things in pursuit of these objectives.
- (4) The affairs of the Society were managed during 2009 by the elected officers and members of the Board listed below. Together they constitute the Board of Directors of the limited company, and Trustees of the charity and the members of its management committee. Specific matters are delegated to particular committees of the Society by resolution of the Board and in accordance with the Society's Articles.

The following served as members of the Board in 2009

S M MERCHANT President
R W EGLESE President Elect
W B DOWSLAND
R A FORDER Vice President
S L ROBINSON Vice President
S L JOHNS
I M MITCHELL Hon. Treasurer
S C WEDDELL

Unless otherwise stated, changes in the membership of the Board occur at the end of a calendar year.

(5) The committees are established to implement policies of Board & General Council with respect to meeting the Society's objectives and to controlling expenditure. The names of the committees are set out as follows, together with the object ((a) or (b) as above) towards the achievement of which they contribute:

Accreditation Panel (a)
Awards Panel (a)
Education & Research (b)
Events (a), (b)

Investment Management of investments

Past President's/President Elect's Elections, planning & administrative reviews

Publications (a)
Publicity, Membership & Website (a)
Training Working Group (b)

(6) Other Committees are set up from time to time for specific purposes, but they are given no

delegated powers. In addition, the Society has a large number of active Special Interest Groups which are listed in the Journal of the Society. They contribute particularly to object (a).

(7) The registered address of the Society is:

Seymour House 12 Edward Street BIRMINGHAM B1 2RX

Its Secretary & General Manager is: Its Bankers are:

I G Blackett The Co-operative Bank

The OR Society
Delf House
12 Edward Street
BIRMINGHAM
SKELMERSDALE
B1 2RX
WN8 6WT

Its Solicitors are: Its Auditors are:

Sydney Mitchell and Co
Cavendish House
Waterloo Street
BIRMINGHAM
Mazars LLP
The Broadway
DUDLEY
DY1 4PY

B2 5PU

Its Investment Adviser is: Its Stockbrokers are:

John Ross Rensburg Sheppards Rensburg Sheppards 2 Gresham Street

2 Gresham Street LONDON LONDON EC2V 7QN

EC2V 7QN

- (8) The Society's investment policy is governed by the legislative provisions relating to charity investments, but the Society is not otherwise restricted in the way in which it can invest. However, it is the Society's policy not to invest in tobacco shares.
- (9) These particulars are published in compliance with Statement of Recommended Practice: Accounting and Reporting by Charities, March 2005, issued by the Charity Commissioners in England and Wales.

# Statements as to disclosure of information to auditors

In accordance with Company Law, as the charity's trustees, we certify that:

- so far as we are aware, there is no relevant audit information of which the Charity's Auditors are unaware; and
- we have taken all the steps that we ought to have taken in order to make ourselves aware
  of any relevant audit information and to establish that the Charity's Auditors are aware of
  that information.

# Statement of responsibilities of the elected officers and members of the Board

Company law requires the elected officers and members of the Board to prepare financial statements for each year which give a true and fair view of the state of affairs of the Society and of the surplus or deficit of the Society for that period. In preparing those financial statements, the elected officers and members of the Board are required to:

- select suitable accounting policies and then apply them consistently;
- make judgements and estimates that are reasonable and prudent;
- state whether applicable accounting standards have been followed, subject to any material departures disclosed and explained in the financial statements;
- prepare the financial statements on the going concern basis unless it is inappropriate to assume that the Society will continue in business.

The elected officers and members of the Board are responsible for keeping proper accounting records which disclose with reasonable accuracy at any time the financial position of the Society and to enable them to ensure that the financial statements comply with the Companies Act 2006. They are also responsible for safeguarding the assets of the Society and hence for taking reasonable steps for the prevention and detection of fraud and other irregularities.

# **Approval of report**

We approve this report and the audited accounts for the year 1st January to 31st December 2009, and recommend their adoption by the Society at its Annual General Meeting.

R W EGLESE President I M MITCHELL Hon Treasurer

J CROCKER W B DOWSLAND R A FORDER J D GRIFFITHS S L JOHNS S M MERCHANT S L ROBINSON S C WEDDELL

Being the elected officers and members of the Board of the Operational Research Society as at 6th July 2010.

I G Blackett Secretary & General Manager 6th July 2010

# **Annual Report 2009**

#### Activity in support of the Society's charitable aims

The charitable aims of the Society are to advance knowledge of and interest in OR and to advance education in OR. The Society's publications, conferences, training, accreditation, awards, regional societies, special interest groups and several other activities all continued to further these aims this year, as did the 'Science of Better' campaign to promote wider knowledge of OR. The committee reports in the next section include many references to the activities we undertook in support of these objectives but the following deserve specific mention:

The Society continues to publish five major journals, and in 2009 a wide range of institutions subscribed to them; in particular the Journal of the OR Society (JORS) was circulated to an increased number of different institutions worldwide, bringing the number of institutions to 736 and reversing the downward trend of recent years. New editors have been appointed for JORS as the former editors came to the end of their period of office. OR Insight was published by the Society but a transition has been completed to being published by Palgrave which should help it to reach a wider public. New editors for OR Insight commenced their duties in January 2009.

The OR in Schools Task Force produced a schools careers DVD in 2008 and this has been disseminated in various forms through 2009. The DVD has been very well received and garnered the accolade of "best corporate video" at an industry awards ceremony. A new website, www.LearnAboutOR.co.uk was launched in 2009 to assist school pupils, teachers, students and members of the public wishing to know more about the subject; it also hosts a copy of the careers DVD. Discussions took place during 2009 about the appointment of an Education Officer to the Society's staff to support the OR in Schools Initiative and other charitable aims of the Society connected with OR and education. It is anticipated that an appointment will be made in 2010.

The Board agreed the amount of funding to be made available for charitable projects and bids were sought. One bid was received for consideration. Continuing support was offered for NATCOR, a national training centre initiative in OR.

The Society's biennial conference for young people engaged in OR was held in the spring at Warwick University and was a success. The Society's annual conference (OR51), open to all, was also held at Warwick University. Several free places were once again made available, to enable a wider audience to attend.

Training courses open to the public were run by the Society during the year recording over one hundred bookings, which is a further improvement on last year's success. A Careers Open Day comprising presentations and exhibitions was once again held at Birmingham University, attracting many students to find out about potential careers in OR.

The annual Blackett Memorial Lecture, which is open to the general public free of charge, was delivered at the Royal Society in November 2009 by Professor Richard A. L. Jones FRS (Pro-Vice-Chancellor for Research and Innovation, University of Sheffield). The lecture was entitled 'What next for nanotechnology?' and was very well supported. The occasion was also used to make presentations to award winners.

A new prize for the best PhD in OR was launched in 2009, to help raise awareness of the subject and to encourage research in OR.

#### **Board Business**

The Board and General Council conducted business for the third year under the new constitution, which took effect from January 2007, following approval at the Society's AGM in July 2006. The Society now has a much smaller Board of Directors than hitherto (whose ten members are now the Trustees of the Society) and this is supported by a General Council, which is larger than the old Council, having a maximum membership of thirty-six. These two bodies now assist the Society in its ongoing commitment to involve as many members as possible in its affairs. The Board of Directors is responsible for routine business, and the General Council, with its wide representation, addresses more strategic issues. Members of General Council have also, in all cases, been assigned to one of the Society's four main committees: Publications; Publicity, Membership and Website; Education and Research; and Events and Training, and representatives of those committees are currently Board members. The changes have helped to improve the flow of information and ideas between the Board and General Council members. Two special meetings between the Board and General Council members ('mega-meetings') were held during the year to facilitate communication.

The Constitution was reviewed in March and it was agreed to leave it unchanged, but the Constitution and its interpretation will continue to be discussed by the Board. A new membership database system and a new journal management system were introduced, coming into operation towards the end of 2009. The database will also allow Board to begin monitoring the Equality statement it agreed with General Council. A report on Special Interest Groups was prepared and discussed by the Board, but this did not result in any major changes.

The Board received reports from its Investment Committee which met twice during the year to monitor the Society's finances. A summary of the Society's finances is provided in a later section of this report.

The Board continued to be concerned about the policy of the Engineering and Physical Sciences Research Council (EPSRC) concerning the potential removal of all studentships for Masters courses. Early in the year, consideration was given to making funding available for a limited number of scholarships for UK students, but this was put on hold as legal advice may be required to check whether such a proposal breaches EU legislation. In the event, some money for studentships was made available by the EPSRC for Masters courses in OR starting in 2009 for courses that had previously been supported this way. Stewart Robinson and Sue Merchant organised a meeting between academics and practitioners to discuss ways of mitigating the effects of the loss of EPSRC funding. There remains a concern about how this change of funding policy will affect the quantity and quality of UK Masters students in OR and the consequent potential effects on recruitment to practitioner and academic careers in the discipline. The Board will continue to keep this matter under review.

#### **Committees**

The Board wishes to thank all those members of the Society who devote so much time and energy to committee and associated activities to ensure that the Society continues to meet its charitable objectives and enhance its service to members and general public alike. Their efforts and those of the office staff, who are ever supportive and efficient, are very much appreciated.

The **Events** committee (chaired by Sandra Weddell) oversaw several conferences. YOR16 at Warwick was chaired by Samantha Mackay and attracted 151 participants, 60% practitioners, 40% academics.

The main annual conference OR51 was also held at Warwick and attracted 272 participants, 32% practitioners, 68% academics. The co-chairs of the organising committee were Ruth Davis and Frances O'Brien. Unfortunately Ruth Davis fell seriously ill in the month before the conference and thanks and congratulations are due to Frances O'Brien and other members of the organising committee for ensuring the success of the event. A specialist conference on Intelligent Management Systems in Operations, IMSIO 4 was held at Salford in July 2009 chaired by Khairy Kobbacy and attracted 27 participants. A special event was held in April 2009 at the LSE as a 'Tribute to Jonathan Rosenhead at 70'.

The committee continue to oversee the appointments of conference chairs and the selection of suitable conference sites for future meetings. Plans are in hand for meetings in 2010 and beyond including a simulation conference (SW10) to be held in the Midlands, OR52 to be held in September 2010 at Royal Holloway College, YOR17 to be held at Nottingham University in 2011 and OR53 to be held in September 2011 at the East Midlands Conference Centre. Further specialist meetings are under consideration.

The Society is indebted to the organisers of these conferences for their hard work and imagination, and especially to the Society's Conference Officer.

The committee are considering the scope for a public event where the recipient of the Beale medal would make a presentation.

In 2009, 24 **training** courses were advertised: 10 of these ran plus an additional 6 that were inhouse/bespoke or non-scheduled. 119 bookings were satisfied leading to a surplus of over £21k which is the best performance for some time. Thanks are due to the members of the **Training Working Group**, chaired by Martin Keys, who put much effort into selecting trainers, to the trainers who bid to run these courses and to the OR Society office staff who worked hard to move dates to suit delegates' requirements. These efforts have been very worthwhile.

The **Publicity, Membership and Website** committee (PMW) was chaired by Richard Eglese. The total number of OR Society members changed from 2688 at the end of 2008 to 2727 at the end of 2009. Now that a new membership database has been introduced, there will be a check and reconciliation of numbers with the old system. There was an encouraging increase in the total number of new members joining, while the percentage of the membership renewing in the year remained about the same at 88%. Options for retired members were discussed during the year, but it was decided not to introduce any radical changes. Take-up of the Society's accreditation scheme continues to increase, albeit slowly, with 300 members currently accredited at the various levels.

The number of student members has increased to 288 at the end of 2009. There has been an increase in the proportion of students converting from student membership to full membership in 2009 compared to 2008, though still not as high as in previous years. A student survey questionnaire was run with broadly encouraging results.

A new website, www.LearnAboutOR.co.uk, has been launched which has been designed to provide information about the OR discipline, particularly for young people. The new OR in Schools DVD is available through the website and in other forms. A "Learn About OR" booklet which links with the OR in Schools DVD has been produced, printed and widely disseminated.

Under the leadership of the Society's marketing consultant, Graham Sharp, publicity activities continued at a similar level to recent years and included electronic newsletters sent to business decision-makers who had opted to receive them. The number of hits on the Science of Better and Learn About OR websites have been monitored, suggesting that the electronic newsletters and other promotional activities encourage visits to these sites.

The committee discussed alternative ways of producing the electronic version of Inside OR. It was agreed that the bookmarked PDF version was the most cost effective alternative and this has been implemented. This has also reduced the amount of work required in the office to produce the electronic version.

PMW is also responsible for the Society's websites. Jeff Jones was appointed as Website Editor and is looking at the content and design of the main site. He has begun his work including a review discussed in the committee.

The committee continues to monitor the numbers of accredited members in the different categories. The total number of accredited members has changed little over the year, though some have moved to higher categories. Roger Forder has continued to lead discussions on promoting accreditation including attending a meeting of the Heads of OR Forum.

The **Publications** committee has been chaired for the last eleven years by Brian Haley and the Society is very grateful for his careful oversight of this important area of the Society's activities. At the end of 2009 he handed over to Jeff Griffiths.

The year saw a number of changes in editors as they completed their periods of service and the success of the journals themselves is largely due to their efforts.

The editors of the Journal of the Operational Research Society (JORS), Prof Terry Williams and Prof John Wilson are retiring and the Society is pleased to record that Prof Tom Archibald and Prof Jonathan Crook are taking over. The Society owes a tremendous debt of gratitude to the outgoing editors who have maintained the scientific reputation and improved the standing of our premier journal and money earner.

During 2009, **JORS** (edited by Terry Williams and John Wilson) produced 13 issues; **EJIS** (edited by Ray Paul and Richard Baskerville) produced 6 issues; **KMRP** (edited by John Edwards) produced 4 issues; **JOS** (edited by Simon Taylor and Stewart Robinson) produced 4 issues; **OR Insight** (edited by Alistair Clark, Tolga Bektas and Jim Freeman) produced 4 issues. These journals are published by Palgrave and overall show an increase in net profit which currently stands at £457k and a proportion of this is retained by the Society. The Society publishes **Inside OR**, edited by Rajan Anketell, with news and features for members. Inside OR has seen a decrease in advertising revenue and has recorded an increase in its cost to £44k from £12k. Overall there has been a reduced gross income from all publications and the overall effect has been a net contribution to the Society of £288k which is marginally below the previous year.

The work on providing electronic access to all back issues of JORS, EJIS and OR Insight has been completed so all of the Society's journals are now available electronically.

The committee recorded their thanks to Ros Pyne (Palgrave) and her team for their efforts during 2009.

The **Education and Research** committee (ERC) is chaired by Stuart Johns. The Society's Careers Open Day at Birmingham University in November was held again, though this year the Royal Statistical Society was not able to collaborate in the event. The event again proved to be popular with undergraduate and postgraduate students.

ERC continued to oversee the OR in Schools Task Force which was responsible for producing the innovative careers DVD for use in schools. The Committee is also responsible for archives matters and library stocks.

In preparation for the International Review of Mathematics to be held in 2010, the committee were able to nominate Professor Lyn Thomas to the steering panel to ensure the Society's interests were well represented.

ERC helped coordinate the Society's responses to a number of consultations on wide-ranging topics, including Adrian Smith's review of the provision of postgraduate education, the future structure of mathematics A-levels and the framework for measuring research excellence.

The Committee completed proposals for an annual prize for the best PhD in OR which was launched. A shield in memory of former vice-president George Paterson has been commissioned which will be inscribed with the name of the winners.

#### **Awards**

The Board oversees the **Awards Panel**, which is chaired by John Ranyard. Its remit includes promoting entries (for most awards), assessing entries according to agreed criteria, selecting winners, producing appropriate citations, arranging presentations if appropriate and proposing subsequent publicity.

The Society's principal medals in 2009 were awarded to the following, who are congratulated on their achievement.

- **Goodeve Medal** awarded for best paper published in JORS in 2008. D Ronen and C A Goodhart, "Tactical store delivery planning". JORS 59 p1047-1054.
- **Stafford Beer Medal** awarded for best paper published in EJIS or KMRP in 2008. Colin Ashurst, Neil Doherty and Joe Peppard for the paper titled "Improving the impact of IT development projects: the benefits realization capability model". EJIS 17, p352-370.
- Tocher Medal awarded for best paper published in JOS in 2007/8. Kathy Kotiadis, "Using soft systems methodology to determine the simulation study objectives". JOS 1 p215-222.
- **PhD Prize** awarded for the most distinguished body of research leading to the award of a doctorate in the field of OR. Konstantinos Kaparis.
- Beale Medal awarded for a sustained contribution to the theory, practice, or philosophy of OR. Jeff Griffiths
- **Companionship of OR -** awarded for service to the Society. Ray Paul.

#### **Finance**

The Society has weathered the turbulence experienced during 2009. The level of the Society's net current assets has increased by almost £100k. Unrealised gains of some £164k replace the unrealised losses of £210k of 2008, reflecting the changes to the stock markets. The volatility of the markets requires a balance of prudence in the coming years with expenditure on worthwhile sustainable developments. The net surplus for the year of £114k, which included a £6k gain from the sale of investments, is double that of 2008. The Society has remained in surplus through the challenging environment of 2008 and 2009.

The OR Society's principal income stream comes from its publications. Another excellent performance in 2009 resulted in a net contribution of £288k to funds. Given the importance of the income from the Journals the Society continues to keep the future security of that income stream under review. Subscriptions are another key contributor with income for the year running to £142k.

In accordance with the accounting practices that are recommended for charitable organisations, the Society's funds are divided into four, with an additional fifth designated fund in respect of the risk to Journal income:

- the General Fund, representing the ongoing operational performance of the Society;
- the Reserve Fund, comprising the Society's investments, the Seymour House property and the money held on deposit by our stockbrokers;
- the Journal Risks Special Reserve Fund represents funds set aside to cover potential future reduction in income from the Society's journals;
- the Charitable Projects Fund, which is used to promote educational, development and research projects undertaken in line with the Society's charitable aims; and
- the Award Fund which contains the bequest from Mrs Hicks this is kept separate from the other funds and is used to support projects which are consistent with her wishes, by providing awards for the best student OR projects, undertaken for a client organisation.

With regard to supporting its charitable aims, the Society spent £17k on specific projects over and above 'normal business', principally supporting OR in Schools, and the NATCOR PhD Conference.

The Society's publications, conferences, training, accreditation, awards, regional societies, special interest groups and other activities all further the charitable aims of the OR Society. The 'Science of Better' campaign continues with targeted promotion of OR, for which the Society has maintained its support under the 'advancement of knowledge' rubric. The range of journals offered during 2009 supports the same aim. Inside OR continues as a broadly circulated publication.

2009 saw improvement regarding the level of liquid reserves. The Society policy has been that the value of cash, shares and stocks held in the Reserve Fund should not be less than 75% of General Fund expenditure. This policy is intended to ensure that the Society has adequate funds to see it through temporary shocks. The Society's General Fund expenditure for the year was £857k and the designated Reserve Fund stood at £826k at the end of 2009. The ratio stands at 96%, having recovered from 79% in 2008 with a historic low of 48% in 2002, although it had been over 100% as at the end of 2007. The mix of cash, shares and stocks provides resilience through a broad set of environments. Low interest rates in 2009 limited the return from cash whilst the same cash holdings had been the means of mitigating the fall in share prices the previous year.

The OR Society Board sets financial policy for investment, reviewing this from time-to-time. Within the constraints of this policy, decisions are passed down to the Investment Committee, as a sub-committee of the Board. The investment policy has been designed to maximise financial returns without any undue exposure to risk or to the particular performance of a given market sector. The Society, through its investors, instituted a regular ethical review of its holdings, with the suitability of any 'flagged' investments being considered on an individual basis.

#### **Voluntary contributions**

In 2009, the Society's work benefited from voluntary contributions of time, from members and others, under the following principal headings: authorship and refereeing of journal papers; editing of journals; authorship and delivery of conference papers; conference organisation; authorship and delivery of talks to regional societies and special interest groups; organisation of regional societies and special interest groups; the work of the Society's officers; contributions to the administration of the Society through service on the Board and the Society's committees.

It is estimated that a total of 5,000 person-days were contributed in 2009 under these various headings. If this time is valued at £500 per day, its value is £2.5m. The Society is most grateful to all who contributed voluntary effort, without which the Society could not accomplish its goals.

#### Appointment of trustees

The officers and other members of the Board are elected by secret ballot of the Society's membership and the members of General Council respectively, to serve for a three-year term. A member of the Board whose first term of office has expired may stand for election for one further term. At the end of 2008, Sally Brailsford and Jeff Griffiths finished their terms as members of the Board. Bill Dowsland and Stewart Robinson were elected to the Board from the start of 2009.

#### Induction of new trustees

New trustees receive a comprehensive information pack, setting out details of their role and responsibilities as both trustees and company directors, the nature of a charity, the Society's constitution, its policies on members' interests and expense claims, and including the Charity Commission's 'welcome' leaflet.

#### Risk

The Society conducted a detailed risk assessment in 2003. This was reviewed in 2009 and action, particularly on the matter of loss of key personnel and risks to journal income, has been taken. As the impact of the loss of journal income would be material, Board has closely monitored 'open access' developments, as well as the funds held in its Journal Income Risk Reserve Fund. This was established in 2006 with a balance of £370k at the end of 2009, rising some £71k, indicating the the scope of the changes to share prices during the year. Board also debated the impact of a loss of funding support for students undertaking Masters courses in O.R. This matter remains under consideration.

#### Members' interests

In accordance with Article 46 of its constitution, the Society requires that members of Board or committees having an interest in a matter to be debated should declare that interest and leave the room whilst the matter is discussed and decided. Members of the Training Working Group are drawn from organisations which have no interest in bidding for courses and wherever appropriate, recommendations on major charitable projects are made by a special expert committee comprised entirely of disinterested parties.

Written on behalf of Board by Richard Eglese and Ian Mitchell	
Signed on behalf of Board	
0.7 72 7 7 7	
Richard Eglese, President	lan Mitchell, Hon Treasurer

# **Accounts**

### for the year ended 31st December 2009

# INDEPENDENT AUDITORS' REPORT TO THE MEMBERS OF OPERATIONAL RESEARCH SOCIETY

We have audited the financial statements of the Operational Research Society for the year ended 31 December 2009 which comprise the Statement of Financial Activities, the Balance Sheet and the related notes. The financial statements have been prepared under the accounting policies set out therein.

#### **Respective responsibilities of trustees and auditors**

The trustees' (who are also the directors of the company for the purposes of company law) responsibilities for preparing the Annual and the financial statements in accordance with applicable law and United Kingdom Accounting Standards (United Kingdom Generally Accepted Accounting Practice) and for being satisfied that the financial statements give a true and fair view are set out in the Statement of Trustees' Responsibilities.

Our responsibility is to audit the financial statements in accordance with relevant legal and regulatory requirements and International Standards on Auditing (UK and Ireland). This report, including our opinion, has been prepared for and only for the company's members as a body in accordance with Chapter 3 of Part 16 of the Companies Act 2006. Our audit work has been undertaken so that we might state to the company's members those matters we are required to state to them in an auditor's report and for no other purpose. To the fullest extent permitted by law, we do not accept or assume responsibility to anyone other than the company and the company's members as a body for our audit work, for this report, or for the opinions we have formed.

We report to you our opinion as to whether the financial statements give a true and fair view, have been properly prepared in accordance with United Kingdom Generally Accepted Accounting Practice, and have been prepared in accordance with the Companies Act 2006. We also report to you whether in our opinion the information given in the Trustees' Annual Report is consistent with those financial statements.

In addition we report to you if, in our opinion, the charity has not kept adequate accounting records, if the charity's financial statements are not in agreement with the accounting records, if we have not received all the information and explanations we require for our audit, or if certain disclosures of trustees' remuneration specified by law are not made.

We read the Trustees' Annual Report and consider the implications for our report if we become aware of any apparent misstatements within it.

#### **Basis of audit opinion**

We conducted our audit in accordance with International Standards on Auditing (UK and Ireland) issued by the Auditing Practices Board. An audit includes examination, on a test basis, of evidence relevant to the amounts and disclosures in the financial statements. It also includes an assessment of the significant estimates and judgements made by the trustees in the preparation of the financial statements, and of whether the accounting policies are appropriate to the charity's circumstances, consistently applied and adequately disclosed.

We planned and performed our audit so as to obtain all the information and explanations which we considered necessary in order to provide us with sufficient evidence to give reasonable assurance that the financial statements are free from material misstatement, whether caused by fraud or other irregularity or error. In forming our opinion we also evaluated the overall adequacy of the presentation of information in the financial statements.

#### **Opinion**

In our opinion the financial statements give a true and fair view of the state of the charity's affairs as at 31. December 2009 and of its incoming resources and application of resources, including its income and expenditure, for the year then ended; the financial statements have been properly prepared in accordance with United Kingdom Generally Accepted Accounting Practice; the financial statements have been prepared in accordance with the Companies Act 2006; and the information given in the Trustees' Annual Report is consistent with the financial statements.

Glen Jones (Senior Statutory Auditor) for and on behalf of Mazars LLP Chartered Accountants (Statutory Auditor) The Broadway Dudley DY1 4PY

#### STATEMENT OF FINANCIAL ACTIVITIES FOR THE YEAR ENDED 31 DECEMBER 2009

							<u>2009</u>	<u>2008</u>
			Unre		£	£		
				estricted i dric	13	Journal		
				Designated		Risks		
		D	esignated		Designated	Special		
		General	Reserve	Projects	Award	Reserve	Total	Total
	Note	Fund	Fund	Fund	Fund	Fund	Funds	Funds
	INOLE	<u>ı unu</u>	<u>r unu</u>	<u>r unu</u>	<u>r unu</u>	<u>r unu</u>	<u>i unus</u>	<u>i unus</u>
INCOMING RESOURCES								
Charitable activities :								
Subscriptions		141,687	-	-	-	-	141,687	132,823
Events and Conferences		166,013	_	_	_	_	166,013	206,998
Training		113,425	-	_	_	_	113,425	95,370
Publications	2	509,020	_	_	_	_	509,020	515,125
Accreditation	_	4,973	_	_	_	_	4,973	5,311
World Wide Web and Internet		8,629		_			8,629	16,863
Miscellaneous Sales		443	_	_	_	_	443	
Miscellarieous Sales	-					0		1,550
De delle com		944,190	-	-	-	-	944,190	974,040
Rental Income	_	16,398	-	-	-	-	16,398	17,369
Investment Income	6	754	20,583	-	2,539	12,675	36,551	61,188
Total Incoming Resources	-	961,342	20,583	0	2,539	12,675	997,139	1,052,597
RESOURCES USED								
Investment Management Costs		0	4,244	0	0	2,320	6,564	6,410
Direct charitable expenditure	:							
Subscriptions		109,507	1,634	_	_	_	111,141	85,141
Events and Conferences		179,716	880	_	_	_	180,596	294,036
Training		91,581	371	_	_	_	91,952	80,546
Publications	2	219,747	1,176	_			220,923	223,111
Accreditation	2		201	-	-	-		
World Wide Web and Internet		11,204		-	-	-	11,405	7,372
		68,437	1,238	-	-	-	69,675	51,844
Miscellaneous Sales	_	4,113	44		-	-	4,157	7,236
Other Charitable Expenditure	3	127,372	333	16,975	1,250	-	145,930	180,393
		811,677	5,877	16,975	1,250	0	835,779	929,679
Governance Costs	4	45,109	1,007	-	-	329	46,445	31,876
Total Resources Used	5	856,786	11,128	16,975	1,250	2,649	888,788	967,965
NET INCOMING/(OUTGOING)	-							
RESOURCES BEFORE								
TRANSFERS		104,556	9,455	(16,975)	1,289	10,026	108,351	84,632
Transfers between Funds		(40,000)	-	40,000	-	-	-	-
NET INCOMING/(OUTGOING) RESOURCES FOR THE YEAR		64,556	9,455	23,025	1,289	10,026	108,351	84,632
RESOURCES FOR THE FEAR	<b>L</b>	04,000	3,400	23,020	1,209	10,020	100,331	04,002
carried forward		64,556	9,455	23,025	1,289	10,026	108,351	84,632

#### STATEMENT OF FINANCIAL ACTIVITIES FOR THE YEAR ENDED 31 DECEMBER 2009 (continued)

							<u>2009</u> £	<u>2008</u> £
			Unrestricted Funds					
		Journal  Designated Risks  Designated Charitable Designated Special						
		General	Reserve	Projects	Award	Reserve	Total	Total
	<u>Note</u>	<u>Fund</u>	<u>Fund</u>	<u>Fund</u>	<u>Fund</u>	Fund	<u>Funds</u>	<u>Funds</u>
brought forward		64,556	9,455	23,025	1,289	10,026	108,351	84,632
Realised Gains/(Losses) on Sale of Investments	14	-	5,400	-	-	354	5,754	(28,349)
NET INCOME FOR THE FINANCIAL YEAR	_	64,556	14,855	23,025	1,289	10,380	114,105	56,283
Other Recognised Gains and Losses : Unrealised Gains/(Losses) on								
Investments in the year	13	-	104,759	-	(1,173)	60,741	164,327	(210,118)
NET MOVEMENT IN FUNDS	_	64,556	119,614	23,025	116	71,121	278,432	(153,835)
Balances brought forward 1 January 2009		590,431	706,786	(302)	52,502	298,397	1,647,814	1,801,649
BALANCES CARRIED FORWARD 31 DECEMBER 2	2009	654,987	826,400	22,723	52,618	369,518	1,926,246	1,647,814

The notes on pages 4 to 10 form part of these accounts.

The Statement of Financial Activities, noted on this and the preceding page, shows income and expenditure relating to the five unrestricted funds operated by the Society in accordance with Statement of Recommended Practice (revised 2005), "Accounting and Reporting by Charities".

The figure reported as net income for the financial year in the Statement of Financial Activities, £114,105 ( 2008 - £56,283) corresponds to the surplus for the financial year that would be disclosed if an Income and Expenditure Account compliant with the Companies Act 2006 was presented.

The structure of the Society's unrestricted funds is detailed in note 1(2) of these accounts.

#### **BALANCE SHEET - 31 DECEMBER 2009**

	<u>Note</u>	2009 £	2008 £
FIXED ASSETS			
Tangible Fixed Assets Investments:	7	254,330	274,405
Listed at Market Value	8	899,898	659,554
Cash Deposited with Investment Brokers		140,914	183,653
Charities Aid Foundation	9	59,068	57,701
		1,354,210	1,175,313
CURRENT ASSETS			
Debtors	10	474,118	510,719
Cash at Bank and In Hand	. •	172,486	62,839
		646,604	573,558
CREDITORS (amounts falling due within one year)	11	74,568	101,057
NET CURRENT ASSETS		572,036	472,501
TOTAL ASSETS LESS CURRENT LIABILITIES		1,926,246	1,647,814
FUNDS			
General Fund		654,987	590,431
Designated Reserve Fund	12(1)	826,400	706,786
Designated Charitable Projects Fund	12(2)	22,723	(302)
Designated Award Fund	12(3)	52,618	52,502
Journal Risks Special Reserve Fund	12(4)	369,518	298,397
TOTAL FUNDS		1,926,246	1,647,814
	****	******	*****

The reconciliation of movement on total funds is noted in the Statement of Financial Activities on pages 2 and 3.

The notes on pages 4 to 10 form part of these accounts.

Approved by the Board on 6th July 2010 and signed on its behalf :

I. M. MITCHELL Honorary Treasurer

R. W. EGLESE President

#### NOTES TO THE ACCOUNTS FOR THE YEAR ENDED 31 DECEMBER 2009

#### 1 ACCOUNTING POLICIES

#### (1) Accounting convention

The accounts have been prepared in accordance with both the Companies Act 1985 and the Statement of Recommended Practice (Revised 2000), "Accounting and Reporting by Charities", and under the historical cost convention in accordance with applicable Accounting Standards as modified by the accounting policy for investments quoted on a recognised stock exchange, which are stated at market value (see 1(6) below).

#### (2) Designation of funds

Income and expenditure arising from the normal charitable activities of the Society is included within the general fund. The Trustees may make transfers from the general fund to the designated funds which are set aside for specific purposes. The designated charitable projects fund represents amounts set aside for specific charitable projects. The designated reserve fund consists of resources of the Society which are represented by land and buildings, fixed asset investments and cash deposited with the Society's investment brokers. The designated award fund represents a legacy received in 2002 which will be used to fund a bi-annual award. The journal risks special reserve fund represents funds set aside to cover potential future reduction in income from the Society's journals.

#### (3) Dividends and investment income

Dividends and investment income are recognised when receivable.

#### (4) Other income and expenditure

Income and expenditure other than dividends are accounted for on an accruals basis.

#### (5) Value added tax

The Society has partial exemption status for Value Added Tax and Value Added Tax on apportionable costs which cannot be reclaimed is disclosed separately within administration costs. This item was £nil in 2009.

#### (6) Investments

Investments quoted on a recognised stock exchange are included in the accounts at their market value. Net investment gains/losses are taken to either the Designated Reserve Fund or the Journal Risks Special Reserve Fund as appropriate.

#### (7) Tangible fixed assets and depreciation

Tangible fixed assets costing more than £500 and with a useful economic life in excess of 3 years are capitalised and included at cost including any incidental expenses of acquisition.

Depreciation is charged on a straight line basis at the following rates :

Long leasehold building - 2%
Office machines and computer equipment - 25%
Fixtures and fittings - 10%
Software systems - 25%

#### (8) **Pensions**

The Society contributes to individual pension schemes established for each eligible employee.

#### (9) Allocation of costs

Salaries, depreciation, world wide web expenditure and other central and establishment overheads are allocated to appropriate cost categories using consistently applied ratios based on estimates of actual time and costs expended in each area.

#### (10) Cash flow statement

No cash flow statement has been prepared, as permitted by FRS1, as the Society meets the criteria of a small company under the provisions of the Companies Act 1985.

#### NOTES TO THE ACCOUNTS FOR THE YEAR ENDED 31 DECEMBER 2009 (continued)

2	PUBLICATIONS	<u>2009</u> £	2008 £
	Incoming resources :		
	Journal / KMRP	356,947	328,432
	Inside OR	45,515	86,376
	ORMS Today	2,600	2,500
	EJIS	99,542	95,377
	Insight	4,416	2,440
		509,020	<u>515,125</u>
	Resources used :		
	Journal / KMRP	82,795	82,383
	Inside OR	99,978	98,907
	ORMS Today	2,330	3,155
	EJIS	18,066	19,929
	Insight	17,754	18,737_
		220,923	223,111
3	OTHER DIRECT CHARITABLE EXPENDITURE		
	Designated charitable projects fund	16,975	54,393
	See note 12(2) for details of the projects funded		
	Non-revenue earning activities in pursuit of charitable aims		
	IAOR/EJIS Online - Members access	6,415	6,965
	Library	7,958	6,696
	Foreign Affairs Expenses	3,090	6,032
	Regional Society Grants (note)	(2,274)	1,677
	Special Interest Groups	6,481	6,126
	Public Information about OR:		
	Science of Better	64,466	59,023
	Learn about OR	1,238	-
	General Publicity	36,204	29,059
	Medals, Awards and Scholarships	3,770	3,194
	Strategy	1,607	7,174
	Other Costs		54
		128,955	126,000
	Total	145,930	180,393
	note: Bank Account previously remitted by NEORG (now moribund) now incorporated into Society funds		
4	GOVERNANCE COSTS		
	Board and Committees	36,534	21,020
	Auditors' Fees :		
	for audit	5,250	5,150
	for other services	-	-
	Other Legal and Professional Fees	4,661	5,706
		46,445	31,876

#### NOTES TO THE ACCOUNTS FOR THE YEAR ENDED 31 DECEMBER 2009 (continued)

#### 5 TOTAL RESOURCES EXPENDED

#### Expenditure analysed by type of cost

Expenditure analysed by type of cost :						
				Total	Total	
	Staff Costs	Other Costs	<b>Depreciation</b>	2009	2008	
	£	£	£	£	£	
Investment Management Costs	0	6,564	0	6,564	6,410	
Subscriptions	66,503	23,643	20,995	111,141	85,141	
Events and Conferences	35,810	139,476	5,310	180,596	294,036	
Training	15,091	75,360	1,501	91,952	80,546	
Publications	47,832	165,710	7,381		223,111	
Accreditation	8,185	2,406	814	11,405	7,372	
World Wide Web & Internet	50,389	14,275	5,011	69,675	51,844	
Miscellaneous Sales	1,790	2,189	178	, -	7,236	
Other Expenditure	13,556	131,025	1,349	145,930	180,393	
Governance Costs	16,626	28,165	1,654	46,445	31,876	
_	255,782	588,813	44,193	888,788	967,965	
Staff costs: Wages and Salaries Social Security Costs Pension Costs				212,534 20,899 22,349 255,782	201,526 20,138 21,209 242,873	
The average number of employees of the Society, calculated on a full time equivalent basis, during the year was :						
•				<u>2009</u>	<u>2008</u>	
Charitable activities				5.6	5.7	
Management and administration				1.2	1.3	
				6.8	7.0	

No employee of the Society earned in excess of £60,000, excluding pension contributions, during this or the preceding year.

No remuneration was paid or is payable to Trustees for service on the Board for the year (2008 - £Nil).

During the year 9 Trustees (2008 - 8 Trustees) received a total of £4,637 (2008 - £8,819) in reimbursement of expenses incurred on Society business. Prof S L Robinson received £2,950 for the the supply of training courses to the Society during 2009. No such payments were made during 2008.

Other external costs include :	<u>2009</u> £	<u>2008</u> £
Other Operating Leases	3,043	1,468

#### NOTES TO THE ACCOUNTS FOR THE YEAR ENDED 31 DECEMBER 2009 (continued)

6 INTEREST RECEIVABLE AND SIMILAR INCOME	6	INTEREST RECEIVA	ABLE AND	SIMILAR	INCOME
--	---	------------------	----------	---------	--------

	<u>2009</u> £	<u>2008</u> £
Income from Listed Investments	32,939	34,813
Interest on Bank Deposits	1,072	23,885
Distributions - CAF	2,540	2,490
	36,551	61,188

Long

#### 7 TANGIBLE ASSETS

	Leasehold				
	Land and	Office	Fixtures	Software	
	<u>Buildings</u>	<b>Equipment</b>	& Fittings	<u>Systems</u>	<u>Total</u>
_	£	£	£	£	£
Cost					
At 31 December 2008	314,306	116,503	42,297	506,315	979,421
Additions	-	-	-	25,537	25,537
Disposals	-	(2,839)	-	-	(2,839)
At 31 December 2009	314,306	113,664	42,297	531,852	1,002,119
Depreciation					
At 31 December 2008	94,290	84,668	35,774	490,284	705,016
Charge for the Year	6,286		1,009	20,128	44,193
Disposals	-	(1,420)	-	· -	(1,420)
At 31 December 2009	100,576	100,018	36,783	510,412	747,789
Net Book Amount					
At 31 December 2009	213,730	13,646	5,514	21,440	254,330
At 31 December 2008	220,016	31,835	6,523	16,031	274,405

Capital expenditure authorised but not contracted for at 31 December 2009 and not provided for in the accounts amounted to £Nil (2008 - £Nil).

The Trustees consider the market value of the Long Leasehold Land and Buildings to be materially in excess of the book written down value shown above.

The Trustees do not consider that the difference can be accurately defined without the benefit of a professional valuation.

#### NOTES TO THE ACCOUNTS FOR THE YEAR ENDED 31 DECEMBER 2009 (continued)

#### 8 LISTED INVESTMENTS AT MARKET VALUE

	Designated Reserve Fund £	Journal Risks Special Reserve Fund	TOTAL £	Designated Reserve <u>Fund</u> £	Journal Risks Special Reserve Fund	TOTAL £
Market Value at 1st January 2009	415,287	244,267	659,554	574,693	175,566	750,259
Additions at Cost	114,496	82,544	197,040	89,481	163,156	252,637
Proceeds on Disposal	(92,209)	(35,739)	(127,948)	(76,222)	(27,646)	(103,868)
Net Investment Gain /(Loss)	110,159	61,093	171,252	(172,665)	(66,809)	(239,474)
Market Value at 31st December 2009	547,733	352,165	899,898	415,287	244,267	659,554
Cost	490,285	332,054	822,339	490,131	295,487	785,618

All the above investments are listed on a recognised stock exchange in Great Britain, and fall within the wider range of investments as defined by the Trustees Act 1961.

The Society's narrower range of investments as defined by the Trustees Act 1961 is covered by deposits held at Rensburg Sheppards.

#### 9 CHARITIES AID FOUNDATION

At 31 December 2009 this investment is represented by 97,795 units (2008 - 93,519 units) of the Charities Aid Foundation Income Fund, having a market value of £59,068 (2008 - £57,701).

		2009 £	2008 £
	Market Value at 1st January 2009	57,701	54,202
	Additions at Cost	2,540	2,490
	Net Investment Gain /(Loss)	(1,173)	1,009
	Market Value at 31st December 2009	59,068	57,701
	Cost	61,366	<u>58,827</u>
10	DEBTORS		
		<u>2009</u> £	2008 £
	Trade Debtors	11,514	87,594
	Taxation Recoverable	20,581	27,431
	Prepayments	26,458	30,828
	Accrued Income	415,565	373,866
		474,118	519,719

#### NOTES TO THE ACCOUNTS FOR THE YEAR ENDED 31 DECEMBER 2009 (continued)

#### 11 **CREDITORS**

	<u>2009</u>	<u>2008</u>
	£	£
Trade Creditors	14,754	17,243
Taxation and Social Security	0	0
Accruals	21,525	45,632
Deferred Income	38,289	38,182
	74,568	101,057
Deferred income brought forward		38,182
Released to incoming resources during the year		(38, 182)
Deferred income arising in the year		38,289
Deferred income carried forward		38,289

#### **DESIGNATED FUNDS** 12

The funds of the charity include the following designated funds which have been set aside out of unrestricted funds by the trustees for specific purposes:

#### (1) Designated Reserve Fund

The designated reserve fund consists of resources of the Society which are represented by land and buildings, fixed asset investments and a cash deposit with the Society's investment brokers.

#### (2) Designated Charitable Projects Fund

	31 December <u>2008</u> £	<u>Transfers</u>	New <u>Designations</u>	Expenditure £	31 December <u>2009</u> £
Specific Future Projects	(302)	40,000	(16,975)	-	22,723
OR in Schools	-	-	11,975	(11,975)	0
Support for NATCOR PhD Conference	<u>-</u>	-	5,000	(5,000)	0
	(302)	40,000	0	(16,975)	22,723

#### (3) Designated Award Fund

The Designated Award Fund represents a legacy received in 2002. The Legator, Mrs May Hicks, expressed a non-binding wish that the Society uses its bequest to fund a bi-annual award to be determined by the Council of the Society. The legacy is currently invested in the Charities Aid Foundation Income Fund.

#### (4) Journal Risks Special Reserve Fund

The Journal Risks Special Reserve Fund was established to cover possible future falls in income from the Society's journals and is represented by fixed asset investments and a cash deposit with the Society's investment brokers.

#### NOTES TO THE ACCOUNTS FOR THE YEAR ENDED 31 DECEMBER 2009 (continued)

13 ANALYSIS OF NET ASSET	S BETWEEN FUNDS	_	Designated		Journal Risks	
		Designated		Designated	Special	
	General	Reserve	Projects	Award	Reserve	
	<u>Fund</u>	<u>Fund</u>	<u>Fund</u>	<u>Fund</u>	<u>Fund</u>	<u>Total</u>
	£	£	£	£	£	£
Tangible Fixed Assets	40,560	213,770	-	-	-	254,330
Investments	-	547,733	-	59,068	352,165	958,966
Cash Deposited with Investi	ment					
Brokers	-	66,176	56,730	-	18,008	140,914
Net Current Assets/Liabilitie	s 614,427	(1,279)	(34,007)	(6,450)	(655)	572,036
Total Net Assets	654,987	826,400	22,723	52,618	369,518	1,926,246
Reconciliation of movement unrealised gains/(losses) or investment assets:						
Unrealised gains at 31 Dec Realised investment (gains)		(74,845)	-	(1,125)	(51,221)	(127,191)
losses during the year	-	27,534	-	-	10,591	38,125
Net unrealised investment g (losses) arising during the		104,759	-	(1,173)	60,741	164,327
Unrealised (losses)/gains in	cluded					
in net assets at 31 Dec 20	009 0	57,448	0	(2,298)	20,111	75,261
14 DISPOSAL OF INVESTME	NTS					
14 DIOI COAL OF HAVEOURIE					Book	Realised
					Gain/(Loss)	
			Cost	Proceeds	on Disposal	Gain/(loss)
			£	£	£	£
Designated Reserve Fund		:	114,341	92,209	5,400	(27,532)

#### 15 PENSION FUND

**Journal Risks Special Reserve Fund** 

The Society contributes to individual pension schemes established for each individual employee. The assets of these schemes are held separately from those of the Society in independently administered funds. The pension charge represents contributions payable by the Society to the schemes and amounted to £22,349 (2008 - £21,209).

45,975

35,739

354 (105,902)

#### 16 CORPORATE STATUS

The Operational Research Society is a company limited by guarantee and is a registered charity, the objectives of which are the advancement of knowledge and education in operational research.



In the autumn of 1947, at a dinner discussion convened at the Athenaeum Club in London, it was decided to form an Operational Research Club. The Club was inaugurated in April 1948 with an initial membership of 50, under the chairmanship of Sir Charles Goodeve and with Mr J A Jukes as the first Secretary. The exclusivity associated with the word "Club" was deliberately chosen for the initial period, to ensure clarification of what was meant by operational research and to attempt to develop a wholeness in what was otherwise a somewhat vague field. The Club met regularly in the rooms at the Royal Society for technical discussions. By 1953 the initial objectives had been achieved and the pressure to form a normal "learned and professional" society had become strong. Therefore, the Club was transformed into the Operational Research Society, and its first President was Sir Owen Wansbrough-Jones and the Hon Secretary Mr B H P Rivett.

# **Presidents of the Society**

Sir Owen Wansbrough-Jones	1954/55
Sir William K Slater	1956/57
Professor M G Kendall	1958/59
The Earl of Halsbury	1960/61
Professor B H P Rivett	1962/63
Professor G A Barnard	1964/65
Professor R T Eddison	1966/67
Mr E C Williams	1968/69
Mr S Beer	1970/71
Professor K D Tocher	1972/73
Mr R C Tomlinson	1974/75
Mr A M Lee	1976/77
Professor M G Simpson	1978/79
Mr G H Mitchell	1980/81
Professor K B Haley	1982/83
Dr R S Stainton	1984/85
Professor JV Rosenhead	1986/87
Dr J C Ranyard	1988/89
Mr P N Thornton	1990/91
Professor C B Chapman	1992/93
Professor L C Thomas	1994/95
Mr I J Disley	1996/97
Professor R G Dyson	1998/99

Professor M Pidd	2000/01
Mr J Gibb	2002/03
Professor V Belton	2004/05
Professor J D Griffiths	2006/07
Mrs S M Merchant	2008/09
Professor R W Eglese	2010/11

# **OR Society awards**

# **Companion of Operational Research**

Sir Hermann Bondi	1983	Professor P Whittle	1994
Mr D Hicks	1983	Mr J Plymen 1994	
Professor R V Jones	1983	Professor S Vajda	1995
Professor B H P Rivett	1983	Professor K B Haley	1996
Mr H R W Watkins	1984	Professor M F Shutler	1996
Professor Sir David Cox	1985	Professor D J White	2001
Lord Ezra	1985	Professor K C Bowen	2001
Mr P Hughes	1985	Dr R A Forder	2005
Lord Zuckerman	1985	Professor F Kelly	2005
Sir John Kingman	1986	G K Rand	2005
Sir Dennis Rooke	1986	Dr J C Ranyard	2005
Sir Charles Carter	1987	Professor J V Rosenhead	2005
Mr T P Frost	1987	Dr J F Miles	2006
Professor H.Muller-Merbach	1988	Professor R G Dyson	2007
Mr D A Quarmby	1989	Mr E K G James	2007
Professor R C Tomlinson	1990	Professor J Friend	2008
Mr R A Showell	1991	Dr G Royston	2008
Mr G H Mitchell	1992	Professor R J Paul	2009

# **Goodeve Medal**

D.U.S.A. I		4076	4 B	4000
B H Mahon		1976	A Bouzaher	1993
R J M Bailey	1976		S Offutt	1993
N R Tobin		1977	D W Bunn	1994
I Sanderson		1979	E R Larsen	1994
A J Williams		1980	K Vlahos	1994
J G Shepherd		1981	G M Campbell	1995
F K Lyness		1982	C F Davis	1995
L P Fatti		1984	M Carey	1996
A H Christer		1985	D Lockwood	1996
W M Waller		1985	C M Yeats	1997
G Best		1987	T Rehman	1997
G Parston		1987	D-W Tcha	1998
J V Rosenhead		1987	T-J Choi	1998
D Rowland		1988	Y-S Myung	1998
I R Turner		1989	F Duckworth	1999
R Bandyopadhay		1990	A J Lewis	1999
S Datta		1990	J Banasik	2000
D Schrady		1992	J N Crook	2000
D Wadsworth		1992	L C Thomas	2000

K Korporaal	2001	P Tarnaras	2005
A Ridder	2001	J Turnbull	2005
P Kloprogge	2001	K Taylor	2006
R Dekker	2001	B Dangerfield	2006
S Howick	2002	S C Brailsford	2007
C Eden	2002	D Evenden	2007
J E Beasley	2003	V Harinda	2007
H Howells	2003	P Harper	2007
J Sonander	2003	A Medina-Borja	2008
R Hartley	2004	K S Pasupathy	2008
G Lanot	2004	K Triantis	2008
S C Brailsford	2005	D Ronen	2009
V Lattimer	2005	C A Goodhart	2009

# **Stafford Beer Medal**

JJ Jahng	2003	S Madon	2006
H Jain	2003	C Middleton	2007
K Ramamurthy	2003	W Cukier	2007
Rikard Lindgren	2004	S K Sia	2008
Dick Stenmark	2004	C Soh	2008
Jan Ljungberg	2004	C Ashurst	2009
S Sarker	2005	N Doherty	2009
S Sahay	2005	J Peppard	2009

# **Tocher Medal**

K Kotiadis 2007/8

## **PhD Prize**

K Kaparis 2008

# **President's Medal**

D R Corkindale	1976	J H Powell	1998
M L Chambers	1977	G Laporte	1999
R G Dyson	1977	F Semet	1999
M Sloman	1978	V V Dadeshidze	1999
J V Rosenhead	1979	L J Olsson	1999
P Doyle	1980	F Vasko	2000
J Fenwick	1980	H Gilles	2000
G P Savage	1980	D Bright	2000
D B Gilding	1981	V Kocatulum	2000
C Lock	1981	E Wolf	2000
B Fokkens	1982	J Moffat	2000
M Puylaert	1982	J J Race	2001
R S Hambleton	1983	D Burnell	2001
A W Nimmo	1984	M Neighbour	2002
C B Chapman	1985	M Acutt	2003
D F Cooper	1985	P Loader	2004
A B Cammaert	1985	M Bryant	2004
P Doyle	1987	P Bates	2004
J Saunders	1987	C McGuckin	2004
M Pidd	1988	D Kelly	2004
S R Clarke	1989	P Loucopoulos	2005
A H Christer	1990	KG Zagrafos	2005
K A H Kobbacy	1990	Y Pyrgiotis	2005
B C Dangerfield	1991	D Beis	2005
C A Roberts	1991	A Swain	2006
M B Wright	1992	A Ross	2006
C P Thunhurst	1993	A Lewins	2007
C J Ritchie	1993	M Sykes	2007
A Khakee	1994	A Moon	2007
K Stromberg	1994	M Allright	2008
J J Glen	1996	J Ball	2008
H Tsoukas	1997	D Pankhurst	2008
D B Papoulias	1997	I Wright	2008

# **Beale Medal**

J V Rosenhead	1992	R C Tomlinson	2005
D J White	1993	P Checkland	2006
A H Christer	1995	C Eden	2007
G H Mitchell	1998	L C Thomas	2008
H P Williams	1999	J D Griffiths	2009

# **Silver Medal**

Sir Charles Goodeve	1964	Sir Geoffrey Vickers	1975
Professor P M Morse	1965	Mr E.K.G.James	1979
Professor K D Tocher	1967	Professor E M L Beale	1980
Professor B H P Rivett	1968	Professor S Eilon	1982
Professor R T Eddison	1969	Professor G Dantzig	1986
Mr A M Lee	1970	Mr L V Kantorovich	1986
Professor R L Ackoff	1971		

# **Bronze Medal**

R M Adelson	1965	M F Cantley	1969
J Stringer	1967	F D Lyness	1970
T A Burgin	1967	A M Duguid	1972
A R Wild	1967	C G Moss	1972
D I Chambers	1968		