

*Annual  
Review  
2012*

Centenary of Crystallography

Front cover:  
Some crystal structures

Sodium chloride  
DNA (B form)  
Haemoglobin  
Common cold virus

These are not to the same scale!



**Leeds Philosophical  
and Literary Society**

**Annual Report and Review**

**2012**

The 192<sup>nd</sup> Annual Report of the Council  
at the close of the session 2011-12

*presented to the Annual Meeting held on  
5<sup>th</sup> December 2012*

and reviews of events and of grants awarded

THE LEEDS PHILOSOPHICAL AND LITERARY SOCIETY, founded in 1819, has played an important part in the cultural life of Leeds and the region. In the nineteenth century it was in the forefront of the intellectual life of the city, and established an important museum in its own premises in Park Row. The museum collection became the foundation of today's City Museum when in 1921 the Society transferred the building and its contents to the Corporation of Leeds, at the same time reconstituting itself as a charitable limited company, a status it still enjoys today.

Following bomb damage to the Park Row building in the Second World War, both Museum and Society moved to the City Museum building on The Headrow, where the Society continued to have its offices until the museum closed in 1998. The new Leeds City Museum, which opened in 2008, is now once again the home of the Society's office. In 1936 the Society donated its library to the Brotherton Library of the University of Leeds, where it is available for consultation. Its archives are also housed there.

The official charitable purpose of the Leeds Philosophical and Literary Society is (as newly defined in 1997) "To promote the advancement of science, literature and the arts in the City of Leeds and elsewhere, and to hold, give or provide for meetings, lectures, classes, and entertainments of a scientific, literary or artistic nature". The Society is keenly interested in cultural developments in Leeds and the region, and is constantly looking for new ways to further its aims.

*Application forms may be obtained from the Hon Treasurer and are also to be found on the Society's website.*

**Website:** [www.leedsphilandlit.org.uk](http://www.leedsphilandlit.org.uk)

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# THE LEEDS PHILOSOPHICAL AND LITERARY SOCIETY LIMITED

## LEGAL AND ADMINISTRATIVE INFORMATION

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<b>Constitution</b>	Company limited by guarantee. Registered number 177204 Registered charity number 224084
<b>Governing document</b>	Memorandum and articles adopted 2 July 1997.
<b>Members of Council (who are trustees for charity law and directors for company law)</b>	
<b>President</b>	A C T North BSc, PhD, CPhys, FInstP
<b>Vice-president</b>	C J Hatton BSc, PhD, CPhys, FInstP
<b>Treasurer</b>	C M Taylor BSc (Eng), MSc, PhD, DEng, FREng, FIMechE, FCGI
<b>Secretary</b>	J E Lydon BSc, PhD
<b>Other Council members</b>	R J Bushby BSc, DPhil (appointed 7.12.11) M Dagg, BSc, PhD, CPhys (resigned 7.12.11) J N Douglas BA, MA J R Evans TD, FCA (co-opted 5.7.12) P J Evennett BSc, PhD, Hon FRMS J M Hill BA, DPhil, DUniv, FEA (appointed 7.12.11) P N Hirschmann MSc, FDS, FRCR, DDR R Jakeways BSc, PhD, CPhys E A Nash C Paynton (resigned 7.12.11) E Reed MA, PhD (resigned 10.5.12) B F Richardson MA, MPhil, FBA M R D Seaward MSc, PhD, DSc, FLS P Wainwright BSc
<b>Registered Office</b>	c/o Leeds City Museum, Cookridge Street, Leeds, LS2 8BH
<b>Website</b>	<a href="http://www.leedsphilandlit.org.uk">www.leedsphilandlit.org.uk</a>
<b>Bankers</b>	Lloyds TSB 6/7 Park Row Leeds LS1 1NX
<b>Investment advisors</b>	Investec (formerly Rensburg Sheppards) 2 Gresham Street London EC2V 7QN
<b>Independent Examiner</b>	Katharine Widdowson ACA 406 Otley Road, Leeds LS16 8AD

# **THE LEEDS PHILOSOPHICAL AND LITERARY SOCIETY**

## **192<sup>ND</sup> ANNUAL REPORT FOR 2011-2012**

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The Council presents its report and financial statements for the year ended 30 September 2012. The financial statements comply with current statutory requirements and with the requirements of the Society's memorandum and articles.

### **CONSTITUTION**

The Society is a company limited by guarantee governed by its memorandum and articles of association. Membership is open to anyone on payment of an annual subscription of £18 which is due on 1 October each year. Only those members who have paid or have been elected to Honorary Membership are entitled to vote at the AGM. In the event of the Society being wound up, every person who is a member, or who has been a member within one year, is liable to contribute to the debts and liabilities of the Society a sum not exceeding £10.

### **STRUCTURE, GOVERNANCE AND MANAGEMENT**

The members of the Council are considered to be both directors for Companies Act purposes and trustees for Charities Act purposes. One third of the members of Council retire by rotation at each Annual General Meeting (normally held in December), when appointments or reappointments are made. The Council has powers to co-opt to its membership. Membership of the Council takes into account the need to have members with expertise to cover the variety of activities of the Society.

All members of the Society are notified prior to the AGM of the names of the Council members who are due to retire and are invited to submit nominations. Dr Dagg and Ms Paynton had resigned during 2011. The AGM held on 7<sup>th</sup> December 2011 approved the re-election of Dr J E Lydon and Professor A C T North, and the election of Professors R J Bushby and J M Hill as trustees and members of Council. During the year, Dr Reed resigned on the grounds of ill health and Mr J R Evans was co-opted to membership on 5<sup>th</sup> July 2012.

The Officers of the Society are elected by and from the members of Council at the first meeting of Council following the Annual General Meeting; at the Council meeting on 12<sup>th</sup> January 2012, Professor North was re-elected as President, Dr Lydon as Secretary, Professor Taylor as Treasurer and Dr Hatton as Vice-President. Council met on six occasions during 2011-2012. Parts of its business were delegated to the following committees: Grants, Events, Publications and Museums, chaired respectively by Dr Hatton, Mrs Wainwright, Mr Hirschmann and Professor North. These committees are required to act in accordance with the Society's Aims and Policies, and their recommendations are put to the Council for its approval.

Mr Norman Madill has continued as Assistant Secretary, managing the Society's links with its members, the sale of its publications (in association with Jeremy Mills Publishing Ltd), and other necessary administrative matters.

## THE SOCIETY'S AIMS AND ACTIVITIES

### General

The Society aims to promote the advancement of science, literature and the arts in the city of Leeds and its immediate area. In furtherance of this aim, which Council believes to be of benefit to the public in this area, the Council's policy has been to disburse its income as follows by:

- providing a programme of free public lectures relevant to the Society's aims
- supporting the work of the City of Leeds Museums & Galleries
- supporting other activities in Leeds of a scientific, literary or artistic nature.
- providing grants for purposes of research, publication, or artistic performance
- awarding prizes

### *Grant-making policy*

In making grants to promote the advancement of the Society's aims, the Council places particular emphasis on (but does not limit its grants to) the support of activities which directly benefit the citizens of Leeds or assist those engaged in academic and scholarly activities relating to Leeds and its immediate area. It does not normally give grants in general support of students on taught courses. The value of grants is normally in the range £100 to £2,000, although this limit may be exceeded in special circumstances. The Council is keen to support new endeavours by the award of 'pump-priming' grants.

## ACHIEVEMENTS AND PERFORMANCE

During the 2011-2012 session, the Society continued its recent successes in fulfilling its aims as listed above, including a programme of artistic and scientific events for members and non-members as detailed below. During the year the Society lost 11 members through resignation or death and welcomed 18 new members, so that at the end of September 2012 the total number stood at 189.

### *Events*

The regular monthly events covered a wide range of topics as usual and were always well supported both by Society members, guests and members of the public. The following events took place:

- Professor Mark Seaward *The role of lichens in shaping our world*
- Professor Alan Walker *Public Education in Science – explaining the 'God particle'*
- *Launch of public appeal for funds to purchase the West Yorkshire Hoard*
- Mike Hoyland Pre-Bonfire-Night Spectacular
- Sir John Meurig Thomas *The Stoner lecture – the genius of Michael Faraday*  
(Joint lecture with the University of Leeds, School of Physics & Astronomy)
- The Priestley Lecture: Dr Patrick Eyres *The case of Wentworth – the Georgian battle of the follies*
- Annual General Meeting and Dinner, with after-dinner speaker, John Battle *Engineering, poets and politics: the character of Leeds*
- Danielle Miles *Can protein-like gels be used to cure back pain?*
- Eddie Edmundsen *Colonel North, "Nitrate King"*
- Professor George Brooke *The Dead Sea Scrolls and the Bible*
- Dr Alan Ogden *Facial Reconstruction in Archaeology*
- Professor Derek Fraser *The Welfare State: Past and Present*
- Dr Joann Fletcher *Female Pharaohs*
- Summer visit to Standedge Tunnel, The Red House and Oakwell Hall
- *An evening with Professor David Cooper, School of Music, Leeds*

## **Grants and Prizes**

During the year the following grants and prizes were awarded by the Society:

- to support a bursary appeal for the Yorkshire Youth Choir Residential Course 2012
- to provide additional support to the Leeds Museums and Galleries to enable them to achieve the purchase value (£171k) of the Anglo-Saxon hoard
- towards the recording costs of a CD of vocal and choral compositions by Champs Hill records
- to bring 3 international performance groups to Leeds to celebrate disability and wellbeing at a new Festival for Leeds. ‘LUDUS’
- towards the publication of the proceedings of a conference held at Wentworth Castle entitled ‘Jacobites and Tories, Whigs and True Whigs: Political Gardening in Britain, c.1700-c.1760’
- towards the publication costs of ‘*A Potted History – The Experimental Gardens of the University of Leeds*’
- to help fund the presence of Carol Ann Duffy, Poet Laureate, at Leeds Parish Church when it became a Minster on 27<sup>th</sup> September 2012
- towards the purchase of a Post-Medieval gold seal matrix by Leeds Museums and Galleries
- towards the cost of staging the Science Fair at the 2012 Otley Science Festival
- to pay for the pianist’s fees for a new opera, *Amy’s Last Dive*, performed at the Workshop Theatre, Leeds in June 2012
- towards the costs of research into the history of Jewish culture in Leeds
- to support a series of public concerts by the School of Music of the University of Leeds aimed at young children (5 – 11 years) and their parents
- to the Yorkshire Archaeological Society to support the cataloguing of their collection of Ralph Thoresby’s letters
- Arthur Chadwick Prize: Robert Schiffrian, B.Sc. Biochemistry (1st class Honours)
- Modern Languages Prize: Clare Poolman, B.A. French and International Development

## **Publications**

The Society has agreed to the joint publication with the Thoresby Society of the second edition of *Walks Round Redbrick* by the late Maurice Beresford, revised by Christopher Hammond, to be published in 2013.

## ***The Leeds City Museum***

As before, we have continued to enjoy a good relationship with the staff of the Museums, to whom we are most grateful for their collaboration. It has been helpful that Mr John Roles, the Head of Museums and Galleries, has attended a number of Council meetings. Council meetings have continued to be held in the Museum Denny Room. The Museum’s arena again provided a splendid theatre for our ‘pre-bonfire night spectacular’.

The Museums Committee, comprising representatives from the Council and the Leeds Museums Service, has met twice in the course of the year and provides a valuable meeting place to discuss collaboration in the planning of events and the best use of grants for supporting the museum.

## **FINANCIAL REVIEW**

The Society's budget aims to fund its events, grants and publications from its income. The Society's financial position has been monitored regularly by the Council and in discussions with representatives of Investec Wealth and Investment, our investment advisers. Dividend income from investments within the financial year reflected a 13% decrease from the previous year, a return of about 4.5%, although the market value of the Society's fixed assets investments has increased by nearly 10%. The investment advisers continue to work towards achieving the level of income that the Society has previously enjoyed. Our liquid reserves in the Charities Deposit Fund have decreased slightly but the overall general unrestricted funding base of the Society has increased by some 9% to about £396,000 . There remains a significant sum yet to be paid out for grants for which a commitment has been given.

### ***Reserves policy***

The Society's reserves comprise an unrestricted fund derived from past benefactions and its annual subscriptions, including the proceeds from the sale of the Philosophical Hall to Leeds City Council in 1921. The fund has increased in value over the years as income exceeded expenditure. Since the Society adopted its new constitution in 1997, Council's aim in the medium term has been to balance its expenditure and income without depleting the capital value of its investments. The Society's income and expenditure do, however, vary from year to year depending on a number of factors. The Council therefore considers it prudent to hold liquid reserves in the Charities Deposit Fund and current bank account. The policy on reserves is reviewed annually by the Council as part of its annual budget review.

### ***Investment policy***

There are no restrictions in the Society's Memorandum and Articles on the Society's power to invest. The Council's investment objectives are to maintain a level of income sufficient to fund the Society's activities, while maintaining the capital value of its invested assets over the long term in line with inflation. To this end, it is the Society's normal practice to reinvest realised gains on its assets. The Council has delegated the management of its investments on a discretionary basis to Investec Wealth and Investment.

### ***Risk management***

- 1) Income: The investment managers pursue an active investment policy on the Society's behalf. The arrangements are regularly reviewed by the Trustees.
- 2) Expenditure: Expenditure on *individual* Grants, Publications and Events usually represents a small part of total expenditure and risks are minimised by standard procedures for authorisation of all financial transactions. The potential risks at the Society's events are considered as part of the planning for them, and appropriate steps are taken, including the arrangement of Public Liability insurance as necessary.
- 3) The quality of the Society's Events and Publications and the outcome of Grants that have been awarded are reviewed by the Trustees at their regular meetings so as to ensure that all the Society's activities are of a high standard consonant with its Aims.

The Society has taken advantage of the small companies' exemption in preparing this directors' report.

*Approved by the members of the Council on 8 November 2012, and signed on their behalf by*

*A. C. T. North (President) and C. M. Taylor (Treasurer)*

**STATEMENT OF FINANCIAL ACTIVITIES  
FOR THE YEAR ENDED 30 SEPTEMBER 2012**

	Note	2012	2011
		£	£
<b><i>Incoming resources from generated funds</i></b>			
<i>Voluntary income:</i>			
Subscriptions and donations		3,825	3,749
<i>Investment income:</i>			
Dividends		16,009	18,422
Interest receivable		277	194
<b><i>Incoming resources from charitable activities</i></b>			
Sales of publications	2	491	151
Income from events		3,660	5,148
<b>Total incoming resources</b>		<b>24,262</b>	<b>27,664</b>
 <b><i>Resources Expended</i></b>			
<b><i>Costs of generating funds</i></b>			
Investment management fees		3,438	3,425
<b><i>Charitable activities</i></b>			
Costs of publications	2	443	-
Grants payable	3	11,225	7,960
Other charitable activities	4	2,108	2,236
Cost of events		4,110	5,323
		<b>17,886</b>	<b>15,519</b>
<b><i>Governance costs</i></b>	5	<b>4,163</b>	<b>4,000</b>
<b>Total resources expended</b>		<b>25,487</b>	<b>22,944</b>
 <b><i>Net incoming/(outgoing) resources before other recognised gains and losses</i></b>			
		(1,225)	4,720
Other recognised gains and losses			
<b>(Losses)/Gains on investment assets:</b>			
Realised	6	2,106	(583)
Unrealised	6	32,914	(13,221)
		<b>35,020</b>	<b>(13,804)</b>
 <b>Net movement in funds</b>			
<b><i>Reconciliation of funds</i></b>			
Fund balance brought forward		<b>362,042</b>	<b>371,126</b>
 <b>Fund balance carried forward</b>		<b>395,837</b>	<b>362,042</b>

The Society had no recognised gains or losses other than those shown above.

The notes on pages 11 to 14 form part of these accounts.

**BALANCE SHEET**  
**30 SEPTEMBER 2012**

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	Note	2012 £	2011 £
<b><i>Fixed assets</i></b>			
Investments	6	369,135	336,972
<b><i>Current assets</i></b>			
Debtors	7	2,555	2,905
COIF Charities Deposit Account		29,138	32,371
Bank current account		6,290	4,241
		<hr/> <hr/> 37,983	<hr/> <hr/> 39,517
Creditors: amounts falling due within one year	8	(11,281)	(14,447)
<b><i>Net current assets</i></b>		<hr/> <hr/> 26,702	<hr/> <hr/> 25,070
		<hr/> <hr/> 395,837	<hr/> <hr/> 362,042
<b><i>Funds</i></b>			
General Fund - unrestricted		<hr/> <hr/> 395,837	<hr/> <hr/> 362,042

For the year ended 30 September 2012 the company was entitled to exemption from audit under sections 475 and 477 of the Companies Act 2006.

No member eligible to do so has required the company to obtain an audit of its accounts for the year ended 30 September 2012 in accordance with section 476.

**Directors' responsibilities:**

- The directors acknowledge their responsibilities for complying with the requirements of the Companies Act 2006 with respect to accounting records and the preparation of accounts.
- These accounts have been prepared in accordance with the special provisions in part 15 of the Companies Act 2006 relating to small companies.

Approved by the Members of Council on 8 November 2012 and signed on their behalf by:

A C T North

President

C M Taylor

Treasurer

The notes on pages 11 to 14 form part of these accounts.

# NOTES TO THE ACCOUNTS FOR THE YEAR ENDED 30 SEPTEMBER 2012

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## 1 Accounting policies

### Basis of accounting

The accounts have been prepared using the historical cost convention except for the inclusion of investments at market value, and in accordance with the Statement of Recommended Practice "Accounting and Reporting by Charities", the Financial Reporting Standard for Smaller Entities and the Companies Act 2006.

### Investment income

Investment income is credited when due, together with any corresponding income tax recoverable.

### Publication costs

All costs of academic publications are carried forward until publication and written off in that year. No value is assigned to any stocks the Society holds of earlier publications.

### Grants payable

Grants payable are voluntary payments to individuals or organisations in furtherance of the Society's objectives. Grants are accounted for when they have been approved by the council and the recipient has been told of that approval.

### Governance costs

Governance costs are the costs of administering the charity, including communicating with members.

### Fixed assets investments

Fixed assets investments are revalued at market value at the year end. All gains and losses, whether realised or unrealised, are reported on the Statement of Financial Activities.

## 2 Publications

	2012	2011
	£	£
Income from Society's publication sales	<u>491</u>	<u>151</u>
<i>Costs of academic publications:</i>		
Reprinting "Leeds Mummy - Nesyamun" booklet	<u>443</u>	<u>-</u>

	2012 £	2011 £
<b>3 Grants payable</b>		
Projects or organisations (7 grants)	5,525	270
Individuals (1 grant)	1,000	930
Leeds City Council (2 grants)	2,200	5,510
University of Leeds (3 grants)	2,000	750
University of Leeds for prizes	500	500
	<hr/> <hr/> <hr/>	<hr/> <hr/> <hr/>
	11,225	7,960
	<hr/> <hr/> <hr/>	<hr/> <hr/> <hr/>

The grant recipients are listed in the Annual Report for the year.

#### **4 Other charitable activities**

Public lectures and fireworks demonstration	2,108	2,236
	<hr/> <hr/>	<hr/> <hr/>
	2,108	2,236

#### **5 Governance costs**

Annual Review 2011	208	332
Stationery	95	389
Telephone & postage	879	481
Insurance	350	348
Sundries	31	37
Accountancy and independent examination	600	600
Assistant secretary's honorarium	2,000	1,813
	<hr/> <hr/>	<hr/> <hr/>
	4,163	4,000
	<hr/> <hr/>	<hr/> <hr/>

The costs for stationery, postage and the assistant secretary's honorarium include an element of support costs for grant making and publication sales. This is not material and cannot be easily identified.

No remuneration has been paid to any trustee in the year. No expenses (2011 - £nil) were reimbursed to trustees.

## 6 Fixed asset investments

	Listed Investments	Cash for investment	Total 2012	Total 2011
	£	£	£	£
Market value at 1 October 2011	330,279	6,693	336,972	353,620
Disposals at opening market value	(69,691)	-	(69,691)	(123,399)
Cash reinvested	-	10,460	10,460	9,169
Investment management fees	-	(3,370)	(3,370)	(3,451)
Acquisitions at cost	61,850	-	61,850	114,254
Net gains on revaluation	32,914	-	32,914	(13,221)
Market value at 30 September 2012	355,352	13,783	369,135	336,972
Historical cost at 30 September 2012	360,002	13,783	373,785	369,996
Proceeds of disposal of investments			71,797	122,816
Realised gain			2,106	(583)

### Analysis of investments

	Market value	
	2012	2011
	£	£
UK equities including unit trusts	157,131	140,296
International equities and property, including unit trusts	89,795	81,756
Gilts, bonds and fixed interest stocks	108,426	108,227
Cash held by investment managers	13,783	6,693
	369,135	336,972

### Material investments (over 5% by value of portfolio)

2% Treasury Stock 2016	-	22,702
HSBC Infrastructure ord 1p	-	17,400

	2012 £	2011 £
<b>7 Debtors</b>		
Income tax recoverable	92	99
Investment income	1,314	2,630
Sundry debtors and prepayments	1,149	176
	<b><u>2,555</u></b>	<b><u>2,905</u></b>

	2012 £	2011 £
<b>8 Creditors: amounts falling due within one year</b>		
Trade creditors	1,290	1,740
Grants approved but not yet paid	7,950	10,725
Accrued expenses	2,041	1,982
	<b><u>11,281</u></b>	<b><u>14,447</u></b>

## The year's finances at a glance

We are required by law to set out our finances in the form given in the preceding pages. It may however be helpful to set the Society's finances during the financial year in a different context. The Society sets a broad budgetary aim of funding its events, grants and publications from income during any financial year. To this end a budget is drawn up and approved by Council to attempt to achieve a balance between income and expenditure, determined on a receipts and payments basis, for the financial year. The pie charts for income and expenditure during the 2011-12 financial year are presented below.

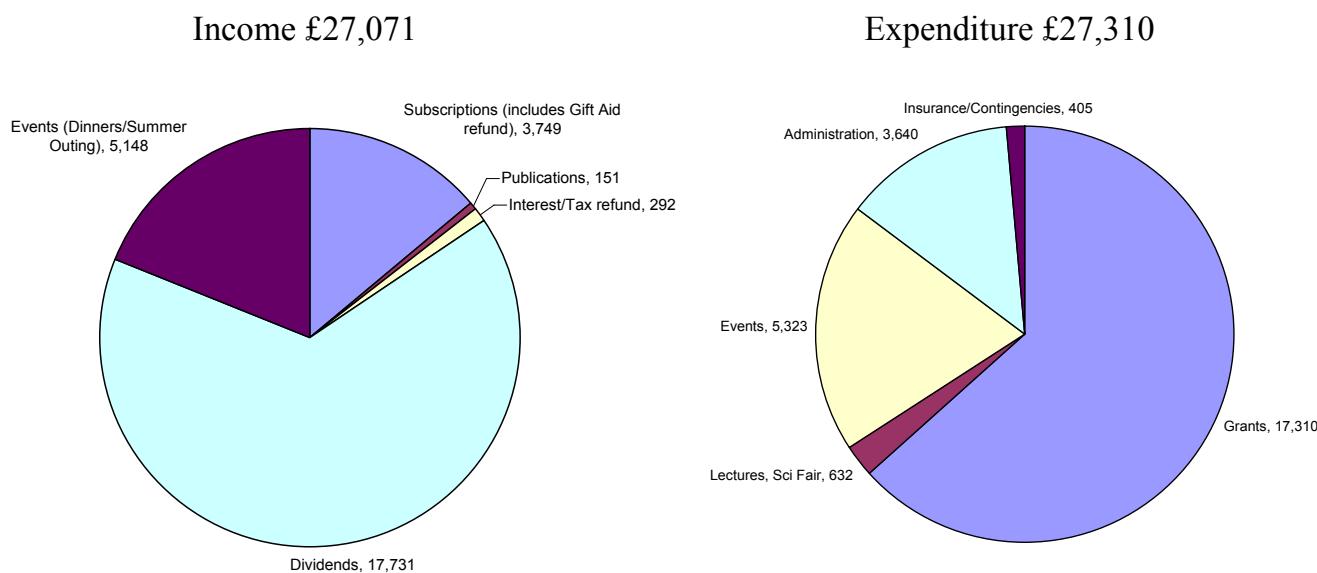
The only adjustment to the figures presented on the pie charts compared to the actual in-year receipts and payments is to the expenditure on grants. This is because during any financial year grant payments are related not only to the grants awarded during that year but also to grants awarded in previous years i.e. grant payments approved but not yet paid are carried over to the next financial year. In order to avoid this distortion in assessing the in-year income/expenditure balance, the grants expenditure of £11,225 in the Expenditure

pie chart is the total for grants awarded through Council for the financial year 2011-12. In fact £2,450 of this has not yet been paid. Also there are still grants totalling £5,500 relating to previous financial years to be settled. A further point is that the budget for grant awards for 2011-12 was set at £13,000 so that the expenditure approved was under spent by £1,775.

There are particular matters relating to expenditure items to be noted. The figure of £3,621 for the support of lectures and the Science Fair is this year significantly higher than usual. This relates to the settlement of a very late invoice from the School of Music at the University of Leeds of £2,114 representing a charge for the use of the lecture room and security staff for fourteen Society lectures since July 2010. This increase was however pretty much balanced by the expenditure under-spend on grants referred to above. Also the expenditure on publications was anticipated to be about £1,500 higher, but the book associated with this budget item has not yet been published. When this latter payment is actually made, and the sum added to the expenditure total on the pie chart, there is a good balance with the income total. There is a certain serendipity regarding this balance noting also that the income from dividends was £1,121 down on budget. The fall in events income/expenditure from the last financial year is because the second dinner during the financial year was held in late September 2012 and will be accounted for in the 2012-13 financial year. However the difference between events income and expenditure is small, as normal, representing hospitality for guests.

Dividends amounted to some 69% of the income and Subscriptions (plus gift aid) 16%. The administration costs representing 17% of expenditure include an honorarium, the accountant's fee, stationery, photocopying, telephoning, postage and printing. Grant payments will represent 50% of the expenditure when completed.

Emeritus Professor C M Taylor, Hon. Treasurer



## Presidents

*(since the foundation of the Society)*

1820-26	John Marshall	1919-22	Sydney D Kitson, MA, FSA, FRIBA
1826-28	Revd W H Bathurst, MA	1922-24	Arthur J Grant, MA
1828-31	Michael Thomas Sadler, MP	1924-26	Walter Garstang, MA, DSc, FZS
1831-33	William Hey	1926-28	Edwin Hawkesworth
1833-35	James Williamson, MD	1928-30	F W Branson, FIC
1835-37	Revd Joseph Holmes, MA	1930-32	E O Dodgson
1837-40	Revd Richard Winter Hamilton	1932-34	A Gilligan, DSc, FGS
1840-42	Adam Hunter, MD	1934-36	R Whiddington, MA, DSc, FRS
1842-45	John Hope Shaw	1936-39	Hugh R Lupton MC, MA
1845-50	Revd William Sinclair, MA	1939-46	W M Edwards, MC, MA
1850-51	William West, FRS	1946-48	E A Spaul, DSc, PhD
1851-54	Revd Charles Wicksteed, BD	1948-50	W L Andrews
1854-57	John Hope Shaw	1950-52	J N Tetley, DSO, LLD
1857-58	James Garth Marshall, FGS	1952-54	Terry Thomas, MA, LLD, BSc, PhD
1858-59	Revd W F Hook, DD	1954-56	H C Versey, DSc, FGS
1859-61	Revd Alfred Barry, MA	1956-58	H S Vick, JP
1861-63	Thomas Pridgin Teale, FRS	1958-60	H Orton, MA, BLitt
1863-66	Revd Thomas Hincks, BA	1960-62	Sir George Martin, LLD, JP
1866-68	Charles Chadwick, MD	1962-64	E J Wood, MA
1868-72	John Deakin Heaton, MD	1964-66	R D Preston, DSc, FInst P, FRS
1872-74	Revd Canon Woodford, DD	1966-68	J le Patourel, MA, DPhil
1874-76	J I Ikin, FRCS	1968-70	G P Meredith, MSc, MEd, PhD
1876-78	Revd J H McCheane, MA	1970-72	J G Wilson, MA, PhD, FInst P
1878-81	T Clifford Allbutt, MD, FRS	1972-74	J Taylor, MA
1881-83	Revd John Gott, DD	1974-76	H Henson, DSc, PhD, FRES
1883-85	J E Eddison, MD	1976-78	P R J Burch, MA, PhD
1885-86	Edward Atkinson, FLS	1978-81	R Reed, MSc, PhD
1886-89	Thomas Marshall, MA	1981-83	Lord Marshall of Leeds, MA, LIB
1889-92	Thomas Pridgin Teale, MA, FRS	1983-85	B R Hartley, MA, FSA
1892-94	Revd J H D Matthews, MA	1985-87	D Cox, BA, ALA
1894-96	Revd Charles Hargrove, MA	1987-89	B Colville, MB, BS, FRCGP
1896-98	Edmund Wilson, FSA	1989-91	I S Moxon, MA, BA
1898-00	Nathan Bodington, MA, LittD	1991-93	R F M Byrn, MA, PhD
1900-02	J H Wicksteed, President InstME	1993-95	Mrs J E Mortimer, BA
1904-04	Arthur Smithells, BSc, FRS	1995-97	A C Chadwick, BSc, PhD, DSc, CBiol, FIBiol, FRGS
1906-06	J E Eddison, MD	1997-99	O S Pickering, BA, BPhil, PhD, DipLib
1906-09	E Kitson Clark, MA, FSA, MInstCE	1999-03	P J Evennett, BSc, PhD, Hon FRMS
1909-11	Revd J R Wynne-Edwards, MA	2003-06	M R D Seaward, MSc, PhD, DSc, FLS
1911-12	C T Whitmell, MA, BSc, FRAS	2006-09	C J Hatton, BSc, PhD, CPhys, FInstP
1912-14	P F Kendall, MSc, FGS	2009-11	A C T North, BSc, PhD, CPhys, FInstP
1914-17	Revd W H Draper, MA		
1917-19	James E Bedford, FGS		

## Life Members

Byrn, Dr R F M	Moxon, I S
Day, N	Pantin, Dr H M
Laurence, Miss M	Tetley, R J

## Subscribing Members, as at 31.12.2012

Adamthwaite, Professor A P	de Pennington, Mrs J	Hill, Professor J M
Addlesstone, Dr M	Devereux, Dr T A	Hindmarch, Professor I
Alexander, Professor R McN	Diamond, N	Hirschmann, P N
Andrews, Professor R A	Dodson, Mrs H I	Hoyland, M
Archenhold, W F	Douglas, Ms J N	Hope, Professor T E J
Arnold , J O	Dowson, Professor D	Jakeways, Dr R
Ash, D	Drewett, Dr R	James, M
Baker, Dr R A	Drife, Dr D	Jenkins, Professor E W
Barker, Ms J	Eastabrook, Ms G	Johnson, Dr C L
Bates, J	El-Hassani, M R	Jones, Mrs R L
Beddows, Professor C G	Evans, J R	Kellerman, Mrs S
Bellerby, Mrs E	Evennett, Dr P J	King, Dr M H
Bielby, N	Eyres, Dr P J	Kirby, Revd Dr D A
Blair, Professor G E	Farmer, P J	Knapp, Dr D G
Blair, Dr M	Finnigan, R E	Knowles, R
Boothroyd, K	Fletcher, Mrs C	Lance, Professor C E
Bower, Dr D I	Fletcher, Dr C R	Lawson, P W G
Briggs, M	Forbes, Mrs M	Lee, Mrs A
Britten, E A	Forster, G	Lees, R
Brown, Mrs C	Gaunt, Dr G	Lenton, Mrs C
Bushby, Professor R J	Godfrey, Ms M A	Leszczynski, T
Butlin, Professor R K	Gooday, Professor G	Lewis, Dr E L V
Cecil, Hugh	Gosden, Dr M S	Lockett, Dr A
Chadwick, P R P	Grady, Dr K	Lydon, Dr J E
Chadwick, Mrs A L	Gray, Professor P	Lynch, Ms K
Chesters, Dr M S	Griffin, Mrs E	McCleery, Dr I
Childs, Professor W	Griffiths, Dr W K	McTurk, Professor R
Collins, C J	Hall, Dr K	Madill, N
Colville, Dr B	Hammond, Dr C	Maunder, Mrs S
Conaboy, A	Hann, Professor M A	Meadowcroft, M
Cooper, Miss E	Harrison, Mrs H	Meredith, Professor P
Crosswell, R	Harrison, M R	Mill, Dr P J
Cruse, J	Hatton, Dr C J	Millner, Dr P A
Dagg, Dr M	Henderson, A	Monaghan, J J
Dalton, Dr S	Henderson, Professor P J F	Morgan, Professor G J

Morgan, J	Rushton, Professor J G	Taylor, Professor C M
Morris, A	Rastall, Professor G R	Taylor, Professor D
Muller, A E W	Rawnsley, Dr S J	Temple, Mrs M
Murphy, K	Reed, Dr E	Thomas, M E
Nash, Cllr Mrs E A	Salinger, Dr D	Thomas, P
Newiss, Miss J	Savage, Professor M D	Thornton, Dr D
Nix, P J	Seaward, Professor M R D	Turton, Dr A
North, Professor A C T	Sellen, Dr D B	Unsworth, Dr R
North, Bill	Sentug, Ms Ala	Wagstaff, Mr P
Oakshott, Ms J, MBE	Sharp, Dr P R	Wainwright, M
Olakulehin, F	Sherwin, Dr J R	Wainwright, Mrs P
Oughton, J	Slomson, Dr A	Watson, Professor A A
Parker, Dr K D	Smith, Mrs A	Webster, I C
Parry, Professor G	Smith, Mrs D	Welch, Dr R B
Parsons, Dr M R	Smith, W	Wesley, Mrs J
Paynton, Ms C	Smithson, R T	Widdowson, Mrs J
Peacock, Mrs A	Sowrey, Dr J T	Wilson, Miss C A
Peat, Dr D W	Speakman, Dr P T	Wilson, Mrs J
Pickering, Dr O S	Stafford, Professor P A	Winn, P
Plant, Mrs I	Stephenson, Mrs A	Wood, S J
Proctor, Ms J	Sunderland, Dr P	Wood Robinson, Mrs V
Reynolds, P	Suter, Mrs P A	Wrathmell, Ms S P
Richardson, Professor B F	Sutton, Dr S L	Wright, Dr P G
Robson, Ms R M	Swire, Ms L M P	Wyatt, Dr H V
Roche, Mrs G M	Taggart, Ms L	Yates, B J
Roots, Dr L	Tannett, P G	



## **Reports of Events held during 2012**

*Editor's note: the events described below cover the calendar year 2012 and therefore differ from those listed in the Annual Report section of the Review, for the financial year 1 October 2011 to 30 September 2012.*

### **Can protein-like gels be used to cure back pain? – Danielle Miles**

**19 January 2012**

Adjacent vertebrae in the spinal column are separated by doughnut-like disks which act as shock absorbers, and degeneration of the disks is a major contributor to the back pain suffered by 80% of men and women, at a substantial cost to the individuals concerned and to national productivity. Traditional methods of treatment have included fusion of adjacent vertebrae after removal of the disk, which may worsen the pressure on neighbouring disks, or total disk replacement, which also is difficult to achieve satisfactorily.

Danielle's research has been aimed at an alternative approach. The intervertebral disks comprise the *Annulus fibrosus*, essentially a firm but flexible outer enclosure, surrounding a jelly-like interior, the *Nucleus pulposus*. This interior has a high water content, and disk degeneration results from a loss of interior fluid as a result of trauma or long-term use.

The objective of the research has been to obtain a substance that could be injected into a disk in order to restore its shape and flexibility. The natural gel consists of proteoglycans, a complex of proteins and polysaccharides, which attract a high content of water into the disk. To mimic this, the first step was to design a synthetic peptide (a very short protein chain), and it was decided to make chains containing 11 amino acids; amino acids are the building blocks of natural proteins of which there are 20 varieties whose protruding side chains have a range of properties – some with a 'greasy' nature which would repel water, while attracting each other, some with positive or negative charges that would attract water or other charged molecules. The choice and order of these was such that the synthesised molecules would form a flat zig-zag ribbon with alternate side chains pointing in opposite directions (this arrangement had been found by W T Astbury in Leeds some 75 years ago as the structure of silk fibres). With appropriate choice of amino acids, the synthetic chains could be made to associate into pairs, which would further assemble into ribbon-shaped fibrils.

A range of these 11-unit-long peptides was synthesised with different arrangements of the amino acids. Transmission electron microscope studies of the resulting molecules identified those that formed into the best ribbons and rheological tests were then carried out to select those that had the gel-like properties that corresponded most closely to those of the natural disks. A second major component of the natural disks comprises small molecules, glycosaminoglycans (GAGs), and the ratio of GAGs to peptides has a major role in the properties of the complexes, varying from solid-like to liquid-like gels, and their ability to attract water.

Once the most appropriate composition had been established, a further step was to solve the method of injecting the gel into a collapsed disk. A gel of the required stiffness could only be injected through a very coarse syringe needle, which would be painful and disruptive of the outer 'skin' of the disk. It had now been found that the 'operation' could be carried out in two steps: first, to inject the liquid-like peptide gel, then to inject the solution of GAG molecules, which interact with the peptides to give the final desired effect of a water-containing gel of suitable stiffness.

Danielle emphasised that we were still some distance from a clinically acceptable product; more fine-tuning of the molecules' properties was required and more sophisticated injection methods had to be found, but undoubtedly much progress had been made.

The project involved familiarity with a wide range of scientific fields, including chemistry, physics, biology, engineering and medicine. Danielle acknowledged her research supervisors and her sources of funding. The size and composition of the audience showed widespread interest in the topic, and the quality of her presentation left us fully appreciating the reasons for which she had been awarded her Faculty's Postgraduate Researcher of the Year Award for 2011.

### ***Anthony North***

#### **Colonel North the “Nitrate King” – William “Eddie” Edmundson**

**16th February, 2012**

In Leeds, Colonel North's name is known chiefly because he gave Kirkstall Abbey to the city in 1889. How this came about, however, is less well known. Mr Edmundson read a little vignette, in the Yorkshire accent of the three *dramatis personae* concerned (despite his admission that he came from the other side of the Pennines), which explained how it happened. Colonel North's breakfast was interrupted one day at his London home by two Yorkshiremen bringing the news that the Abbey was coming up for auction. After questioning the two as to whether or not they had had breakfast – no, they hadn't – Colonel North then asked why Leeds Borough wasn't buying the historic site for the city. Leeds hadn't got the money, they replied. Well, countered North, wire Leeds and tell them I'll buy it.

How had this son of a coal merchant become so wealthy that he thought nothing of writing a cheque for £10,000 (about £1m at today's values)? The story of his rise to riches – he was also famous enough to be much-caricatured in his day – was entertainingly told by Eddie Edmundson, whose interest in Colonel North began when researching into the British presence in Chile while he was Director of the Chilean-British Institute in Concepcion.

North's reputation as benign benefactor in his native Leeds contrasts with a more critical view in Chile, however, where some have described him as a predatory capitalist. Eddie Edmundson told us how this intriguing character rose from a mechanic's apprenticeship in Hunslet in the 1860s to dominance of the nitrate business in Chile before adding a bank, water, coal and steamship investments to his portfolio. It was said in Chile that air was the only element he didn't run.

Returning to England, flush with government mining licences bought cheaply, North reinvented himself as a country gentleman, buying Avery Hill House in Eltham near London and spending an almost unimaginable £200,000 on renovations. Only a fragment of the mansion now remains after bombing in the last war, leaving the oddity of a Listed Loo, and winter gardens which are being restored by its current owners, Greenwich University.

By the late 1880s North had begun to sell the nitrate shares that had been the foundation of his fortune, investing in coal in South Wales, rubber, gold – and a luxury hotel in Ostend, the latter never realised because North died of heart failure at the age of 54.

Having written the biography of Col North (who was entitled to use his rank through his appointment as Honorary Colonel of Tower Hamlets Volunteer Engineers), the speaker questioned whether he would have liked his subject. He thought he probably would. North's financial arrangements were dangerously close to fraudulent Ponzi schemes and asset-stripping, but he was generous, gregarious and a risk-taker, and loyal to his Yorkshire roots.

### **Penny Wainwright**

## **The Genius of Michael Faraday – Sir John Meurig Thomas**

**23<sup>rd</sup> February 2012**

**(Stoner Colloquium, held jointly with the Dept of Physics and Astronomy, University of Leeds)**

The reputation of John Meurig Thomas had gone before him so that the large lecture theatre of the Business School was almost full. We were not disappointed. We were entertained and informed for ninety minutes and the length and warmth of the applause at the end spoke volumes.

Faraday was the son of a blacksmith who left school at 13, never went to University and never had more than a working grasp of mathematics. His big chance came while he was working as a bookbinder and errand boy, when he went to listen to a set of lectures given by Sir Humphrey Davy at the Royal Institution. Faraday wrote up his notes, bound them and presented them to Davy who was so impressed that he took Faraday on as an assistant. Undoubtedly Faraday learnt a lot from Davy (they worked together on the safety lamp) but a crucial stage in his scientific education was also when Napoleon Bonaparte invited Davy to Paris. This was the start of a scientific ‘Grand Tour’ of Europe 1813-1815 which brought Faraday into contact with many of the greatest natural philosophers of his day.

Faraday was devoutly religious and obsessed with the idea of the fundamental unity of the forces of nature. He is perhaps best remembered for the discovery of electromagnetic induction (the connection between electricity and magnetism) and the Faraday effect (the connection between magnetism and light) but he also demonstrated the fundamental ‘sameness’ of the electricity obtained by induction, the voltaic method and from biological sources like the electric eel. He discovered the first semiconductors, made the fundamental distinction between diamagnetism and paramagnetism and, through his work on liquid gases, came up with the idea of the ‘critical point’. He would undoubtedly have regarded himself as a natural philosopher rather than a physicist and he ventured into what these days we would call chemistry and biology. He studied the oxygenation of blood (the way that two paramagnetic compounds, oxygen and haemoglobin, combine to give a diamagnetic product, oxyhaemoglobin). He discovered benzene, the first organic photoreaction and, most importantly, established the laws of electrochemistry bringing order and clarity to a chaotic field of knowledge.

All of this was achieved in parallel with the very demanding role of Director of the Royal Institution where he gave hugely popular public lectures on every aspect of natural philosophy attracting large audiences including royalty and those from the ‘literary’ as well as the ‘scientific’ elite of his day.

Einstein regarded Faraday as the greatest physicist after Newton, few men other than Faraday could even have been considered to replace Shakespeare on the £20 note and no other scientist in the world has two units named in his honour.

## ***Richard Bushby***

## **The Dead Sea Scrolls and the Bible – Professor George Brooke**

**15<sup>th</sup> March, 2012**

This was a topic that attracted a lot of interest, judging by the full lecture theatre. Professor Brooke’s fluent and entertaining style held everyone’s attention, and his talk prompted a lively question-and-answer session at the end.

The first scrolls were discovered in 1947, found by a shepherd boy in caves at Qumran on the shores of the Dead Sea, in what is now the West Bank. Because they were written on leather, the boy took them to a cobbler - an antique dealer on the side - who bought three of the seven found.

Coincidentally, it was a leather expert from the University of Leeds, Dr Ronald Reed, who dated fragments of the scrolls by studying the collagen chains in the material. Owing to a shortage of funding, it wasn't until the 1960s that an international team of scholars worked on the manuscripts and much later, in 1991, that 15 scholars, including Brooke, were invited to study the texts. During the 1950s, further discoveries were made over a wide area – about 900 manuscripts in all –written between the 3rd century BCE and 1<sup>st</sup> century AD, on parchment, papyrus and one on copper, some stored in jars sealed with linen and tar. Until the discovery of the scrolls, all that scholars had had to work on were coins and bones. This new textual source changed the understanding of Jewish culture completely.

The scrolls showed that Judaism was religiously pluralistic. Many of them describe the sect of the Essenes; a number of fragments are concerned with ritual washing, borne out by the archaeological discovery of stone cups for the purpose. In the 1st century, the Roman author, Pliny, refers to the Essenes to the West of the Dead Sea and Josephus describes the sect “renouncing pleasure”.

Close study of the manuscripts revealed that the Jewish and Greek translations often differed from the Hebrew text of the scrolls. For example, the Greek translation of the book of Jeremiah was much shorter than the Hebrew and some elements appeared in a different order. Scribes would sometimes shorten a line to fit the page. Even the addition of a single letter could change a meaning. The familiar verse in Genesis, “And God called the light Day” (i.e. a 24-hour period), which is how it appears in the Rabbinical Bible and which is the basis of the English translation, is rendered “daytime” in the Qumran text. It was 4-500 years before the Bible canon became stable. Professor Brooke therefore emphasised that the text of scripture couldn't be idolised and the search for an “original text” was impossible.

No New Testament texts have been discovered among the scrolls, but some quotations taken from the Old Testament have now been found in the Qumran manuscripts with minor textual variations, while some references to events described in Acts were also to be found in the scrolls. Although written 200 years before Christ, some texts refer to the resurrection, so Jesus would have known the tradition of God in the Messianic age.

Were there any more texts to be discovered? Professor Brooke thought it likely, most probably when earth movements revealed new caves. The Rylands Professor at the University of Manchester could be busy for a while yet.

### **Penny Wainwright**

#### **Bringing the past to life – Dr Alan Ogden 26<sup>th</sup> April 2012**

More than 50 members and friends gathered in the School of Music on 26 April were both entertained and instructed by a graphically illustrated presentation on “Facial reconstruction in archaeology” by Dr Alan Ogden, currently a Research Fellow at Bradford University and formerly Clinical Lecturer at the Leeds Dental Institute. His graphic portrayal of his extensive anthropological and forensic work covered a wide spectrum of topics, ranging well beyond that of facial reconstruction, which were essential to the interpretation of human activities from the Neolithic to the 19th century. The complementary roles of art history, cremation, mummification (under hot + dry, cold + dry and frozen conditions) and chemical analyses were stressed for such interpretations. He also showed how sex and age could be determined from bones and teeth. However, the main theme centred on facial reconstruction, as exemplified by the remains of Gristhorpe Man, Tollund Man, medieval lepers, a medieval Scottish noblewoman, a naval officer

from Franklin's ill-fated expedition and composers (Bach & Haydn). One very interesting aspect of this work showed how an ageing face could be reconstructed, and thereby portrayed through a photographic sequence. However, it was the speaker's pioneering work on Gristhorpe Man that caught much of our attention: we are now able to fully appreciate this remarkable 4,000 year-old exhibit on permanent display in Scarborough's Rotunda Museum. Not only did we have a two-dimensional face peering at us from the past, but a three dimensional film sequence (with voice-over) addressed the audience. As indicated from the lively questions addressed to the speaker, and subsequent conversations after the event, those present were clearly spellbound by this most enjoyable and engrossing lecture.

### ***Mark Seaward***

### **The Welfare State: Past and Present – Professor Derek Fraser 17<sup>th</sup> May 2012**

There are few more characteristic aspects of the life of the United Kingdom since the second world war than 'The Welfare State'. In addressing his topic the speaker first looked back to welfare in the Victorian Era, focussing on the Poor Law Commission which was established to oversee relief for the poor after the Poor Law Amendment Act of 1834. The aim of the Act was to deter pauperism, and as a principle held that the pauper should be less 'eligible' than the most independent menial worker. This rings bells today as we see the changing face of state support for the needy. The origins of the Welfare State after the second world war are to be found in the workhouses of the Victorian era, institutions which harboured inhumane conditions, and to this day the fear felt by citizens in the 19<sup>th</sup> and early 20<sup>th</sup> centuries for them is remembered. Politicians, however, came to accept that the conditions of poverty might not be the responsibility of the individual, and that there were 'deserving' and 'undeserving' poor, once again resonating with some current thoughts.

William Beveridge was an economist and social reformer. After the start of the second world war, Ernest Bevin, Minister of Labour, invited Beveridge to take charge of the Welfare Department of his Ministry. Although not liked by his politician contemporaries, Beveridge found himself reporting in 1942 on 'Social Insurance and Allied Services', recommending on how the 'Five Giant Evils' of Want, Ignorance, Disease, Squalor and Idleness might be addressed. He took as his starting point that there should be full employment, a National Health Service and child allowance. He argued that the system should provide a minimum standard of living. The recommendations were not warmly embraced in the wartime National government, but with the support of the Labour Party, and their election in 1945 reflecting the support of citizens, the Welfare State and 'cradle-to-grave' support came into being on 5<sup>th</sup> July 1948, including a 'free' National Health Service.

The story since 1948 has been complex and continuous. The National Health Service has grown and demands upon it are almost limitless, welfare benefits were inadequate and the changing terminology of welfare has embraced supplementary benefits, job seekers allowance, means tested benefits, welfare to work etc. Successive governments and politicians have struggled to deal with perverse incentives, cycles of family deprivation and benefit fraud. Margaret Thatcher and Tony Blair both focussed on welfare reform in their periods as Prime Minister. And the current government is likewise addressing reforms under the most challenging of national and international financial circumstances. The public lecture on 'Welfare Reform: Past and Present' was timely and well received and many of the audience possibly harboured thoughts of what the future holds.

### ***Chris Taylor***

## **Female Pharaohs – Dr Joann Fletcher**

**7<sup>th</sup> June, 2012**

The Society had a rare treat on 7<sup>th</sup> June 2012 when the speaker was Dr. Joann Fletcher who is an Honorary Research Fellow at the University of York. She specialises in, and teaches, as part of an archaeology degree course, ancient Egyptian funerary archaeology. She showed a remarkable and comprehensive grasp of her subject and had a rare ability to talk about it in an informative, entertaining and easy to follow manner. The talk was given in the City Museum which was appropriate since the excellent British Museum travelling exhibition was on display in the arena at the time.

Her subject was the role of women in the royal hierarchies of ancient Egypt. Everybody has heard of Cleopatra of course and many will be familiar with her personification as a raven-haired beauty in the cinema. She was however only one of many important women in ancient Egypt and it is thought that as many as twelve actually took the title of Pharaoh. When one visits the ancient sites and museums in that country the emphasis seems to be largely on macho male pharaohs doing great deeds, generally being very warlike and with a partiality for enormous statues and even more enormous tombs. The women, when in power, however, were equally important and could actually be just as ruthless as their male predecessors in disposing of undesirable relatives!

The talk was well illustrated and included a number of items which were to be seen in the recent exhibition in the Leeds Museum. An excellent evening all round.

## ***Robin Jakeways***

### **Summer Outing to Standedge Canal Tunnel, Red House and Oakwell Hall**

**11 July 2012**

The main attraction of this year's outing was undoubtedly the Standedge canal tunnel, one of the wonders of 19<sup>th</sup> century engineering, at the head of the Colne valley a short distance from the village of Marsden. En route to Standedge we were to visit Red House in Gomersal and on our return we would visit Oakwell Hall in Birstall. As we awaited the departure of the coach, reading an excellent introduction to Marsden and the Standedge Tunnel prepared by the secretary, John Lydon, we may have wondered if there was a link between the houses in (the former) Spenborough and Marsden in the Colne valley. Was it just geography or were there other links?

On arrival at Red House we soon found out that there were! Red House, built in 1660, was owned by the Taylor family until 1920. It is now a museum, displayed as a prosperous middle-class home of the 1830s when Joshua and Anne Taylor lived there with their six children. One of their daughters, Mary, was a school friend of Charlotte Bronte who on visits to Red House came to know the family well. It was here that Charlotte learned about the assaults on mills in West Yorkshire in 1812 by the Luddites who were opposed to the introduction of machinery in the textile industries. It being the bi-centenary of the Luddite disturbances, there was an interesting display in the house charting the history of their activities. In her novel, *Shirley*, set in 1812, Charlotte based many of her characters on the Taylor family (the *Yorke*s) and featured Red House as *Briarmains*. Oakwell Hall which we would visit later in the day was also featured as *Fieldhead*, Charlotte having visited it when it was a boarding school in the 1830s. The 'The Secrets Out' museum, an annex to Red House, was specifically devoted to the link between Charlotte Bronte and the Taylor family.

In the early 1800s Joshua Taylor owned a woollen cloth finishers mill where, before the introduction of machinery, the ‘cropping’ was done by hand. The machinery that was to replace so many of his workers was developed by two brothers who were smiths in Marsden....and that is where we went to next!



We were fortunate that, despite 2012 being one of the wettest summers on record, we travelled up the Colne valley with its stone terraces, railway viaducts, former mills, green fields and high-level villages in glorious sunshine. After a short walk from the coach park along the Huddersfield Narrow Canal we arrived at the Standedge Visitor Centre and the entrance to the tunnel. This, the longest canal tunnel in the UK (5.2km), took 17 years to construct and was opened in April 1811, i.e. its bi-centenary was last year! It is

also the highest (196m above sea-level) and the deepest (194m below the moors). We were divided into two groups for a thirty-minute guided trip aboard a glass-roofed narrow boat into the tunnel. The guide explained how the boats were propelled by men ‘legging’ along the sides of the tunnel for 3 to 4 hours! He also pointed out the various links with the three railway tunnels that run alongside and above the canal tunnel. The highlight of the trip occurred at the farthest point of our excursion when the lights were turned out and to our surprise John Lydon read the poem by Gregory Harrison, *Legging the Tunnel*, with the aid of a flickering nightlight!

On our journey to Oakwell Hall, John pointed out the so-called Dumb Steeple in Mirfield where the Luddites amassed before their ill-fated raid on Cartwright’s mill in 1812.

As indicated earlier, Oakwell Hall is also linked to Charlotte Bronte’s *Shirley*, it being the home of the eponymous heroine, but, having explored that connection at Red House, the main purpose of our visit was to see this well preserved Elizabethan manor house and examine the construction methods used at the end of the 16<sup>th</sup> century.



On our return to Leeds John Lydon had another surprise up his sleeve for those with a botanical interest. About 10 years ago a group of three Tulip trees (*Liriodendron*) were planted in front of the Edward Boyle Library at the university and they were in bloom for the first time. The group that he led to see these exotic flowers were suitably impressed and no doubt mused whether the display was the result of the vast quantity of rain that had fallen this year.

So ended another very enjoyable, well organised day with a wide range of things of interest and some surprises too.

**Chris Hatton**

## **An evening with Professor David Cooper**

### **20 September**

The evening followed the pattern of previous “Evenings with”, beginning with an excellent three-course dinner in University House followed by the talk in an adjoining room. Our guest, Professor David Cooper, was appointed as a lecturer at the University of Leeds in 1988 and was promoted to a personal Chair in Music and Technology in 2003. His talk ranged over his eclectic musical interests, including the Hungarian composer Béla Bartók, the ancient folk melodies of Ireland, including the famous Ulster Protestant anthem ‘The Sash,’ and film music. Such apparently disparate areas of research were, it became clear, connected by music’s power to communicate.

Among the film composers Professor Cooper had studied was Bernard Herrmann, to whom Alfred Hitchcock credited much of his film *Psycho*’s success. Even those who never saw the film can recognise those spine-chilling screeching violins from the famous shower scene, but it was fascinating to see how those notes were written – resembling a sort of musical cliff on the score.

However, the high point of the evening was the selection of pipes the speaker demonstrated. First strapping a belt round his waist that secured the bellows, he played a remarkable variety of different pipes, each with their distinctive timbre (and a good deal easier on the ear than Scottish bagpipes would have sounded in a comparatively small room!) His playing succeeded in getting the audience’s feet tapping and in the relaxed atmosphere created, there was no shortage of questions and good-humoured exchanges, a sure sign of a successful evening.

### **Penny Wainright**

## **Annual Science Fair**

### **6 October 2012**

This year the Science Fair had to be held in October rather than in the Spring at the time of Science and Engineering Week since the Central Museum Arena was in use at that time for the British Museum “Ancient Egypt” Exhibition. The number of visitors was rather smaller than usual but those who came enjoyed it. We had the usual regulars: astronomers, microscopists, wildlife enthusiasts, the Association for Science Education and a City Museum stand. In addition this year we welcomed the Royal Statistical Society, educating the public into understanding statistics, and the Leeds Beekeepers who brought along a very professional exhibit complete with live bees. Two post graduate students from the University came along to help as volunteers and did a splendid job as door keepers enticing the public in.

As always we are most grateful to the Leeds Museum Service for allowing us to use the Arena for this event. Next year we shall be back to our normal time of year on 23<sup>rd</sup> March.

### **Robin Jakeways**



Scenes from the Science Fair

## **Solar Energy – will we ever mimic the leaf? Professor Robin Perutz**

**18 October 2012**

Several closely-related problems are facing civilisation: global warming, against which it is essential to reduce man-made contributions by limiting the production of ‘greenhouse gases’; the increasing scarcity and expense of fossil fuels; and the increasing demand for power, not least arising from the increasing world population. In her lecture to the Phil & Lit last year, Professor Teresa Thiel spoke about biological approaches to providing alternative energy. In this year’s lecture, Professor Perutz introduced us to problems in the underlying chemistry involved in trying to mimic industrially the photosynthetic mechanism used by plants. In essence, the problem is to develop chemical methods to use the energy received from light, together with cheap commodities (such as water), to produce highly energetic compounds that could be used as fuels or synthetic materials such as plastics.

We are very much reliant on energy released by fossil fuels, which are stores formed from the absorption of solar radiation falling on plants since they first grew on earth. The need now is to convert radiant energy directly for our immediate use. Current energy consumption on earth is of the order of 15 TW – even with the economies at which we are aiming this will double within 20 years or so. A very large power station such as Drax can generate 4 GW, but the energy falling on the earth from the sun is 100,000 TW. Domestic solar panels can capture just a few kilowatts.

1 gigawatt (GW) is a million kilowatts (kW),  
1 terawatt (TW) is a thousand gigawatts

Photochemistry is a familiar process – e.g. light falling on our retinas is converted to nervous impulses by chemical means. Plants convert light to chemical products by means of ‘light-harvesting proteins’ which carry out chemical reactions in two stages. In the first stage, a complex known as Photosystem II splits a water molecule into an oxygen molecule, electrons and protons (charged hydrogen atoms). The electrons are then involved in the production of the chemical compounds required by the living organism. An important aspect of the process is that the molecular structure of the photosystem prevents the electrons and protons from simply recombining to form neutral hydrogen. Photosystem II incorporates 4 atoms of manganese within its structure, which endow the system with the property of splitting the water molecule following the absorption of the energy received when the system is ‘hit’ by the photons of light rays.

Perutz is a member of a consortium SolarCAP, whose members are trying various ways of mimicking Photosystem II, but with fewer components. These include using other elements such as ruthenium and rhenium instead of manganese, but the synthetic molecules often seem to have very limited lifetimes; in addition, ruthenium and rhenium are not abundant on earth. While some progress has been made, we are as yet only partly along the way to mimic nature sufficiently well to promise industrial scale generation of power. However, Perutz pointed out that alternatives to present-day conventional systems must be suitable to be distributed widely through the world, massive and vastly expensive alternatives such as fusion reactors not being appropriate to developing countries.

*Anthony North*

## **Mike Hoyland's 'Pre-Bonfire Night Spectacular'**

**1 November 2012**

The Society's annual chemical pyrotechnic 'spectacular' took place in the central arena of the City Museum on 1 November. Mike Hoyland, ably assisted (and kept in order) by Matt Smithson, entertained our usual large audience of adults and children of all ages. This year I decided that some of our grandchildren were old enough, so I took James (age 8), Sophia (7) and George (6), with their fathers. They were certainly interested, amazed, fascinated, (their words), and they clearly enjoyed it. They all liked the exploding hydrogen and oxygen bubbles, and James commented that they shook the building. George was most impressed by the 'barking dog' because of its unexpected flash and large bang. Sophia said she "sat on Dad's knee in case he was scared of the bangs"! George liked the "bubbling white liquid" that turned into 'elephants' toothpaste'.

Sophia remarked that it was interesting even though she doesn't understand chemistry. James told me "I can't imagine anyone not liking this" and that "even little children would enjoy it, and there's no upper age limit"; he's already planning to come again next year. They all agreed that it was a fabulous evening. Well done, Mike!

**Peter Evennett**

## **Dan Dare and L. Ashwell Wood – Dr Patrick Eyres**

**15 November 2012**

The well-attended talk given by Patrick Eyres on "Dan Dare Pilot of the Future" and the cutaway drawings of L. Ashwell Wood in the Eagle comic, was one of the most entertaining of the year.

The Eagle, set up by the vicar Marcus Morris, as well as thrilling its readers and interesting boys and, fortuitously, some girls, (me included) in the world around them, incorporated a serious moral message of doing the good and the right thing. Dan Dare was portrayed as the defender of a free and good world against the menace of the Mekon who had a tiny body but an enormous head containing an enormous brain full of evil intent! Dan Dare appeared to be protecting the world single-handedly as a Brit. It was at a time when Fascism had just been defeated in Europe, yet there was the threat of the Cold War.

Dan Dare standing against tyranny and evil was reinforced by the comic strips of Texan Ranger Jeff Arnold set 100 years previously and by modern day PC 49 upholding the law in British streets. But it was the exploits of Dan Dare that were the most thrilling.

Although altruistic in content, the Eagle reflected the class-structured and male-dominated society of the 1950's. Dan Dare was upper class, public school-educated and played cricket and rugby. His batman, First Spaceshipman Digby, supported the, then, working class game of soccer. There was the token woman in Dan Dare's team, the clever and glamorous botanist who went to Venus to advise on food production, but she was subservient to the men.

Patrick Eyres went on to show some of the architectural cutaway drawings of L. Ashwell Wood, including the German battleship the Graf Spee and the premier British aircraft carrier H.M.S. Eagle. Each section of the drawings could be a cut away feature, for example, the shell hoist on the Graf Spee. Some of Wood's later drawings began to take a futuristic view of transport. We were shown drawings of an aircraft transporting family saloon cars and a stealth-type V-shaped aircraft with passengers tucked up in conventional beds!

The audience participation was excellent. One member pointed out that a Dan Dare cricket match on a typical 1950's village green, which became invaded by flying saucers, had four stumps. Patrick Eyres hypothesized that cricket had started with one stump, then two and now three. Perhaps cricket in the future would have four stumps. Another member suggested that the English bowlers (in their opening Test Match) would do better in India if they had four stumps to bowl at! Another member, sporting a Dan Dare tee-shirt, had been such a fan of Dan Dare that he sought and gained an apprenticeship with British Aerospace. The Eagle, a comic of its day, was educational, stimulating and inspiring. But above all else, the Eagle, like our evening lecture, was fun.

The evening ended with a quiz set by John Lydon. What was Dan Dare's middle name? What was the name of Dan Dare's spaceship?; Where was Digby born? What was Digby's expression of exasperation or astonishment?

### ***Elizabeth Nash***

### **AGM dinner and talk - Diamond Chronicles - India & the West - Dr Nima Pooveya-Smith 5 Dec2012**

Nima Pooveya-Smith is a Curator and Speaker. She is the founding director of Alchemy, a cultural enterprize company based in Yorkshire. Nima gave a lively, fascinating talk exposing a few well known myths about the famous Golconda diamonds, including the Koh-i-Noor and Hope diamonds which were once kept in the vaults of Golconda .The talk was clearly illustrated with slides and pictures of the world's most breathtaking diamonds.

The region of Andhra Pradesh was one of the world's earliest diamond producing regions and was the first known source of diamonds until 1730 when diamonds were discovered in Brazil. Diamond is the hardest naturally occurring substance known to man. The only method of cutting a diamond is with another diamond. Diamonds are evaluated by the 4 C's Colour, Clarity, Cut and Caratage.

There is a saying "Diamonds are a girl's best friend", but Nima said it is now most likely to be "Diamonds are a crook's best friend". There are many stories of greed, violence, murder and bad luck surrounding the Koh-i-Noor. The diamond passed many times to different ruling dynasties. In 1739 the Persian King Nadir Shah invaded India where he defeated the Indian ruler Mohammed Shah who handed him the treasure of his Akbar Shah dynasty, including the Koh-i-Noor diamond, many precious stones and the renowned Peacock throne.

Eventually, the Koh-i-Noor was presented to Queen Victoria by the Maharaja of Lahore. The British Governor General Lord Dalhousie arranged that the Koh-i-Noor should be given by Duleep Singh to Queen Victoria. The Koh-i-Noor was exhibited in the Great Exhibition of 1851, after which the original diamond weighing 186 carats was requested by Prince Albert to be re-cut to show the brilliance of the stone, reducing it to 105 carats.

Nima stressed the value and importance of the Golconda Fort which was built by Mohammed Quli Qutub and became a flourishing diamond trading centre where diamonds were kept in secure vaults, including the famous Koh-i-Noor and Hope diamonds. The original mud fortress was expanded and rose to prominence around 1507 It was re-built into a granite fort with walls around 5 km in circumference. The fort was renowned for its acoustical system and it is believed that a hand clap at the fort's main gate could be heard at the top of the citadel on top of a 91m high hill and echoed around the fortress.

### ***Mahdi El-Hassani***

## The West Yorkshire Hoard

In 2012 the society awarded grants totalling £7,000 to Leeds Museums and Galleries towards the purchase of a group of rare and wonderful archaeological artefacts. The society also linked up with the Friends of Leeds Museums to front a fundraising campaign which raised over £14,000 from the public towards the £171,000 needed to secure this treasure for Leeds.

In September 2008 a metal detectorist working alone in a field just outside Leeds happened upon one of the most significant archaeological discoveries in Leeds for many years. He had, quite literally, struck gold. He had found a small hoard of jewellery and other precious items dating back some 1300 years. Comprising four complete gold finger rings, part of a gold cloisonné brooch, a piece of gold ingot, and a lead spindle whorl, the hoard represents a highly significant and important group of Early Medieval gold objects seldom found in this part of Yorkshire. The objects all date from the 7th to 11th centuries and yet the state of preservation of these items is excellent and the workmanship is of the finest quality.

The four rings are extraordinary, demonstrating beautiful examples of Anglo-Saxon craftsmanship. The most spectacular ring has a large, lozenge-shaped bezel set with a garnet gemstone. It shows little sign of wear and was in all likelihood a piece owned by someone of high status such is its quality and value. Another, also in almost perfect condition, is decorated with gold filigree and



pellets, while a third boasts decoration of flora and fauna in niello (a black mixture of copper, silver, and lead sulphides used as an inlay). This ring shows much more wear suggesting it may have been regularly worn. The fourth ring is unusually large and has a bezel decorated with intricate spirals and twists of gold wire and granules.

There is something of an enigma about this group of items; their condition shows that some pieces in the hoard had evidently survived for a long time before being buried and yet their style and decoration suggest a huge span of time between their manufacture. The brooch has been dated at 7<sup>th</sup> century, the rings are later, perhaps between the 9<sup>th</sup> and 11<sup>th</sup> centuries and yet even though there are some 400 years between them, they were found together. This period is the time when the Vikings were active in the area and there are suggestions that this hoard may have been assembled by Vikings for the purpose of reworking – or could they be stolen goods? The burial site seems to have been disturbed and pieces of gold broken from the ingot and brooch suggesting a thief returning to his hoard, maybe to realise a bit of the value of his stash. Truth is, we will never know, but that is part of the incredible magic of a find like this.

The hoard is currently on temporary display in Leeds City Museum and in 2013 a new permanent display is being prepared alongside some thorough research into this most rare of finds for Leeds.

***Camilla Nichol***

## **Reports on Grants received during 2012**

### **Leeds Lieder+ 2011 – Educational Projects**

*£750 to support educational projects linked to the 4<sup>th</sup> Leeds Lieder+ Festival*

The fourth biennial Leeds Lieder+ Festival took place from Friday 7 - Sunday 9 October 2011 in venues across Leeds: The Venue at Leeds College of Music, the Clothworkers Centenary Concert Hall, University of Leeds, the Howard Assembly Room and the West Yorkshire Playhouse. The Artistic Director was Malcolm Martineau. Over 460 primary and secondary school students in the Education Leeds catchment area participated in three education projects; 10 adults with severe learning disabilities and their carers took part in an interactive creative project managed for us by Pyramid of Arts using artists suggested by us; and a very appreciative, though disappointingly small, audience of just over 50 children and adults enjoyed a Family Lieder+ concert presented by us in partnership with Leeds University International Concert Season on Sunday 25 September 2011. The Trustees of Leeds Lieder+ are extremely grateful to the Leeds Philosophical and Literary Society for their grant of £750, helping us to offer the education projects free of charge to schools. The success of the projects may be summed up in this comment made by one of the children in the Discovering Lieder+ project to Annabel Thwaite, the pianist in the creative team: "*Eh, Miss, that were well good!*"

#### **The Projects Supported by the Society:**

**Discovering Lieder+** 219 children (one class of Year 5/6 children in each of 8 primary schools) enjoyed interactive workshops in their schools. Designed to allow the children to experience at close hand the power and range of the naturally projected singing voice, learn the stories and music of a selection of classical and folk songs, write their own words to an existing song and get to know the artists leading the project, the workshops were very much enjoyed.

**Cool Lieder+** 125 students (one class from each of 5 secondary schools) took part in this project. Once again using the Cool Lieder+ Song Book we produced in 2009, music educator Sue Hollingworth, aided by three young alumni of Leeds College of Music: Lucia Walsh- Hughes *soprano*, Neil Balfour *baritone* and Dominic Mountain *piano*, introduced the students to songs by the great composers and with the aid of their teachers, prepared them for a performance to over 100 of their peers, families, friends and LL+ supporters at the West Yorkshire Playhouse on 7 October. The project was once again managed on our behalf by Northern Orchestral Enterprises Ltd (NOEL)

**Kathleen Evans, Festival Administrator, Leeds Lieder+**

### **Roscoe – a unique history**

*£250 towards production of a book recording the social history of Roscoe Methodist Church, Leeds*

Roscoe Methodist Church celebrates its 150<sup>th</sup> Anniversary in 2012. A small group began meeting in 2009 to prepare a book charting the history of Roscoe from its beginnings in the mid 1800s to the present with particular reference to the stories of the people involved and the impact they have had on the local community, Leeds as a city and the wider world.

Information was gathered from the church's own records, West Yorkshire Archives, materials from the Vickers family (owners of Vickers Oils Ltd, Leeds, and instrumental in the early Roscoe story) and a large number of personal 'reminiscences'. The group collated and edited a wide range of

information to produce ‘Roscoe Methodist Church Leeds – A Unique History’ which was published with assistance from Peepal Tree Press in October 2011.

The grant from the Leeds Philosophical & Literary Society was invaluable in supporting the production of proof copies and the printing of the initial print run of 200 at a cost of nearly £600. A subsequent print run of a further 100 copies has been produced using monies raised from the first batch of books. The congregation of Roscoe and the small planning group are indebted to the Society for their grant which gave the impetus to the possibility of publishing the book and our gratitude is duly acknowledged in the Preface.

### ***Revd Mark Harwood***

#### **Building a Great Victorian City**

*£500 towards the publication of ‘Building a Great Victorian City: Leeds Architects and Architecture, 1790-1914.’*

For the first time, the buildings and their designers in this pre eminent ‘Victorian city’ have been thoroughly studied; indeed it can be claimed confidently that for this period, no English provincial centre has been so comprehensively investigated, with the possible exception of Bristol.

This substantial, elegantly designed book runs to 419 pages, 130,000 words and 230 plates. It is the work of 11 scholars, including several with international reputations, all of whom are the specialists in the subjects on which they have written. The book contains substantial chapters on 13 major practices plus shorter accounts of a further 21. However, the book is more than a compendium of the lives of a series of gifted architects and several additional chapters discuss wider issues of architectural practice. Taking a single provincial centre as its focus, it is a ground-breaking examination of the birth, growth and maturity of the architectural profession in this seminal period of its development and a fascinating story of the way architects responded to the challenges and opportunities that a great industrial town provided. It is also a celebration of the outstanding buildings that have given Leeds its unique character.

The generous grant from the LPLS was a crucial subvention. With it, the book’s organisers were able to come to a satisfactory arrangement with Jeremy Mills Publishing Ltd to take on the title. The book appeared in mid-November 2011 and to date (mid-February) just over 200 copies have been sold. The publishers tell me they are delighted with sales and orders continue to come in ‘almost daily’. A further 200 copies are currently being printed. No reviews have yet appeared, but informal responses have been exceptionally positive and it is known that architectural historians elsewhere are actively considering a similar project for their own provincial cities.

#### **Relationships between 19<sup>th</sup> century research on anthrax in West Yorkshire and the continent**

*£200 towards the cost of a visit to archives in London*

The grant has made it possible to fulfill all the stated objectives of the project with four major outcomes: a PhD thesis, virtual exhibit, conference paper(s) and journal article.

The grant was used to consult archival papers at the Wellcome Library and British Library. Specifically, the Wellcome’s collections of correspondence between Pasteur and British researchers,

the complete Pasteur correspondence and the British Library's rare texts on veterinary medicine from the late nineteenth century were used. These allowed me to examine how the exchange of knowledge and practices surrounding anthrax took place in the late nineteenth and early twentieth century. Specifically, the resulting work has shown how the strong relationship between Bradford and anthrax (also known as *la maladie de Bradford* in French literature of the period) had a global reach.

The research which this grant allowed me to carry out formed a major part of Chapter 5 of my doctoral thesis ("Practices, Techniques and Therapies: Bradford and Continental Anthrax Research"), which argued that French, German and British medical scientists viewed and attempted to combat the disease in remarkably different ways. Vaccination – a technique widely used to immunise livestock in Continental Europe – never found favour in Britain, largely because anthrax amongst herd animals was never a widespread problem. My thesis was examined successfully.

The material from both the Wellcome and British Library was used to produce a film – "Anthrax Through the Ages" (<http://www.youtube.com/watch?v=HX8qyJ0jTwk>) – which is a blueprint for the planned virtual exhibit. The film has had over 900 views on YouTube, and shows how different generations have held different cultural and medical preconceptions of anthrax. The virtual exhibit itself is due to launch in June 2012.

I presented a paper at the annual conference of the American Association for the History of Medicine in Philadelphia in July 2011. The paper examined the relationship between Bradford and Glasgow from 1880-1920, and showed how medical practitioners dealt with the disease in a wide variety of fashions. Again, the material which I was able to consult thanks to this grant formed a major proportion of the primary evidence.

Finally, I have recently had a paper accepted in the prestigious journal *Health and History*. This paper argues that there were strong international connections between Britain, France and Australia in terms of exchange of information about anthrax. The paper offers a fresh perspective on the disease-based relationship between animals and humans. It is slated to appear in 2012.

### **James F Stark**

#### **Lotherton Hall Bird Garden Specimens**

*£500 to Leeds Museums and Galleries towards the cost of taxidermy of bird specimens*

The birds in question were recent fatalities in the bird collection at Lotherton Hall, and represent a range of primarily exotic species:

Ruddy Headed Goose	Ringed Teal
Superb Starling	Marbled Teal
Sacred Ibis	Edwards Pheasant
Helmeted Curassow	Snowy-crowned Robin Chat
Bullfinch	Francolin
Red-crested Pochard	Whistling Duck
Roul Roul	Paradise Shelduck
Brush Turkey	Avocet
Speckled Pigeon	Blue-eared Pheasant
	Bahama Pintail

These birds are being preserved as study skins and taxidermy mounts by James Dickinson. The birds have been skinned and cleaned, and will be turned into study skins or mounts in the near future. The mounts add to our collection of high quality, modern (and therefore non-toxic) mounts of great value for use in museum displays, public programmes and learning and access. Additionally, study skins will be valuable for research purposes.

The support of the Leeds Philosophical and Literary Society will be acknowledged in the TMS records for each of the birds involved, and on labels borne by any displayed material.

***Rebecca Machin***

**Exhibition on the Mexican business activities of Weetman Pearson (Lord Cowdray)**

*£500 towards the cost of mounting the exhibition*

Funds were sought specifically to mount an exhibition in the Parkinson Court at the University of Leeds of photos and rare film footage from the turn of the 20<sup>th</sup> century which depicted the transformational effect on Mexican lives and landscape of the business and engineering projects carried out by Yorkshire businessman and politician Weetman Pearson (later Lord Cowdray) in that country over a period of 30 years between 1889 and 1919. The exhibition ran between 10th-14th October 2011 with an official opening and reception on 11 October. To coincide with the occasion I also presented my recent book on Pearson and his Mexican enterprises: *British Lions and Mexican Eagles: Business, Politics and Empire in the Career of Weetman Pearson in Mexico 1889-1919*, (Stanford University Press, 2011). The reception was attended by the Vice-Chancellor and staff in Spanish, Portuguese and Latin American Studies in the School of Modern Languages and Cultures at Leeds. Guests of Honour included the Mexican Ambassador his Excellency Eduardo Medina Mora; the Hon. Charles Pearson, Cowdray's great grandson and Chair of the Cowdray Trust; Richard Maudslay CBE, the President of the British-Mexican Society; and the Lord Mayor of Leeds, the Revd Councillor Alan Taylor.

The purpose of bringing together those who have either historic or current interests in British-Mexican relations was to establish a network of individuals and organizations with a connection to Yorkshire and Mexico with a view to future academic and non-academic collaborations. A short-medium-term goal is to attract future sponsorship for research activities (in the first instance, designated postgraduate bursaries) thereby strengthening British-Mexican links at the University. A longer-term goal remains to establish a Centre for Mexican and Latin American Research and Collaboration at Leeds. With a specific focus on Latin America, such a Centre would attract home/EU students and international students from Latin America to study in a broad range of Arts, Humanities and Social Science disciplines (including International Relations, Development and Business Studies). Should it attract sufficient funding, the Centre would have the potential to extend its focus beyond the academy by fostering links and exchanges between educational institutions, voluntary and business organizations in Yorkshire and their counterparts in Mexico and Latin America. The Pearson-Cowdray legacy not only provides an illustrative historical lesson of international business success emanating from Yorkshire, but one which could provide inspiration for business and cultural links between the UK and Latin America in the present and the future.

***Paul Garner***

## **Exhibition marking the anniversary of the 1911 school strike in Leeds**

### *£250 towards the cost of materials for the exhibition*

The Stanley & Audrey Burton Gallery (University of Leeds) gratefully accepted the grant which was awarded to produce promotional and interpretative materials for an exhibition which commemorated the 100th anniversary of the 1911 schools strike in Leeds.

The exhibition, finally entitled ‘School’s Out: Leeds and the 1911 Schools Strike’ was held in the Education Room of the Gallery at the University of Leeds from 22 August – 1 October 2011. The exhibition, guest-curated by Sarah Prescott, used material from a variety of sources, including:

- Posters, cartoons and pamphlets from the University’s Mattison collection detailing the political and social background to the strike.
- Photographs of working class areas and maps of Leeds from the Central Library’s Local History Collection.
- Archival material loaned from the Leeds Education Authority collection, held at West Yorkshire Archives , including the only surviving School Log book to refer to the Strike.

The exhibition also included artwork produced by local children through innovative engagement workshops.

Since there was little surviving testimony from children involved in the 1911 Schools Strikes, the Gallery team tried to recreate a child’s eye view of events, through external workshops with local children. The workshops explored the Schools Strikes by encouraging children to empathise with their counterparts of 100 years ago, and to produce creative work which represented their reactions and reflections on the Schools Strike. The project worked with Hawksworth Wood Primary School, Little London Primary School and Al-Haqq Supplementary School. Some excellent pieces produced by the children were included in the final exhibition.

The project also included a Gallery-based workshop, which used the exhibition to discuss activism in education. The workshop was open to members of the public and incorporated contributions from a variety of speakers, including representatives from ‘Leeds Women Against Apartheid’, the NUS and Unison. The exhibition was popular with the wider public as well as with these specially-targeted groups; media coverage, notably from the *Yorkshire Evening Press* and *North Leeds Life* encouraged good visitor figures (1957 regular visitors during the exhibition run).

The grant from the Society enabled the Gallery to enhance this thought-provoking and popular exhibition with large image reproductions for the display, as well as to print promotional and interpretative literature, ensuring that the exhibition reached the widest audience possible. The success of this exhibition—with local children, community groups, the media, and our regular visitors – is in great part thanks to the support of the Society and thus, the Gallery team is particularly grateful for their ready aid towards such special projects, that encourage knowledge and understanding of our local history.

***Layla Bloom***

## Cleaning, re-articulation and mounting of Leeds City Museum's Moa skeleton

£610 to cover the cost of conserving a Heavy-footed Moa specimen, LEEDM.C.1868.6.

When the moa was identified in storage, it had a number of conservation issues. As well as a large amount of dirt, many bones had cracks and breaks and required consolidating. The old armature was in place but no longer able to support the skeleton properly.

The conservator Nigel Larkin was appointed to conserve the moa, after Clare Brown received tenders for this work. The moa bones were cleaned of dust, dirt, particulates and fluff using various conservation-grade techniques. After bones were consolidated as appropriate, breaks were repaired. The skeleton required black-smithing skills to remount on a new armature. Nigel Larkin transformed the specimen into a beautifully mounted skeleton. It stands on a new permanent base, which will be clad in display quality covering made by Ian Fraser of Leeds Museums and Galleries.



As well as improving the appearance of the specimen, the new armature and mounting will help to keep the moa safe, and more accessible to the public. It will go on display either in the City Museum or Discovery Centre once the mount has been clad.

The generous support of the Leeds Philosophical and Literary Society will be acknowledged as part of the display of the moa skeleton.

**Rebecca Machin**

## Yorkshire Youth Choir Spring Residential Course, April 2012

£275 towards bursaries for participants

We run two YYC Residential courses a year, funding permitting, for talented 10 - 21 year-olds from across Yorkshire. Choir members are chosen by audition, and the Choir is constantly evolving as new members join, and older members leave. The Choir rehearses for 5 days before putting on a public concert in a prestigious venue. The Spring Course was held at Queen Ethelburga's once again.

Our objectives for the Course were:

- to give young singers the opportunity to meet others;
- to learn to develop skills in working together and respecting each other, irrespective of background;
- to give older members the opportunity to act as mentors, thus developing their organisational and caring skills;
- to give young professional musicians the opportunity to shadow experienced professional tutors;
- and to give a high quality concert before a paying audience in a prestigious venue.

116 YYC members attended, 6 supported by Bursaries. 306 attended the concert which was performed to an exceptionally enthusiastic audience in the magnificent Huddersfield Town Hall on Saturday 14th April:

For many of the new members, this was the first time away from home and the first time they had been given such intense and high calibre training. Such experience teaches them how to socialise, how to look after more vulnerable members and how to develop confidence - as well as training their voices and making them healthier. The Choir helps with developing social cohesion and building bridges between communities. Choir members' comments showed the great extent to which these aims had been achieved.

We would be unable to run these courses without the generosity of Trusts and Foundations and private individuals - many of whom have supported us so loyally through all the downturns of the economy. Heartfelt thanks to the bodies that supported us.

***Charlotte Weightman, NOEL (edited)***

### **Wentworth Castle and Georgian Political Gardening: Jacobites, Tories and dissident Whigs**

*£1000 towards publication of the conference proceedings*

The grant was a vital contribution to the overall cost of publication, £5860, and complemented the funds raised from other grant-awarding bodies: Yorkshire Gardens Trust, £2560; Duke of Devonshire's Charitable Trust, £1000; Stanley Smith (UK) Horticultural Trust, £1000; Friends of Wentworth Castle Gardens, £300. As a result the book was published in August 2012 under the title: *Wentworth Castle and Georgian Political Gardening: Jacobites, Tories and dissident Whigs* (198 pp., 130 illustrations).

The 500 acre Wentworth Castle estate is a Grade 1 historic landscape. It has been rehabilitated and opened to the public through the rolling programme of restoration undertaken by the Wentworth Castle Heritage Trust since 2003. The book has enabled the Trust to fulfil a major aspect of its educational programme by emphasising the historical significance of the place. It has also contributed to the Trust's aim to restore the reputation of the estate's creator as a man of military, diplomatic and cultural distinction. As a deposed Tory minister and suspected Jacobite, Thomas Wentworth, 1<sup>st</sup> Earl of Strafford (2<sup>nd</sup> creation) was written out of history by Whig authors.

Set against the backdrop of political instability generated by Jacobite attempts to restore the exiled Stuart kings to the British throne, the book explores the symbolic meanings embedded within the country estates of the Tory, Jacobite and dissident Whig landowners who formed the parliamentary opposition to the mainstream Whig governments that managed Britain on behalf of the Hanoverian Kings George I and George II. Key issues:

- ~ Contrary to received wisdom, political gardening was not the monopoly of Hanoverian Whig or dissident Whig politicians; it was a vital activity for Tory and Jacobite members of the parliamentary opposition;
- ~ The landscape design and folly building of Lord Strafford at Wentworth Castle played an innovative role in the evolution of Tory and Jacobite political gardening. Moreover Strafford's relationship with his younger cousin Lord Bathurst, also a Tory and a Jacobite conspirator, stimulated Bathurst's political gardening at Cirencester Park and Riskings, both places already acknowledged as classic Tory landscapes;
- ~ The emerging role at Wentworth Castle of the architect James Gibbs, not only in the design of the mansion's interiors but also of the garden and landscape buildings, complements the architect's known importance within Tory political gardening elsewhere;

As an important complement to the above, 2 of the 11 authors discussed:

- ~ The impact on Jane Austen of the significance of the Wentworth name and the media interest in the often scandalous financial and marital affairs of the second Lord Strafford's close relatives between 1791 and 1803, and her consequent use of these names and events in her novels;
- ~ The relationship of the Heritage Lottery Fund funded restoration of Wentworth Castle to the West Riding County Council's innovative post-war purchases of country mansions for conversion into teacher training colleges – so that the 1944 Education Act can be seen as the catalyst to the formation of contemporary heritage culture

### ***Patrick Eyres***

#### **Carol Ann Duffy – An evening of poetry and music**

*£500 towards the cost of Carol Ann Duffy's presence at celebratory event at Leeds Minster*

The event was held at Leeds Minster on Thursday 27<sup>th</sup> September 2012 and included music from John Sampson, a display of artwork from Stephen Raw and poetry readings from Carol Ann Duffy, the Poet Laureate. There was an audience of approx. 400, including Bishop John Packer and the Lord Mayor.

Carol Ann Duffy read from her latest collection, *The Bees* and earlier work. Favourites included, *The Christmas Truce*, a poem about the cessation of conflict on Christmas Eve, 1914 and, on a more humorous note, four readings from *The World and His Wife*, imagining what it might be like to be the wife of King Midas or Dr Faustus, Darwin or Tiresias.

The poetry was punctuated by comical interludes and the lively, jaunty music of John Sampson. Pipes and brass lifted the audience or provided poignant backdrops to some of the poems. The highlight of the evening was the first reading of *In Regio Loidis*, a new poem written especially for the event and celebrating the making of Leeds Minster. The poem took on added significance as its words filled the space “between the river and the human churn”. Listening, we were profoundly aware that we were now the “good citizens” on whom the windows dropped their colours like petals. It was a real privilege to be woven with the history, the present and the future of this “sacred site”.

In the interval the audience had the opportunity to see Stephen Raw's artwork – a vibrant representation of the poem, beautifully captured on canvas. There was the opportunity to buy prints of the work and contribute to the fund to keep the original in the minster.

At the end of the evening Carol Ann Duffy was available to sign copies of her books, available from a Waterstones pop-up shop at the side of the minster. A long queue for books demonstrated what a success the evening had been! A limited edition programme, including the poem, was produced and has subsequently been requested for use as part of an exhibition at Leeds Library.

### **Daniel Brown**

#### **Otley Science Festival Fair**

*£250 towards the cost of staging the fair*

The fifth Otley Science Festival Fair on 17<sup>th</sup> November 2012, a free family event, was very successful. During the day, between 550 and 600 people of all ages attended the Fair. Many stayed for several hours, to take advantage of the variety of activities available throughout the building.

Contributors to the event included the Institution for Civil Engineering, the Thackray Medical Museum, the British Ornithological Trust, Leeds Geological Association, Primley Park Dental, ‘Mad Science’, The Institute for Medical and Biomedical Research, BeCycling, two local schools and two local GPs. “Joseph Priestley” (actor Tim Baxter) was available all day, talking about his life and work. The robot maze activity included computer programming followed by practical applications.

The main cost to the Science Festival Committee is the hiring of the Courthouse rooms and facilities for the whole day, and the work of the Site Managers. The grant from the LPLS has been used towards these costs. Many, many thanks again.

### **Hazel M Costello**

#### **Amy’s Last Dive – a new opera by Cheryl Frances-Hoad**

*£750 to help fund a pianist’s participation in the opera*

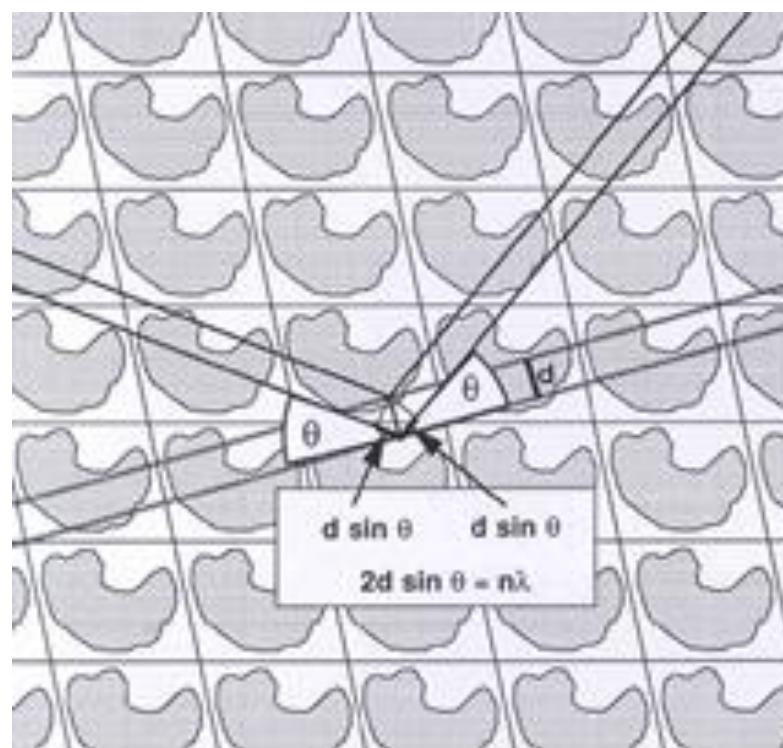
The Society’s generous grant enabled me to use a pianist in the orchestra for my opera. Up until this point I had not been able to afford the inclusion of a pianist, but it really was a vital part of the orchestra, so the funding from Leeds Literary and Philosophical Society made a tremendous amount of difference to the success of my opera, for which I am very grateful.

The opera was premiered in the Workshop Theatre Leeds, with further performances in Bridlington. The reception of the opera was extremely good with David Cooper telling me that this project was exactly what he had hoped for when he had the idea for the DARE Fellowships.

*Amy’s Last Dive* was 90 minutes in length and written for soprano, mezzo, tenor, small orchestra, community choir and young actors.

### **Cheryl Frances-Hoad**

Bragg's law: X-rays are reflected by planes of atoms or molecules, provided  $2d \sin \theta = n\lambda$  where  $\theta$  is the angle of the rays to the planes,  $d$  is the separation of the planes,  $n$  is a whole number and  $\lambda$  is the X-ray wavelength



WLB described his 'bright idea' as to how the X-ray diffraction pattern from a crystal was related to the arrangement of atoms in the crystal to a meeting of the Cambridge Philosophical Society in November 1912. The two men worked together, using WHB's X-ray spectrometer in Leeds, during the following months, determining a number of crystal structures.



W L and W H Bragg  
The only father and son to be  
jointly awarded a Nobel prize