

Annual report 2010 -2011

AGM Tuesday 8 November 2011, Imperial College

1. Overview

This year we have continued to maintain the high level of activity attained last year. Our membership has increased. Finances have improved. Our donation to the College was increased. We organised eleven events this year - one less than last year but three more than the year before. We organised our first event off campus. However our total audience numbers for the year fell slightly.

We held six lectures and two Behind the Scenes events, three more than in the programme published in June 2010. We invited Dr Nic Harrigan and his troupe of post-graduate quantum physicists to put on a show in January, attended by 300 people, called *Real Tricks: the quantum mechanics show*. In June a party of members visited the Diamond Light facility at Harwell Science Park. At the end of June we held another successful Summer Party to end our season and launch the new programme for the year.

Audience numbers have declined about 5% to 1441 this year from 1511 last year and 1540 the year before. Audiences for all three years are much higher than four years ago when the total audience figure for the year was 484.

Our membership has increased to 274 from 270 last year, a modest increase of 1.5%. We have increased the number of contacts to 1705 contacts including members and those who are not members but who have attended at least one of our events in the last few years.

We continue to attract a wide range of people to membership and to our events. Through our programme of promotion many of the people attending our events are new to the College and we have continued to attract a number of school groups. In this way we help to promote science to a broad spectrum of people and to young people as a future career.

We have continued to implement the strategy drawn up in 2009 to consolidate our activities, improve our administration systems and to experiment with new types of activity as described above, learn more about our audiences and maintain the quality of our programme.

We also carried out some research into audience reaction to one of our lectures in which 100% of those that answered (60% of the audience) said they "enjoyed" the lecture.

We therefore believe that we are fulfilling our aim of helping the College with one of its five strategic intents "to communicate widely the significance of science in general, and the purpose and ultimate benefits of its activities in particular".

Winton Capital Management Ltd has made a further generous donation for the fifth year running. This donation has allowed us to maintain low subscriptions and low ticket prices whilst promoting Friends' events in local magazines and other media.

We continue to receive a great deal of support from the College in the provision of lecture theatres, technical support and promotion of our events.

We are very appreciative of this funding and support of our activities.

This year we have increased our contribution to the Students Opportunities Fund to £2500 in recognition of the increase in our reserves.

2. Organisation

This is the sixth year that your committee has taken on the responsibility for the organisation of our membership and activities. As you are aware we are responsible for our own finances, arranging lectures, organising food and drink, managing bookings and membership.

The College has continued to support us in a number of ways: through promoting our lectures to the 40,000 or so on their database of alumni through publications and emails; featuring our events prominently on the College website; providing the lecture halls and the attendant security and technical staff at no cost.

Our new website launched last year has continued to perform well with an increase in the number of our audience booking and paying for their ticket over the web, thus reducing our administrative costs.

Our administrator Jill Cook has continued to provide excellent service during the year and her enthusiasm and energy has made a major contribution to increasing our membership and maintaining our audience levels. Jill has moved to the South Coast but has continued to work from there effectively.

3. Committee

Your committee has met five times during the last academic year.

Committee members during 2010-2011 were Rodney Allen (local representative), Bill Blackburn (Treasurer), Rita Leek (planning), John Little (IT), Emma Jones or Louise Birrell (OAD representative), John Nuttall (Strategy), Paresh Parmar (Event promotion), Roderick Rhys Jones (Chairman), John Sanderson (Secretary), Riitta Soininen (Membership Secretary).

4. Finance

We are financially independent of the College and therefore aim to make a surplus on all our events which, together with our membership subscriptions and the donation from Winton Capital Management, provides sufficient funds to cover administration and promotion.

This year's financial statement shows that income rose by £1,575, from £16181.00 last year to £17,756.00 this year. Expenses were lower by £3,714 giving an operating surplus of £5164.60 against a small loss of £125.09 last year. This reflects improved administrative and marketing efficiencies and lower catering costs.

I would like to thank Bill Blackburn who has continued as our very effective Treasurer.

Our membership subscriptions will remain the same for the coming year.

5. Donation to the College

This year we increased our donation to the Students Opportunities Fund to £2500 from £2000 last year. The Fund helps to promote sciences amongst schools, supports needy students and contributes to new facilities at the College.

Our members are to be congratulated for the huge support that they have given us again this year.

6. Membership *

Our membership remained virtually the same this year - 275 as against last year 277. This is considerably lower than the previous growth rates of 65% in 2009-10 and 41% in 2008-09 – see table.

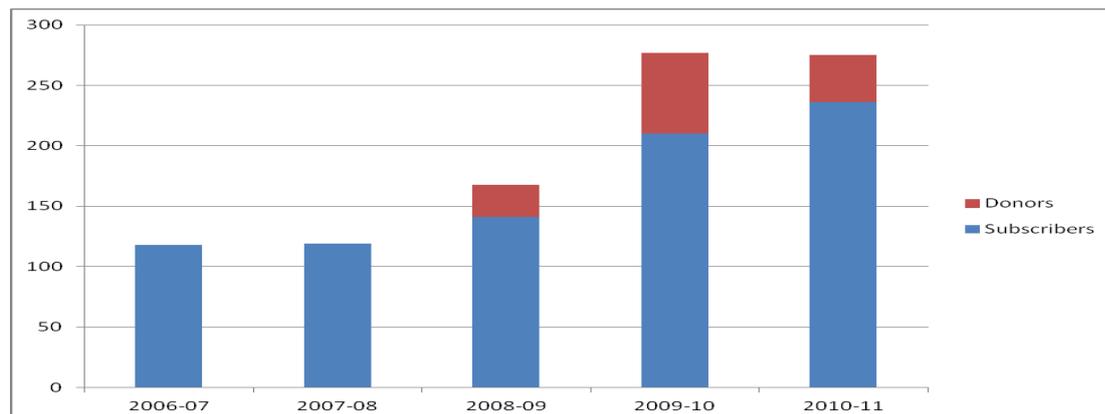
However the number of subscribers has increased to 236 from 210 last year - an increase of 12%. This suggests that donors are becoming subscribers.

39 donors have taken up our offer of free annual membership this year as against 67 last year – a reduction of 42%.

Fig 1 Table showing members, subscribers and donors

Year	Subscribers	%	Donors	%	Total	%
2006-07	118				118	
2007-08	119	1			119	1
2008-09	141	18	27		168	41
2009-10	210	49	67	148	277	65
2010-11	236	12	39	-42	275	-1

Fig 2 Graph showing the growth of membership and the relative level of donors



Our database has 1705 names on it including members and those that have attended one of our events in the last few years.

We have been gathering information about our members and about our non-member supporters – those who are not members but whose membership has lapsed or who have attended an event. The table below shows that the largest category of members is “other”. We are intending to find out which category each of our members belong to. It will be difficult to find out what categories fit our non-members. Many are in this category as when people book on the web or by phone we only ask for their email address as that provides us with an opportunity to promote our activities.

Fig 3 Table showing the categories of members and supporters

Connection	Members	Non-Members
Alumnus	82	243
Staff	12	230
Student	6	340
Parent	3	1
Live Locally	26	14
Imperial 1000 donor	3	0
Imperial donor	64	42
Other	103	373
None	27	417
Total	326	1660
Grand Total	1986	

Note: some people fit two or more categories

7. The year’s events

We organised eleven events this year, three more than in the programme launched at the Summer Party in June 2010. In addition Professor Al Khalili was unable to give his planned lecture on Chaos Theory due to television filming commitments. We were delighted to welcome Dr Frank Berkshire, from Imperial College Mathematics Department who stepped in for Al Khalili and gave an amusing talk entitled *Chaotic cards and dynamic dice: Why is gambling so attractive?*

We invited Dr Nic Harrigan and his troupe of post-graduate quantum physicists to return to put on a show in January, attended by 300 people, called *Real Tricks: the quantum mechanics show*. In June a party of members visited the Diamond Light facility at Harwell Science Park. At the end of June we

held another successful Summer Party to end our season and launch the new programme for the year.

We organised four members-only events: two Behind-the-Scenes events, the Diamond Light visit and the Summer Party.

Our events are listed below

1. *Behind the scenes @ The Institute of Biomedical Engineering*, Professor Ross Ethier 22 September 2010
2. *The end of ageing: If some animals can regenerate, will we be able to do so in the future?* Professor Nadia Rosenthal, Chair in Cardiovascular Science; Scientific Director, National Heart and Lung Institute, Imperial College. 19th October 2010
3. *How the sun influences climate*. Professor Joanna Haigh, Chair of Atmospheric Physics; Head of Department of Physics, Imperial College, Member of the Royal Society Working Group on Geoengineering. 16 November 2010
4. *Real Tricks: the quantum mechanics show*. Master of Ceremonies Dr Nic Harrigan and his troupe of post-graduate quantum physicists 25 January 2011
5. *Can humanity survive in the age of information?* Emeritus Professor Igor Aleksander, Senior Research Investigator, Department of Electrical and Electronic Engineering, Imperial College 8 February 2011
6. *Chaotic cards and dynamic dice: Why is gambling so attractive? How do gamblers lose when they win?* Dr Frank Berkshire, Department of Mathematics, Imperial College. 17 March 2011
7. *Behind the scenes @ Nanostructured Materials and Devices Group Sustainable Chemistry as illustrated by the production of Polymers from Renewable Resources*. Dr Charlotte Williams, Senior Lecturer, Nanostructured Materials and Devices Group, Imperial College 13 April 2011
8. *Swarm robots – the future of drug delivery? Designing new medical devices to mimic swarms of birds and insects for more effective drug delivery* Dr Frantisek Stepanek, Reader in the Department of Chemical Engineering, Imperial College; Associate Professor at the Institute of Chemical Technology, Prague. 12 May 2011
9. *Quantum mechanics and reality - does God play dice? Challenging popular belief: quantum uncertainty is not fundamental and time is universal not relative*. Dr Antony Valentini, Research Associate, Theoretical Physics Group, Imperial College. 9 June 2011
10. *Visit to Diamond Light facility*, Harwell Science Park 18 June 2011
11. *Friends annual Summer Party* Sir Keith O'Nions; 30 June 2011

8. Attendance *

All our events were well attended. Our set-piece lectures attracted an average of 153 with the two most popular entitled *The end of Ageing* attracting 190, *Quantum Mechanics and reality* attracting 183 and the least popular with an audience of 90 *Swarm Robots – the future of drug delivery*. Despite the low attendance all those that answered our questionnaire found this lecture enjoyable and fascinating.

Fig 4 Attendance by category at events 2010 -11

Topic	Total Members	Guests	Staff	Students	Schools	Total Non Members	Grand Total
E1 BTS @ The Inst of Biomedical Eng (Sep-10)	42	5	1	3	0	9	51
E2 The end of ageing (Oct-10)	61	37	12	38	42	129	190
Annual General Meeting (Nov-10)	16	0	0	0	0	0	16
E3 How the sun influences climate(Nov-10)	62	28	16	16	4	64	126
QC Real Tricks: the quantum mechanics show (Jan-11)	66	98	20	71	45	234	300
E4 Can humanity survive in the age of information? (Feb-11)	71	51	10	30	8	99	170
E5 Chaotic cards and dynamic dice (Mar-11)	53	57	9	29	3	98	151
E7 BTS @ Nanostructured Materials (Apr-11).	30	3	1	2	0	6	36
E8 Swarm robots – the future of drug delivery? (May-11)	44	27	5	8	6	46	90
E 9 Quantum mechanics and reality – does God play dice.(Jun-11)	72	45	12	31	23	111	183
DL Visit to Diamond Light facility, Harwell Science Park (June 11)	18	0	0	0	0	0	18
SP Friends annual Summer Party (Jun-11)	56	30	24	0	0	54	110
Total	591	382	86	228	131	830	1441
<i>Percentage audience</i>	39%	27%	8%	16%	9%	61%	100%

Nic Harrigan’s Quantum Circus proved to be the most popular event of the year with 300 people

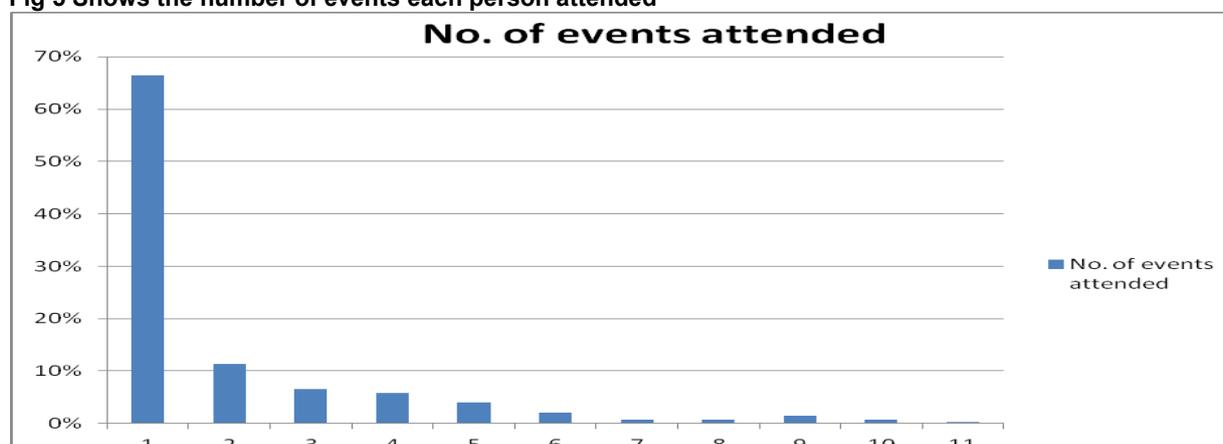
The three events which were limited in size and therefore restricted to members and a guest were at capacity and attracted 105. One of these events, a visit to the Diamond Light facility at Harwell Science Park, was our first visit off campus. Eighteen members and their guests travelled to Harwell, some in a coach from the college, others independently, and they met up for lunch before visiting the facility. The trip proved popular and it is planned to repeat a similar visit this year.

Thirty nine per cent of our audience are members, a change from last year when 49% were members, but sustaining the increase over the previous year when members represented only 20% of the annual audience.

There were 131 school students attending this year much the same as last year (133) but many less than the 253 the year before. All three years were above the year before when only 13 attended.

228 Imperial students attended the lectures, a reduction from 252 students last year and 253 the year before. Our events have continued to be featured on the student union web site and the student weekly magazine has featured reports of some of our events.

Fig 5 Shows the number of events each person attended



This year 66% of visitors attended only one event, up from 53% last year. Just under a quarter (24%) of our audience attended three or more events – slightly up on last year’s proportion of 22%. This suggests that members and non-members chose carefully which lecture they are going to attend. Although the figures might suggest that our audience does not come back because they are dissatisfied, this is not borne out in the results of our audience research which shows a very high level of satisfaction. We also know that if a subject is particularly attractive people who have not attended for a year or so will book for the attractive event.

9. Audience research

We organised a questionnaire for one lecture during this year *Swarm robots*. 73% of the audience of 90 responded. Half were members and half non-members. 97% said the lecture “met their expectation”. 100% found it “enjoyable.” Twice as many members commented on the lecture, mostly complimentary on the interesting content and good presentation. A handful, 5, commented that the lecture was difficult and others, 6, said that the lecturer spoke too fast.

We plan to carry out more assessments of our events.

10. The programme 2011 –2012

Our programme for the coming year is:

Behind-the-scenes @ Department of Materials. Professor Neil Alford, Head of the Department of Materials Monday 26 September 2011

The extended mind: recent experimental evidence. Dr Rupert Sheldrake, Fellow of the Institute of Noetic Sciences. Tuesday 18 October 2011

Celebrating chemistry - past, present and future. Emeritus Professor David Phillips OBE, President of the Royal Society of Chemistry. Tuesday 8 November 2011

Oddities of Science! Explosion! Implosions! Dr Nic Harrigan and his physics team explore the quantum world in a show of the strangest, most intriguing and nerdiest feats that science has to offer. Wednesday 25 January 2012

The human genome: 21st Century medicine. Professor Timothy Aitman, Consultant Physician, Imperial Academic Health Sciences Centre, Chair in Clinical and Molecular Genetics, Head of Molecular Genetics and Rheumatology Thursday 2 February 2012

Where does life come from? Dr Zita Martins, Royal Society University Research Fellow, Imperial College London Thursday 15 March 2012

Behind-the-scenes @ Lifelong Health Project Armand Marie Leroi, Professor of Evolutionary Development Biology Wednesday 18 April 2012

Plastic electronics: the coming revolution. Professor Donal Bradley, Lee-Lucas Chair of Experimental Physics, Imperial College London, Deputy Principal of the Faculty of Natural Sciences. Director, Centre for Plastic Electronics Tuesday 15 May 2012

Changing lives globally: technological innovation for health. Professor the Lord Darzi of Denham PC, KBE, Paul Hamlyn Chair of Surgery, Chairman, Institute of Global Health Innovation, Imperial College London Tuesday 12 June 2012

11. Strategic development

We have continued our strategy of consolidating whilst experimenting with other kinds of events. This year we organised a successful visit off campus to Diamond Light at Harwell Business Park. We again invited Nic Harrigan to put on his ever-popular show.

We have continued to improve our web-based booking and member administration system. It has led to considerable reductions in the administration time which we have been able to spend on marketing.

During the year we have been considering becoming a charity in order to attract more funds to allow us to develop our services and to provide further donations to the Student Opportunities Fund.

12. Thank you

I would like to thank our sponsors, the College, our members and other supporters and particularly members of the committee and our administrator Jill Cook, all of whom have contributed so much to the smooth running and success of our year.

*Roderick Rhys Jones,
Chairman, 8 November 2011*

* Changes have been made in the method of collecting statistics and in audience categories as we have developed the new database. This has resulted in some apparent anomalies between this and last year's report.