

The Worshipful Company of Scientific Instrument Makers

A review of 2018/2019

Moving forward, giving back



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The Master's Report

Moving Forward - Giving Back



It has been a privilege to be your Master for this year, which I would characterise as a year of change!

The most obvious manifestation of change is of course our very capable new Clerk, Misha, and Karen our new assistant and I thank them for the support given me throughout my year. I also must thank Neville, our esteemed Clerk for some 19 years, for his service to The Livery.

Less obvious change and resulting from the Strategic Review Process we conducted over the past two years, are the significant changes to our management committee structure. Alongside an unchanged Education Committee, we introduced two new committees: one for Promotion and Marketing and one for Membership Development and Activities. These committees are beginning to take effect and will work with our Wardens for Recruitment and Induction. I believe you will soon see innovative actions from them to the benefit of all. Some of these actions have already tailored more events in support of our younger members.

These committees report to a revamped Executive/ Finance & General Purposes Committee, delegated by The Court to oversee our programmes. This, of course, sits alongside our Hall and Charity Committees – all reporting to the Court.

The most outward manifestations of these improvements are a complete set of Style Guidelines and a modernised Web Site, for internal and external communications, detailing what we are about and our charitable educational programmes, as well as constantly updated news about our activities. The website also has a printable live calendar showing upcoming events. To support our recruitment efforts – which continue to be successful, with Liverymen numbers just one below the magic 200 – we placed our first 'advertorial' in Physics World.

Turning to events throughout the year – we entertained some prestigious speakers covering subjects of Science and Engineering and the

environment. These included: Warren East, CEO Rolls Royce; Sir Anthony Cleaver, past CEO IBM and Chairman Eng(UK); Anthony Walker, CEO Tech UK; and Simon Buckle, Head of Climate Change, OECD.

Aimed specifically at our younger members, the SIMposium, entitled 'I'm an Entrepreneur – Get me in There!' attracted a range of speakers, covering all aspects of starting a business – including two of our Freemen who had done just that. The event achieved 90% satisfaction ratings.

My Master's weekend was in the lovely city of Oporto, in Portugal, and a very sociable occasion it turned out to be for which I received many messages of appreciation.

We continued to develop our relationship with external organisations such as the Science Museum, where our younger members have been closely involved in the presentation of their new Scientific Instrument Gallery which opened to the public in September. The Science Museum are hosting the 2020 meeting of the Scientific Instrument Commission and we have agreed the official dinner will be held in our Hall, to which members will be invited.

The Clerk and I held a meeting with Shaun Fitzgerald Director of The Royal Institution looking at some future involvement. Also Past Master Sawyer and I met with Gavin Costigan, CEO of The Foundation for Science and Technology, who will also be hosting an event in our Hall. This organisation debates and helps to define policy for Government on a range of Scientific issues and, again, our members will be invited to the event. Our relationships with Eng(UK) and the Big Bang Fair have continued to strengthen and in collaboration we again funded an ISEF (International Science and Engineering Fair) contestant in 2019.

It was a delight to receive notice, just at the end of my year, that approval had been given by HM the Queen for our Royal Charter. Stand by for a significant celebratory event next year!



Of course, in addition to the work within the Livery, there were so many personal highlights, too numerous to mention (see the Master's Blog on the Website!) that will stay with Maureen and I forever, including the developing relationships with members of the other Liveries.

It has been an honour to have been Master and I would like to thank everyone who has helped me throughout the year. I wish my successor, Prof Ken Grattan, in whose capable hands I leave you, an exciting and fulfilling year also.



The Worshipful Company of Woolmen's Great Annual Sheep Drive across London Bridge

A year in the life of the Company...

October 2018 to September 2019



OCTOBER

At the end of October 2018, and the start of a new Livery year, we held the annual Admission Court in the Hall, where the new Master Ken Sanders, the Senior Warden Professor Ken Grattan OBE and Junior Warden Martyn Wheatley were admitted.

Our new Clerk, Dr Misha Hebel, was also admitted on the same day. Misha joined us from the Worshipful Company of Educators where she had previously held the position of Clerk. She took over from Neville Watson who had been the Clerk of the Company for over 18 years.

At the Court meeting we also admitted five new Liverymen, three new Freemen, three new Honorary Freemen and three new Apprentices. The names of all new Members of the Company can be found later in this annual review. The dinner following the Court was one of the best attended for a long time with some 180 SIM members and their guests attending and enjoying good friendship and fellowship.

The principal guest was Warren East, a former colleague of the newly appointed Master at Texas Instruments. Warren became Chief Executive of Rolls Royce in July 2015, after being appointed as



a Non-Executive Director in 2014. Prior to that he worked for Arm Holdings plc where he was CEO from 2001 to 2013.

Warren talked about the challenges facing technology-driven industry, of the rapidly accelerating pace of development, the consequent need for more young people to be trained in modern technology and to enter the field, and the challenges of sustainability. Many people commented afterwards about how good it was to hear a technology CEO also talking about the environment.

After the dinner, the Deputy Master, Professor Ron Summers, presented the 2018 SIM scholars and military award winners with their certificates. All the Award winners and scholars names can be found later in the report.

NOVEMBER

November was an incredibly busy month with a wide variety of almost conflicting events ranging from celebrations of achievements through to taking time to remember all those killed in conflict since the First World War.

Celebration of achievement – Early in November, the Master attended the Arkwright Scholarship Trust presentation at which three exceptional students were presented with a Scholarship funded by SIM.

An Arkwright Engineering Scholarship is the most prestigious scholarship of its type in the UK to inspire and nurture school-age students to be the country's future leaders of the Engineering Profession.

The Scholarships are awarded to high-calibre 16 year old students through a rigorous selection process and support students through the two years of their A levels, Scottish Advanced Highers or equivalent qualifications.

Every Scholarship is sponsored by a commercial company, trade association, university, professional institution, armed service, government organisation,

Far left: Principal guest, Warren East

Left: SIM members at dinner

Right top to bottom: – Two new apprentices at the Guildhall London

Beloe Fellow 2018 – Dr Jamie Marland from Edinburgh University.

100 Years Anniversary Commemoration and Remembrance at St Paul's

worshipful company, charitable trust or personal donor. This means that support offered varies greatly and includes – valuable hands-on work experience, support for a curriculum project and a personal mentor who can help students with aspects of studies and career planning. SIM is delighted to be able to support aspiring young engineers in this way.

Commemoration and Remembrance – 2018 marked the 100th Anniversary of the end of the 1st World War and the Master and Clerk represented the Company to plant a cross in the Garden of Remembrance at St Paul's Cathedral on the 5th of November. The British Legion explained that the theme of 2018 commemorations were to say 'Thank You' to all who served, sacrificed and helped change the world. The thanks were inclusive of men, women, civilian and military, British and Commonwealth.

Later that week on Sunday November 11th, the Master and Consort attended the Service of Remembrance at St Paul's Cathedral, where most Livery companies were represented. With the special significance of the hundredth anniversary of the Armistice, the service was particularly moving. After the service the Livery representatives, in full regalia, processed along Poultry to the Royal Exchange where a further short service was held before wreathes were laid at the foot of the memorial to World War 1 casualties. An incredibly poignant and humbling service.

Celebrating the Lord Mayor – The Master, the Senior Warden Professor Ken Grattan OBE and Freeman Steven Vuong took part in the 803rd Lord Mayors Show. They walked with the Modern Liveries in a group organised by the Worshipful Company of Firefighters and were accompanied by a big gold painted double decker bus. Twenty two different modern livery companies were represented with their banners proudly held high.

Visit to the Wellcome Centre – Over twenty Company members gathered at the Wellcome Museum for a fascinating tour of the Museum.





The group were fascinated by the array of exhibits including controversial ones such as shrunken heads, Darwin's expensive ivory walking sticks, early surgical implements of "torture", paintings of medical procedures in the early days, infamous Gin Alley portrayed by William Hogarth, paintings of the sectioned human form' preserved human remains with intact wrinkled skins through to rusty guillotine blades. All of these objects provided fascinating glimpses of scientific innovation and old instruments and a hugely informative day and well worth a visit.



DECEMBER

December was a much quieter month in the run up to the festive holidays but still allowed time for members of the Company to meet on at least two occasions.

Livery Lunch – The informal Livery Lunch was established some time ago to encourage members of the Livery, IMC and our local Ward Club to get together. In 2018, not only was the lunch excellent but we were also entertained by the children of Charles Dickens School who sang to thank the Company for the donation made to buy science books and equipment.

At this event we also said thank you and goodbye to Carole Seawert, who had assisted the Clerk and Company with marketing for the previous three years. Carole had been involved in developing the Company style guide and overhauling the website.

The Annual Carol Service took place on 19
December at St Margarets Church, Lothbury. The service was, as always held jointly with Coleman Street Ward Club and Broad Street Ward Club.
Over 35 Members of the Company and their guests attended this final event of 2018.

JANUARY

January was an extremely quiet month for events but not so for the various committees and meetings held on a regular basis throughout the year to oversee the affairs of the Company. These meetings all feed into the Court meetings held regularly in February, April, July and October.

FEBRUARY

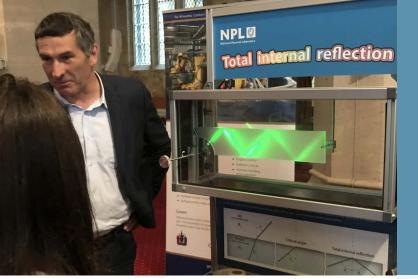
Activities and events quickly moved back to full speed ahead for the Company by February following the festive season

February Court Livery Dinner – This was the first social event of the year and prior to the dinner two Apprentices were bound at the Guildhall. At the afternoon Court meeting two new Liverymen, one Freeman and one Apprentice were admitted. An excellent dinner was enjoyed by 80 Liverymen, Freemen, Apprentices and guests and the guest speaker was Antony Walker, deputy CEO of tech(UK), the UK's leading digital technology Trade Association, comprising some 900 members covering over 700,000 employees.

Antony gave a wide ranging talk, on the role of technology in a time of change, the extreme challenges we face and reasons to be optimistic. Covering a range of issues from the impact of social media on the younger generation, digital surveillance concerns and climate change, at times quite controversially, Antony certainly sparked some discussion amongst our members, that continued on after the Dinner!

Education Trust Supper – This event, which is supported by a generous Past Master, brings together our younger Apprentices, Scholars and Freemen. The event started with attendees sharing their professional interests using a single slide with only two minutes to present their topic. Content of these presentations ranged from optical interferometry temperature sensors to entrepreneurial ventures developing 3D-scanned bespoke bras and the challenges of gathering social media data to the New International System of Units.

The presentations were followed by an opportunity for some informal networking and a supper. Sixty people attended this event and once again we were joined by Antony Walker of techUK as the guest speaker, who presented a more positive view of technology than we are used to reading in the media. Conversation was lively and very much focussed on the entrepreneurial opportunities of contemporary scientific instrument making.



Far left (top): Freeman enjoying February Court Dinner

Far left (bottom): Guest Speaker Antony Walker of techUK at Education Trust Support

Left: Liveryman Simon Hall manning the SIM stand at the Livery Schools Link event

Below: Andrey Gizdov, Award winner at Big Bang Fair

MARCH

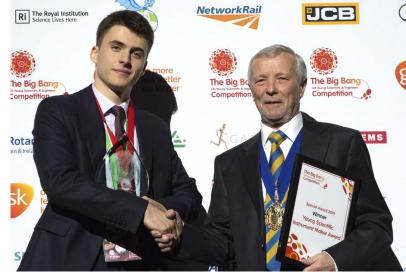
March brought the excitement of the Company's attendance at the Big Bang Fair and the Big Bang competition. This competition, involving regional heats and a national final recognises and rewards young people's achievements in all areas of science, technology, engineering and maths (STEM), whilst providing them with the opportunity to build their skills and confidence in project-based work. The Competition is open to all UK residents in full-time education or training (year group 7-13). SIM is heavily involved in the competition through the provision of judges at various regional and national levels and a special mention must be made of Liveryman Simon Hall who was responsible for the co-ordination and judging on behalf of SIM.

The Big Bang Fair – Andrey Gizdov from Ackworth School was awarded The Young Scientific Instrument Maker Award from The Worshipful Company of Scientific Instrument Makers (WCSIM).

The SIM award aims to reward the student whose innovative project demonstrates the practical application of scientific and engineering methodology to a real-world problem in a costeffective manner. The judges assessed the marketability, potential impact and uniqueness of the solution as well as the skillful and inventive use of measurement and control in the project.

Andrey received a certificate and prize, including a fully-funded all-expenses paid place to attend the Intel International Science and Engineering Fair (Intel ISEF), in Phoenix, Arizona in May. Andrey was also invited to apply to become a Scientific Instrument Maker (SIM) Apprentice.





APRIL

The month of April brought the annual SIMposium which in 2018 was on the subject of Entrepreneurship and entitled – 'I'm an entrepreneur get me into there!'

To an audience of some 40 people, including Apprentices, Scholars, Freemen and Liverymen a number of speakers, including Senior Warden of the Guild of Entrepreneurs and Executive Director of the Institute of Innovation and Entrepreneurship covered many aspects of this important subject.

Topics covered included what it takes to start a business and a number of the technical aspects including Intellectual Property, Business Plans, and Exit Strategies. The day also included several case histories of successful start-ups, including two from our own members, Freeman Ruth Amos and Freeman James Popper – via video link from the USA!

Feedback from members of the audience, after the event, was very positive, from young and old. There was plenty of time allowed for members and guest speakers to interact throughout the day and we can also report, of two potentially new business relationships formed amongst members present!



MAY

The Month of May brought the annual Masters weekend, when a number of the Company joined the Master in Oporto for the weekend.

The merry band enjoyed a number of visits over the weekend including a boat trip on the river Duero, at which the engineers in the group thoroughly enjoyed the huge locks they encountered including the Mourithe lock at some 35 metres deep! Obviously a trip to Oporto would not be complete without a trip to a vineyard and indeed an opportunity to learn about the production of Port. The group visited Taylors where they learnt that in some cases they still literally tread the grapes that are picked for their port production. This is done in pits or lagers by in-line treading teams of men and women, arm in arm. It is a precision operation, carried out in silence and guided by the head treader who ensures all the crop is pulped. The grape juices are collected, filtered, fermented, fortified and matured in huge casks or barrels.

An excellent and enjoyable weekend was had by all experiencing the culture, food and drink of Portugal.

Masters weekend in Oporto



JUNE

June was a busy month with celebrations at the Annual Banquet as well and an engaging and practical day with almost 200 young people from a variety of schools attending a day looking at STEM activities.

The STEM event was a lively and exciting day aimed at inspiring Year 7 and 8 students to study STEM subjects. The picture below shows students from The Compass School in Southwark undertaking the roller coaster challenge.

This challenge involved making a rollercoaster to roll a marble in the slowest time possible from beginning to end. Following this, teams were then challenged to build a car powered only by an elastic band to see which design could travel the furthest distance.

The day was incredibly interactive and involved a number of practical team challenges as well as opportunities to listen to some guest speakers including two Freeman of the Company: Lucy Hogarth and Owen Hewitt. The Keynote speaker was Professor Daniela Bortoletto, Head of Sub Department of Particle Physics Oxford. The feedback on the day was incredibly positive with the balance of practical activity and speakers about right.

Still on the theme of engaging with students, SIM hosted a stall at the Schools Liverly Link at the Guildhall. This provided an opportunity for Livery Companies to showcase the opportunities and career possibilities for students.

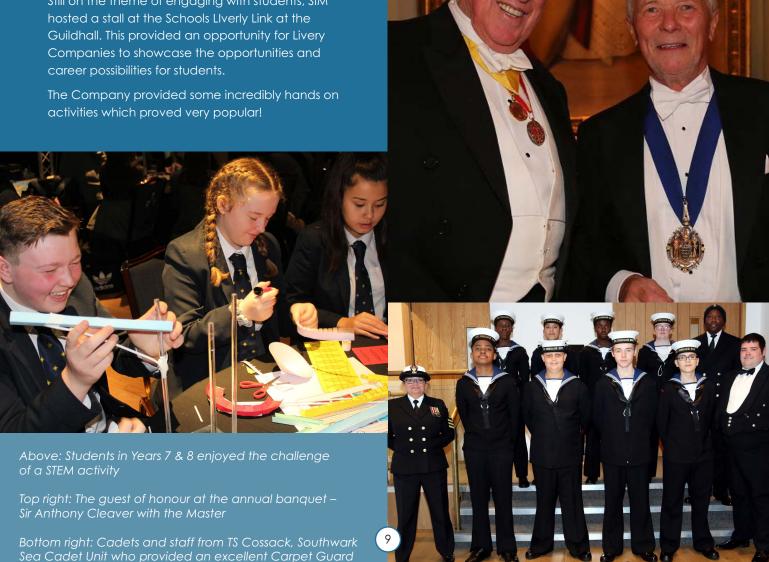
ANNUAL BANQUET JUNE 2019

The Company held its annual Banquet on Thursday 27 June at Painters Hall, with over 150 Liverymen, Freemen, Apprentices and guests attending.

Members and their guests were welcomed to the Banquet by the Master and his Consort before mingling with others during a short reception. The Guests then moved to the Banqueting Hall past a carpet guard of Cadets provided by Southwark Sea Cadets, TS Cossack.

As well as many personal guests of members present, we were delighted to be joined by Masters and Consorts from The Glass Sellers, The Apothecaries, The Air Pilots and The Guild of Entrepreneurs.

The principle guest for the evening was Sir Anthony Cleaver, former Chief executive and Chair of IBM UK. who suitably entertained all present with a speech and made a toast to the Company.



JULY

July saw an exceptionally busy Court meeting at which WCSIM welcomed five new Liverymen, two Freeman and four Apprentices into the company. The day started at the Guildhall when the four new Apprentices were bound.

The binding of apprentices originates from the medieval trade guilds which were established to regulate particular crafts. Guilds supervised the training of apprentices, controlled standards of craftsmanship, and protected craftsmen from unfair competition. The tradition of binding an apprentice today allows an opportunity for young people to access advice, guidance and support from SIM members and it maintains the traditions of the London Livery Companies which dates back to the 13th Century. The Apprentice attended a Binding Ceremony at the Guildhall before returning the Hall for the Admission Court meeting at which the new Liverymen and Freemen were also admitted. SIM are proud to engage with future scientists and engineers in this way whilst maintaining the traditions of the Livery.

Below: Gary Mutch receiving the Freedom of the City of London Bottom: SIM members fortunate enough to visit CERN just outside Geneva in August



AUGUST

This year August provided a highlight to a small handful of Company Members who were able to accept a short notice invite to visit the Worlds Largest Particle Physics Centre, CERN, just outside Geneva in Switzerland.

Freeman Bridget Donaldson was working at CERN over the Summer on a research project which gave her the opportunity to organise a visit for friends. She was kind enough to offer this opportunity to WCSIM members. Such a visit was high on many members 'bucket lists' which meant that despite the short notice of the visit, there was a large response to the invitation for the 7 places available. The Master and the Technical Visit Warden helped to organise the trip and were given the difficult task of selecting the candidates. A 'draw' was held to pick the lucky members who were then offered places. In all, seven members, (four Liverymen and three Apprentices) were able to go on the visit. On a packed (and very hot day), the group was privileged to visit six locations in the establishment, in a manner not available to the general public, and not to be repeated for 10 years or so, as once the LHC resumes operation nobody will be allowed access to the tunnel or detector caverns due to the risk of radiation contamination.

This was a fantastic opportunity and one thoroughly enjoyed by all those able to attend and we are extremely grateful to Bridget for enabling such an exciting visit.

SEPTEMBER

Recent members surveys indicated a desire among members for light social events, for members and partners, to complement the lunches and dinners in the Calendar. On the 21st of September, we witnessed the first of such events – a Thames Walk organised by Junior Warden, Martyn Wheatley.

Commencing at Southwark Cathedral, a dozen of our members accompanied Martyn on a walk along the Thames, in the unusual direction heading East.

After a lengthy and detailed tour around Southwark Cathedral and a very lively Borough Market, the party headed off under London Bridge, along the South Bank towpath towards Hays Wharf. The group learnt, on the way, the history of 'The London Bridges' and the impressive Scientific Instrument that is the Monument (of the Great Fire of London).

Pressing on towards HMS Belfast, the group passed City Hall and then Tower Bridge – learning an awful lot about the engineering and power behind the hydraulic mechanism that lifted the road spans – something that happened 2 to 3 times hourly in the early 20th century!

Well into Rotherhithe, the group stopped for lunch at The Angel, a lovely pub by the river.

After lunch a visit was paid to the beautiful Church of St Mary The Virgin, spiritual home of the good ships Mayflower and the Speedwell, and hence connected to the Pilgrim Father's final departure in 1620 for the 'New World'.

The final stop-off was to view the intended entrance of Brunel's first pedestrian tunnel under the River Thames, a world first, which was sadly never profitable but has served well as part of the Tube system since.

Thanks must be offered to Junior Warden Martyn Wheatley for arranging this walk and providing the historical commentary along the way.

Below: The Thames Walk and The Great River Race



September's Great River Race Success!

The Great River Race is London's River Marathon and is a spectacular event attracting nearly 350 boats from all over the world. This event takes place in September every year and there are crews from countries all over Europe as well as entries from far wider afield including the USA and Australia. The gruelling course is nearly 22 miles long, starting in London Docklands and, after passing many of London's historic landmarks, finish in Ham. There were around 2,500 competitors taking part in 2019, some very serious racers and others in an array of fancy-dress raising money for charity.

Unlike a marathon race, the boats were handicapped with the quickest crews starting at the back of the field. Each boat was timed over the course but with boats of all different shapes, sizes, speeds and crew numbers, the early miles made for a challenging and exciting race. The course is narrow in places especially around London's famous bridges to allow for other river traffic. This results in the coxes of faster moving boats searching for near impossible gaps to overtake.

With a starting number of 293, the WCSIM crew successfully overtook 280 boats on their way to winning the Riparian Trophy. They clocked the 6th fastest time overall (2 hours 22 minutes) and picked up The Thames Waterman Cutter Shield and the City Challenge Cup against some very stiff competition. In addition the crew also raised over £300 for Mencap.



Membership of Court and Committees 2018-2019

Court of Assistants

Master K J Sanders

Deputy Master Professor R Summers

Senior Warden Professor KTV Grattan, OBE

Junior Warden Mr M E Wheatley

Senior Past Master Dr N K Reay

Past Masters Dr D Townsley-Hughes

Captain G P Brocklebank, RN

Mr H L Tee, CBE Mr B D Fishwick Mr K F Etherington Eur Ing D W Kent Professor T Wilson Mr C J Sawyer Mr J F Caunt

Court Assistants Mr C J Holroyd

Mr A Dunford Professor P Thomas Mr J C Webster Mrs J E Fishwick Professor H McCann

Honorary Assistants Mr D A Wallis*

Mr W Lyons*

Sir Ivor Cohen, CBE, TD, Hon FREng*

Professor R C Hills*
Dr R W Hartley,*
Mr B J Lowings*

Clerk Dr M Hebel

Clerk Emeritus Mr N J Watson

Honorary Chaplain Rev'd Prebendary W J H Crossley

Hon. Dir. of Music Mr R F H Townend

Honorary Solicitor Mr D R Seaton

The Beadle Mr A W Parker

*all Past Master Emeritus

EDUCATION SUB-COMMITTEE

Chairman Mr M E Wheatley - Junior Warden

Mr C J A Holroyd Mr C Clifton Professor S Dennis Mr I Gilbert

Mrs J E Fishwick - Court Assistant

Professor S Hall

Dr S Pollitt - Scholar/Freemen Warden

Professor R Summers - LSL Rep

Prof P Vadgama Mr A Woodward

- Apprentice Warden
Ex Officio Mr K J Sanders - Master
Secretary Dr M Hebel - Clerk

PROMOTION AND MARKETING SUB-COMMITTEE

Chairman Mr C J A Holroyd

Mr A Dunford
Michael Gucleur
Ms L Hogarth
Mr S Vuong
Mr A Woodward
Dr M Hebel - Clerk
Mr K J Sanders - Master

MEMBERSHIP DEVELOPMENT
AND ACTIVITY SUB-COMMITTEE

Secretary

Ex Officio

Chairman Professor K T V Grattan, OBE

Senior Warden Dr M Hebel - Clerk

MEMBERSHIP DEVELOPMENT PANEL

Chairman Professor K T V Grattan, OBE

Mr M E Wheatley - Junior Warden Mr J F Caunt - Membership Warden Dr S O'Connor - Induction Warden

Mr P Meades

TECHNICAL AND SOCIAL ACTIVITY PANEL

Chairman Professor K T V Grattan, OBE

Mr M E Wheatley - Junior Warden

Mr C J A Holroyd Mr R Abreu Ms E Murphy

GLAZIERS HALL BOARD

Mr C J Sawyer*
Mr K F Etherington*

*alternate Mr B D Fishwick

SENIOR STEWARDS

Dr L B Davies Mr R Murton Ms D Howse (Almoner)

STEWARDS

Mr C Clifton

- Master's Steward

Professor S Khan

- Senior Warden's Steward

Mr Ian Gilbert

- Junior Warden's Steward

Mr R Abreu Miss E C Cohen Mr J F Comer Mr D R Craven Mr N W Gammon Professor S Hall

Mr M N Hunter-Wyatt

Mr K P Lambert Dr I J Lewis

Ms J A Migdal (Lady White)

Dr G S Philp Dr S Pollitt

Mr M J Sharrocks Dr D A Spencer Mr B R Sowter Mr S M Walton Dr M D Windram

APPOINTMENTS

Apprentice Warden Mr A Woodward

Barge Master Captain G P Brocklebank

Honorary Treasurer Mr B D Fishwick
Honorary Almoner Ms D Howse
Induction Warden Dr S O'Connor
IILG Convenor Professor R Summers
Livery Schools Link Professor R Summers

Membership Warden Mr J F Caunt
IT Warden Mr A Peters
Scholar/Freemen Dr S Pollitt

Warden

Technical Liaison Mr R Abreu
Group Ms E Murphy

Web Master Dr M Hebel (from Nov 18)

These appointments are for three years with effect from October 2017.



Below: The impressive Mourithe Lock found on the Masters weekend in Oporto



Committee Achievements

Executive Finance & General Purposes 2018 – 2019

The Executive Finance & General Purposes (F&GP), as its name suggests is delegated by The Court to oversee all the business of the Livery. Following the final meeting of the Strategic Review Committee at the end of 2018, the F&GP Executive was tasked to oversee the implementation of the recommendations and to monitor progress in achieving the outstanding actions. The major outcome of the review was the creation of two new committees: Promotion and Marketing and Membership Development.

The finances were also a key focus this year. With uncertainty in the markets producing lower returns on our investments, attention was turned to fund raising ideas and the decision was taken to raise our Quarterage for the first time in seven years.

Programmes for the Education Committee were approved, in conjunction with the charitable trust, including a potential revamp of our University Programme. The two new committees made a good start – defining their priorities for the year, as well as funding for recruitment evenings in the usual format.

In addition to managing the ongoing business activities, a number of 'specific' items were reviewed and approved as follows:

- The impending approval of our Royal Charter and plans for a dinner celebration, with a prestigious Guest of Honour and Church service
- The Livery Hall Code of Conduct
- Plans to video a short spoken summary of the Livery Movement and extracts from the Court's Admission process for the website
- A revamp of our Safeguarding Policy, to bring it up to date, and to document the procedures more thoroughly.

Finally, a new Court Assistant and Lay Assistant were nominated and approved.

Ken Sanders - Master

Charitable and Educational Trust (SIM Trust)

The SIM Trust was created by the founders of the Livery to: support education and training in the craft of scientific instrument making in all its guises; to support the Corporation of London through annual donations and to support individual members of the Livery who have specific needs. The fund that allows SIM to achieve this charitable giving remains well managed and even in the challenging markets of 2019 has shown a slight increase to approximately £3.2 million. The fund and its reinvestment of surpluses continue to be managed by Adam & Co. and their representative provides a progress report at each meeting of the SIM Trust.

The majority of charitable giving is based on recommendations made by Education Sub-committee and include: annual donations to Charles Dickens Primary School and London Nautical School (both rinafenced for STEM activities to be defined by the school); prizes to individual students at the City of London Academy Southwark, and to the best experimentalist at the British Physics Olympiad; individual apprentice awards; individual scholar awards; several postgraduate scholarships at UK universities; and one post doctoral fellowship. The SIM Trust is also seeking to support two Year 12/13 students at an international innovation fair held each year in the United States. In addition, SIM Trust provides funding to host what has now become an annual STEM day aimed at pre-GCSE students from a number of schools with an intention of influencing the choice of science-based GCSE subjects.

Other charitable causes that the SIM Trust supports include the Southwark Sea Cadet unit who provide the carpet guard at the Admission Court Dinner and Banquet; and a travel fund was initiated in 2017/18 to support any Livery member who has the opportunity to disseminate content related to scientific instrument making.

Thus, whereas support of school-based students is aimed at raising awareness of our craft, Livery membership has gained from the knowledge of apprentices, scholars, and postgraduate students. To achieve the accomplishments above, the total support provided from SIM Trust during 2019 approached £85K; a worthwhile investment for the future sustainability of our craft.

Prof Ron Summers – Deputy Master

Sim Hall Board

The financial year has been challenging on a number of fronts. In February we parted company with our Managing Director, who had successfully managed the business over 13 years and the successful further development and refurbishment of the Hall. This departure gave rise to material exceptional costs which were written off in the year.

Nicholas Bills was recruited as the new Managing Director in early May but in the interim, Keith Etherington (SIM), used his significant business and management experience and successfully stepped into the MD role. Since his appointment, Nicholas has recruited new staff in a number of key sales and marketing roles together with temporary resource in operations to cover for maternity leave.

In the current economic climate and along with the Hospitality sector more generally, the market has been challenging. However, as we move into the new financial year, recent levels of enquiry and business being secured are encouraging and support the strategy and marketing approach being implemented by Nicholas and his team. The board continue to monitor progress carefully.

The outturn for the year has produced, a pre-tax loss of £69k compared to the budgeted profit of £238k. The accounts remain subject to audit. The 12% shortfall against budgeted Net Revenue began from the start of 2019 with the business only stabilising and beginning to show signs of recovery towards the end of the financial year.

The business successfully concluded the refurbishment project with the final payment to the contractor in September 2019.

The balance sheet remains healthy. The Hall continues to be included at market value with vacant possession at £8.9m (valued by CBRE in March 2018) which together with other tangible assets of £869k and long-term investments of £544k gives total fixed assets of some £10,313m. The property revaluation following completion of the project resulted in an uplift of some£3.8m compared to the total amounts capitalised for a spend of £2.4m, an incremental value gain of £1.4m. Net borrowings amount to £1,634k which excludes the long-term investments of £544k. Gearing on a net debt basis is 23.5%.

The current trading environment remains challenging, nevertheless, current levels of enquires and business are encouraging. The board is satisfied that our budget for the year ending next September is reasonable and shows net revenue of £1.8m and an EBITDA of £311k which generates a positive cash flow of some £265k after interest costs but before taxation and movements in working capital.

Christopher Sawyer - Post Master

Promotion and Marketing Committee

The first meeting of the newly created Promotion and Marketing Committee was held on the 4th December 2018.

As a new Committee, the first meeting focused on agreeing the terms of reference, which were defined as:

• Recruit a minimum of 10 new Liverymen per annum;

- Look after the Livery's external comms, e.g. web, PR, adverts;
- Review current recruitment processes, identifying target groups, their motives for becoming Liverymen, so that focused marketing messages can be delivered;
- Work on the web challenge, in particular to ensure that member profiles are up to date, and to create an effective database that lists interests and skills which encourages successful networking ('giving back') between the membership;
- Excluded from the Scope are the activities and processes whereby Freemen and Apprentices are encouraged to convert to Liverymen. That lies within the remit of the Membership Development Committee.

The Committee reviewed and discussed the key findings of recent membership surveys and also reviewed a recent marketing report.

The second meeting in March 2019 agreed the draft Objectives and Scope, and discussed the Company membership profile by age and geography. It was agreed that the website should have more stories to encourage visitors to remain longer. It was noted that there are more 'hits' in the week leading up to formal dinners. The committee also looked at the draft of a new advertorial leaflet. Finally, the committee discussed the marketing funnel as an aid to understanding what needed to be done to increase recruitment:

Awareness > Interest > Member > Loyalty > Advocacy.

A conclusion was that Awareness of the Livery and

what it stands for is very limited and misunderstood.

At the third meeting held in June, the committee was pleased to learn that 60 biographies had been added to the members' area of the web, and that the Clerk and Assistant Clerk were making good progress on the membership area. The committee discussed what to do to make the website more appealing. In respect of the marketing funnel, the New Members' Evenings and format were felt to be an excellent way of creating Interest amongst those who were already aware of the Livery, and that it would be important to check that the spend per new Liveryman was efficient. It was also felt that Liverymen should be encouraged to bring prospective members to the formal Dinners, and that these could be contacted via follow-up activities. For Awareness, the discussion focused on putting something in Physics World to reach its 100k+ circulation.

The final meeting of the year in September was told that the 200 Liverymen milestone was anticipated to be broken in October. A terrific achievement and full credit has to go to Past Master John Caunt who did so much to encourage recruitment and promote the Livery. Work had continued to put up member profiles and website hits monitored.

Charles Holroyd - Court Assistant

Education Committee Annual Report 2018/19

The Education Committee has the responsibility for allocation of funds of almost £100,000 on the Company's key education programmes. 2018/19 proved to be another busy year for the Committee and programmes.

Volunteers from the committee were involved with judging at the Big Bang Fair 2019 which was held at the NEC. Our successful candidate, Andrey Gizdov, was selected and supported for entry into the renowned International Science and Engineering Fair (ISEF) which is held annually in the USA. The WCSIM, working with Engineering (UK), sponsored Andrey's participation at ISEF which resulted in him being offered a scholarship to attend the prestigious Arizona State University.

Our involvement in The Big Bang Fair continues to provide a key source of apprentices for SIM alongside our involvement with the Arkwright organisation.

The Company's support of Primary Engineers has produced several successful events to promote and aid the teaching of STEM topics through primary school educators. SIM will continue to support this important initiative.

In addition, SIM's 2019 STEM Learning Day, held at The Hall, was a packed structured day of activities and inspirational presentations. For the first time the event was co–educational and it proved to be a great success. Going forward, it is anticipated that the event will remain Co–educational.

In the last twelve months EdCom has refreshed its contact with the Livery Schools Links (LSL) organisation. LSL works cross all The City liveries to network schools and livery companies with opportunities to support education in and around London. In 2019 SIM contributed to the LSL Showcase

SIM stand at Livery Schools Link



held at The Guildhall. The event is open to students in years 7–9 providing information and potential careers advice plus support from livery companies. SIM's own excellent entry was very well attended by students and we will be attending in future years.

SIM's links to local schools continued with activities and support continuing with London Nautical School, City of London Academy Southwark and Charles Dickens School

An important EdCom development this year is the appointment of our new University Warden, Professor Hugh McCann. SIM's connections to key STEM universities is a vital part of our commitments to attract new scholars, freemen and members. Our new warden will establish regular contact with our existing university network while extending SIM's reach to other important academic seats. This new pro–active structured approach will strengthen our university links, raise the company's visibility in academia and create new opportunities for SIM and our members.

Martyn Wheatley - Junior Warden

Membership Development & Activity Committee

The Membership Development & Activity
Committee was formed in the last year or so with
the key purpose of providing a forum for discussion
and organisation of social activities to further
enhance the opportunities and experiences of
the membership. This Committee compliments the
Promotion and Marketing Committee but focusses
on development of the membership and social
activities rather than recruitment.

The Committee deals with supporting the planning and organization of a variety of events – from recruitment Open Evenings to Walks in London (courtesy of the Junior Warden) and the more traditional annual Lectures and the SIMposium, as well as Technical Tours to key establishments associated with instrumentation. The Committee recognises the diverse nature of the Company in age, location, affordability etc and tries to ensure a balance of activities on offer throughout the year which will appeal to all. Some activities may be aimed at younger members and some aimed at more established individuals but all events are open to all members should anyone be interested.

The Committee is very open to suggestions for how best to support the development of the membership and welcomes new ideas and comments on what we could do better, not only to keep bringing in new members but also in providing social opportunities for current members – given the diversity in the Livery.

Professor Ken Grattan, OBE - Senior Warden



Karen Fulton Assistant Clerk

I originally hail from the most northerly town on the British mainland, Thurso, which can be found some 22 miles west of John O'Groats.

I moved to Glasgow to study at Jordanhill College of Education, which later became part of Strathclyde University, before embarking on a career working within the Charitable Sector. My specialism is development of young people through the writing of resources and production of curriculums. In addition to curriculum development, I am also an experienced trainer who has written a number of courses and resources to develop adults and young people in essential skills such as leadership, communications, presentations, conflict resolution, to name a few.

My hobbies include boating and I have been fortunate enough to take part in a considerable number of Tall Ships Races over the years, sailing in a variety of crafts ranging from Square Rigged Sailing Ships through to Yachts. I have sailed the majority of the European and UK Coast from Portugal all the way to Scandinavia and experienced everything from a force 10 in the Bay of Biscay through to being becalmed on the edge of a major shipping lane!

I more frequently enjoy a more sedate kind of boating now, as my family own a 60' Narrow Boat which is moored on the River Wey. We are most certainly not fair—weather sailors and are regularly the only boat moving on the Thames during the winter in the snow and rain!

I am currently an Officer within London Area Sea Cadets holding the rank of Lieutenant Commander (SCC) Royal Naval Reserve. My role is the Area Recreation Officer for London Area which means I am responsible for organising all the Area level competitions and supporting the teams selected to represent the London Area at National Competitions.

I am very pleased to be supporting the Scientific Instrument Makers and use my charity sector, safeguarding and event management experience.

New Members October 2018 to September 2019

New Liverymen

Andreas Theodrous AUGOUSTI
John (Ian) COWIE
Thomas Paul DAVIS
Ian Colin GILBERT
Roger GOLDSBROUGH
David Anthony HOWARTH
Susan Frances JOHN.
John Christopher LANCASHIRE
Gary Adrian MUTCH
Steven Nicholas Penn SMITH
Richard Andrew WILLIAMS, OBE
Edward ROSS

New Freeman

Sorin-Ionut BALABAN
Christine BOOTH
James Edward BRANDRETH
Katy Alexandria CORNISH
Jingyuan GAO
Lucy Margaret HOGARTH
Chun Hin James KUNG
Olive NORMAND
Henry Charles Walter PRICE
Dorsa Nasrollahi SHIRAZI
Jergus STRUCKA

New Apprentices

Geno Racklin ASHER
Timothy DE GOEDE
Gabrielle FEENAN
Theodore John MELLOW
Joshua Luke MITCHELL
Julia PEROTTI
Hina Jabeen RAJA
Finlay WATSON

Beloe Fellow 18/19

Dr Brendon Kettle, Imperial College

SIM Scholars 2019

Lydia Elstone, Manchester University Nickolai Gerasimov, Edinburgh University Eric Ritchie, City University, London Thomas Robins, UCL

In memorium

With great regret we reported the deaths of the following members:

Liveryman John Spencer on 28 November 2018 Liveryman Ernest (Jim) Buckland on 30 December 2018 Liveryman Charles Thomas Austen on 13 May 2019 Honorary Freeman Susan Cornish on 28 July 2019

Our Senior and Junior Wardens Elect

Martyn Wheatley Charles Holroyd

A brief introduction

Martyn Wheatley Senior Warden Elect

Martyn Wheatley is an automation feedback specialist. This means, if you own a robot, then he is your man!

Martyn has worked in automated systems of all descriptions for over 40 years and specialises in the application of a wide range of sensor devices across every type of computer controlled set up imaginable.

With origins in Birmingham and degree qualified from Aston University, Martyn has worked with several blue-chip companies, growing sensor sales by identifying and developing sensor opportunities into growth markets.

Martyn was on the original team which created and grew Baumer UK to become a multi-millionpound business. Honeywell Control's industrial, aerospace and networks divisions were the next to benefit from his market knowledge and his targeted structured approach to selling. He also set up Contrinex UK and is currently the Sales Director of Rechner UK.

His expertise of sensors for manufacturing is broad and extends from extremely rugged inductive sensors for welding cars together through to explosion zone ATEX capacitive products for safely handling flour in biscuit production.

Martyn has been an active member of SIM for over 13 years, supporting many new initiatives and especially the current focus on recruitment of new members. He is very happily married to Valerie and their hobbies are buying art, playing Mah Jong, watching old films, theatre and travel.

Charles Holroyd Junior Warden Elect

Charles became a Scientific Instrument Maker in 1990, following in his father John's footsteps who joined the Livery in 1964. Charles was Steward to Trevor Dixon.

Charles has a BSc in Electrical and Electronic Engineering from the University of Bristol and an MBA from INSEAD. He is a Chartered Engineer and a Fellow of the Institution of Engineering and Technology.

Charles has held senior management positions within a number of publicly quoted companies. He has lived and worked in a number of countries including France, Pakistan, Brazil, Uruguay and Singapore. Most recently Charles worked at Oxford Instruments plc, which he joined in 1999 and where he served on the Board and was responsible for group business development including M&A activities. He retired from Oxford Instruments in 2018.

Charles is currently Chairman of IBEX Innovations, and the Senior Independent Director at Judges Scientific plc.

Below: Senior Warden Professor Ken Grattan OBE (centre), Marytn Wheatley (left), Charles Holroyd (right)



The Master Elect's Statement

Master Elect Ken Grattan gives us a flavour of his forthcoming year

I am delighted to be the next Master of this Worshipful Company of Scientific Instrument Makers and I would like to thank the Court and my friends and colleagues in the Livery for the honour they have bestowed on me as I look forward to the next year – it is an exciting and fascinating prospect. I hope to reward that trust and, with Lesley my wife and consort, to serve you well over the next 12 months in this role.

I would like to thank the outgoing Master – and his consort Maureen – for their hard work over the last year. Only now as I see the range of interesting events and activities building up in my diary do I fully appreciate the commitment and time given by Ken and Maureen: and on your behalf thank them for that.

Misha, our Clerk has been with us now for one year and Neville Watson has become Clerk Emeritus, completing the hand over in the last year. I would like to also welcome Karen Fulton who has joined us as the Assistant Clerk and who will be supporting Misha in the Clerk's office.

I am delighted to say that we have been recruiting well to the Livery and those of you who are regular attendees at our dinners will notice a number of new faces, both young and old. Our relationship with a number of Universities has been very important to us and to our links to the next generation of scientific instrument makers and I am very pleased that Assistant Professor Hugh McCann has taken on the new role of University Warden to further develop and enhance that relationship. In addition, Assistant Jim Webster has also taken on the key role of Recruitment Warden from Past Master John Caunt. I am sure that these two individuals working with our Induction Warden, Professor Stephen O'Connor and our Clerk, will make a formidable team!

Let me turn to the next year in the Livery. We are planning our annual SIMposium on 17th April next year. The theme will focus on what the Livery can give and gain from the more youthful members among us. We plan to look at the future directions

in Scientific Instrumentation and how the Livery can enhance and support new developments and new areas through supporting younger members of the Company. Thanks to the generosity of our Deputy Master, we have significant funds to support this and I hope that many of our members, both early-career and indeed more mature in their careers, can come along.

The Master's weekend will be held from 15th to 17th May and we are going to Northern Ireland – to see something of the sights of my native Province – amongst them the UNESCO Heritage site, the Giant's Causeway, the word-famous Titanic Centre and Dinner in the Great Hall at Queen's University where I was a student a long time ago. We are looking to provide the maximum flexibility in travel and accommodation to suit everyone, so Lesley and I hope that as many of you as possible can join us in May next year.

I am delighted to say that at a meeting of the Privy Council held recently at Buckingham Palace, Her Majesty The Queen approved an Order granting a Charter of incorporation to The Worshipful Company of Scientific Instrument Makers. This is a very important occasion for the Livery and I am delighted that it will happen during my year as Master. We plan to mark this historic occasion at a Banquet in June and as soon as we have details of this memorable event, we will let you know. I do hope that you will plan to attend. Through the generosity of Past Master Sawyer, we will have a splendid and unique charter, featuring a number of scientific instruments old and new.

I hope to meet as many of you over the coming year at the range of events that are organized in the Hall. I look forward to working closely with the newly elected Wardens – Martyn Wheatley, the Senior Warden and Charles Holroyd, the Junior Warden who I know will support me in a number of different ways during the year.

I look forward to seeing you in Belfast next year and to showing you a different side, from the one that you may think you know, of a what is a fascinating city.



The Worshipful Company of Scientific Instrument Makers

Moving forward, giving back

CALENDAR 2019 – 2020 November 2019 June 2020 Saturday 9 Monday 8 December 2019 Foundation of Science & Friday 6 Marketing and Membership June 2020 Annual Banquet – presentation of Royal Charter Partners welcome January 2020 Wednesday 24 Election of Sheriffs followed Trustees, SIM Hall Ltd Exec F&G P by lunch July February 2020 Court & Livery Dinner Thursday 6th Friday 21st Monday 20 **March 2020** Marketing and Membership September Marketing and Membership

followed by lunch Partners welcome

Committee

April 2020

Monday 27 Spring Court & Court Family Dinner

May 2020

Livery Weekend – Belfast City

05-20 tbc

Tuesday 26

and Membership Development

Recruitment Evening (1800-2000)

Development Committee

Four Liveries' Lecture -Monday 21

WCSIM hosting

Election of the Lord Mayor

followed by lunch

October

Thursday 22

Partners welcome