



The Royal Scottish Society of Arts

Showcasing Scotland's Science, Technology and Innovation

Annual General Meeting and 8th Meeting of the 201st Session
(2021-2022)

Presidential Report

This is the President's Report for the 201st Session of the Royal Scottish Society of Arts. My report concerns the objectives and activities of the Society from this time last year, and, despite our activity having been truncated even before last year's AGM by the effects of the pandemic, there is still much that has been achieved.

As you know, the Society was formed almost two hundred years ago for 'the encouragement of the useful arts in Scotland', which these days is taken to mean that we are concerned with advances in science, technology, engineering and manufacture – and indeed, our strap line is 'showcasing Scotland's Science, Technology and Innovation'. For two years now, the Society sadly has been unable to make any visits, nor, with national school examinations cancelled again, been able to award any medals or prizes. We did manage to arrange a complete lecture series of seven talks, through hybrid meetings in which people were free to attend at the Augustine United Church or stay at home to view on Zoom. We were able to consider virtually the Society's future at three Council meetings – for all of which I must thank Councillors, the Vice-Presidents, Office-holders and especially the Secretary for keeping the Society on track. Also many thanks from all of us to the Programme Secretary, Brigadier Ian Gardiner, for all the splendid efforts put into the programme, past and present. Thanks too, to Treasurer Graham Rule, who has kept us connected through Zoom, managed the hybrid meetings (I found the questions difficult to master; but Graham had to run around the Hall with a hand microphone - ably assisted by Pat Jones) as well as recording events for YouTube. More recently, we have been able to drink tea; thanks to Peter Stewart and Pat Jones. We are most grateful to you all. I'd also like to thank you, the Fellows, for supporting what we do by turning up and/or tuning in on (mostly) the fourth Monday of the month to hear about new and recent aspects of cutting-edge Scottish STEM developments.

As you may recall, three years ago now, Council formed a small sub-committee, to work out how we might celebrate our forthcoming Bicentenary: 200 years of 'showcasing Scotland's Science, Technology and Innovation' should not go unmarked. Because of coronavirus, we have been forced to postpone our celebrations not once but twice, and much of our intended events will now take place after this AGM later this summer, and thus be covered in the next Presidential Report.

However, the subcommittee, which met virtually 6 times in the past year, has continued with organisation of the bicentenary events, and I can report various things which we have already done, and then I'll list those where progress is being made towards the events that we hope to undertake. These are:

- we were able to have the Society's coat-of-arms made into a special and rather splendid bicentenary coat-of-arms by the genealogist and heraldry expert Mark Dennis, who kindly did this without charge to the Society. This has been used on our stationery produced for the year, and it can be seen on the website;
- Fellows were each provided with a mug embellished with this bicentenary coat-of-arms. There are still some of these available for purchase from the Secretary;
- Fellows were also provided with metal lapel badges made with Minerva's head in gold on a red ground, and 'RSSA 200' and the dates 1821-2021;
- Through the firm Lochcarron, we commissioned a Society Bicentenary tartan, based on the colours of the bicentenary coat-of-arms - mostly green, brown, blue with smaller stripes of white and red. Lambswool scarves are available from the Secretary for purchase by Fellows - and through them as gifts for friends and family. Warm and inexpensive, they are really very cosy in the winter!
- A Bicentenary Lunch, with an invitation to the Society's Patron HM The Queen: a celebratory lunch in the Upper part of the Signet Library to which our Patron had been invited in late June or early July 2022. Our delayed Bicentenary celebrations have moved into the Platinum Jubilee anniversary year, and the two dates we hoped to entertain Her Majesty turned out to be unsuitable for the royal diary. We continue to talk to the Assistant Diary Secretary, and more news on this will be announced shortly.
- The Bicentenary Seminar, with The President speaking about 'Two hundred years of "The Useful Arts" in Scotland: the Bicentenary of the Royal Scottish Society of Arts', followed by RSSA Honorary Fellow, Professor Dame Anne Glover speaking about Post-Covid Scotland, with refreshments at the Royal Scots Club had to be rescheduled from 13 December 2021, and will now take place on 16 June 2022.
- The Society's Royal Charter granted in 1841 (now held in the National Library) has been photographed and placed into a new, bespoke conservation-approved box, instead of being folded up in its original small tin.
- We plan to get the Society's 19 volumes of *Transactions* – published between 1841 and 1927 – digitised and made accessible on-line to both Society Fellows and the general public. We continue to discuss this with the National Library of Scotland, who are prepared to do this for free, and will then support the project on their website. This did not move forward during lockdown, understandably, and now that National

Library staff are returning to their offices we hope to have positive news about this shortly.

- We continue to plan the award of an RSSA Bicentenary Prize: this would be in the form of a travel scholarship to the value of £2500. Submissions will be invited from Scottish Universities.
- A Civic Reception: the Lord Provost's Office will be approached in due course.
- The lecture series for the 202nd Session, 2022-2023, will be very much the flavour of the current and immediate past series: but we hope to hold a day symposium in which invited speakers will discuss the future of their subjects – with perhaps an introduction showing where their discipline was 200 years ago.

At last year's AGM, I was able to report that the RSSA Bicentenary subcommittee had moved this agenda forward. And again, despite progress being frozen for part of the past year, we have managed to carry things forward a little further, as I have just outlined. We fully intend to keep Fellows posted as to what is happening just as soon as we know ourselves. Please keep an eye on the website, where events will be announced. For the moment, I should tell you more about what we have accomplished during this past (quite difficult) year.

As I said, there were, due to Covid, no excursions for the second successive year. In September our 201st annual lecture series began, all given virtually through Zoom, and recorded by Graham Rule and put on YouTube. From the start of this session, we were also able to go back to the Augustine United Church and attend in person. Fellows who were unable to attend either the 'live' or virtual meeting, were, on request, able to watch these recordings. There were in total seven lectures, the first given by Dr Bradley Harper, Colonel (rtd) US Army Medical Corps, on secondment to the University of Edinburgh. He was able to step in, at very short notice, and give an amusing but serious talk entitled 'Sherlock Holmes as Science Fiction'. A retired military pathologist with real-life experience in forensic death investigation, Dr Harper provided a brief overview of the history of forensic science, sharing the story of the world's first crime lab, inspired by Sir Arthur Conan Doyle's fictional detective, and the murder case it cracked that made forensic science a part of every major police department around the world. He also showed the part Scotland played in the development of the speciality of forensic science. Our second speaker, Professor Lorna Dawson, Head of Forensic Soil Science, James Hutton Institute, Aberdeen, delivered an enlightening talk on 'Natural Justice and a sense of place: how soil can be used as intelligence and evidence', which demonstrated the development of the use of soil materials as forensic trace evidence from as far back as Roman times. This evidence can be used to aid crime investigations and reconstructions, and has made significant advances in the past

decade, along with communication of these advances to the general public. Our third absorbing presentation came from the RSSA's former President, Professor Ian Robson, who was able to talk to us at very short notice about 'The Changing Scene in Astronomy'. Starting with the ancient Babylonians (admittedly just a brief mention), Professor Robson covered the history of astronomy from the invention of the telescope in 1609 to the recent launching of the James Webb Telescope, and showed his audience some of the marvels uncovered by these technological wonders. He also gave us a brief glimpse into the future, where astronomers will have to grapple with the onset of 'Big Data' in modern astronomy. Subsequently we heard from Professor J. Murray Roberts, Professor of Applied Marine Biology and Ecology at the School of Geosciences, University of Edinburgh, on the fascinating topic of 'Cold-water corals in a changing ocean'. Over the past twenty years cold-water coral research has shown these organisms to be the most diverse and dynamic of marine ecosystems, and that they also act as sentinels of change in the deep oceans: an alert for increasing human activity causing global change. Our fifth presentation came from Professor Wilson Poon, Professor of Natural Philosophy at the University of Edinburgh, who talked about 'Goo Galore: the science, the technology and the fun of all things squidgy', observing that 'goo' can be found in the domestic sphere - shampoo, toothpaste, ketchup, mayonnaise - while industry needs goo - paints, glue, cement. He described these as 'liquids with bits'; but it is the 'bits' that confer the properties interesting to physicists, including 'squidginess'. Next we heard from Professor Colin Pulham, Head of the School of Chemistry at the University of Edinburgh, speaking about 'Cool Crystals - From Hand-warmers to Heating Homes and Tackling Fuel Poverty', a really pertinent topic which concerns us all. The development of phase-change materials - compounds that absorb heat on melting and release heat on freezing - has led to the the commercialisation of compact storage units known as 'Heat Batteries', developed in partnership with a local industrial company, Sunamp Ltd. Even now, these can be connected to solar panels and other forms of renewable energy heating equipment. Our final presentation came from Professor Steven Brusatte, Professor of Palaeontology and Evolution at the University of Edinburgh. He spoke about something that had just been in the news, and had caused a bit of a stir: 'The Rise and Fall of the Dinosaurs ... including Scottish Dinosaurs!' The talk centred on the dinosaurs that ruled the Earth for over 150 million years - where they came from, how they rose to be the Earth's dominant species - how giant dinosaurs once called Scotland home during the Jurassic - and how most of them died out with the catastrophe of a giant asteroid hitting the Earth, with some surviving and becoming the ancestors of today's birds. I think you'll agree that Council suggested some quite extraordinary and powerful speakers, who gave some inspiring talks: and our thanks to Graham Rule for his mastery of the technology, and to Brigadier Ian Gardiner, Programme Secretary, for pulling it all together.

The Society has presented awards and medals since its earliest days, back in the 1820s. These days, we endeavour to engage with younger people by the annual presentation of medals and book tokens to the student with the top marks in the Engineering Science Higher examination, and another to the winner with top marks in the Engineering Science Advanced Higher examination. Usually these awards are presented at the 'Science and the Parliament' day, which this year, again for the second time, was held virtually; but as there were similarly no examinations, also thanks to the pandemic and state response to it, sadly no medals were awarded.

Council's plans to celebrate the Society's Bicentenary with events have been similarly thwarted. Although the actual foundation date of the Society (and here I speak as a historian) is strangely difficult to place one's finger on, we decided that as the centenary - when Fellows had emerged from a Great War and another pandemic - was held with a public dinner in July 1921, we would follow their lead and try for July 2021. Alas! This was not to be; but Fellows each received an anniversary lapel pin, with a golden Minerva's head (Minerva being the Roman goddess of wisdom, usually seen with an owl - two owls' heads are on the 'shield' in the coat-of-arms). They also received a mug with the special Bicentenary coat-of-arms.

We sincerely hope that other bicentenary activities - the digitisation of the Society's Transactions, care of its archives and Royal Charter - will be put again in motion with the easement of lockdown. Lunch in the Signet Library, we hope in the presence of our Royal Patron, had been programmed for late June or early July 2022, but has had to be postponed. Other celebratory events, once firmed up, will be posted on the website and announced at meetings, which are again being held in the Augustine United Church with an option of watching virtually from home.

I trust that the coming year, now that we are coming out of the shadow of Covid-19, will prove as interesting and as varied as the past (perhaps more so): and thank you all again for your support.

Dr Alison Morrison-Low
President
26th May 2022