

# 37-year-old mystery is solved as 'long-lost' Fellow rejoins RMS!

## Chance discovery of letter reunites former UCL lecturer with Society

**As Ferey Faridian rummaged through a box of documents at his home in California, he came across an intriguing old letter.**

The 65-year-old's interest was piqued for three reasons: firstly, because the missive appeared to relate to his much-cherished time as a young academic at University College London in the 1980s, and secondly, because he suddenly recalled receiving a letter from the RMS at a scientific meeting around that time. The greatest intrigue of all, however, arose from the fact that the top half of the paper – and therefore almost all the letter's content – was missing.

Determined to get to the bottom of the matter, Ferey contacted RMS Chief Executive Allison Winton, emailing her a scan of the remaining portion of the letter (pictured, opposite).

Ferey explains: "As a microscopist, I had the privilege of working with some of the pioneers of a new form of microscopy at University College London and Stanford University. My research culminated in the development of the first gas coupled acoustic microscope under the auspices of a beloved mentor; the late professor Sir Eric Ash, former rector of Imperial College.

"When I found the document, I remembered there was an international conference back in 1984 hosted in London, and prof. Andrew Briggs [Hon FRMS] was present and had given Eric and myself this letter on behalf of the RMS. They must have thought the work we were doing was new and interesting and wanted to recognise that formally."

Picking up the investigative trail, Allison consulted a

volume of the RMS *Proceedings* from January 1985, and Ferey's hunch was proven correct.

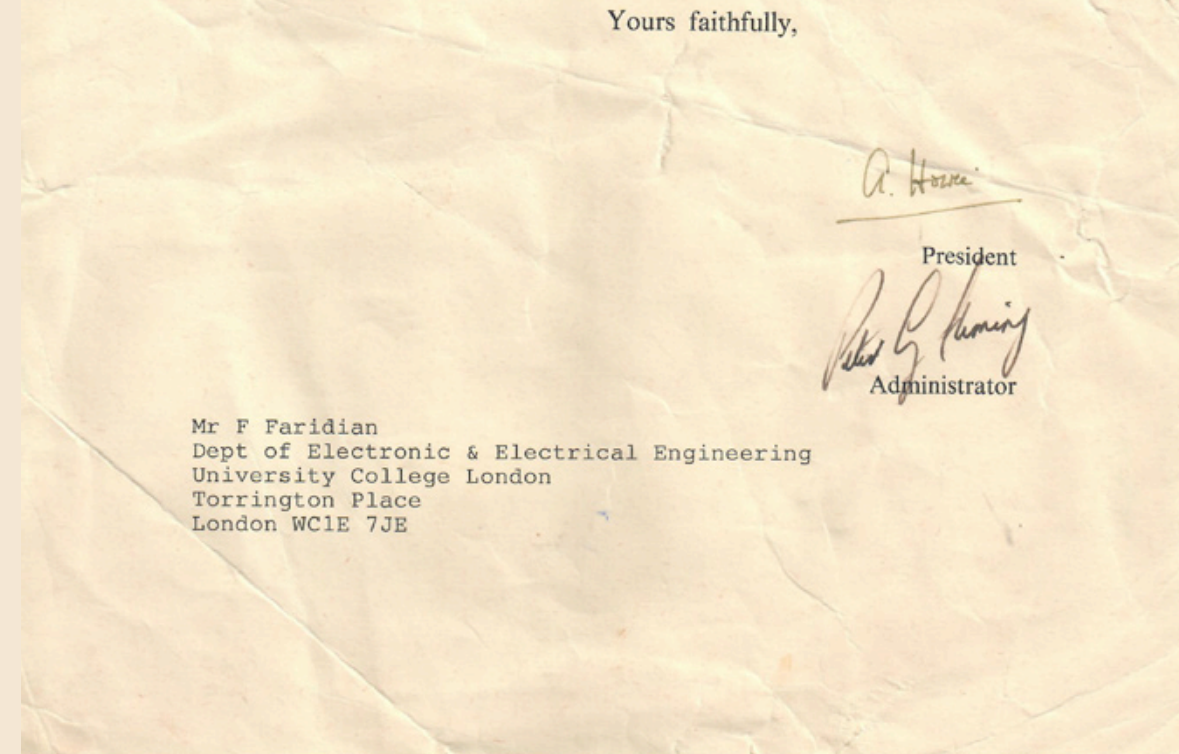
She says: "Looking at the last few lines on the bottom half of the letter, I guessed that this was a letter confirming Ferey's election as a Fellow of the RMS – and sure enough, his name was right there, listed under 'Elections to Fellowship'. He had obviously let his membership lapse, but I told him it's never too late to rejoin the Society!"

Ferey duly reinstated his membership, bringing a close to the mystery, and reigniting his pride at belonging to the world's oldest society dedicated to Microscopy and Imaging.

He says: "I was only 28 at the time of the letter, and so I was very honoured, but perhaps I didn't fully



A young Ferey, pictured in the early 1980s.



The remaining portion of the letter from 1984, which bears the signatures of former RMS President, Professor Archie Howie Hon FRMS, and the Society's Administrator at the time, Colonel Fleming.

understand this enough to look after my letter and membership! I had completely forgotten about it, so it was really nice to kind of pin down where this came from, and to know that I had actually been elected to the Society. It was a very pleasant experience."

Ferey arrived in the UK from his native Iran as a teenager in the mid 1970s. His initial plan was to study here for his degree and return home, but as the Iranian revolution erupted mid-stride of his master's degree at UCL in London, he pivoted to academic research, starting his PhD in 1980, and going on to become one of the youngest members of UCL's Faculty of Engineering, as a lecturer, by 1986. By this point he had also gained UK citizenship, married his "English rose", and started a family.

He recalls: "I was a member of a prestigious lab – the '904' – and I loved it. We were on the ninth floor of a building in Torrington Place and doing sub-micron microscopy in a building that moved by several centimetres every time the wind blew! It was a wonderful place, and the lab had many good people in it.

"Eric Ash was a strict but wonderful mentor. He had

been working on focusing techniques for electron beams and holography under Denis Gabor, a Nobel laureate, so he expected monk-like dedication from his students. Gradually he went into surface wave acoustics. By my time, we were working on GHz acoustic microscopy. The researchers at Stanford had picked it up, and Eric had done his rounds there, and we were all trying to put together variants of a microscope that would 'see' with sound at resolutions comparable to optical microscopes.

"The teams at UCL and Stanford were the two leading teams commercialising the technology, so we became more and more known for our multi-modal imaging and pioneering microscopy techniques. The one I worked on was unique because the sound beam had to go through a column of gas, and when you do that, you have orders of magnitude more difficulty in reaching your object, but much better resolutions. It was the first gas acoustic microscope and we had to develop a perfectly polished 10  $\mu$ m radius lens, the smallest lens ever produced at the time, in precisely oriented and cut to a minute of arc in anisotropic sapphire crystals.

"In 1986 we thought that Cal Quate and Eric Ash might get the Nobel Prize for acoustic microscopy, but once the scanning tunnelling microscope came along, that was it – and of course that year the Nobel prize in Physics was shared between Ruska, Binnig and Rohrer for what became the precursor of the atomic force microscope. One of my earlier advisers, prof. Kumar Wickramasinghe, who had just returned from Stanford, went on to join that team at IBM."

The commercial world soon came calling and by the late 1980s, Ferey had taken up a role at Schlumberger, leading an accelerated product development SWAT team at Weston-Solartron, working with "great people" at Enfield, Farnborough, Rolls Royce and the Royal Aircraft Establishment (fascinatingly, one of the products the team developed during this time is used to this day on NATO's Euro-Fighter aircraft).

Ferey says: "I felt so lucky to be doing what I was doing in academia, but I remember at the time London was expensive on my lecturer's salary. I suppose I sold my academic soul, but in the end, when someone in a Global 500 company says they will double your salary, it's very difficult to turn that down."

In 1990 Ferey moved into Management Consultancy at Sagentia, a technology and business consulting and venture group, in Cambridge. He says: "This was a truly amazing company that oozed with innovation and afforded me the mentorship of the late Gordon Edge of the Cambridge phenomenon fame." Ferey represented the company and high-tech SMEs on the UK's Parliamentary and Scientific committee while his international assignments gradually morphed from technology management to change management, corporate strategy and M&As in twelve countries.

By 1996 he had moved to Boston and within a year to Los Angeles, California, into the world of Fortune 100 consulting and middle-market investment banking. Having gained several years' experience at the sharp end of corporate strategy and M&As, Ferey worked for more than 10 years in numerous investment banking and principle investing roles in private equity and venture capital, before serving as a CEO or Board

Member in a number of Silicon Valley and SoCal hi-tech companies. Now on four boards, he is Managing Director and Partner of Newport LLC, a national CEO advisory firm in the US, assisting founders of middle market and growth companies, and the funds investing in them, with value acceleration, M&As and exits. He is also a principal advisor at LARTA - a non-profit organisation which helps entrepreneurs secure seed funding from government agencies to commercialise cutting-edge technologies.



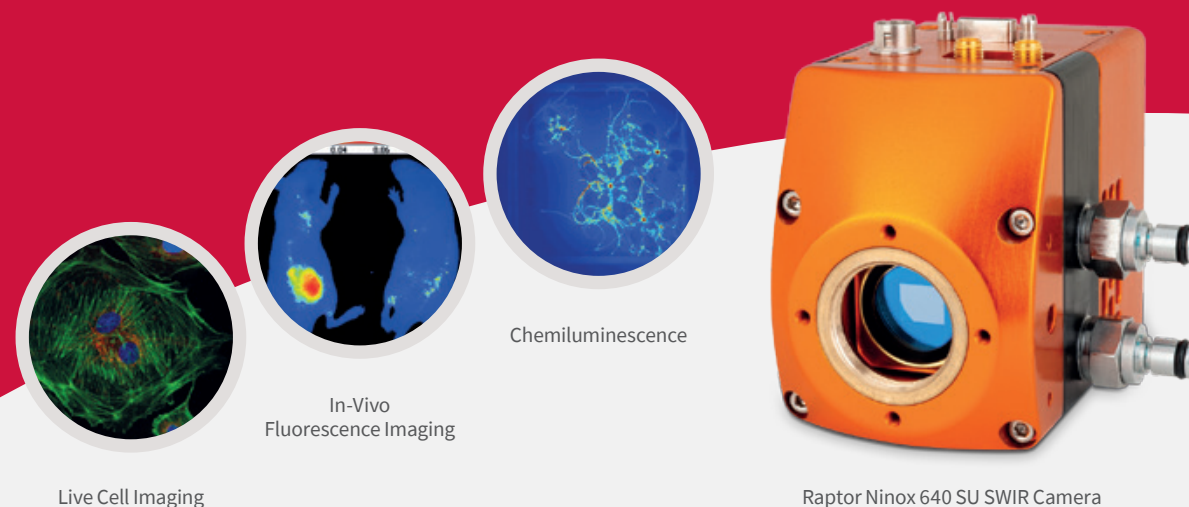
*Ferey as he is today.*

Ferey says: "I absolutely love my job, and my background in imaging and microscopy has certainly helped me to stay sharp. It means that whenever there is a company looking for a board member, and they have some really sophisticated technology, it obviously helps when they realise I have a deep understanding of the technology."

Reflecting on his time in academia and being at the forefront of developments in microwaves, optics, acoustics, imaging and microscopy, he adds: "I feel very lucky to have been close to such advanced research at UCL and Stanford, and after all these years, it really feels like a crowning achievement to discover the intriguing half of the RMS letter, like a message in a bottle, and then to decipher what the other half of it meant!"

**Owen Morton**

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