

The History of the Institute of Materials Finishing (1925-2015)

by
Ian R. Christie MSc, FIMF
and
Clive Larson MA, BSc, FIMF

The Institute of Materials Finishing



About the Authors



Ian Christie



Clive Larson

Ian Christie, who sadly passed away in April 2001, was a member of the IMF, and of its London Branch, for over 30 years, during which time he served on, and chaired a number of committees. He was Institute President from 1990 - 1992.

While working in industry he was responsible for important developments in metal finishing, notably in trivalent chromium electrodeposition (for BNFMR) and in initiating metal electrodeposition processes for electronics applications (at GEC-Marconi Hirst Research Centre). In the 75th anniversary year of 2000 he was presented the Institute's highest award - the Gold Medal - for his services to the Institute and the profession.

Clive Larson had an earlier career in materials finishing in industry and Fulmer Research Institute, and for the last two decades has been coordinating the publishing of Transactions as Executive Editor. He has published research and review articles on a diverse range of topics including composite plating, use of acoustic emission to detect development of cracking during electrodeposition, pulsed current plating, electrodeposition of alloys and applications of SEM and AFM in characterisation of electrodeposit surfaces. He regularly analyses the surface engineering industry with, for example, reviews of research into coatings for aerospace structures and global comparisons of national surface finishing industries.

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Foreword to the 1st edition

All people and organisations enjoy the opportunity that an anniversary brings for taking stock, reminiscing and indulging in nostalgia. The 75th anniversary of the Institute, from its inception as the Electrodepositors Technical Society, is no exception and Executive were in little doubt that it was timely for an account of its history to be written.

The last two founder members — Simon Wernick and Edward Masek — have passed on relatively recently and that is in a sense the passing of an era. But there are still many members with long memories, so it was very encouraging that Ian Christie accepted the invitation to write a history which could be described as primarily a social history and not a dry and definitive work.

The Institute has gone through a number of phases of life as patterns of work and professional needs have changed and developed. The big annual conference at which over 300 members with their wives gathered at seaside resorts for a relaxing week of socialising, golf and lubrication, tempered with a few technical papers, has long gone, as has the frequent and well-attended branch meetings after which the industry's gossip was passed around, analysed and expanded.

Ian has captured quite a few aspects of this saga and surely will trigger off memories for many members and introduce younger members to faded glories of the past. Together with the records of officers and awards this will be an excellent commemorative for the anniversary dinner and give readers continued pleasure. Thank you Ian!

*David Gabe
Chairman - Publications Committee
October 2000*

Introduction to the 1st edition

As the millennium year and the 75th anniversary of the Institute of Metal Finishing coincide it was felt appropriate to produce a short history of the Society and Institute, hopefully outlining the more important events that have taken place. Many documents have been perused and some “elders” of the membership approached in order to produce a short but hopefully complete history — their help is gratefully acknowledged. Without doubt some events and names have not been mentioned but I did not wish to produce a table of events and people in a manner similar to a scientific paper and I hope I have offended no one in my attempt to be concise.

In going through the records at Exeter House it has been amazing that such a wealth of data has been retained including the minutes, in hand written form, of the first meetings. At the same time it has been frustrating that many activities went unrecorded even the actual date that the first President was inaugurated. I have tried to be historically accurate and where possible have checked with independent sources. My thanks especially to Jean Sturch for her help and patience with me as I rummaged about trying to find something and thanks are also due to the late Edward Masek for early reflections on the Society.

Ian Christie

Introduction to the 2nd edition

Sadly, Ian Christie passed away on 16th April 2001 shortly after the 1st edition written by him was published. In adding the story of the last 15 years to his earlier work I have tried to keep to a compatible style. Some, minimal, editing of the original has been unavoidable but hopefully this hasn't detracted from that worthy piece. I hope, too, that readers will enjoy this joint effort of 90 years history of the Institute as a whole. My thanks go to Barry Gay for his constructive comments on the draft manuscript.

Clive Larson

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The History of the IMF

I. The Electroplaters and Depositors Society

The origins of The Institute of Metal Finishing can be traced to the early 1920s when the progress in many industrial processes was beginning to adopt a scientific basis. The importance of metal finishing was being recognised for a number of industrial processes both in the decorative and in the engineering sectors. However the evolution that led to our specialist Institute is interesting in itself. The need for a society to provide for the emerging professions of metallurgy and electrochemistry which were closely linked at the beginning of the 20th century was recognised by industrial metal finishers of considerable acumen and drive. Sherard Cowper-Coles was a prime mover in establishing the Faraday Society in 1905 and Cowper-Coles' Sherardising process still holds its place in finishing technology. For some 20 years the professional needs of metallurgists and electrochemists were met by this Society. Eventually these disciplines matured creating the need for more specialist organisations. Whilst it took some two years for the Electroplaters and Depositors Society to come into being the relationship with the Faraday Society was good, two members of the Faraday Society assisting the formation of the Electroplaters and Depositors Society and serving on the early committee meetings.

Eventually the Faraday Society became the Faraday Division of the Royal Society of Chemistry and it is pleasing to note that within the Division, the Electrochemistry Group and the Industrial Physical Chemistry Group have often contributed to meetings of the IMF.

The Faraday Society was the main outlet for technical papers up to 1925 but the need for a specialist organisation which could discuss the more practical needs of the emerging technology was recognised. At the suggestion of the Faraday Society a small provisional committee was formed under the

chairmanship of S. Field with F. S. Spiers as secretary and the first meeting was announced to take place at The Northampton Polytechnic on Wednesday 11th November 1925. The meeting was preceded by announcements in the scientific press e.g. Nature (7/11/25) and in the national press.

This inaugural meeting was to discuss the need for such a society and much debate concerning its function, aims and objectives ensued. It was decided that all aspects of deposition processes would be represented and that two types of meeting would be held: open meetings when both members and non-members would be welcome and at which formal papers would be presented, and meetings for Society members only which would take the format of round table discussion. This latter type of meeting would enable members to discuss production problems and their solution as well as informal exchange of experiences and general problems. These round table discussions would not be reported in detail to preserve confidentiality and soon proved to be most popular with the membership. A unanimous vote agreed to form a society and the first provisional committee was voted into office. The committee consisted of the following individuals:

Mr S. Field. Chairman (Head of the Technical Chemistry Dept. Northampton Polytechnic)
Mr S. F. Spiers. Secretary (Secretary and Editor, The Faraday Society).
Mr J. S. Sutherland. (London School of Printing).
Mr W. F. Pilcher. (Sturtevant and Co Ltd Electroplaters).
Mr D. J. McNaughton. (Research Dept. Woolwich Woolwich Polytechnic)
Mr L. Gorin. (The Clerkenwell Plating Co).
Mr W. James. (Kings Cross and A. H. Wood Plating and Enamelling Co).

The interest in the new society appeared strong and 50 individuals attended this meeting. Much praise was given to the Faraday Society for instigating the concept and support. It was decided that the new society would remain associated to the Faraday Society.

A second committee meeting was held on the 25th November 1925 to discuss draft rules of the society, membership

fees and the initial technical programmes. Much discussion centred on a suitable name and the title The Electroplaters and Depositors Society-in association with The Faraday Society was agreed.

Membership fees were fixed at five shillings (25p) per annum and two shillings and sixpence (12.5p) for students. Fifty four membership applications had been received of which fifty were accepted. The remaining four were company membership requests but it was decided that membership would be restricted to individuals only. A preliminary programme, commencing in December 1925 was decided.

A third committee meeting on 9th December agreed the draft rules of the Society and accepted a further 22 members.

II. The first technical meetings

The Society's first general meeting was held at the Northampton Polytechnic on the 9th December 1925 where it was announced that all future meetings would be held at this venue. A draft set of rules for the society was proposed and accepted (Fig. 1). The inaugural paper was presented by S. Field entitled "Electrodeposition, A Survey of Modern Progress." Practical examples included: adhesion of metals, citing Ollard's work, Fescol Ltd application of electroplating to recover worn parts, early work on attempts to produce a satisfactory process to deposit chromium and work demonstrating the superior corrosion resistance of cadmium compared to zinc. Strangely, a plea for more research into the fundamentals of the electrodeposition process was made, a plea still echoed today. Also the point was made that more liaison between research and production and the need for standardisation within the industry were required.

The society grows

A members only meeting was held on 13th January 1926 with 63 paid up members attending. This centred around solution control methods and Mr Field offered to do free cyanide determinations for members. It is probably at this meeting that Mr Field was asked and agreed to become the first

The Past-President shall be a member of the Committee for one year after having held the office of President.

The Vice-President, Treasurer, Honorary Secretary and the four non-official members of the Committee shall be elected annually and be eligible for re-election, excepting that no elected non-official member may hold such office for more than three years in succession.

8. DUTIES OF COMMITTEE

- (a) To elect Members of the Society
- (b) To conduct the general business of the Society, to be responsible for the funds and finances, arrange meetings and arrange for the publication of papers read before the Society
- (c) To make any bye-laws which may be found necessary for the proper carrying-out of the objects of the Society.

9. THE ACCOUNTS

shall be made up to September 30th in each year and having been audited by two Members of the Society, shall be presented at the Annual General Meeting. The Honorary Auditors shall be appointed annually at the Annual General Meeting and they shall be eligible for re-election.

10. MEETING

- (a) The Annual General Meeting which shall be held in November.
- (b) Ordinary Meetings to consist of:
 - 1. Open meetings where suitable papers or lectures or demonstrations will be given and to which visitors may be invited. Reports of these meetings will be offered to suitable journals for publication.
 - 2. Members' meetings for Members only, for informal discussion on some subject relating to electro deposition of which no report shall be published.

11. WITHDRAWAL OF PRIVILEGES OF MEMBERSHIP

The Committee shall have the power to ask any Member or Student Member to withdraw from the Society. If any person so requested refuses to withdraw, the Committee may, if it thinks fit, ask the general body of Members, either at an Ordinary or at a special Meeting, to consider the advisability of removing the name of that person from the Register of the Society. In no case but that of actual expulsion shall such an incident be recorded in the Minutes of the Society.

12. ALTERATION TO RULES

No alteration or additions shall be made in these Rules except by the majority of votes at a special meeting called for the purpose by the Committee, or on the requisition of at least ten members of the Society. Two weeks' notice of such meeting must be given to all Members of the Society and one third of the total number of Members shall be required to form a quorum.

President of the society (Fig. 2) and Mr Spiers agreed to become the Vice President. No formal records were kept of these round table meetings but from isolated notes discussion revolved around the problem of obtaining reproducible results in silver electrodeposition, experienced by several members especially when plating onto aluminium.

By February membership had reached 100 and the meeting on 10th of the month was Ollard's paper on the deposition of chromium. He described the Liebreich process and continued by outlining applications and processing costs. The latter was clearly a bone of contention with electroplaters who felt that the high current requirements of the process would make the process at least six times the cost of nickel. Ollard dismissed this as the high speed of the process gave increases in throughput which more than compensated. He stated that polishing requirements were similar to nickel. The interest of the motor industry was clearly demonstrated as both Autocar and The Auto in their February issues quoted extensively from Ollard's paper, especially for components and headlamps, citing that Ollard had clearly demonstrated the advantages over nickel alone.



Figure 2. Mr S. Field. The first President.

Numerous meetings were held over the first year with acclaim from the technical press and learned societies alike. Towards the end of the first full year the first venture outside London was arranged with the Annual General Meeting being held in Birmingham at the Municipal Technical School with support from W. Canning, an enthusiastic early supporter of the society. E. Ollard and E. Dobbs presented a joint paper on nickel plating.

Over the next few years the society continued to grow both in terms of membership and reputation. The policy of open meetings and closed round table discussions continued with occasional meetings in other centres. It is clear that the founding fathers of the society enjoyed a high reputation and in discussion with one of the early members, Edward Masek gave the following comments.

“Attending a society meeting was like going to church, each of the elders had his seat and no mere stripling would be prepared to risk the elder’s wrath by sitting in his chair. The meeting commenced with a welcome and usually a comment or two on the weather and some newsworthy topic. However the wealth of information and the desire to teach and help to solve problems made the meetings almost compulsory for any up-and-coming electroplater.”

By the end of 1929 the society had a membership of over 300, a standards committee, and was beginning to attract members from abroad, notably the USA, Japan and Europe. 1929 also saw the further contact with Birmingham with the establishment of an annual conference in February at the Birmingham Central Technical College, although before this date many members were from the Midlands region. (Fig. 3). The Birmingham influence steadily grew and in 1933 the Inaugural meeting of the Birmingham Centre was held. It was decided to form a Centre at the James Watt Memorial Institute with its own committee aided financially and administratively by London. The first committee was appointed with Dr M. Cook as chairman and Messrs. B. J. R. Evans and N. R. Laban as joint treasurer and secretary. The premises were described by Simon Wernick, already some years in office as the Society’s



Figure 3. Birmingham Conference March 1929.

Secretary Gen as very luxurious by the London standards with a 200 seat lecture theatre, a committee room and a good reference library. This represented the first formation of a local section of the society with the aim of providing for both technical and social activities for the industry.

Up to the end of the Society's year (June 1934) eight meetings were held at the Birmingham centre with a one-day conference, a very credible record for the new activity. (Fig. 4). Many London based members attended meetings in Birmingham and the sense of a more united society becomes apparent in the records.

In 1935 a major exhibition on electroplating was held at the Science Museum which commenced on 25th of June. Over the course of the exhibition over 100,000 visitors were recorded with many favourable notices from the press. These reports were not restricted to the technical press but included the national press. The interest of the general public far exceeded the expectations of the organising committee. The organising committee was chaired by R. A. F. Hammond with able

PROGRAMME OF MEETINGS.	OFFICERS AND COMMITTEE.
<p>All Meetings, unless otherwise stated, are held at the James Watt Memorial Institute, Gt. Charles Street, Birmingham, at 7-30 p.m.</p> <p>1933. SEPTEMBER 7th.—INAUGURAL MEETING. SEPTEMBER 28th.— "The Commercial Development of Chromium Plating." By L. WRIGHT, B.Sc.</p> <p>OCTOBER 25th.— "De-Greasing." By W. F. JESSON.</p> <p>NOVEMBER 22nd.— "The Preparation of Metallic Surfaces for Electrodeposition." By N. R. LABAN, B.Sc., A.I.C.</p> <p>DECEMBER 11th.— "Nickel and Chromium Plating Technique." By M. COOK, Ph.D., M.Sc. and B. J. R. EVANS.</p> <p>1934. JANUARY 8th.— "Electrodeposition for Wear Resistance." By J. KRONSBELN, D.Sc.</p> <p>FEBRUARY 6th.— "Open Discussion on Nickel Plating Troubles." Opened by E. J. DOBBS, B.Sc.</p> <p>MARCH 6th.— "The Protective Value of Electrodeposited Coatings." By H. SUTTON, M.Sc.</p> <p>APRIL 17th.— "Electrodeposition of the Platinum Metals." By R. H. ATKINSON, M.A. and A. R. RAPER.</p>	<p style="text-align: center;">Session 1933-34.</p> <p style="text-align: center;"><i>Chairman :</i> MAURICE COOK, PH.D. M.Sc.</p> <p style="text-align: center;"><i>Vice-Chairman:</i> L. WRIGHT, B.Sc.</p> <p style="text-align: center;"><i>Joint Hon. Secretaries and Treasurers :</i> B. J. R. EVANS, N. R. LABAN, B.Sc., A.I.C.</p> <p style="text-align: center;"><i>Committee :</i> H. BACHE, C. F. J. CARTER, R. E. CLOSE, W. F. JESSON.</p> <p style="text-align: center;"><i>Ex-Officio Members :</i> D. J. MACNAUGHTAN, F.INST.P. S. WERNICK, PH.D., M.Sc.</p>

Figure 4. The first Midlands programme.

assistance from S. Baier and H. Day. The exhibition covered all aspects of electrodeposition including decorative, engineering, anodising and research categories and was seen by all as a fitting tribute to the first 10 years of the Institute's history.

Membership of the Society continued to grow slowly and both the London and Birmingham centres produced a wide range of technical papers holding, on average, 20 meetings per year between them. An established annual conference was held in Birmingham usually on a special theme e.g. silver electroplating. Meetings were held in conjunction with the Faraday Society and with other technical societies. All important contributions were recorded in the Society's annual journal which was published in hard back each year. This publication was purchased by many universities, libraries and industrial organisations as an important technical journal.

In 1936 plans were made for the first international conference under the chairmanship of Mr Ollard, the current president. Lord Melchett had agreed to become patron and conference opener. For the Society this was an ambitious project, probably the first of its kind in the specialist world of electroplating and a number of members expressed reservations concerning its success both in technical and financial terms. In both aspects the conference was a success. The conference was held in London in March 1937 over two days with 25 papers presented over a wide range of subjects in electrodeposition presented by authors from throughout the world. These papers and discussion were published in a separate volume of the society's journal (Vol. 13). The hope at the conference was that this would be the first of many such ventures which would be taken up by other sister organisations in other countries. Simon Wernick, already the society's secretary for some ten years reports that the American Electroplaters Society had been so impressed that they had undertaken to hold a Second International Conference in New York in 1939. This was the start of co-operation between the two societies that has continued to the present.

III. The war years

The war years had many impacts on the functions of the

Society. It was not possible to meet most evenings and many meetings were held during the day often at short notice. Resignations or just loss of contact with many overseas colleagues followed by many UK members joining the armed forces disrupted the steady growth in membership and the paper shortage reduced publications and publicity. The Society assisted the Ministry of Labour in providing statistics on numbers, ages and qualifications of people engaged in the industry and made representations to the Ministry concerning reserved occupations for certain categories of members.

However as the war progressed the number of individuals engaged in electroplating grew due to the increasing armaments effort and the Society membership grew correspondingly from 287 in 1940/41 to 370 in 1943/44. The number of technical meetings also increased albeit with lower attendance figures. The Society also provided members to the standards committee of the Ministry of Aircraft Production and the use of engineering coatings both in production and reclaim became of significant importance to the war effort. Also, some classes in the training of people for the electroplating industry were held, especially as a number of skilled technicians were in the armed services.

The final year of the war saw the Society emerging in a stronger position than before. Despite the lack of international contacts or the inability to hold conferences, meetings both in London and Birmingham had continued virtually unchecked and a steady increase in membership was recorded. The importance of electroplating to the war effort was recognised and the ingenuity of the industry to provide solutions to the solving of industrial problems was recognised.

IV. Post war period

The end of the war saw a dramatic increase in membership of the Society to about 750 and the resumption of full activities both in London and Birmingham. Dr Simon Wernick, the Hon Secretary for many years was elected as president and S. W. Baier was elected as Hon Assistant Secretary for the duration of S. Wernick's presidency. An international conference was held in London and recorded as a great success. Held at the

Hyde Park Hotel it was attended by some 350 people including 40 overseas delegates. Additionally social celebrations to mark the first 21 years of the society were held.

1947 was an important year in the Society's history as the continuing expansion of the membership to around 1000 necessitated reorganisation of administration and member services. The society's office was staffed permanently between the hours of 9.00 am and 4.00 pm and a number of committees were formed to ensure the smooth running of various activities. These were a programme co-ordination committee, chaired by H. Silman, a publication committee, chaired by S. Wernick, an education committee, chaired by E. A. Ollard, and a technical committee chaired by E. A. Ollard. Additionally, the standards committee which had carried out work with the government continued to represent the industry, again chaired by E. A. Ollard.

The London centre for the first time had its own elected committee — in the past the centre was controlled by the main committee. A new centre was established at Sheffield as a spin-off from the Midlands centre. The first meeting took place at the Mappin Hall, Sheffield University on 14th October 1947 under the chairmanship of F. Mason when, with representatives of the Midlands centre, it was resolved to establish the new centre. The first general meeting was held on 26th January at the Grand Hotel, Sheffield with a discussion on bright silver plating given by E. W. Wilson.

The now regular annual conference was a success with contributions from overseas somewhat blurring the distinction between annual and international meetings. Also beginning to emerge was the company or corporate membership of the society in recognition of the importance of the society to manufacturing industry.

On the lighter side as a reminder of the austere conditions which still existed in the UK, the annual general meeting recorded thanks for food parcels sent from the Sydney and Melbourne branches of the American Electroplaters Society to members selected by the society.

A new centre was proposed to serve the needs of members in the Manchester region by the setting up of the North-West centre with meetings held on the last Friday of the

month at the Engineers Club, Albert Square, Manchester.

1950 saw the 25th anniversary of the foundation of the society which was celebrated by a jubilee conference held at the Grand Hotel, Eastbourne, 19th-22nd April, 1950 and the volume of papers produced resulted in the publication of a separate volume of the proceedings of the Society (Vol. 25) in order to cope with the extra papers produced. During this year a number of awards were instituted by the society. In addition to the already established Gold Medal, which was awarded occasionally, a number of annual awards were agreed: the Hothersall Memorial Medal, The Johnson Matthey Silver Medal and the Westinghouse Brake and Signal Co. Ltd. Prize. The Society also decided to lease the offices at 32 Great Ormond Street to act as the headquarters for at least a few years.

V. Formation of The Institute of Metal Finishing

For some time debate had taken place concerning the society's increasing role and membership and the need to control both income and activities in a more formal manner. At the AGM held on the 18th December 1950 it was agreed that the Society be incorporated as a company limited by guarantee with no share capital. The title of the new named organisation was agreed to be the Institute of Metal Finishing incorporating the Electrodepositors Technical Society. The interests of the organisation were widened to include all aspects of surface coatings but the main objectives, to promote the study of and to disseminate information on finishing processes, were to remain.

This activity was a lengthy process and involved discussion and agreement with the Board of Trade. The Certificate of Incorporation was granted on 18th August 1951 and the licence to omit the word Limited from its title on 19th July 1952. The society was henceforth known as The Institute of Metal Finishing soon abbreviated to the IMF. The title was adopted in September 1951 at the end of the 26th year of the society's existence.

The Institute now covered the majority of locations in England with a strong metal finishing background but it was not long before a Scottish branch was formed at an inaugural

meeting held at the headquarters of the Institution of Engineers and Shipbuilders in Glasgow on 21st June 1953. The first chairman was H. C. Fairle who soon began to organise evening meetings at 39, Elmbank Crescent, Glasgow.

In March 1953 the inaugural meeting of the newly formed Organic Finishing group was held at the Charing Cross Hotel London which included a luncheon. A number of paint and varnish companies were represented as well as the Paint Research Association and the Society of Paint Manufacturers. The group was briefed to hold technical meetings at various suitable locations across the country.

By 1954 the increasing international importance of metal finishing saw a further increase in activities with sister organisations overseas. A fourth international conference was held at the Holborn Restaurant, London, 21st-24th April 1954. This was in collaboration with the American Electroplaters Society and the Commission Beige de l' Electroform-Deposition. The conference was attended by 509 delegates from 14 countries. The next international conference was to be organised by the A.E.S. in 1959 with assistance from the IMF.

For the next few years the Institute moved forward slowly consolidating its activities and its influence via increasing technical publications and annual conferences. The Institute also was strongly represented on national committees, especially in the area of standards. It also began to influence technical training matters for the industry and began to discuss the various skills and qualifications required for a finishing shop for quality control and processing. In 1957 an apprenticeship scheme was established via the Institute with various finishing bodies. These included The Metal Finishing Association, The Society of British Motor Manufacturers, The Name Plate Manufacturers Association, The Zinc Alloy Die-Casters Association, The Amalgamated Engineering Union, and the National Society of Metal Mechanics. The theme of education in the metal finishing industry was to occupy the IMF for some years, as it still does today.

The title of the Institute's journal was changed to The Transactions of The Institute of Metal Finishing, volume 28 being the last under the title of the Journal of the Electrodepositors Society. This gave rise to an increase in the number of papers

published and to an expanding international group of authors. By 1954 the Institute was recognisably in a similar format to the present, with branches and specialist groups. The branches were London, Midland, Sheffield and North-East, North-West, and a Scottish Group. The first specialist group in organic finishing was also established and sub-committees were formed to cover education, technical matters, conferences, publications, finance and general purposes.

Whilst all the sub-committees worked strenuously in their respective specialities, particular note needs to be made of the achievements of the education committee under the direction of Dr J. E. Garside. After a long period of negotiation with the City and Guilds Institute a new examination scheme leading to the "Metal Finishing Operatives Practical Certificate" was agreed and the first examination held in May 1957. This step can be viewed as the significant initial move which began the long road to the Institute's recognition as an awarding body in advanced training and education. During the same period an Industrial Advisory Committee was formed to advise on activities in the industrial sphere which would impact on metal finishing. The committee represented the Institute in liaison with other industrial bodies, trade organisations and Government bodies.

April 1958 saw the formation of the Southwest Branch with the first meeting taking place on 4th June with N. R. Laban as chairman. A visit to the Bristol Aeroplane Works was followed by the first technical session of the branch with a paper on the finishing of zinc diecastings by L. A. J. Lodder.

Thus the Institute now covered the whole of the mainland UK with each region holding eight to ten technical meetings each year as well as social gatherings and the occasional works visit. This coupled with the awareness of educational requirements and the need of the finishing industry to be represented on government and industrial bodies and committees led to a steadily increasing awareness of the important role to be played by the Institute in the finishing industry. It also put a great strain on the resources of the Institute which was fortunate in that many members were willing to give their time to various activities without reward, a feature common to the whole history of the Institute.

Up to the Autumn of 1958 the Transactions had been produced in octavo format. The increasing number of published papers gave rise to a very thick publication and the decision was made to convert to quarto commencing with the Autumn 1958 issue. The first volume No 36 covered the period Autumn 1958 to December 1959 and subsequent volumes were issued over a normal year, from January to December. Also in 1958 Mr F. L. James retired as Hon Treasurer after 28 years of continued service in office, a record broken only by Dr Simon Wernick, the longest serving officer in the history of the Institute. In this year the initial success of the City and Guilds course was apparent with a number of industrial companies registering as approved employers and releasing staff to attend approved classes.

By the 1959-60 session the first discussions began about considering both better premises for the Institute's offices and the engagement of fulltime staff to assist in the running of the day-to-day matters. This would become an increasing topic of discussion over the next few years as the activities widened both in scope and depth. With this in mind a house fund was set up and appeals made to the industry for support. The initial reaction was encouraging and was actively pursued by the then president Mr A. A. Harvey.

In the same year the publication by the Institute of a booklet entitled "Design for Metal Finishing" met with a very favourable response .

1963 saw the Institute host the 6th International conference on metal finishing and resulted in the issue of a separate volume of the Transactions (Vol. 42). Also, the house fund was considered adequate enough, if only just, to begin negotiations to purchase the leasehold property in Goswell Rd, Clerkenwell. This property would provide a council room, a library and sufficient office space to run the Institute. The premises were previously occupied by Silvercrown Ltd and the company provided help and assistance in the subsequent negotiations. By September of 1964 the Institute had commenced the move to 178 Goswell Rd E.C.1. and during the next few months this was refurbished. However even then this was only considered as a temporary accommodation until sufficient funds had been acquired to purchase outright a purpose built suite of offices. To this end the House fund was continued and pursued

enthusiastically in subsequent years.

In 1964 a new group concentrating on Printed Circuits was discussed. A meeting at the Borough Polytechnic on 18th of February 1965 was held to discuss the proposal to form the "Printed Circuit Group." About 120 people attended and voted to form the group under the chairmanship of Mr. R. Wall. The group rapidly got underway holding a symposium in Southsea at which 300 delegates attended.

In the same year the Education Committee launched the examination for a new technical qualification to be known as the Technicians Certificate, which began the road to full academic and professional qualification in the future.

In 1965 the long standing efforts of Dr Simon Wernick were to some extent recognised when he was appointed as the Honorary Secretary General of the Institute. He had been in office since the near beginnings of the Society and with several secretaries in existence in the various groups in the Institute it was only appropriate that his service was recognised in some way.

Over the next few years under the chairmanship of George Isserlis the Education committee expanded the range and increased the levels of professional qualifications offered by the Institute. The already successful Technicians Certificate was quickly joined by the Advanced Technicians Certificate and in 1967 the Licentiate grade was introduced. These qualifications were accepted as equivalent to other scientific bodies' examination routes and the grades of Fellow and Associate were awarded to suitably qualified and practised members. This in turn led to the Institute being recognised both nationally and internationally as a professional body and it was not long before the demand to hold examinations abroad was expressed. Within the UK examinations were held annually in London, Birmingham, Dundee, Galashiels, Sheffield and Leicester. This was a period of great importance both to the Institute and to the industry as the importance of finishing was becoming recognised as a vital step in the manufacturing process. It probably represented the peak of industrial activity in finishing when the use of modern processes and the need for a supply of qualified personnel at all levels was recognised. The automobile industry was using electroplated chromium for

most if not all of the bright finishing processes which entailed the requirement of large plants, quality control and technical control of the processing. Thus the prominence of the Institute was high and the demands on its services extreme.

The final step in awarding degree equivalent qualifications was made by the decision to hold courses leading to the graduate membership of the Institute with the first examinations proposed for 1972. This course was recognised as degree equivalent and many successful candidates of later years continued their studies to obtain higher degrees. The main driving force behind the complex negotiations to achieve these ends was the Education committee headed by George Isserlis and his hard work was recognised in 1970 by the Presidency of the Institute.

Other activities continued during this period including the formation of another branch, the Southern Branch. This covered the south coast region especially Portsmouth and Southampton. D. W. Windley was the first chairman and the group became very active over the next few years.

On the 22nd of February 1972 the Anodising group was formed under the chairmanship of V. F. F. Henley representing the third specialist group of the Institute. It was planned to hold meetings both in London and Birmingham and the first meetings took place in April when an anodisers forum was held at both centres. The meetings were well attended with approximately 100 attendees at each venue.

1975 represented the 50th anniversary of the foundation and many members looked back on the achievements the 50 years had made. The Society had gone from a small local organisation representing some of the interests of electroplaters to a recognised international Institute serving the practical needs of the finishing industry. It had also become a degree equivalent awarding body whose qualifications were recognised internationally. It covered the UK with groups representing general and specialist interests, produced probably the best technical journal and represented the industry in standards, health and safety, liaised with government bodies and with sister organisations overseas. On the down side its revenues were small and it relied for its continuance on the efforts of numerous members and the support of the industry. Slowly

it was building up sufficient reserves to achieve its long term ambition to own its premises close to a centre of metal finishing activity.

The Golden Jubilee was celebrated by several events. A banquet at the Guildhall, London; a comprehensive metal finishing exhibition at the City University; and a special luncheon at the City University where the Society was originally formed. The next quarter century began with increasing emphasis being placed on pollution. The Institute already had a committee dealing with pollution issues but this was wisely enlarged both in membership and scope to begin to deal with the serious issues which could affect the industry.

During this year the lease on the Goswell Rd offices became due for renewal and after considerable negotiation a new three year lease was taken but at a higher cost. This gave cause for concern for the long term viability of the Clerkenwell site and renewed attempts commenced to seek alternative premises.

The Centre for Science and Technology, a new venture in London was examined as a possible site for the Institute but was rejected on grounds of cost. Two other London sites were examined but considered unsuitable. The Midland branch suggested that Birmingham could be advantageous both in terms of cost and being central to the finishing industry. There was some concern on moving to the Midlands both in terms of tradition, the effect on staff and removal costs. Nevertheless the Midlands branch was requested to seek out possible sites. This was done and in 1980 the present premises of the Institute were purchased. There was great concern as to the immediate financial liquidity of the Institute as the purchase of Exeter House had practically depleted the reserve accounts.

VI. The move to Exeter House

The purchase of Exeter house was organised by the then president, Peter Vivian, but with great assistance from a number of the Institute's members both in London and Birmingham. The purchase price was £90,000 but including professional charges and necessary adaptations the total cost was £93,500. Although by today's standards this sum is quite modest at the

time it represented a more significant amount. The House fund at the time stood at £69,796 and the rest of the monies was produced from sale of some investments. The transfer took place in February 1981 and was reported by Ron Read, as Hon Secretary General at the time of the next AGM. He stated that the move proceeded smoothly with the help of two working parties of members without any break in the running of the Institute's activities.

On 16th June 1981 the Lord Mayor of Birmingham, Councillor Ken Barton, accompanied by the Lady Mayoress, officially opened the new headquarters in the presence of some 70 representatives from commerce, industry and the press; following which the event was reported in several national and local newspapers and journals. (Fig. 5).

1980-81 was also a busy year in other activities. The East Midlands group held a spring symposium entitled Connectors 81, the first of many such events, the Printed Circuits Group, in association with Slough College of Higher Education, held a one year course on printed circuit technology with plans to continue in future years, as well as the organisation of an advanced course. Three students successfully passed the Grad IMF course, and there were passes in the Technician course both in the UK and in Hong Kong.

The year was also unique in that Dr Simon Wernick was elected for a second term as President, with the Hon. Sec. General office going to Ron Read, an office he was to hold on more occasions in the future. This represented a major change for the Institute as Dr Wernick would no longer be the Hon Secretary General, in many ways the most important office of the Institute, but instead the post would be by election and the office held for four years. The election of Dr Wernick to the presidency was in recognition of 50 years of continuous service to the Institute.

The move to Exeter House, having been successfully completed, drew the attention of the executive officers to more modern methods of controlling the functions of the organisation. The Institute began to computerise records under the influence of the treasurer, Mr Peter Vivian. Amongst other points this computerisation of member's records showed a big discrepancy between the actual membership figures and

the figures reported in previous years. This discrepancy arose from the old practice of counting as members those who had lapsed payment of subscriptions. The new method allowed the Institute to chase lapsed members more effectively and although an overall reduction of members resulted the income from subscription rose.



Figure 5. The opening of Exeter House in June 1981.

In education matters, although still producing a number of qualified personnel this was probably below its peak, in part due to the expansion of full-time degree courses at an increasing number of Institutions. Already discussion was underway as to methods to reach the individuals who could not easily find a suitable local centre for specialist education. The format and scope of Transactions was also being heavily debated and R. Pinner produced a paper on the results of a membership survey, under the chairmanship of J. D. C. Hemsley, which concluded that the most popular parts of the contents were the R&D papers closely followed by papers on production practice. The great majority of readers were interested in electrolytic and electroless plating but with a very strong following in printed circuits. Thus the bulk of the membership was still in the more traditional areas of metal finishing with little readership in the newer technologies.

1983 saw the plans for a redesigning of the Transactions into the format to last for a further two decades, and the first issue was produced in Jan 1984. The use of three columns rather than two per page and great improvements to the photographic

quality gave the journal a more modern appearance as did the decision to use colour photographs on the front cover. Despite the extra expense caused by this revamp the Institute recorded a small financial surplus for the year and overall the finances were in good shape.

The Institute continued in good financial shape with its various committees and branches carrying out their functions. This period also saw a rise in the popularity of the annual conference. Not only did this raise the status of the Institute and increase the international recognition but also the surplus at conference increased the reserves substantially.

1984/5 also saw the first discussions of the distance learning scheme in association with the Paint Makers Association and to that end a grant was requested to assist in the setting up cost from the Manpower Services Commission which was later successful.

Also in this period head office was attracting significant extra income by administering the office needs of the Institute of Corrosion Science. This in turn led to the revision of the head office layout and gave a more professional appearance to the office as well as increasing computerisation by the purchase of a second Sirius Computer. The purchase of a franking machine and a "business reply" licence completed the rearrangement.

1987/8 saw the successful completion of the first two distance learning modules after hard work on behalf of the education committee and other co-opted members, and saw the successful launch of the pilot scheme. As this had resulted in considerable expenditure on the Institute's behalf the take up by industry was awaited with some trepidation. Later years showed that the education committee were correct in their assumptions and many young people in the industry benefitted from this new tailored route to technical qualifications. The Education Committee chairman John Foster was to be congratulated on his foresight and determination to see the concept through.

The Institute also recorded that in 1988 the student sponsored in part via the Research and Development Working Party successfully completed his PhD at Aston University.

1989 saw changes in the administration of the Institute with the resignation of Miss Mary Whetnall and the Institute of

Corrosion Science and Technology moving their administration away from Exeter House to set up their own facilities in Leighton Buzzard.

In August 1989 Mr Michael Ruston was appointed as the new Executive Secretary and swiftly moved to take up the reins. Due to his influence the IMFormation sheet was to become a part of the Institute's regular services to members in future and he also began actively to recruit sustaining members. The distance learning packages produced had shown a good reception and the first attempts at expanding the courses to more advanced students was discussed and agreed in outline. The first approaches towards investigation of the NVQ route to qualification was also explored.



Figure 6. Prince Michael of Kent accepting a memorial gift from I. Christie at the Faraday reception.

The annual conference in Torquay in 1990 was, despite the recession, a successful event both in technical and financial terms but was probably the last of the old style conference held in May at a seaside resort. In future the conference would be held either in conjunction with another event or in an industrial centre.

The 1991/2 session celebrated the bicentenary of the birth of Michael Faraday and the Institute hosted a reception at the Goldsmiths Hall which was attended by Prince Michael

of Kent and the senior officials of other scientific bodies. (Fig. 6). A Faraday postage stamp was also available with a date of Faraday's anniversary which was sent as a first day cover to the membership. (Fig. 7).

In September 1992 the new style conference was held at Telford in conjunction with the Finishing Exhibition. This was poorly attended and resulted in the first financial loss at conference in the Institute's history.

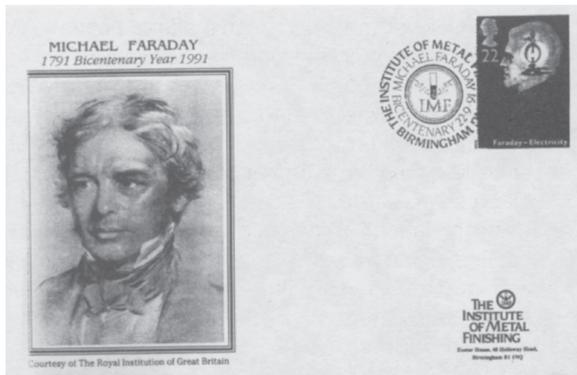


Figure 7. The Faraday bicentenary 1st day cover.

In this year the report *Surface Engineering Coatings in 2005* was published by a team based at Hull University. The Institute was a major contributor to the report and to its planning. It confirmed that the finishing industry was significant and that the industry was vital to the existence of manufacture, the most important sectors being Organic Finishing and Electroplating. This laid the foundation for the subsequent sponsorship by the DTI of a finishing advice centre.

Work on the expansion of the distance learning modules was well underway. At the same time a series of tutorial notes was published in *Transactions* which received critical acclaim from the membership. It was also apparent that training was becoming more important and the Education Committee was renamed the Education and Training Committee. Due to the increasing needs of training, a Training and Education Officer, Don Clements was appointed to supervise the various

activities.

The newly formed marketing committee surveyed the membership to determine their needs and opinions. Both Transactions and the new IMFormation rated very highly in members' opinion. The ability to contact others in the industry and to influence the industry were also rated highly.

In March 1994 a small conference was held at the NEC in conjunction with the Finishing Exhibition but was poorly attended and resulted in financial loss to the Institute. In the same year the Aluminium Finishing Group decided to cease operation due to poor attendance, dealing two blows to the Institute.

To combat the decline collaborative efforts between IMF, the British Surface Treatment Suppliers Association (BSTSA), MFA, and PCIF were developed and the formation of the Confederation of Finishing Industries occurred. This was launched on April 14th 1994 with the aim of speaking collectively to government and other bodies, with the IMF maintaining leadership in training and education.

1995 saw the launch of the distance learning modules for the Advanced Technician award with good student take up. Further discussion and effort went into the development of NVQ modules with a number of Personal Work Records being produced. The interest in the Institute's education courses expanded to the USA and Australia and the work of local branches, especially the Midlands and London branches, resulted in a high uptake of the various programmes.

The year saw the successful launch of the Irish branch with a planned spring symposium. The Electroforming group was established and made successful presentations to engineering and manufacturing associations.

Although the annual conference concept was no longer a feature of the Institute year, September saw the IMF as host country for the International Union for Surface Finishing conference in Birmingham as Interfinish 96. A full programme of both technical and social events was held and the occasion was judged as very successful.

The decision was made this year to publish the Transactions six times each year rather than quarterly as before and, at the same time, IMFormation was also increased to six

issues. This arrangement permitted the publication of a wider range of papers and also increased the service to the general membership.

Towards the end of 1996 application was made for the IMF to become part of the Engineering Council (EC). If successful the IMF would become an Award Body and Qualified members would be able to add the appropriate EC qualification. The Australian sister institute adopted the IMF examination route for Technicians Certificate and 18 candidates sat the September 1996 examination.

Despite considerable efforts by the committee the planned 1998 conference (Eurofin 98) did not take place due to lack of delegate support and this is the first time that a major conference has been cancelled in the history of the IMF. This led to a rethink on the format of future events and these were proposed to be of shorter duration and of more specialist content than the historical conference. A trial event was suggested for 1999.

A mini conference in association with the Nickel Development Institute was held in Meriden, Coventry in May 1999 and was both a technical and financial success and may have pointed the way for the established format for future IMF conferences.

In pursuance of the IMF application to become a Nominated Body of the Engineering Council members of the Engineering Council visited the IMF. It was suggested that the IMF apply to become a Professional Affiliate.

VII. The IMF in the 21st Century

As the IMF began the start of the new century, and indeed the start of the new millennium, many of the aims and objectives of the founding fathers were seen to have been achieved, and possibly exceeded. The IMF had become a world recognised professional body, possessing a highly regarded technical publication and a sought after series of qualifications. As in the beginning it has owed its success to the whole membership many of which give freely of their time and expertise in running the various activities. The small professional staff at head office

also contribute in no small measure to the smooth running of the organisation.

The Institute hit the ground running at the beginning of the 21st century. The much lauded tutorial series of articles published in Transactions in recent years were edited and collated by Publications Committee members C. Larson, D. R. Gabe and F. C. Walsh and published in 2000 as a 3-volume set of booklets, dealing with, respectively, (i) Fundamentals of Electrochemistry, (ii) Processing Technology, Kinetics and Control, and (iii) Applications Testing and Measurement. The hope was that these tutorial books would find a valuable function as background surface finishing scientific and technological information for both students on the Institute's own courses and university students following relevant modules.

The President at the time, Peter Farr was the last to serve a two year term in office. It was decided that after him, the President would serve a three year period in office, which it was felt would give the incumbents more time to complete the tasks which they had set for themselves, after the quite lengthy bedding in period experienced by most Presidents.

During Peter Farr's presidency the Institute was busy, not only with the usual branch activity (in 2001 alone four symposia at branch level were reported in Transactions, in addition to a joint conference with NiDI on electroforming – all of which yielded valuable practical and scientific articles for the journal) but also with 75th anniversary matters. The anniversary led to not only a prestigious banquet, but also the publication of the first edition of this book on the IMF's history in 2000.

Increasing legislative and economic challenges to the UK and European mainland surface finishing sectors coming from EU environmental protection and health and safety initiatives, as well as the move of production offshore to lower cost Asian and East European regions, and the Institute's role in helping to minimise the damage being done to the industry, were to become recurring themes in IMF Presidential addresses, and Council (and, later, Management Board) reports to AGM during this first decade and a half of the 21st century. Thus, when he succeeded Keith Dennis as president in July 2004, Trevor Pearson set out a series of survival strategies to help companies combat these threats including investment in

processes (evaporation units, reverse osmosis, ion exchange, carbon filtration etc.), to improve rinse and waste treatment and replacement of chromic acid based processes, with the clear implication for the Institute to feature such technology in publications and education and training. That these issues, particularly that of legislation, would continue to challenge the industry, and the Institute, over the next decade can be seen from the Hothersall Memorial Medal lecture given by Graham Armstrong in 2013 at the start of his current Presidency (2013-2016). In it he noted that “the factor which will have the biggest impact on our industry, both now and in the short to medium term, must be the effects of legislation” and went on to suggest that the biggest driver of change for the industry would be the EU REACH legislation, introduced in 2005 with the purpose of regulating and authorising the use of “dangerous” chemicals. He pointed out that lobbying of legislators at both UK and European level seemed to cause them to listen, and working on an across the supply chain and multiple areas of industry basis appeared to be effective. The IMF was playing a full part in this process.

Other issues and development opportunities, apart from the legislation challenge, have been taken up by the Institute over the past 15 years.

In the Report of Council for the year ended 30th June 2003 it is recorded that a new younger members group (the Future Group) had been formed to encourage the recruitment (and keeping) of younger members, whose prime interests may not always be similar to their older peers. A new Mechanical Finishing Group, championed by 3 prominent manufacturing companies, was also established and after some analysis of the industry, it was noted that a new Organic Finishing Group was likely to start in the near future – the Institute’s management of the time could have had little idea how valuable this was to be to the IMF, both in showing the Institute’s relevance to the largest sub-sector in the surface finishing field, and in the extent of effort these members were to put in over the years to both the Group’s and the IMF’s success and development.

After a difficult early part of the decade financially, with the managing editorship of Transactions being put in the hands of a group with trade journal experience in the hope that

revenue from advertising might increase, the Council report for the year 2004-5 noted that “the future looked brighter with financial stability well under control”, and a surplus being made in the year. Further changes took place with the running of Transactions in which the IMF became partners with a commercial publishing firm, experienced with institute journals, Maney Publishing, and as this relationship evolved it was to serve the journal and the Institute well right up to the present. In addition the newly revamped website was to be operational at the end of 2005, giving a much clearer and informative portal for the Institute. During the year the proposed Organic Finishing Group was officially formed, championed by Keith Taylor, Malcolm Griffiths and Peter Mitchell, getting into its stride quickly by organizing, with the help of Ron Read, a seminar to take place the following year. This event, aimed at the automotive industry was a great success, and led to the group planning for a similar event targeting the aerospace sector to take place in 2007. The success of this has led in turn to the now familiar biennial IMFAir conferences on coatings and surface treatments for the aerospace and transportation sectors generally.

With its various activities running well it was perhaps a case of “cometh the hour, cometh the man” when in July 2007 R S (Sam) Briggs, whose business was involved in electrophoretic deposition, took on the Presidency, and made it his mission to change the management structure of the IMF to better cope with the modern world. After decades of being run by a Council of members, Sam introduced over his term of office the concept of a Management Board to govern the Institute’s affairs in a more business-like manner which has led by general consensus to a more effective IMF, and in his Presidential Address, Sam’s successor, Paul Lansdell was generous in his acknowledgement of Sam Briggs’ legacy. This includes the change in the term of office of the Secretary-General from a fixed period to an unlimited one, a move which gives much more stability to the overseeing of the administration of the IMF.

Over the past 15 years a perhaps lesser known activity of the Institute, that of the Science Committee, has become established and effective. Chaired for many years by Peter

Farr, and latterly by Trevor Crichton, this committee has a dual role, a) to promote innovation in our field by encouraging research and development and helping the IMF's membership identify funding, support and prospective partners, and b) staying aware of important technological changes in surface engineering to the advantage of our members.

As the Institute stands at present, in 2015, it can proudly claim to be firmly achieving its mission, across all its activities in which it interacts with the industry ie education and training, publication of scientific and technological papers, and organising conferences and seminars.

There is no doubt that one of its continuing success stories over the past 15 years has been the operation of its Education and Training effort for the industry. It is estimated that over this period over 1,000 student-modules have been successfully completed, for mostly younger company employees, with an increasing number of Foundation level students returning at a later time to study at Advanced level. This helps immeasurably to create a more knowledgeable workforce for the future, by adding to existing on-job training. Courses currently available for study are:

Foundation Certificate - Study consists of a total of 15 units of which 7 are mandatory, 5 from one of 3 Technology Blocks covering Electroplating, Aerospace or Organic Coating subjects and a further 3 from units from an optional units block of subjects not already included in the mandatory section to be studied.

This course is designed to provide personnel in surface finishing and related technologies with the opportunity to improve and increase their knowledge and thus be able to deal with shop floor problems more effectively. It is also of value to line management and sales personnel to better increase their knowledge of the processes operated within the company.

Technician Modules - Following on from the Foundation Certificate there are currently several more advanced modules covering the following: Principles of Electroplating; Electroplating Practice; Paint, Lacquer and Varnish; Powder Coating; Environment, Health and Safety; Electroforming; Automotive; Materials

Science. The student is awarded a “Technician Certificate”, subject to passing a written examination, and which may be endorsed as a Credit or Distinction.

In addition to the standard Institute courses a number of bespoke courses have been developed and delivered for larger companies.

The broad span of topics offered also indicates how far the Institute has come from its early days as the Electroplaters and Depositors Society in embracing other technologies and required knowledge in our industry.

This becomes clear, too, from the content of conferences and meetings held. Although the branch activity in this regard has dwindled with only the Southern and Irish branches organising the sort of meetings that were common a decade ago, the 2-yearly conferences organised from Exeter House since 2007, led by members of the Organic Finishing Group, lasting typically over 2 days, and covering aerospace and other transport sector coatings and finishing, feature a good mix of aqueous, organic and plasma surface treatments, among others. These conferences also serve as a valuable source of papers, both practical industrial and scientific, for *Transactions*, enabling the journal to also reflect the multi-technology nature of the Institute now. The journal, too, has become the vehicle of choice for publication of papers from conferences organised by prestigious groups outside these shores, including the first six of the 2-yearly European Pulse Plating Conferences. In addition we have been asked to feature papers in *Transactions* from this year’s EAST Forum (European Academy of Surface Technology), and for input from this body to be a regular event.

Thus all 3 of the legs supporting the IMF (meetings, publications, and education and training) and enabling it to fulfil the objectives referred to earlier in this book, are strong and performing well. The future, as far ahead as we can see it, looks healthy, not only in the IMF’s traditional activities as seen above, but also, in recent years, in continuing to strengthen its links to other bodies in our field. Thus, current President Graham Armstrong, a life-long paint man, reported at the last AGM in December 2014, that he had spoken at both the BCF annual conference in May of this year and at the OCCA autumn

ball. In addition, Paul Lansdell, Immediate Past President, was invited to give the Special Overseas Honour Lecture on the state of the European industry at the 50th Memorial Symposium, in honour of Prof. Takeo Oki, at the Chubu Branch of the Surface Finishing Society of Japan, on 10th September 2014. This was initiated by Prof. Hideyuki Kanematsu, a Fellow of the IMF, and international member of the Editorial Board of Transactions. A particularly pleasing follow-up to this event has been Prof. Kanematsu giving a paper at the Institute's conference, IMFAir 2015, in June of this year. This has been a tremendous opportunity to develop a good long lasting constructive relationship with an important fellow society in our sector.

The Institute of Materials Finishing

It would be wrong not to remark on the change in the Institute's name which came about during the 2012-2013 year. For years debate had, if not raged, then taken place on whether the existing name truly described the role of the IMF within the industry. The growing influence, and indeed market share, of powder and paint coatings, and the emerging of other technologies leading to coatings other than metals, in addition to non-metallic substrates, finally led to the historic decision that for only the second time in 90 years the Institute's name would change. Thus was the Institute of Materials Finishing born, reflecting much more clearly the Institute's activities. Indeed, It is no coincidence that one of the most energetic groups within the IMF is the Organic Finishing group. With the name change for the Institute the name of Transactions also changed from the first issue of 2014. Although it is early days yet to determine the effect of this it is interesting that in 2015 the Publications Committee has seen a significant increase in submission of papers for publication, including many featuring technologies other than the journal's traditional electrodeposition field.

The Future

It is difficult to predict the next 90 years of the IMF. The manufacturing base of the UK has been considerably eroded in

recent decades, with much production relocating to developing low-cost regions, and this is likely to continue, until employee costs in these areas rise towards those of developed regions, and, in some cases, where reliability and quality issues for critical components bring production back to the developed area. As industry shrinks so does the potential membership of the Institute. However, despite this reduction in industry the membership over the recent years has remained remarkably constant. It may well be that the UK industry will become increasingly specialist requiring professional people at all levels from process operator upwards. If this is the case the IMF is in a strong position to train and provide an informed body to serve this industrial sector. We believe that all members will join in wishing the Institute well over the next 90 years of its history.

Appendix 1

The Institute's staff

Over the years the Institute has relied on the freely given services of the membership but initially to help in routine administration and later in playing a more significant role in Institute affairs it was recognised that more effort was required.

In 1965 under Simon Wernick's direction Mrs Pelc was appointed to take care of the routine affairs and to assist in running the various activities of the organisation. Her services soon proved to be essential and many of the members had cause to be grateful for the help she gave covering the wide range of Institute activities. She continued in this role until the move to Birmingham in 1981.

By this time the Institute was becoming more involved with sister societies both in the UK and abroad with a much enhanced profile, and the Council decided that an Executive Secretary needed to be appointed to be responsible for the day to day activities, and in some cases to act as the representative of the Institute at meetings with other bodies. The appointee, Mary Whetnall, who joined in March 1981, soon became well known to both the Institute members and to other Technical Organisations. She reorganised all the Institute records, ensured that meetings were advertised, attended the more important committee meetings and ensured accurate reporting of all activities. Her impact on a smooth running organisation cannot be over-stated and her departure in 1989 was regretted, although in essence she had done the job in full to the Executive's requirements.

After some soul searching on behalf of Council and Executive committees Mike Ruston was appointed in 1989 to take her place and he brought his own ideas to the organisation. He was very keen on getting ideas and information to the membership and was responsible for the production of IMFormation, at first an occasional publication but later a regular source of news to the membership. He also liaised with finishing companies and was primarily responsible for the increase in the number of Sustaining Members. In addition, he brought the computer system up to scratch and liaised with

other bodies including the Institute of Sheet Metal Engineering who ran their administration and conference organisation via the IMF.

He left the organisation in late 1997 and a long period elapsed before Peter Griffin was appointed in early 1999. Peter became engaged in a number of roles and for five years was a courteous and efficient presence at the centre of Exeter House, retiring in early 2004.

Probably the best known staff member to the recent generation of members is Jean Sturch, who retired in May, 2008. Jean was initially appointed as book keeper in October 1983 but her organisation and people skills were soon recognised and the cry “when in doubt, ask Jean” was echoed by most members from time to time. Probably her greatest exposure was during the run up to a conference and as the prime organiser at conference. She was also deeply involved with the student body in the examination run up and the distance learning group. One way or another most members have contacted her with a problem or query over the years and obtained the information they required. In March of 2004, Ken Hoare and David Meacham joined the Institute and soon became a formidable partnership, dealing with, respectively, Institute development, and education and membership. Ken retired in April 2014 after taking a leading role in administering developments such as the REACH Club, organising of conferences and events, He has been replaced by Helen Wood, who joined as Development and Office Manager in May 2014, and has already come through her first major conference organising task (IMFAir 2015), as well as getting to grips with the administration of the various committees.

Appendix 2

Dr. S. Wernick

No history of the IMF would be complete without mention of Dr Simon Wernick, who was associated with the IMF for so many years. Although not quite the founder he was without doubt the man who steered the Institute through good and bad times from the late twenties until the late eighties and until his death played an active role in many aspects of the organisation. He was recognised not only by the Institute as a man of outstanding technical and organising ability but by the award of the OBE for his work during and following the war years. He occupied the post of Hon Secretary General until the early eighties being responsible for Transactions and Policy, he was a founder member of the IUSF, member of a number of government committees on surface finishing aspects and on finishing standards. To one of us (IRC) when he first became a member of the IMF, Simon offered help, and later friendship, and in return expected hard work in furthering the aims of the Institute. Simon was the only member to be elected President on two separate occasions.

Appendix 3

Presidents of the Society and the Institute

S FIELD ARCS.....	1925-1929
R S HUTTON DSc MA.....	1929-1932
D J MACNAUGHTON F Inst P.....	1932-1935
E A OLLARD ARCS FRIC FIM.....	1935-1937
A W HOTHERSALL MSc(Tech)FIM.....	1937-1939
H J T ELLINGHAM BSc PhD ARCS MIChemE FIM.....	1939-1943
J R I HEPBURN PhD DSc FRIC MIChemE FIM.....	1943-1945
S WERNICK OBE PhD MSc FRIC FIM FIMF.....	1945-1947
E GARDAM PhD ARCS ERIC FIM.....	1947-1949
A W WALLBANK BSc FRIC.....	1949-1951
H SILMAN BSc FRIC MIChemE FIM.....	1951-1953
J W CUTHBERTSON DSc FIM AMIEE FIMF.....	1953-1955
R A F HAMMOND OBE BSc ARCS FRIC.....	1955-1957
T P HOAR MA ScD(Cantab) ERIC FIM.....	1957-1959
A A B HARVEY MSc ERIC Barrister-at-Law.....	1959-1961
L BAILEY PhD DIC FinstP.....	1961-1963
J E GARSIDE MSc(Tech) PhD FRIC FIM FinstF.....	1963-1965
E L MASEK FIMF.....	1965-1967
J N T ADCOCK BSc FIMF.....	1967-1969
G ISSERLIS BSc(Eng) FICorr FIMF.....	1969-1971
F C PORTER MA FIM FICorr FIMF.....	1971-1973
T L HOUGHTON BSc FRIC AIM.....	1973-1975
J EDWARDS PhD BSc FIM FIMF.....	1975-1977
R H PINNER BSc FIMF.....	1977-1979
P G L VIVIAN FIMF.....	1979-1981
S WERNICK OBE PhD MSc FRSC CChem FIM CEng FIMF.....	1981-1982
L D BROWN FIMF.....	1982-1984
J D HEMSLEY CChem CEng DipChemEng FRSC FIChemE FIMF.....	1984-1986
M CLARKE BSc PhD DSc(Eng) CEng CChem FRSC FIM FICorr FIMF.....	1986-1988
N LAYTON PhD MSc ARCS DIC MInstP CPhys FBIM FIMF.....	1988-1990
I R CHRISTIE MSc CChem FRSC FIMF.....	1990-1992
L V LEWIS FIMF.....	1992-1994
R R READ LRSC FICorr FIMF.....	1994-1995
R GABE PhD DMet FIMF.....	1995-1997
R EASTHAM PhD FIMF.....	1997-1999
J P G FARR BSc PhD FRSC FIMF.....	1999-2001
J K DENNIS BSc, PhD, DSc, FIMF.....	2001-2004
T PEARSON MRSC, PhD, CChem, FIMF.....	2004-2007
R S BRIGGS IEng, FIMF, JP.....	2007-2010
P A W LANSDELL BSc, PhD, FIMMM, FIMF.....	2010-2013
G ARMSTRONG FIMF.....	2013-2016

Appendix 4

The Institute's Award Winners.

The Institute makes several awards which are considered by committees and Council (now Management Board) usually on an annual basis.

Gold Medal.

This award is the highest accolade given by the Institute and is only given on occasions for outstanding scientific or technical service relevant to the objectives of the Institute.

Hothersall Memorial Award.

This award, usually on a bi-annual basis, is given in recognition of service to the industry. The recipient is invited to present the Hothersall Memorial Lecture either at Conference or following the Annual General Meeting.

Samuel Field Medal

This award is made to any member of the IMF deemed to have given extraordinary voluntary service to the IMF.

Eddie Marlow Memorial Medal (sponsored by PMD (UK) Ltd)

This award is for an outstanding contribution to the education and training of people working in surface engineering.

Johnson Matthey Silver Medal.

This award, usually on an annual basis, is presented for a paper of high quality published in Transactions on the subject of precious metals.

The Westinghouse Prize

Awarded for the best paper published in Transactions in the science and practice of electrochemistry in general and electrodeposition in particular.

Canning Bi-centenary Medal (sponsored by MacDermid plc).

Awarded for the best practical paper published in the Bulletin section of Transactions.

Jim Kape Memorial Medal.

This is presented from time to time for a paper of significance in the field of aluminium finishing or other light metals finishing and published in Transactions.

Connie Sieff Memorial Award.

This award is for meritorious service to the surface finishing industry internationally.

Pexa Award

This award is given for the best paper relating to organic finishing and published in Transactions

Gold Medallists

S FIELD.....	1947
A W HOTHERSALL.....	1950
S WERNICK OBE FIMF.....	1951
G E GARDAM	1956
U R EVANS.....	1961
A A B HARVEY.....	1969
D J ARROWSMITH FIMF.....	1989
P G L VIVIAN FIMF.....	1991
J EDWARDS FIMF.....	1993
T E SUCH FIMF.....	1995
I R CHRISTIE FIMF.....	2000
D R GABE FIMF.....	2002
R R READ FIMF	2008
J P G FARR FIMF	2010
D DOWLING FIMF	2013
C BARNES FIMF	2014

Hothersall Memorial Medal

G E GARDAM.....	1952
W BLUM	1954
W A WESLEY.....	1956
U R EVANS.....	1957
R S HUTTON.....	1959
J W CUTHBERTSON FIMF.....	1960
A BRENNER FIMF	1961
T P HOAR.....	1962
S WERNICK OBE FIMF.....	1966
C L FAUST.....	1967
H SILMAN	1969
G ISSERLIS FIMF	1973
R H PINNER FIMF.....	1975
G DUBPERNELL FIMF.....	1977
J EDWARDS FIMF.....	1983
D J ARROWSMITH FIMF	1985
T E SUCH FIMF.....	1987
G C WOOD FIMF.....	1989
C H J RAUB FIMF.....	1993
A W BRACE FIMF.....	1995
S A WATSON FIMF	1997

Hothersall Memorial Medal (cont.)

J K DENNIS FIMF.....	1999
C BISHOP FIMF.....	2002
J P G FARR FIMF.....	2004
I ONATE PHD, FIMF.....	2006
H J LEWERENZ.....	2007
P L CAVALLOTTI.....	2008
G ARMSTRONG FIMF.....	2012
D R GABE FIMF.....	2014

Samuel Field Medal

C BARNES FIMF.....	2008
A CHAPMAN FIMF.....	2009
A KOCH FIMF.....	2010
C LARSON FIMF.....	2011
T CRICHTON FIMF.....	2012
A TURNER FIMF.....	2013

Eddie Marlow Memorial Medal

M COWLEY FIMF.....	2002
G R DAVIES FIMF.....	2003
J STURCH.....	2004
R R READ FIMF.....	2005
K ROE.....	2006
B PERRY FIMF & A TURNER FIMF.....	2007
D MEACHAM.....	2008
C BARNES FIMF.....	2009
A CHAPMAN FIMF.....	2010
J OLIVER FIMF.....	2011
J K DENNIS FIMF.....	2012
M GRIFFITHS.....	2013
I SCHUKER.....	2014

Johnson Matthey Silver Medal

G E GARDAM and N E TIDSWELL.....	1955
F H REID FIMF.....	1957
R H ATKINSON.....	1960
F H REID FIMF and J C BLAKE.....	1962
H C ANGUS.....	1963
C J TYRRELL.....	1966
J HILL and N H HOPKIN.....	1967
J M STEVENS.....	1967
G S REDDY and P TAIMSALU.....	1970
J D UNDERWOOD.....	1971
R A LYNN.....	1972
G C WILSON FIMF.....	1973
M CLARKE FIMF.....	1975
P RAY MIMF.....	1978
J R HOUSE FIMF and W A FAIRWEATHER FIMF.....	1980
R H HILL FIMF.....	1981
D J ARROWSMITH FIMF and G BROWN.....	1983
K J WHITLAW MIMF.....	1985
R DeDONCKER and J VANHUMBEECK.....	1986
D J ARROWSMITH FIMF and K J LODGE.....	1987
C C BOCKING FIMF.....	1988
C C BOCKING FIMF and C DINEEN.....	1994
FANG-ZU YANG, SHU-KAI XU, LING HANG, XUE-YING ZHANG and SHAO-MIN ZHOU.....	1998
J A ABYS, E J KUDRAK and C FAN.....	1999
B BOZZINI and P L CAVALLOTTI.....	2000
G KOZIAOL and J BIELINSKI.....	2003
M GLADSTEIN and H GUTERMAN.....	2005
F C WALSH FIMF, D V BAVYKIN, L TORRENTE-MURCIANO, A A LAPKIN and BA CRESSEY.....	2006
O N VRUBLEVSKAYA, T N VOROBYOVA, H K LEE and S B KOO.....	2007
B BOZZINI, L D'URZO, C MELE, B BUSSON and A TADJEDDINE.....	2011
P L CAVALLOTTI, P COJOCARU and L MAGAGNIN.....	2012

Canning Bi-centenary Medal

G A WELLS.....	1985
S HAMILTON.....	1986
S A HARRIS.....	1987
P G SHEASBY FIMF.....	1988
J S MOORE.....	1989
R T HITCHCOCK MIMF.....	1990
J BIGGIN.....	1991
R MOUNTFORD.....	1994
M BAUMGARTNER, Ch J RAUB and D R GABE.....	1996
I BURKE, N DAVIES (Joint).....	1999
J D FISK and J D BOYLE	2000
D R GABE FIMF.....	2001
S GRIMSLEY MIMF.....	2002
S MENARD and J WURM.....	2003
P A W LANSDALL FIMF.....	2004
P I HOPE MIMF.....	2006
P HOPE FIMF.....	2007
U KONIG and B SESSLER.....	2008
G W CRITCHLOW FIMF, R LITCHFIELD, C CURTIS and M OWEN.....	2009
S J HEMSLEY FIMF and W ZHOU.....	2010
Z MAKAMA, I DOBLE, D NICHOLSON, M E WEBB, I B BEECH, S A CAMPBELL FIMF and J R SMITH MIMF.....	2011
K S RYDER, A P ABBOTT, N DSOUZA and P WITHEY.....	2012
M R GILES and N J DIXON.....	2013

Connie Sieff Memorial Award

R ALLEN MIMF.....	1979
P ANDREWS MIMF.....	1980
R N GIBBONS.....	1981
J P BIDDOLPH MIMF.....	1983
D I HAYNES MIMF.....	1984
I HAYES MIMF.....	1985
T QUINN MIMF.....	1986
I HAYNES MIMF.....	1987
R ALLEN MIMF	1988
D WILLIAMS MIMF	1989
J S OLIVER MIMF.....	1991
C C BOCKING FIMF.....	1992
J S OLIVER MIMF	1993
V WATKINS and K COSSLETT FIMF.....	1995

Connie Sieff Memorial Award (cont.)

C ADDISON.....	1996
J K DENNIS FIMF.....	1998
R R READ FIMF.....	1999
R R READ FIMF.....	2000
C LARSON MIMF.....	2001
R R READ FIMF.....	2002
J D C HEMSLEY FIMF.....	2003
A C HART FIMF.....	2005
P QUINN MIMF.....	2006
P WYNN FIMF.....	2007
J TIMMS FIMF.....	2008
D ELLIOTT FIMF.....	2010
L DALLA TORRE.....	2011
H DE MANN.....	2012
P N ALISEDA.....	2013

Westinghouse Prize

W A MARSHALL.....	1952
A E DAVIES, R M ANGLES FIMF and J W CUTHBERTSON FIMF.....	1953
H LEIDHEISER Jr PhD.....	1954
H FRY.....	1955
F H REID FIMF.....	1957
J EDWARDS FIMF and S A WATSON FIMF.....	1958
H J PICK and J WILCOCK.....	1959
S C BRITTON and M CLARKE FIMF.....	1960
N FLINT and S H MELBOURNE.....	1961
S A WATSON FIMF.....	1962
J EDWARDS FIMF.....	1963
A E JACKSON.....	1964
J K PRALL and L L SHREIR OBE FIMF.....	1965
G T ROGERS and K J TAYLOR.....	1966
J M WEST and W M CLEGHORN.....	1967
P BAYENS FIMF and G KRIJL.....	1968
T BROUGHTON.....	1969
H BROWN.....	1970
A RANTELL MIMF.....	1971
J B WARD MIMF and I R CHRISTIE FIMF.....	1972
E SURVILA FIMF.....	1972
W H SAFRANEK and C H LAYER.....	1973
R W THOMAS MIMF.....	1975

R W THOMAS MIMF	1977
C WHITE and J FOSTER MIMF.....	1978
E SURVILA FIMF and D P ANDREWS MIMF.....	1979
P G SHEASBY FIMF, J PATRIE, M BADIA and G CHEETHAM MIMF	1980
C BARNES, J J B WARD MIMF and V E CARTER FIMF	1981
G C WOOD FIMF and R C FURNEAUX MIMF.....	1983
M SADEGHI, P D LONGFIELD and C F BEER FIMF.....	1984
J A MUADDI, J K DENNIS FIMF, J F BELL and M IZZARD MIMF.....	1985
J M KAPE	1986
J J MASON and Y ZAKA.....	1987
M McCORMICK and S J DOBSON.....	1988
C U CHISHOLM, M R el-SHARIF, A WATSON MIMF.....	1989
M TURLEY and B A WILSON FIMF	1990
C C BOCKING GradIMF FIMF	1991
D J GAWNE FIMF and I R CHRISTIE FIMF.....	1992
K E WATKINS, P J CARPENTER and P G HATHERLEY FIMF.....	1993
K R BALDWIN, M J ROBINSON and C J E SMITH	1994
M EI-SHARIF, S MA and C U CHISHOLM.....	1995
A F AVERILL.....	1996
M BAUMGARTNER, CH J RAUB FIMF and D R GABE FIMF.....	1997
G W READE, C KERR MIMF, B D BARKER and F C WALSH FIMF.....	1998
A F AVERILL, J M INGRAM and P F NOLAN.....	1999
P W HABERECHT and R W HINTON	2000
A P ABBOTT, G CAPPER, D L DAVIES, R K RASHEED and V TAMBYRAJAH.....	2001
C C BOCKING FIMF, D M JACOBSON, A E W RENNIE and G BENNETT.....	2002
L HUANG, F Z YANG, S K XU and S M ZHOU	2003
D R GABE FIMF, G D WILCOX FIMF and M E BAHROLOLOOM	2004
E GOMEZ, E PELLICER and E VALLES	2005
N TANTAVICHET and M D PRITZKER	2006
N ATANASSOV, M MANOLOVA, R RASHKOV and A ZIELONKA MIMF	2007
F C WALSH FIMF and C T J LOW.....	2008
P LEISNER and I BELOV.....	2009
R C TANGIRALA, C T J LOW, C PONCE-DE-LEON, S A CAMPBELL and F C WALSH.....	2010
N GALVANAUSKAITE, A SULCIUS, E GRISKONIS and P DIAZ-ARISTA	2011
B BOZZINI, E TONDO, P RAFFA and M BONIARDI.....	2012
A AZIZI, S TEBBAKH, N FENINECHE, G SCHMERBER and A DINIA	2013

J M Kape Memorial Medal

E P SHORT MIMF and A MORITA.....	1988
D R COWIESON MIMF, N C DAVIES MIMF, R C FURNEAUX MIMF and W R RIGBY.....	1989
R T HITCHCOCK MIMF.....	1990
M R KALANTARY MIMF, D H ROSS MIMF, D R GABE FIMF.....	1991
M R KALANTARY MIMF, D H ROSS MIMF, D R GABE FIMF.....	1992
A J DOWELL MIMF, J BARKER, K P ENG, D R GABE FIMF and D H ROSS MIMF	1994
D R ELLARD and D R COWIESON MIMF.....	1995
P LAEVERS, A NUBIN, H TERRYIN and J VERREECKEN	1996
G BOKMARK, G HOLMBORN, L GIANLUND, D PERSSON and J SIDEN.....	1997
F SERTCELIK, A F CAKIR, M URGEN, D H ROSS MIMF and D R GABE FIMF	1998
A W BRACE FIMF.....	1999
J PIRES, L QUINTINO, C M RANGEL, G E THOMPSON, P SKELDON and X ZHOU.....	2000
S J M PINSON, J COLLINS, G E THOMPSON and M R ALEXANDER	2001
A JAGMINAS and J REKLAITIS	2003
I S MOLCHAN, N V GAPONENKO, G E THOMPSON FIMF, P SKELDON, D A TSYRKUNOV, G K MALYAREVICH and A P STUPAK.....	2005
A M CREE, S V HAINSWORTH and G W WEIDMANN.....	2006
C SUAREZ, E CHAVEZ, J A DIEZ, H GRANDE and R GUIXA.....	2007
Z C GUO, R M WANG and Y F WANG	2008
A M CREE FIMF, M DEVLIN, G CRITCHLOW FIMF and T HIRST	2010
C T J LOW, M DE LA TOBA CORRAL and F C WALSH	2011
M CURIONI, A A ZULETA, E CORREA, X PAN, A BARON-WIECHEC, P SKELDON, J G CASTANO, F ECHEVERRIA and G E THOMPSON	2012

Pexa Award

J HOPE MIMF2014

Examination High Achievement Prizes

Foundation Certificate

N DINSDALE.....2011
A L FIELDHOUSE.....2011
E COTTON.....2012
T GRIFFITHS2013
M SWIRES.....2014

Technician Certificate

N HUGHES.....2011
A GRYGLOWSKA.....2012