

# WOOD SCIENCE NEWSLETTER

Institute of Wood Science

SEPTEMBER 1991

#### FROM THE PRESIDENT

For the Institute too, time rolls on. Another conference gone, new membership policies being implemented, continuing discussions, (mostly recently with major employers), on new education plans, the next conference firmly on the drawing board, all this against the background of a changing trade and an ever-changing world.

At the conference dinner, I quoted one guru's concept of the "FOUR F's" said to be characteristic of any successful organisation. Such an organisation will, it is said, be FOCUSSED, FAST, FLEXIBLE and FRIENDLY. How do you think the Institute rates? Recently we have certainly focussed on key issues such as membership categories and educational policies, but the world moves on and our "focus" may well need readjustment. "Fast"? Well, let's say we move with all deliberate speed! The Institute belongs to its members and change must follow careful thought and consultation. "Flexible"? I think we are flexible in the right sort of way, within constitutional and policy guidelines. And "Friendliness", the magic ingredient, yes, here I believe we are well blessed. Let's guard very carefully the tradition that past officers and members have built up by their integrity and commitment.

But don't let's forget that focus adjustment. It needs checking regularly. When we have put the current educational issues to bed, I hope we can then take some time to think about likely key issues for the Institute for the next few years.

#### Richard Venables AIWSc (President)

## CONFERENCE '91 'THE CHALLENGE OF THE 90's'

And so much was discovered — beautiful Bath, as indeed it is, is more Beau Brummel and Nash than Henry Ford, and the Bath Chair was first devised for the comfortable transportation of IWSc delegates, returning from their designated parking space. But who were we to whine if our corns complained — there were always the waters and six sessions of sitting before us.

"Product Innovation — The Challenge of the 90's" was the first paper gently introduced by the President after he had warmly welcomed us, and excitingly deliverd so that we looked forward to the 90's with enthusiasm. Then we were sadistically reminded that in truth the next decade would be the one of the Standard. Not Petrograde sadly but EC initiated standards, one new one every month of the decade, and our modified metric measurements were to be fully metrificated (who dares!) and to survive we must qualify for the costly BS 5750 OA Certificate to give our customers the assurance that if we produce rubbish we do it consistently. Some challenge these 90's!

To cheer us up we were all invited to the President's Reception Party (is the IWSc really becoming democratic?), free booze — whatever next (alas is anything really free!) but it did whet the appetite for the Conference Dinner.

A pleasant evening this, the President said all the right things and the following lilt of the Irish/Dutch brogue, like the meal itself, was easily digested, and like both there was good meat to be had.

The four sessions on Saturday flew by and despite the previous late night, concentration was easily held, but if there was an odd snore from the London Branch the bright-eyed Julie Harding was with us and would later produce an excellent resume of the Conference in the T.J.J. We thank her for that.

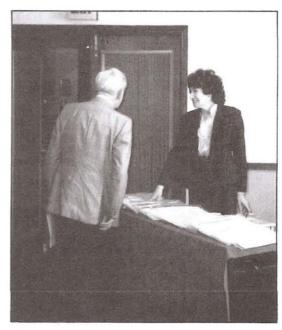
The papers were of an incredibly high standard, and it was rather sad that there was not more of us there to appreciate the quality of the content. Are conferences going out of fashion, or are we too busy, or too poor, or just too idle to make the effort.

Next year, we jump from Bath Spa to Cheltenham Spa (April 3/4 '92) and lets hope we can pay the speakers the courtesy they deserve by being there in numbers.

#### Maurice Holloway, AIWSc (Director)



The President, Richard Venables calls the meeting to order.



Our invaluable secretary, Freda Robinson welcomes a delegate.

# **EDUCATION AND TRAINING**

#### BUCKS COLLEGE - helping to shape the future of the wood based industries

The new BSc (Hons) Forest Products Technology from the Buckinghamshire College of Higher Education is aimed at students with an ambition to shape the future of the wood based industries and the use of forest resources. It is the first course of its kind in the UK.

This three year full time course is academically rather than craft based and follows the utilisation of wood from the forest, through harvesting and processing, to the multiplicity of final uses for wood based products. The range of 'options' on offer, including languages, allows students to shape the course to their own needs and aspirations.

The course ensures that students gain a good understanding of the structure and operation of the business environment in the UK and overseas. This is backed by an overseas study visit in the second year to relevant industrial and technical establishments.

In addition, in line with the growing concern regarding the preservation of the environment, a proportion of the course is dedicated to the environmental impact of wood based industries.

By means of a series of modules consisting of lectures, tutorials and practicals, students develop a broad appreciation of the subject areas, which in addition to the above, include wood engineering, wood composites, wood processing and preservation. In the second year, students conduct a survey of technical literature on a topic of their choice. In the third year they carry out an independent research project.

The BSc Forest Products Technology is a development of the College's BSc Timber Technology course and students initially enrolled for the Timber Technology degree may, if they achieve sufficiently good grades during years 1 and 2, transfer to this Honours Degree. A conversion course is being developed for those who already hold a degree in Timber Technology — they may add honours with the equivalent of one term's study.

There are a broad range of job opportunities available for graduates from this new course within the timber and wood processing industries.

The normal entry requirements for this course are two A levels with GSCE's in Maths, English and a Science or Technology subject. Access for mature students and students with other types of qualifications will also be considered.

For further information please contact Simon Cragg at the Buckinghamshire College, tel: 0494 522141.

#### MID-WARWICKSHIRE COLLEGE Royal Leamington Spa

The College offers a number of courses relevant to the timber industry:

TRADA Open Learning — The course is designed to require about 70 hours of study and provides a good working knowledge of wood, timber products and the timber industry. It is an ideal package for employees who are involved in the timber and associated industries.

IWSc Course — This two year block release course in Timber Technology with a strong emphasis on practical project work leads to the professional qualification of CMIWSc or AIWSc.

The object of the course is to advance and encourage the scientific, technical, practical and general knowledge of timber and wood based materials in order to use the product in an appropriate, economical and efficient way.

Timber & Builders merchants Course — This unique course embodies the syllabus of the IWSc and the BTEC Builders Merchants course. The merger of these two courses provides a nationally recognised award and has been used by several major companies for Staff and Management Training.

For further information contact: Erle Smith on 0926-311711 Ext 247 or Duncan Lightbown on Ext 303.

#### TIMBER FRAME REPORT

FIDOR has just concluded a survey of a cross section of the UK's timber frame building manufacturers. The objective was to make an assessment of the current usage of fibre building boards within the timber frame market and to look at future potential for wood fibreboards within this market. If you would like a copy of the report entitled 'Investigation into the actual and potential use of Fibre Building Boards in the UK Timber Frame Market' then please contact FIDOR on 081-751 6107.

#### MIKE CROGGAN PROJECT

In the September '89 Newsletter we reported on the project to be undertaken by Mike Croggan on the Brazilian Rain Forest Resource. The following is a short review of his continuing work at the Oxford Forestry Institute, Dept. Plant Sciences:

The title of my D.Phil study is 'The investigation of some lesser-known tropical hardwood species from Amazonia and an assessment of their U.K. market acceptability'. The work is now in its third year and much of the early work was in compiling databases. The largest of these is one containing about a thousand woody species from the area with other information about forest types, accessibility, and inventory data. Owing to the vastness of the Amazonian resource, the actual availability of inventory data is minimal. This means that the species that can be reasonably assessed are limited to certain regions within Amazonia. These regions, however, are likely to be more accessible areas and therefore more easily utilised.

Another database that is being compiled contains the technical properties and other characteristics of some of the species. Again, the data are only available for those species that other agencies have felt worthy of investigation and testing.

The third phase of the work will be the U.K. market and assessment. I envisage that where species are found to be available and satisfying criteria for certain end uses, I will devise a positive promotion to introduce the new species, rather than trust to luck that someone will hear about them.

Of course these days no-one dares mention forestry without emphasising sustainability. This is neither as easy nor as widespread as some people would have us believe but within the confines of this emerging science, exploitation with sustainability will be recommended.

I'd like to take this opportunity to thank the IWSc and its members for their continued interest and support.

Michael Croggan BSc, AIWSc.

#### FORESTS FOREVER — A REAL WOOD GUIDE

Forests Forever is a campaign to help preserve the forests of the world forever and for everyone.

We must protect the forests and for action we need facts. These are provided in a 'Real Wood Guide' available at £19.50 each including postage and VAT.

A Forests Forever Video is also available (VHS) at £9.50 each including postage and VAT.

The Guide and Video together can be purchased at a discount price of £25 inclusive from: Forests Forever Campaign, Clareville House, 26/27 Oxendon Street, London SW1Y 4EL.

#### GREENING AUSTRALIA

A conference next March will focus on Australia's most neglected issue — the improvement of its water resource. This very timely conference will focus on the use of trees and other vegetation in water management for both urban and rural use. It will be held in Adelaide, South Australia, from March 23 to 27 1992.

The conference convener is Greening Australia's national Vice-President, Mr. Ted Allender. The programme will include three days of papers, a choice of field trips and a full day of interactive workshops with clearly defined action outcomes. Further information is available from 'Catchment of Green' Greening Australia, P.O. Box 232, Kensington Park, South Australia, 5068. Fax: (08) 332 8810.

# LEEDS AND SHEFFIELD BRANCH AGM — Chairman's Report

Our second year at the conference centre of Hicksons Timber Products Ltd. has been another successful one, and on behalf of all our members I would like to thank Hicksons Timber Products Ltd. for their continued support and generosity — they are an example of what all other companies in our industry should aspire to.

The 1990/91 speakers programme was well chosen by the committee to reflect the increasingly complicated and rapidly changing nature of our industry. It is vital that our committee continue to produce a range of up-to-date and high calibre speakers in order to attract the newly qualified members of the IWSc. I would like to thank the committee and in particular Andrew Newton (our secretary), and Neil Townend for their support and advice in my year as Chairman.

Rather than detailing the whole programme of speakers, I would like to focus on the attendance levels of our meetings. We had a record-ever attendance at our first meeting of the season at Hickson Timber Products Ltd. with numbers in the high 30's. The remainder of the season was to say the least turbulent, and I would like to discuss the issue of attendance and promotion of meetings in general with committee members to see how we can sustain and build on our gradual improvement.

The areas of debate are, I would suggest: SUBJECT MATTER - VENUE -

# **BRANCH LINES**

#### IRISH BRANCH

The Irish Branch held a most successful evening seminar at Thomond College, Limerick on 20th March 1991 on the subject of "The Furniture Industry in Ireland".

The Seminar was addressed by:

Mr. B. Flood, Irish Goods Council (IGC) who gave a profile of the industry and outlined the supports available to the industry at home.

Mr. R. Mullen, Corus Tractala (CTT) who covered the assistance available to industry and export markets through promotion and research.

The final speaker was Mr. J. O'Donnel, Ballydahob who covered the manufacture of furniture with particular reference to his experience of using Irish-grown timber species.

A second Seminar with the cooperation of the Forest Service, Northern Ireland, was held in Belvoir Park Forest, on the outskirts of Belfast on Thursday, May 23rd 1991. There were members of the IWSc from Dublin and other parts of Ireland, as well as good representation from the timber industry and academic institutions.

The first paper "Northern Ireland Sitka Spruce — how strong is it?" was given by Dr. Ian Humphreys, a researcher in the Department of Agriculture. He told the meeting about the investigative work, carried out on behalf of the Forest Service, into strength testing of Sitka Spruce from 20 different locations throughout Northern Ireland. This species represents more than 60 per cent of forest crops in Northern Ireland. Dr. Humphreys referred to the cutting of 2800 battens (4.8m×38mm×89mm) which were kiln dried and machine stress graded at Ballycassidy Sawmill to BS 5268 Pt.2. In particular, he illustrated how silvicultural treatments and especially crop spacing can effect the strength of timber. Overal results gave a pass rate of 67% at strength class (SC) 4 and a pass rate of 94% at SC 3. So the clear answer to the question posed in the title of Dr. Humphrey's paper was that a very large proportion of Sitka Spruce grown in Northern Ireland was suitable for use in construction.

Mr. Bobby Stark of the Northen Ireland Timber Importers Association gve the second talk on the importation of sawn timber into Northern Ireland. This amounted to approx. 250,000m³ in 1990, 44% originating in Canada and 35% from Europe. Northern Ireland imports, he pointed out, were just over 3% of the total timber imported by the United Kingdom. The total value of all imports (softwoods, hardwoods, plywood, particle board and fibreboard) Mr. Stark pointed out, amounted to £64m in 1990.

The meeting was attended by 30 delegates and the Irish Branch would like to thank the Forest Service, Northern Ireland for their sponsorship of this seminar.

G.R. Knaggs AIWSc (Secretary)

#### TIMING -SPEAKER - PROMOTION

Comments and suggestions would be welcome.

Our industry in all its forms is under professional, commercial and environmental pressures. The need for organisations such as the IWSc has never been greater and we must increase our efforts to improve our influence in the timber industries — today.

The overwhelming impression I have gained as your Branch Chairman this year is the hospitality and genuine welcome that we extend to all attendees. A good example of this was our Saturday Outing in the mist of the hills above Otley — with typical organisational skill, the Chairman's dress rehearsal the weekend before had taken place in brilliant sunshine and blue skies.

We will, as you should by now hopefully be aware, shortly have in place a new category of membership — MIWSc — this represents a major opportunity to expand the Branch Membership and draw upon a whole new "Bank" of high calibre expertise. As a committee we must now exploit this situation to our maximum advantage, and suggestions as to potential candidates that we should approach will of course be most welcome.

In conclusion I would once again thank the committee for their support and look forward to the challenges that 1991, and that "Magic Year" 1992 will no doubt reveal.

David Carney AIWSc (Chairman)

#### LIVERPOOL BRANCH

The Liverpool Branch has struck up an interesting and productive liason with the Institute of Builders Merchants (North Wales and Wirral Branch). Those who are not aware of this organisation might be interested to learn that it is broadly similar to our own institute with parallel aims and interests, but centred on the Builders Merchants industry. Entry is principally by means of a course and examination in Business studies and Administration, but suitable candidates with experience and other qualifications may be admitted, subject to branch and council approval.

The nature of our association with the Builders Merchants has consisted of several successful joint meetings, the most noteworthy of which was a presentation by Mr. Keith Purcell (Vice President IWSc) on his travels in Russia. An excellent evening was enjoyed by some fifty members of the two institutes and their guests at a small country pub in North Wales, with a talk and slide show followed by a buffet meal. All present were entranced by the photographs of a country normally well beyond our ken and the presentation by Mr. Purcell can only be described as faultless.

Members of the Builders Merchants organisation, some having only the barest knowledge of timber and timber production, were unanimous in their praise. As an added bonus, the social mixing of our associates in business was also widely appreciated. It is hoped that this friendship will continue to flourish. Further joint ventures are already booked and we look forward to them with anticipation. There is an Association of Builders Merchants in every area in the country; might we suggest that other Branch Committees make contact? Full details are available from Liverpool Branch Secretary, Don Jones.

Paul G. Davies BSc, AIWSc, LinstBM.

#### SCOTTISH BRANCH

Our visit to the Countryside Commission for Scotland at Battleby Estate, a few miles north of Perth was a memorable one. A sunny spring April evening made the drive to the Fair City more satisfying and the direction finding more easy from the main northbound carriageway.

There was adequate parking and we were welcomed at the reception area of the conference centre to enjoy a cup of coffee. The building has been constructed using existing estate service property, with the assembly room centrally placed to complete the conversion.

We first had a tour of inspection to see the many varied items undergoing test over set time cycles in open exposure, having a large variety of external finish treatments on as sawn or machine finished timber battens. These were examined and compared in detail by all present and notes were made with photographs for the records.

We then returned to the conference centre for an excellent talk by Mike Todd encompassing modern finish coatings and treatments, behaviour of wood in joinery, the effect of ultraviolet exposure and moisture control by good design practice. The evening was completed when the speaker replied to the questions raised by the members and guests in attendance.

Our AGM this year was followed by a very interesting talk by Miss Dale Idiens of the National Museums in Scotland, following her recent visit to New Zealand. She gave a detailed description of the Maori Meeting Houses of timber construction illustrating the various components and sections of these traditional buildings, fine carvings and symbolic implications. We were shown typical examples of hand tools for working on the indigenous woods used, although modern buildings are fabricated in more imported timbers, together with MDF and other board materials.

This was a fine presentation to complete the 1990/91 programme.

Your management committee have produced a new programme for the coming autumn for which two meetings will be held at a venue in Glasgow. We trust that you will give us your support by attending and introducing a guest.

Eric Wyllie (Branch Secretary)

#### AUSTRALIAN BRANCH

At the AGM of the Australian Branch of the IWSc, Dr. Harry Greaves was elected as the new Branch Chairman. Our thanks to Prof. Ian Ferguson for his excellent past services as chairman and our best wishes to Harry Greaves who has taken a keen interest in the branch ever since it was formed.

There has also been a change of secretary with the election of Mr. Harold Breitinger. We are pleased to hear that he will be attending the Timbe Engineering Conference in London and we are hoping that he will be able to visit the office while he is in the UK. The retiring secretary, Jim Creffield has put in stalwart work on our behalf for six years and we are very orateful to him, however he has not escaped entirely but will continue to serve the Branch as Membership Secretary.

This is just a reminder to all our members overseas that if you are visiting the UK the office will be pleased to hear from you and if you are in need of local information I am sure that our various Branch Officers will be pleased to help

Jean Taylor

# SIDE LINES

#### NEW CATEGORY OF IWSc MEMBERSHIP ARE YOU ELIGIBLE?

In the first major change to its membership categories since it was founded in 1955, the Institute of Wood Science, at an EGM on 26th March, ratified a proposal from the Membership Committee to create a category of membership for experienced people in the timber industry. This recognises that there are many people working in our industry who have a great deal to contribute to, and gain from, the IWSc but who lack the formal academic qualifications to meet the stringent entry requirements for the lettered grades. The Institute of Wood Science believes that Knowledge gained through experience should be recognised.

The new category, styled 'Member of the Institute of Wood Science' and entitling the recipient to use the letters 'MISc' is aimed at technical, experienced members of the timber industry (from grower to manufacturer), for whom the academic grades are inappropriate. A minimum qualification of ten years' experience in the industry, of which at least the last three will have been in a senior position.

At the Membership Committee in May, three applicants were recommended to be elected as Members and this was ratified by the council on June 25th. These first Members of the IWSc are:

Mr. E. Cook, P.Inst, RTS, MIWSc, Managing Director of Cook (Damp & Decay) Ltd. of Hull since 1974. Mr. Cook has been an Ordinary Member of the IWSc for 12 years. This year he has also been elected President of the Hull Guild of Building for which we also offer our congratulations.

Mr. D. A. Langham, a Certificated member with 40 years experience in the remedial treatment industry and currently a director of the Property Preservation Co. Ltd. of Walsall. Mr. Langham has served on the management councils of the BCDA and the BWPA.

Mr. P. Ross, with over 30 years experience in the timber industry and currently a senior manager with John Gordon & Son Ltd. of Nairn.



Edwin Cook MIWSc Peter R
Two of our first Members of the IWSc



Peter Ross MIWSc the IWSc

### FIRA Technical Audit of Furniture finishing systems

A new technical audit from FIRA can assess the current operation of a furniture company's finishing area so as to recommend potential and beneficial changes to the process or equipment. It can identify where time, space or labour can be saved and product quality improved.

In some cases already looked at in companies, material control has been identified as a problem area; subsequent changes in operational parameters suggested by FIRA have lead to a greatly reduced reject rate and a significantly improved finish quality.

Another example assessed by a FIRA consultant showed ineffective preparation sanding before finishing, especially on panel edges. A recommended edge profile sander freed three operatives to other parts of the factory. During another, FIRA replanned the operation of the finishing area and specified a new automated spray line to match their output, speed and finishes needed. The finishing audit itself can look at preparation of surface, stain and laquer types; as well as application, drying and denibbing methods. It is also concerned with handling methods, faults, product durability, health and safety and environmental considerations.

This independent expertise can lead to significant savings; to discuss further contact Mike Thomas, FIRA's Production Finishing consultant at Maxwell Road, Stevenage, Herts, SG1 2EW, or call 0438 313433.

## FIDOR CONFERENCE OCTOBER 24-26, HILTON NATIONAL, BATH.

The following papers will be presented:

Out of the recession by Fiona Stewart, Henley Centre for Forcasting

Developing wet process fibreboards for exterior use by Alan Wilson, Masonite, S. Africa.

Manufacturing developments in the fibreboard industry by Speaker from Sunds Defibrator.

The collection of Inter European trade statistics by Ian McLean, Business & Trade Statistics Ltd. The future of timber frame housing in Britain by David Scott, Timber & Brick Consortium.

Application of the CE Mark in the single market by Anthony Davies, Department of the Environment.

#### CORPORATE MEMBERS

The Council of management wish to record its thanks to those listed below for their support as Corporate members.

J. Alsford Ltd., Anglo-Norden Ltd., John Boddy Timber Ltd., BSW Timber plc, BPIB, Crosby-Sarek Ltd., Coillte, Cuprinol Ltd., James Donaldson & Sons Ltd., EOLAS, Forest Service N. Ireland, Fosroc Ltd., Glennon Bros. Timber Ltd., Harcros Timber & Building Supplies Ltd., Hicksons Timber Products Ltd., James Latham plc, Marlow & Co. Ltd., F.W. Mason & Sons Ltd., Meyer International Ltd., MBM Forest Products Ltd., Price & Pierce Ltd., Rentokil Ltd., Timber Trade Federation, Timbmet Ltd., TRADA, Travis Perkins plc, Henry Venables Ltd., Watford Timber Co. Ltd., Wickes plc.

# THE IWSC WELCOMES THE FOLLOWING APPLICANTS WHO HAVE BEEN ACCEPTED IN THE IWSC GRADES AS FOLLOWS:

Fellow — Dr. J.A. Evertsen, Straffan, Ireland.

Associates — L. Boustead, Oxford; A.G. Clulow, Newtonabbey, N. Ireland; H.B. Dawson, Derby; Dr. J.C. Flowers, Morgantown, WV, USA; G.K. Harley, Nairobi, Kenya; C.P.A. Houchen, Gerards Cross, Bucks; R.G. Mills, Austins Ferry, Tasmania, Australia; A.V. Page, High Wycombe; G.R. Stringer, Bellbowrie, Australia.

Members — E. Cook, Hull; D.A. Langham, Walsall; P. Ross, Lhanbryde, Morayshire.

Ordinary Members — R.G. Hanney, Bristol; N.P. Hodgson, Liverpool; M.J. McCormack, Dublin; J. Mulligan, Dublin.

#### DATES FOR YOUR DIARY

Sept. 19-22 Self-build Homes Show — Alexandra Palace.

29-6 Home Interiors exhibition London — Earls Court.

Oct. 13-15 DIY and Home Improvement Trade Show Olympia.

> 17-20 London Woodworker Show — Alexandra Palace.

24-26 FIDOR Conference — Hilton National Hotel, Bath.

Nov. 24-29 Interbuild — NEC, Birmingham.

Housebuilding & Construction

Statistics Conference — London,
Tel: 0372-463121

#### 1992

Jan. 16-19 Daily Telegraph Period Homes & Interiors Event — Olympia.

Feb. 4-6 Safety & Health at Work — Sandown Exhibition Centre.

> 11-13 Construction Industry Computer Exhibition — Barbican Centre.

March 13-5 Daily Mail Ideal Home Exhibition
— Earls Court.

23-27 Firesafe '92 - Olympia.

23-27 Catchments of Green Conference
 Adelaide, S. Australia.

April 3-4 IWSc Conference — Cheltenham Spa.

May 5-8 BWPDA Convention — Moat House International Hotel, Stratford upon Avon.

#### REACHING FOR GOLD Bucks college student wins top cabinet making award

Marcus Guise, a student of the City and Guilds Advanced Craft in the cabinet making course at Bucks College, took first prize in the cabinet making section of the prestigious National Skillbuild competition in Belfast.

Marcus, who works for Steelcase Strafor of Broadway, won the award in the face of top class competition from students from colleges around the UK. The fact that he hadn't worked at his bench for six weeks due to a football injury which left his arm in a sling, makes his achievement all the more impressive!

The College is particularly proud of Marcus's success as it is the first time that one of its students has won a Gold Medal in the competition — the previous best was a Silver in 1985