



There's a lot that goes into a pool. It might have a Duratech heat pump, BIO-UV water treatment and LED lighting. Perhaps a couple of short neck skimmers and all the pipe and fittings. But before any of that gets built into the pool it has to get delivered to the job.

And this means that Emma, our Office Manager, and her team have to get the right documents attached to it, from order number to delivery note to invoice.

We know that you take pride in the work that you do and you'll be glad to know that Emma does too. It's safe to say that when you're building a pool, she's a good person to have on your team.

Call us on 01271 378 100 and we can get Emma working for you.





From the Editor

There was a news report this morning that the authorities have so far removed twelve million litres of water which has been flooding and blocking part of the A14 near Newmarket, Suffolk, for over a month. Each day there are miles of queues and all those looking to avoid the issue simply clog up Newmarket High Street instead. I wondered what the authorities are doing with the twelve million litres of water they have removed? Filling a new equine pool? Some might suggest they are simply pumping it back on to the adjacent field!

Talking of pumps, there will be much talk about pumps, and other subjects, at the 131st ISPE One Day Seminar, in Hatfield, Herts., at the end of March. A report will appear in the next issue but the last ISPE Seminar for the Autumn/Winter season looks to be an interesting one, once again.

The ISPE Council are always pleased to hear members' suggestions for subjects that might be featured at the ISPE Seminars. Also, it is always useful to introduce new speakers and expertise into the proceedings, so if you or a colleague are interested in giving a presentation then do please get in touch.

After 131 One-Day Seminars, since 1981, the Institute has covered most subjects and some many times, but the membership is constantly changing and systems and processes benefit from new technology, so a re-visit to all areas is well worth exploring.

Talking of a changing membership, you only need to look at pages 20/21in this issue to see the huge number of new members and students that have joined since October 2023. We welcome you all and hope to see you at one of the ISPE Seminars later in the year.

In the meantime, keep busy!

Ross Alcock March 2024.

The ISPE Council of Management

Officers of the Council

President - Jimmy Lamb, FISPE Vice-President - Bob Judd, FISPE

Immediate Past-President - Philip Barlow, FISPE

Honorary Treasurer - Ian Betts, FISPE - Company Secretary - Chris Carr, FISPE

Elected Members of the Council

Will Dando, FISPE - Colin Day, FISPE - Howard Gosling BSc. FISPE - Colin Jenkinson, FISPE -Shaun Keay, MISPE - Alex Kemsley, MISPE - Glyn Lucas, MISPE - Kim Mumford, MISPE -John Scott, FISPE - Malcolm Sharp, Hon. FISPE - Ben Studdy, FISPE General Secretary - Ross Alcock

The Institute of Swimming Pool Engineers Limited, P.O. Box 3083, Norwich, Norfolk NR6 7YL Tel: 01603 499 959 www.ispe.co.uk Email: ross@ispe.co.uk

NOTICE TO ALL READERS

Articles and advice in the ISPE Magazine are for guidance only. Further professional advice should always be sought before acting upon, or refraining from acting upon, a course of action. Health & Safety is of paramount importance and the correct PPE (personal protective equipment) should always be utilised before undertaking any job. If in doubt, ASK!

© ISPE. The Institute of Swimming Pool Engineers accepts no responsibility whatsoever in respect of any advertisements appearing herein, or for any opinion or statement expressed in technical articles, correspondence or other items.

In This Issue...

- 1 From the Editor and The ISPE Council of Management
- 3 Front Cover Pool Project from HTP Group
- 7 ISPE was front and centre at the vibrant and engaging SPATEX 2024 expo!
- 10 For Sale Swimming Pool Construction / Refurb Shelter
- 12 Large Numbers and Record Attendance!
- 13 Obituary John S. Fowler
- 14 ISPE Logo Use
- 16 Full House For The ISPE 2023 Filtration Workshop

- 20 New Members and Students
- 22 Product Focus Certikin, the leading light in swimming pool illumination
- 24 Focus on Products Lovibond's Scuba3s Electronic Pooltester and SD30 Test Pen
- 25 Do You Know What Dangerous Goods Are?
- 29 Company Focus Plastica's ISO Commitment to Quality and Efficiency
- 30 Obituary Philip James Parton
- 31 Product Focus Covering a Pool to Save Energy and Money
- 32 Situations Vacant, In the Next Issue... and Email Addresses



Front Cover Pool Project

Here we have a one piece Niveko custom-built swimming pool. designed for the client's garden space and to accommodate all year swimming. With teenage round children wanting to eniov swimming lifestyle, it was also built within the parents' remit of having fitness and wellness lifestyle at home.



The initial design consultation with Lewis Salvidge, MISPE, was primarily to establish the client's needs and wishes for a garden pool. The client did have a special request in that the pool was to be ready for a celebration birthday, regardless of whether the surrounding landscapes were complete.



The consideration with the client was the speed of installation. Groundworks and concrete were ready within 7 days and the pool was

installed, plumbed and ready for concrete backfill within 10 days from the commencement of the dig.





Our client says: "This one-piece pool delivery was slightly complicated in access but with the teamwork and determination, we quickly achieved the pool installation and pipe works, with water fill also commencing on day one of the install. The beauty of our Niveko one-piece pool system is the speed and turnaround of associated works and trades. Put all this together and before you know it, an outdoor heated swimming pool becomes part of your daily routine".



DON'T MISS OUT ON YOUR OWN COPY OF



OFFICIAL MAGAZINE FOR THE UK INDUSTRY







An annual subscription to **SPN** costs just £30 (UK) – and represents terrific value for the most respected and established title in the industry.













Every issue of **SPN** is packed full of essential information from the UK and global pool and spa industry - **can you afford not to have your own copy?**

SUBSCRIBE NOW AND YOU WILL:

- Never miss an issue
- Pay no charge for post and packaging (UK)
- Have you own copy delivered direct to your door (home or office)
- Benefit from our satisfaction guarantee your money back for any unmailed issues
- Receive your copy at least a week before our 'virtual' edition goes live



SUBSCRIBING TO SPN COULDN'T BE EASIER...

Just visit our website at www.swimmingpoolnews.co.uk and click on any of the 'subscription' links. You can pay online with any major credit card using our secure PayPal checkout - it'll only take a couple of minutes!

Your SPN contacts are:

For editorial enquiries contact Jon Wadeson on 020 8306 8150 or email jon@aqua-publishing.co.uk For advertising enquiries contact Tony Weston on 01474 813433 or email tony@aqua-publishing.co.uk

Delivered in one piece, the Niveko pool is lightweight yet durable and very easy to manage when unloading. Depending on access, the pool can be unloaded with a telehandler or crane and laid flat for lowering into the excavation. A flat and level concrete base slab is laid and insulated just prior to the pool installed. Pipework beina nections and tails are ready in the chosen pool location so that quick connections can be made back to the pool plant room. Plant & filtration can be modulated onto a skid pack and designed so that the floor space in a plant room can be pre-empted and allocated for the pool plant. This gives more flexibility and, of course, speedier installations on site. All in all, our labour is reduced, meaning, from delivery day to plumbing in and ready for concrete backfill is 2-3 days. Once backfilled the pool is readv for copings and hard landscape.





Our client says: "The HTP team were consistently efficient and on-time with hard working ethics and a cando attitude. The aftercare service and attention to customer care goes a long way and we are impressed with the response times and the courtesy within their service. My wife is extremely pleased with the pool and the fact that her birthday celebrations were made possible by a quality and efficient turnaround from HTP".

For more information contact: Lewis Salvidge, MISPE sales@htpgroup.co.uk HTP – www.htpgroup.co.uk

Your Pictures Here?

If you would like to see your pool project featured on the front cover of the ISPE Magazine, please let us know! Email ross@ispe.co.uk





LEADERS in Heat Pump Technology & Innovation

The Complete Range of Energy Saving Products





Tel 01293 546 126 / 01268 273 040 email info.uk@scppool.com



ISPE was front and centre at the vibrant and engaging SPATEX 2024 expo!

With visitor attendance at this year's SPATEX almost 20 per cent up on the previous year, it's perhaps not surprising that the show's education and training partner, ISPE, recorded very healthy numbers for its workshop programme.



The UK's only dedicated water leisure show, held in February, was widely acknowledged to be a huge

industry-wide success. Celebrating its tenth anniversary at Coventry Building Society Arena, it is fitting that this milestone year drew a record number of visitors. It was a year for superlatives as the show also featured the largest number of exhibitors in its 28-year history. It all added up to a very busy and dynamic event, drawing interest from all sectors.

Never have the aisles been so packed and the 110 stands brimming with so many new innovations and products. There was even the odd celebrity with Olympian, Colin Jackson, on the SpaFlo stand whilst Gladiator's impressive Giant graced the Passion Spas stand.

For the second year running, the STA (Swimming Teachers' Association) chose SPATEX to kick





ENSURE YOU CONTINUE TO RECEIVE YOUR COPY AND

SUBSCRIBE ONLINE

WWW.POOLANDSPASCENE.COM

off their 'Swim to the Beat' campaign. Raising valuable funds for the British Heart Foundation, swimmers were put through a series of aquatic exercises in a magnificent swim spa provided by Sunbeach Spas. The traditional SPATEX networking party on the Wednesday evening of the show was well attended, with the free 'very useful' SPATEX baseball caps, handed out to all party attendees, proving highly popular. Winners of the funniest hatwearing competition, offering great prizes, will be drawn in the summer. Don't forget to send your pictures to Helen in the SPATEX office, the funnier, the better!

As SPATEX's main provider of education and training, the ISPE workshop programme always dovetails well with the exhibition's showcase, and this year was no exception. A diverse number of topics made up the informative ISPE workshop programme and, likewise, in the parallel seminar arena 2



ISPE's General Secretary, Ross Alcock, whose SPATEX swan song this was before he retires in June, says: "I am delighted that this, my final show, was the busiest to date. Attendance figures for the workshop programme were just shy of 600, representing a 15 per cent increase on 2023. I feel satisfied that a lot of technical knowledge and know-how has been imparted and disseminated

over the 35 years that I have been at the helm of ISPE. The partnership between SPATEX and ISPE is in good shape, and ready to hand over to my successor."



SAVE THE DATE: SPATEX 2025 returns - Tuesday 4th to Thursday 6th February. The Coventry Building Society Arena, Coventry CV6 6GE.

For more info: helen@spatex.co.uk Tel: +44 (0) 1264 358558.

LEAK DETECTION & PRESSURE TESTING

EQUIPMENT HIRE AND SALES COMPREHENSIVE ON-SITE SERVICE

'Phone for free Leak Detector!

UNIPOOLS LTD 621 Watford Way Mill Hill London NW7 3JN

Tel: 020 8959 8686 Fax: 020 8959 2037

FOR SALE

Swimming Pool Construction / Refurb Shelter Work whatever the weather 'Concept Pool Up' Inflatable Shelter

- Width 7m, Length 9m which can extend to 12m
- Height **1.7m** + pool
- Weight 75kg
- 8 blowers with standard plugs
- PVC bib for ballast + eyelets + mooring rings
- Actual installation can be done quickly in 15 minutes with 2 people
- Resistant materials Oxford Cloth 210g
- 2 offset entrances, transparent doors

The shelter has been used three times over pools for refurbishment works which we no longer offer as a service, hence the sale. There is a tear approximately 2" long which has been patched and used since and makes no impact on the performance of the shelter. It's easy to transport in the back of a van or fits in the back of a hatchback car. Can be installed quickly with two people in approx.15 mins. Photos available in use on site at request.

£2,950.00 pick up or quote for pallet shipping.

Please call Phil Barlow on 07876 593580 or email phil.barlow@hotmail.co.uk





LOOKING TO KICKSTART YOUR CAREER?

Luxury Pool Builders, Compass Pools, are looking for new members to join their team nationwide.

Are You:

Hardworking and enthusiastic

Looking to learn new skills and work with the best

Career driven and focused on the quality of your work

... If so, we want to hear from you

Current Vacancies:

- Design Consultant
- Apprentice Engineer
- Service Engineer
- Installation Engineers
- Office Administrator

If you would like to join us, please visit:

www.compass-pools.co.uk/careers or email: careers@waterstream.co.uk

Waterstream, Brooks Green Road, Coolham, West Sussex RH13 8GB



Large Numbers and Record Attendance!

Over forty ISPE student members, our highest number ever, attended the recent ISPE Revision Seminar, held in Hatfield, Herts.

The four ISPE Tutors each gave a presentation giving tips and advice on how to pass the ISPE exams, with the main advice being read the manuals!



Chris Carr, FISPE - a busy day!

Chris Carr, FISPE, started the day off looking at the subject of Filtration and he provided a refresher of the contents of the Filtration manual.



John Scott, FISPE

lan Betts, FISPE, looked at some of the multiple-choice Construction questions and identified where in the text particular answers may be found.

After a well-received light lunch, Colin Day, FISPE, covered the basics of Chemicals with Water Treatment and Water Testing, and John Scott, FISPE, rounded the day off with a look at the Heating manual, giving specific tips and advice on how to approach the Heating exam.

Attendance at the Revision Seminar does not guarantee a pass in the ISPE exams but certainly acts as a great refresher session and is an excellent day's training. All delegates were provided with a copy of the presentations after the event.

The normal attendance at the ISPE exams in recent years has been around forty to fifty students but for 2024, sixty five ISPE student members have booked their place, many as a result of the Revision Seminar, it seems.

Passing in the four sections elevates of the ISPE exams successful student members to Certified Technicians and evidence of passing the ISPE exams is one of the criteria to obtaining the blue CSCS card for 'Swimming Pool Leisure Systems Installer'. ISPE Members and those who have passed the ISPE exams may apply for the card, and further details are available on the JIB PMES website. https://www.jib-pmes.org/

Email ross@ispe.co.uk to add your name to the waiting list for the next Revision Seminar (February 2025).

Obituary John S Fowler 1933 - 2023



We were very sad to hear that John Folwler, Hon.FISPE, died peacefully at home on the 11th of December 2023, just three weeks before his 91st birthday. John was one of the original seven Subscribers who formed the Institute of Swimming Pool Engineers (the others being: John 'Jack' Bishop, Edward 'Gerry' Godden, Brian McLaughlin, Hugh Gibson, Graham Rutherford and John Wilkins).

John gave a number of technical presentations at ISPE Seminars and was a regular contributor to ISPE activities and published material.

We are grateful to Peter Lang, FISPE, and Chris Hayes from SPATA, who have kindly supplied the words below, which originally appeared in the SPATA news, just too late for the last ISPE Magazine.

John was born to Stephen and Olive Fowler and, by his birth, into the Fowler family business in Cowfold. At that time the business, having been set up by John's great grandfather in 1853, was involved in house building (but not developing), grain carting in the farming world, joinery and carpentry, and funeral directing.

Following schooling and National Service in the Royal Engineers, John trained with Brighton builders, T.J. Braybon & Son and with whose tuition and night school, he gained a certificate as an Associate of the Institute of Building, eventually becoming a Fellow of the Chartered Institute of Building. He joined Fowler Bros (Cowfold) Ltd. as it was then in 1954.

In 1958, the company added construction swimming pool maintenance to its other activities. They had taken on a contract to build an indoor pool for a charity and having no such experience, sub-contracted the pool work to Unit Pools Ltd. After the contract was successfully completed and, on the basis that they employed bricklayers, plasterers. tilers. plumbers, John and his colleagues saw a further income stream in the growing business of swimming pool installation.

Fortunately, the decision paid off and the workload increased. However, by this time he was Managing Director and, with a head of building, a deputy head of swimming pools and a head of administration, he was able to devote more time to it. This led to contacts with other pool companies in the southeast, such as Rutherford's, and to the formation of The Association of Swimming Pool Contractors (ASPC) in 1961.

Perhaps not unexpectedly, some of the suppliers of pool equipment that were joining the industry, such as Norcal, started pressing to join the ASPC, to increase the awareness of their products as well as awareness of buying swimming pools.

The result was that the Swimming Pools and Allied Trades Association (SPATA) was formed in 1971 and John

was fully involved. He was on the National Council from the beginning, as well as serving as Technical Advisor until he retired in the year 2000. He was President of SPATA from 1976 to 1977 and was, some years later, honoured with a Lifetime Achievement award.



One achievement that may be laid at John's door was that in 1970 his company staged "Swimex", in the Cowfold village Hall, where some of their trade suppliers supported the venture by attending the one-day exhibition,

with equipment and in person, and to which Fowler's customers and potential customers were invited. It successfully impressed a friend, Alan Hadderell, to start SPATEX in Brighton; the last Swimex was in 1971.

As well as the business, John had other interests into which he threw himself. He joined the Territorial Army, was commissioned, loved felling trees with cordtex, and was awarded the Territorial Decoration (TD). He was an enthusiastic member of Round Table and Forty-One Club. He followed country pursuits, particularly shooting and was a farmer. He had a one third size canal boat in which he holidayed for 4 weeks once a year, with different crews each week.

John was a large and friendly personality who was principled, but not unhappy to continue a discussion. This made him a particularly good mediator for SPATA. He was a kind person. He put his all into everything he did and lastly was a proud family man who has left his mark and will be missed.

ISPE Logo Use

Recently, we have noticed a few more cases of members or their companies using the ISPE logo. This is not permitted under any circumstances.

Article 6D, of the Memorandum and Articles of Association of the Institute states: "(D) No member shall at any time or in any place or in any way use the Logo of the Institute to imply in any way that their Partnership, Company or Body Corporate is commercially connected with the Institute in such a way as to suggest that the Institute is a Commercial Undertaking, a Trade Association, or that it is anything other than a learned Professional Body. Such action by a member would be considered a breach of these Regulations, resulting in instant expulsion without redress."

In addition, when any student member passes their exams, this is pointed out in their 'Congratulations' letter and it is also stated on the letters sent to all new members, advising them of their acceptance as members of the ISPE.

Recently, the logo has been noticed on business cards, web sites, emails, adverts, equipment and even vehicles.

We hope that anyone who is using the ISPE logo will remove it with immediate effect and no further action will be taken.

It is perfectly fine to add your designated letters after your name on any business or personal stationery, but please do not use the ISPE logo.

Please get in touch if any clarification is needed.

Chris Carr, ISPE Company Secretary - March 2024.

THE ULTIMATE SEAMLESS POOL FINISH

Pool fittings play a vital role in ensuring that a swimming pool functions seamlessly. Traditionally these fittings have been white in colour which does not always complement the overall design of the pool. However, with Certikin's new range of new patterned fittings you can now get the perfect match.

Specifically tested and developed for swimming pool conditions they are available to complement three of our best-selling liner patterns – Riverstone, Blue Marble and Sublime. With each pattern, the full range of fittings is available including inlets, main drain and light fascia ensuring the ultimate seamless pool finish for your next liner pool project.



Full House For The ISPE 2024 Filtration Workshop



Back in November, the Institute of Swimming Pool Engineers headed down to St. Leonards-on-Sea to Plastipack's headquarters for the annual ISPE Filtration workshop. The Filtration workshop has now become a regular fixture on the ISPE events calendar each Autumn.

The workshop is organised by Chris Carr, FISPE and assisted by Philip Barlow. FISPE and Mumford, MISPE. Chris wishes to acknowledge Phil & Kim's commitment to this increasingly popular event and stated, "It's a pleasure to have Phil and Kim on board, who both help to make the workshop run smoothly interesting for all the delegates. Phil's hands-on guidance is simply excellent and his knowledge on all aspects of pool engineering is first class".

The ISPE Filtration workshop further enhances the Institute's avenues of education and has proven to help many new recruits to the industry, especially students who are due to sit their exams. The Filtration workshops are usually run each autumn (October/November depending on other industry events) and cater for a maximum of 16 delegates at a time. The main concept of this workshop is that each delegate will have the opportunity to understand both the theory and the practical elements of domestic swimming pool filtration, plant & equipment.

For this session, we had a 'full house' of 16 and our enthusiastic delegates arrived from all over the country to a warm welcome from Plastipack staff, as well as Chris, Phil and Kim.

The workshop kicked off with a morning session of in-depth theory for Domestic Filtration, presented in a PowerPoint display by Chris Carr. Chris advised that all delegates would be subject to a practical pipework trade test as well as a mini multi-choice exam. At the end of the workshop certificates would be awarded with a pass mark for both elements being graded as, pass, merit, credit, or The delegates listened distinction. intently and posed a few questions during the morning session. Phil assisted by demonstrating various ways to cut and join pipes as well as how to correctly apply PTFE tape to threaded components. Phil made it look so easy (no doubt he could do this blind-folded!).

Later in the morning all delegates set off to Plastipack's workshop area for the practical trade test which was to make a pipe-work set. The pipe set test is designed to

be awkward, but a good test to measure accuracy in cutting pipe, glue preparation, and perfecting glued & threaded joints. All delegates were monitored throughout the test and each completed item was marked against key criteria to ensure a good standard of workmanship and time taken.



A key area of the day's events is the importance of correctly sizing the pipework to comply with the standards for suction and return velocities. Also, Chris pointed out the risks of entrapment for pools fitted with a single main drain. This seemed to be a bit of an eye opener for most delegates, as it seems that many older pools may have undersized suction pipework as well as a single main drain!



The morning session ran like clockwork and hungry delegates enjoyed an excellent buffet lunch organised by Plastipack. Later, delegates were split into groups for the afternoon 'hands-on' session. Chris & Phil instructed the groups, covering all aspects of filter & pump 'strip down' and rebuild. Each group was

instructed to empty and refill a filter of its media (in this case, Zeolite, which was donated by MSI). Phil was able to give a great deal of advice on pump & filter servicing, having worked on pool filtration plant for over 20 years.

As well as stripping out the sand filters. delegates from the instructed to remove all internal pipefittings, checking & inspecting for damage. Any faulty components were replaced as should be the case in a typical service scenario. Likewise, Phil had prepared a variety of different pumps which were to be completely stripped down, with Phil & Chris giving additional guidance as to how to test & change a mechanical seal.

delegates The (some more than experienced others) really seemed to enjoy the team spirit, working together in groups and a fair amount of useful knowledge was exchanged between them making the day even more valuable. Later in the afternoon, it was back to the classroom and all delegates sat a twenty minute multi-choice exam paper. Whilst these exam papers were being marked, interested delegates had to have tour opportunity of а Plastipack's impressive manufacturing facilities.

It was clear from the results that the day's events had paid off, as all delegates had more than adequately reached the minimum pass mark. And the average for all attendees was an excellent 78%! Not only that, but the top three delegates scored almost the same between 83 and 84%, as below.

The highest combined score went to: Kerry Warner: 84% 2nd Place went to: Shayne Warner: 83.5%

3rd Place went to: Rhys Woolf 83%

Chris, Phil and Kim would like to say very well done to all the delegates

who attended! The Institute also wishes to formally thank Plastipack for once again allowing the Institute to use their facilities for this event, and Plastica for their pipework donations and continued support. Also, many thanks to all our sponsors (below) and especially Plastipack staff who organised a very nice buffet lunch.



Peter Adlington, FISPE presented a bottle of Champagne to the winner.

The next ISPE Filtration workshop will be held around October/November 2024, so be sure to contact Ross (at the ISPE office) to get your name on the list as this has become a very popular event and is on a first-come, first-served basis.

With thanks to the Suppliers/ Sponsors:

- Plastipack For providing the venue
- 2. Plastica For supplying all pipework (for the trade test)
- MSI Home of Zeoclere & Jolly Gel: For sponsoring the lunch & equipment
- 4. AFM For sponsoring the lunch & equipment
- SCP For sponsoring the lunch & equipment
- 6. CPC For supplying 'goodie bags' for all delegates.

The Institute would also like to thank Chris Carr, Philip Barlow and Kim Mumford, who make the whole event possible.

The Next ISPE Filtration Workshop

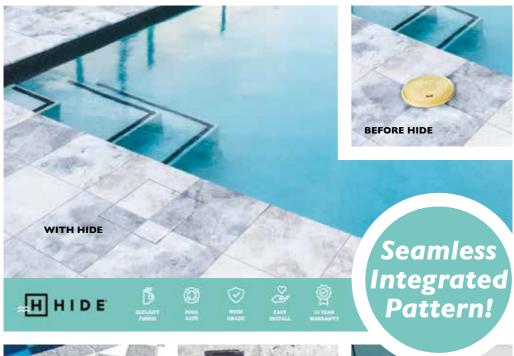
The next 'hands-on' ISPE Filtration workshop will take place in November 2024 in East Sussex, at Plastipack's premises (by kind permission of Peter Adlington, FISPE, once again).

ISPE are holding a waiting list of those who may be interested in attending and as soon as a date is fixed, those on the list will be contacted to see if they are available on the chosen day.

This is an excellent day for those new to the pool industry, and even more experienced fitters who want a bit of a refresher session. There are three theory presentations looking at pipework installation and pipe sizing, sizing a pump and sand filter for a domestic installation and then one on installation and service tips. In addition there are 'hand's-on' sessions striping down and re-building pumps and filters and delegates get to put a pipework test set together.

All in all, another valuable day of training. Contact the ISPE office for more details and to reserve your place (ross@ispe.co.uk or tel. 01603 499959).

Introducing Skimmer Lids from HIDE – the world's first dual-inlay lid system





HIDE's fully customisable inlay system allows you to add your material into the cover, as well as any combination creating a seamless and sophisticated upmarket finish.



HIDE covers can carry any selection of stone, tiles, timber, artificial grass, paver or concrete to match the surrounding landscape of your pool and patio.



Manufactured from solid 316L marine-grade stainless steel, HIDE covers stand the test of time.

See online for more info.

EXCEPTIONAL SERVICE, QUALITY PRODUCTS





New Members and Students

We extend a very warm welcome to all those who have recently joined or rejoined the Institute. If you have a colleague who would like more information on the ISPE and its activities, please email ross@ispe.co.uk or telephone 01603 499959 for more details.

Aldous, N.J. Aldous Mechanical Anderson, G. Aqua Plant Tech

Andrews, T. Ursell Pools and Wellness

Ashton, J. AQS Group Ltd.

Back, A. Devon Pool and Spa Co.

Ball, D. Falcon Pools Ltd. Banks, J. Etatron GB

Berryman, L. Swimming Pool and Spa Solutions

Brookes, L. FT Leisure
Bryant, C. Tanby Pools Ltd.

Burnham, M. Pool Logic

Campbell, A. Neptune Swimming Pools Clohesy, P. Pool Design & Build Ltd.

Coombs, R. Deep End Pools

Cousins, M. Tanby Leisure Products Ltd.

Davey, N. MLEI Consulting Engineers Pty Ltd.

Davies, A. Dante Group

Dench, L. RPS Company Services Ltd.

Dodgson, M. Tanby Pools Ltd. Donlan, A.P. AQS Group Ltd.

Dorrington, I. Blue Cube (Europe) Ltd. Etherington, P. Daizy's Leisure Time Ltd.

Farrant, B.

Faulkner, B.

Fisher, J.

Gainsford, C.

Goodall, R.

UK Poolstore Ltd.

Hydrocare Leisure Ltd.

Pool Design and Build Ltd.

Hydrocare Leisure Ltd.

Alan Bettin S.P. Ltd.

Grunhut, S. Total Water Products Ltd.

Hailing, J. Go Aqua UK
Hale, O. Certikin Int. Ltd.
Hancock, A. D G Pools & Leisure

Harris, R. Buckingham Swimming Pools

Harrison, C. Lotus Pools

Harrop, D. Buckingham Pools Haworth, C. AQS Group Ltd. Hepburn, C. Aqua Leisure Ltd.

Hodder, D. H2O Swimming Pools Ltd. Hutchinson, D. Sterling Hydrotech Ltd.

Kerfoot, P.D. K3 Works Ltd.

Mackenzie, C. RPS Company Services Ltd.

Magbanua, L.H. Certikin Int. Ltd.

Mander, G. Bosta UK

Matthews, M. RG Pools and Leisure Ltd.

Miller, J. AQS Group Ltd.

Mitchell, A. Ursell Pools and Wellness

Molyneux, P. Falcon Pools Ltd.
Murphy, S. AQS Group Ltd.
Nucera, A. Roman Pools Ltd.

Organ, H. Mitie Facilities Management Ltd. Page, J. Cotswold Swimming Pools Ltd.

Parker, J. Panache Pools Ltd.
Phillips, L. Sterling Hydrotech Ltd.

Pierce, J. Swimming Pool and Spa Solutions

Reilly, S. Falcon Pools Ltd.
Reynolds, M.J. Chemsol Cymru Ltd.
Ridgway, J. Certikin Int. Ltd.

Rossor, H. Triwater Pool Water Technologies

Scott, G. Ursell Pools & Wellness

Selvam, M.V. Aqvastar Smart Flow Solutions

Singleton, W. Pool Care Leisure
Smullen, R. Panache Pools Ltd.
Spencer, A. AQS Group Ltd.
Stead, J. Hydrocare Leisure Ltd.

Still, A. Falcon Pools Ltd.

Stocks, J. Surrey Swimming Pools

Thompson, G.K. Certikin Int. Ltd. Thorby, G. Azure Pool Valeting

U'Dell, J.R. Swimming Pool and Spa Solutions

Wade, N. RPS Company Services Ltd.

Wakes, L. Falcon Pools Ltd.

Wicks, M. The Wizard of Pool and Spa

York, A. Poolgenix Ltd.



Product Focus

Certikin, the leading light in swimming pool illumination

For pool lighting, you will find no greater range than that offered by the UK's leading manufacturer and distributor, Certikin. Over the years they have continued to develop an ever-expanding range which includes the successful PU2 mini LED light alongside the Certikin PU9 and PU6, the most popular and reliable lights in the industry.

The company are keen to remain at the forefront of lighting design and deliver products that the industry demands. In addition to the existing stainless-steel finish, the PU2 is now available with a black fascia, ideal for pools with a darker finish. The range has also been extended further with the addition of a variable white LED. This gives the ability to set a specific white colour temperature from a warm white of approximately 2900K to a cool white of approximately 5100K. In addition, the lights are dimmable between 100% and 5%.

Another addition this year is the PU3 LED range. These large LED push fit lights are niche-less and like the smaller PU2 range, are suitable for both concrete (177mm and liner (199mm diameter) diameter) pools and are available with either a stainless-steel or black fascia. The PU3 lights deliver approximately 2150 lumens which is brighter than the equivalent larger PU6 light and means only one light is required for 20m2. For installations of the PU2 lights, we recommend one light per 8m².

Both the PU2 and PU3 lights offer simple installation solutions with a high output and a neat finish. The concrete versions are push fit and will fit into standard 1.5" class C pipe, leaving just the stainless-steel or black fascia on display in the pool. For liner applications the light screws into a standard Certikin inlet fitting leaving an attractive, clean finish.



Certikin offer different LED options across both the PU2 and PU3 lights, with both ranges available in either RGBW or white. alongside the new variable white option for the PU2 range. The RGBW and variable white versions are controllable via a smart phone using the free app, giving control over colour. sequences and brightness.

All lights are now available to order, and for concrete pools and spas they make the ideal companion to the Flolux range of stainless-steel fittings which are also available from Certikin.

For more information, please contact: **t.** 01993 777200

w. certikin.co.uk

e. info@certikin.co.uk

Is your swimming pool safe?

There have been more than

350 recorded deaths & injuries*
due to damaged water outlets,
unprotected suction outlets and
single drain systems in pools
worldwide. For full details visit:

VGB Approved Compliant to ASMA/ANSI All2 STANDARD

→ www.mineralsi.com/pool-injuries



Fitting an MSI Vac-Alert® Safety System can prevent this type of terrifying incident in your pools and spas and bring you peace of mind.



www.mineralsi.com

T +44 (0)1825 790524 F +44 (0)1825 790908 E sales@mineralsi.com www.mineralsi.com

Focus on Products

Lovibond's Scuba3s Electronic Pooltester and SD30 Test Pen

Lovibond's New Scuba3s Electronic Pooltester – it's not a Photometer.

You might wonder, what do I mean by "it's not a photometer"? Well, while the Scuba3s operate on similar principles to a photometer, its optics differ from those used in commercial units. But rest assured, the Scuba3s still delivers the precision, reliability, and accuracy you've come to expect from a Lovibond® product.



So, what exactly is the Scuba3s? It's an electronic Pooltester designed to elevate your water testing and analysis experience. With its digital readout, gone are the days of guessing readings like with traditional test strips. This means you can trust that your readings are accurate, ensuring the safety of swimmers and the longevity of your pool and equipment.

The Scuba3s represent the next generation of electronic Pooltesters, offering numerous advantages over previous models. From an expanded range of testing parameters to faster response times and a durable design, it's engineered to streamline your testing process. Plus, with NFC (tap) data transmission and a dedicated app, managing your pool's water quality has never been easier.

Covering essential tests like chlorine (free, combined, and total), bromine, pH, alkalinity, calcium hardness, cyanuric acid, and active oxygen, the Scuba3s is indispensable for all pool and spa applications.

Now, even the everyday pool owner can enjoy professional-level testing right at home.

The Scuba3s will be available from early April at leading pool and spa distributors.

For more information, contact Lovibond® Water Testing at support@lovibond.uk.

Lovibond® SD30 Test Pen – why have three units when one will do the job?

The SD30 is part of Lovibond® Water Testing's new range of test pens, this new meter replaces the popular SD80 TDS Pen, offering not only TDS (Total Dissolved Solids) testing but also measurements for salt, temperature, and conductivity – all-in-one convenient tool.



With its slimmer design and clearer display, the SD30 makes testing easier than ever before. Its fully waterproof construction and reading 'hold' feature means you can achieve enhanced accuracy by using it directly in the pool or hot tub. Of course, if you prefer, you can still use it with samples in a beaker.

Here's a breakdown of the measuring ranges for each parameter:

- TDS: 10-20000mg/l
- Salt: 10-10000mg/l - Conductivity: 0.01-20mS/cm
- Temperature: 0-60°C

Simplify your testing with the Lovibond® SD30 Test Pen. For more details, get in touch with Lovibond® Water Testing at support@lovibond.uk.

Colin Day, FISPE - www.lovibond.com

Do You Know What Dangerous Goods Are?

Dangerous Goods for Road Transport By Howard Gosling BSc., FISPE

Anybody who is in the trade should always have a Safety Data Sheet, no more than 2 years old, which, in Section 14 will tell them whether there is a UN Number or not. The UN number is the guide. If there is a UN Number for a product or chemical then it is Dangerous for Road Transport and you need to have training before you even employ a warehouseman, or before you move the product off your premises. If you have not had such training, then I suggest you book it now because you have to make sure that you can produce a certificate that you have received formal training within the last 5 years. The certificates which are given out have to be kept by law for at least 6 years.

Recently, products containing Dangerous Goods such as some heat pumps which contain gases which are Dangerous Goods have also been given a UN Number. For example, UN 3537 is a heat pump which is described as an 'Article containing flammable gas' (R32). The actual flammable gas is UN 3252 which is difluoromethane (Refrigerant Gas R32).

New ADR 2019 in were containing Dangerous products Goods such as some heat pumps containing which are gases Dangerous Goods. UN 3252 is Difluromethane (Refrigerant Gas R32). The actual heat pump is UN 3537. 'Article an containing flammable gas' (R32).

During the course of your training, you will in fact learn that in Transport Category 4, the quantity

which may be carried on a vehicle is unlimited. As far as I can see, if you want to transport gas to refill such equipment then you need a full ADR Licence as the Limited Quantity for that item is 0.

Empty uncleaned packagings having contained Dangerous Goods are also unlimited in what can be carried. It is always best to describe then as empty uncleaned packagings rather than waste because if it describes something as waste you need a Waste Disposal Licence.

I am gradually developing a website called Dangerous Chemicals and all suppliers are being asked to specify what products they have available that are Unregulated for Transport, which products are



available in Limited Quantities and that refers to the amount of chemical in the individual container. chemicals, if they are put into a carton must not exceed 30 kilos/litres (under Dangerous Goods Legislation kilos and litres are equated for ease of calculation. Make sure that if you are transporting the goods, that you know the weight of the container and the carton and the pack so that you do not overload the vehicle on a weight basis which means you could contravene Weights the Measures under the Construction and Use Regulations which also define how much weight can be carried on the front and rear axle for example whilst the load might comply with the Transport Regulations for Dangerous Goods).

The Department for Transport has recently (November 2023) reinterpreted some of the ADR Regulations such as those relating to the delivery of Dangerous Goods. The Department for Transport has provided a new interpretation of ADR/RID 1.8.3.1 stating that those carrying out transport related to unloading of Dangerous Goods are required to appoint a Dangerous Goods Safety Advisor, thus extending the number of companies in scope.

The Department for Transport considers Members trading amongst themselves to be "mutual trading", thus the Department for Transport has agreed that BISHTA and SPATA can appoint a DGSA, (Dangerous Safety Advisor) Goods to organisation and that Members can be covered through the organisation for the Transportation of Dangerous Goods provided that the Member has attended Dangerous а Goods Awareness course and has been trained in the Transport of Dangerous Goods and of Limited Quantities and/or Small Load exemptions ("load not exceeding the exception limited prescribed in 1.1.3.6).

The Law requires documentation of training received to be kept by the employer made available to the employee or competent authority upon request. The employee can take their record of training with them to a new employer.

Security Awareness training is another legal requirement see: www.dot.gov.uk/security/dangerousgoods.

Regulations are in place for the Security of Dangerous Goods by Road. These Regulations require organisations to put measures in place that would reduce the risk of interference with Dangerous Goods by criminals and terrorists.

CDGRR09 Regulation 8 (2) "A person involved in the Carriage of Dangerous Goods must take all reasonable steps to ensure that unauthorised access to those goods is prevented".

CDGRR11 reinforces this and it means, for example, locking your vehicle when servicing a pool in order to prevent unauthorised access to chemicals being carried (see under ADR).

Most people in the pool trade are aware that the sale of Hydrogen Peroxide at over 12% strength to end users has been restricted for many years because you need an EPP Licence. More recently, Sulfuric acid has been similarly restricted to 15% and Hydrochloric acid to 10%, which is the same upper limit of Sodium All sales of Sodium hypochlorite. hypochlorite 6% at over are controlled!

The Poisons Act started life in 1972 and the latest new legislative

changes came into force in October 2023.

It is not possible to prevent all purchases of precursor chemicals as some are required for ordinary use in the home e.g., for swimming pool disinfectant, but a range of measures are in place to make it harder to acquire the substances most likely to cause harm, or harder to acquire them without detection. We all have a part to play in this, and in particular an obligation to ensure suspicious purchases are detected or prevented as well as ensuring that loss or theft of chemicals are reported. Members of the public require an Explosive Precursor and Explosives Licence (EPP Licence) to buy Regulated chemicals. Suppliers must adhere to the sale of Regulated Substances Legislation.

Unfortunately, it is not easy to see how to impart this information to the Pool and Spa trade although a couple of police officers, seconded to the Home Office, did give a talk at SPATEX 2024. They will be doing a similar talk at SPATEX 2025 and will then be staying on the stand to answer questions during the rest of the day.

Non-compliance with the new law is a criminal offence and every Member of the pool trade should have the national contact point telephone number in their mobile (0800 789 321 and the email address chemical.reporting@met.police.uk). If you are in any doubt as to verifying a customer, you can contact EPP@homeoffice.pnn.police.uk.

The Selling Chemicals Responsibly leaflet and poster are available and recently SPATA and BISHTA produced a technical advice sheet which has been approved by the Home Office. If you are in any doubt, you can search for a chemical to see what legislation applies by going to legislation@gov.uk.

The latest amendments to the Poisons Act have lists of Regulated and Reportable Chemicals.

One clarification which I sought and arranged a visit for the police, seconded to the Home Office to see is a domestic plant room where there were chemicals being dosed from day tanks, and it was confirmed that if they are using Sodium hypochlorite in excess if 10% or Hydrochloric acid in excess of 10% or Sulfuric acid in excess of 15%, then they need an EPP Licence.

If a member of the public requests to purchase a Regulated substance you should:

1. Ask to see their Explosives Precursors and Poisons (EPP) licence and associated photographic ID and compare the photograph to the customer.



- 2. Verify the photographic ID reference against the ID reference on the front page of the licence.
- 3. Check the product being purchased is allowed as part of the licence conditions: substance, concentration, volume.
- 4. Record the transaction details in the table on the back of the licence.

Is an Explosive Precursor and Poisons licence necessary?

You might be asked by a customer if they need an EPP licence. An EPP is only required for sales of Regulated chemicals to members of the public.

There is a useful video on the following website:

https://www.protectuk.police.uk/ advice-and-guidance/awareness/ poisons-act-1972-selling-chemicalsresponsibly

I have attempted to extract the most commonly used chemicals as far as I am aware for the swimming and spa pool trade. If you sell other chemicals which have a UN Number, then you need to check the actual legislation. As from October last. Sodium hypochlorite exceeding 6% is Reportable. Sodium hypochlorite not exceeding 10% can currently be sold to anyone, but the 14/15% strength sales are restricted to people over the age of 18 and must be delivered into the hands of a responsible person and kept safe.

Dosing machines in domestic premises using over 10% in a domestic situation require an EPP Licence.

Royal Mail no longer produces a printed list of their Prohibited and Restricted items. They are not, in any case, a Dangerous Goods carrier and the last version of their Prohibited and Restricted items was published in March 2023, available online only, as far as I am aware. The website royalmail.com/prohibitedgoods gives detailed information on what you can and cannot send by Royal Mail and there is a similar website for Parcelforce.com, retail prohibitions.

Remember, you must keep your van locked at all times when it is carrying chemicals, even behind a customer's locked electric gates.

The Vehicle Certification Agency, (was VOSA), carry out road checks and they have a routine of once a quarter carrying out national checks. They also visit pool companies to check compliance and training and they can request copies of valid Training Certificates which must be no more than 5 years old.

All police forces now have at least one DGSA.

Remember, do not take chemicals out of their original boxes and then place them in the same box as other chemicals. Mixed packing Regulations apply!

Do secure your loads to stop goods sliding around in the vehicle.

The transportation of chemicals for private use is exempt which means the domestic pool owner can collect chemicals for their own use from a pool shop without any transport restrictions, but if he or she sends their gardener or handyman, then the transport regulations apply.

Finally, remember if you are carrying chemicals in your vehicle, you must have at least one portable fire extinguisher of 2 kg dry power capacity to fight a cab or engine fire. If your vehicle exceeds 3.5 tonnes then you need more total capacity fire extinguishers. For the avoidance of doubt a vehicle with a trailer counts as one transport unit.

Company Focus

Plastica's ISO Commitment to Quality and Efficiency

Plastica takes its responsibility seriously when it comes to managing its business. This year, the company has achieved ISO 14001 Environmental Management Systems and ISO 45001 Occupational Health & Safety registration for its standards in the manufacture and supply of swimming pool equipment and services.



The company maintains an onsite water treatment plant storing large quantities of chemicals of a hazardous nature and therefore is registered as a COMAH site (Control of Major Accident Hazards). This allows them to keep their costs down and pass the saving on to their customers. Plastica takes all necessary measures to prevent major accidents involving dangerous substances and limits the consequences to people and environment of any major accident that may occur.

As one the leading independent swimming loog manufacturers and distributors in the UK, manufacturing up to 80% of its own swimming pool products in its factory. the ISO 45001 demonstrates safer commitment to а environment and protecting employees work Improved against injury. identification of hazards and risk management through setting objectives. targets, staff training and continuous

improvement of working conditions are key aspects.





The company has noticed a trend in increased inquiries from the commercial sector. Adhering to these standards is paramount in collaborating on energy-efficiency solutions and maintenance of all poolside systems.

Benefits of ISO 14001 and 45001 include higher customer satisfaction, improved chance of winning contracts, lower risk of product/service problems, streamlined business processes, and increased consistency in business practices.

Plastica's management team added, "We are eagerly anticipating the future of Plastica. Combining these working practices alongside our existing ISO 9001, an internationally recognized standard for the quality management of business, Plastica is committed to quality, efficiency, and functionality. Customers can trust in the quality of our products and the excellence of our services".

For more information on our products and services please contact: info@plasticapools.net www.plasticapools.net

Obituary Philip James Parton

We are sad to announce the passing of Phil Parton, (Philip James Parton) 1948 / 2024, on the 7th February 2024



Following a prolonged stay in hospital, unfortunately Phil contracted Norovirus, Covid and finally Pneumonia, whilst in hospital being treated for circulatory problems.

Phil worked, together with his father and brother, for J W Green Swimming Pools Limited for over forty years, on pool construction, plant rooms, service, maintenance and repair work. For several years Phil was an MISPE, before his health forced an early retirement.

He travelled extensively in the UK from Dornoch to Lands' End, from Cromer to Aberystwyth, covering thousands of miles and worked with the team on installing over two hundred swimming pools, hydrotherapy pools and full submersion baptisteries.

Among these were the outdoor and indoor pools for Butlins,

Minehead, pools for Butlins, Bognor Regis and numerous other holiday parks.

He met some very interesting people on his travels, from Lords and Ladies, to pop stars and many people with a story to tell from their past.

On one in particular, at Wall Park near Brixham, Phil worked with a steel fixer from north Wales, who had been involved with the construction of the concrete sections that were floated out to Normandy to form the Mulberry harbours.

Phil also made two trips to France, staying over there for several months, to work on the installation of commercial swimming pools and flume slides, in Royan and Montpellier for Haven Leisure.

On the baptisteries, Phil came up with the design for the baptistery in All Saints, Notting Hill, which was accepted immediately by the vicar and church elders, when he presented the design to them.

Phil was a very keen photographer for many years, up until he became dependent on a mobility scooter. He won several awards for some of his entries in his local Photographic Society.

He had three books published on his poetry and several poems commissioned by various people, one in particular for the NSPCC.

Phil will be sadly missed by his brother Mick, Mick's partner Margret and their family, his sister Jean and family and all of us that worked with him or knew him in the swimming pool industry.

With thanks to John Green, MISPE.

Product Focus

Covering a Pool to Save Energy and Money

During our 2023 summer pool testing studies it was found that over a 30-day period an 8m x 4m outdoor heated pool covered with a **Sol+Guard™ cover used 87% less energy** for heating purposes than an identical uncovered pool.

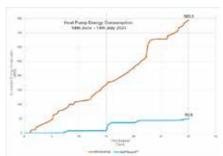


Figure 1. Heat Pump Energy Consumption, 14th June – 14th July 2023

It was determined that this would equate to an energy saving of 2056.8 kWh over the course of just a single 6-month swimming pool season. The cost savings to an end user are considerable and this study strongly demonstrates why a pool should always be covered whenever not in use.

The full details of this study can be found at:

https://www.geobubblepoolcovers.com/wp-content/uploads/2024/02/Sol-HPS.pdf

A second 30-day study was also conducted, this time comparing the energy consumption of a pool covered by a standard 400µm Light Blue GeoBubble™ cover to that of an uncovered pool. As with the previous study, both pools were identical 8m x 4m outdoor heated pools.

Over the course of this second study, it was found that the pool

covered with a Standard GeoBubble™ cover used 48% less energy for heating than the identical uncovered pool. It can therefore be determined that this would equate to an energy saving of 1390.6 kWh over a single 6-month pool season.

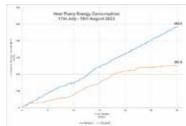


Figure 2. Heat Pump Energy Consumption, 17th July – 16th August 2023

Both cover types save a substantial amount of heating energy per pool season, however during its study period the Sol+Guard™ cover saved 44% more energy than the Standard GeoBubble™ cover.

Not only does a Sol+Guard™ cover achieve a greater energy saving, but it also has a greater warrantied lifespan so can save more energy during its lifetime. Below calculation demonstrating the projected savings potential for both covers over the course of 8 years warrantied lifespan Sol+Guard™ cover, assuming a 6month pool season. After year 4, the warrantied lifespan, the cost of a second. replacement Light Blue GeoBubble™ cover has been deducted from the calculated savings.

Over the course of 8 years, it is projected that covering a heated pool with a Sol+Guard™ cover can save £4678.42 in energy costs that would otherwise be required to heat a pool if left uncovered. A Light Blue

GeoBubble™ cover can save £2959.20, which is also a considerable saving.

Table 1. Projected Energy Savings Years 1-8

	RRP 8m x 4m Cover	Net Year 1 Saving	Net Year 4 Saving	Net Year 8 Saving
Sol+Guard™	£257.90	£359.14	£2210.26	£4678.42
Light Blue GeoBubble™	£189.12	£228.06	£1290.48	£2959.20

The net cost savings offered by Sol+Guard™ are 158% greater than that of a Light Blue GeoBubble™ whilst the cost of investment for a Sol+Guard™ cover (£257.90) is also 32% smaller than that of a Light Blue GeoBubble™ cover (£378.24) — as although the RRP of a Light Blue cover is less, it will need to be purchased twice during an 8-year period.

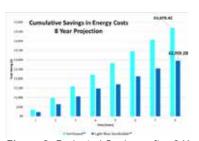


Figure 3. Projected Savings after 8 Years

The findings of these two 2023 studies clearly show the importance of a swimming pool cover. Covering a pool prevents nearly all evaporation, which can be responsible for as much as 70% of the heat loss from an outdoor pool. Solar covers promote temperature gains during the day thus reducing reliance on external heating svstems. Therefore. to maximise energy savings it is always best to а pool with a performance solar cover wherever possible, such as Sol+Guard™.

For more details see: www.geobubblepoolcovers.com

NB: All energy prices were calculated according to Ofgem's Energy Price Cap in the UK, which was set at 30.0p/kWh at the time of publication.

https://www.ofgem.gov.uk/informationconsumers/energy-advice-

households/energy-price-cap

Situations Vacant

For the latest situations vacant see the ISPE website (www.ispe.co.uk).

Obviously some of these positions fill very quickly but the following were still available at the time of writing. New adverts are added regularly.

Swimming Pool & Spa Service Engineers and Refurbishment & Small Works Manager London Swimming Pools

Based in London & the Home Counties

Pool Support Operative Required
Windlesham House School
Based in W. Sussex

Pool/spa Maintenance Engineer Total Fit

Based in London

In the Next Issue....

The next issue of ISPE News will be out at the end of June/early July and will be posted with members' annual subscription invoices.

If you have any product or company news, a project or just something you would like 800 ISPE members and other readers to know about, please let us know.

Email Addresses

Despite asking, we still do not have all our members' email addresses. If we don't have one for you, *please* email ross@ispe.co.uk or you may miss out on the latest news!



Invest in Savings with



Recent testing has shown that covering your pool with Sol+Guard™ could save you over £4,500 in energy bills over its 8 year lifespan.

Find out more at www.geobubblepoolcovers.com



01424 851659

