HERITAGE BUILDINGS: KEEPING VALUED BUILDINGS WORKING EFFICIENTLY.

Construction and Building Services Division Seminar

20 November 2013
St. Paul’s Cathedral, London
www.imeche.org/events/S1749

INCLUDES GUIDED TOUR OF ST PAUL’S CATHEDRAL
WHY YOU SHOULD BE THERE

Join architecture and construction experts to examine engineering solutions for working with heritage buildings, in the impressive setting of St Paul’s Cathedral.

Understand how, as architects and engineers, we can balance building envelope improvements and services upgrades with planning legislation and wider heritage sensitivities in a pragmatic and effective way.

Featuring case studies of, among others, King’s Cross station, Bath Abbey and the Archive Centre at St John’s College, Cambridge, this is a superb opportunity to examine how historically important buildings have been refurbished, upgraded and updated to meet their current requirements. Many of the projects under discussion were required to deliver increased energy efficiency and reduced carbon emissions, incorporating sustainability factors and wider principles and practice of sustainable buildings and services.

Limited spaces are available on a behind-the-scenes tour of St Paul’s Cathedral, where you will explore areas not usually open to the public.

WHEN 20 November 2013
WHERE St Paul’s Cathedral, St Paul’s Churchyard, London EC4M 8AD
BOOK ONLINE www.imeche.org/events/S1749

SUPPORTING ORGANISATIONS

HERITAGE GROUP

London South Bank University

SPONSORSHIP & EXHIBITION OPPORTUNITIES

GET INVOLVED
Attending this event as either an exhibitor or sponsor will give you the opportunity to display your solutions, services and products to the right people at the right time.

This is an excellent way to enhance your company profile and communicate effectively to your target audience.

For sponsorship and exhibition enquiries, please contact Aman Duggal on +44 (0)20 7973 1309 or email sponsorship@imeche.org

BENEFITS OF SPONSORING

• Plant yourself firmly in the minds of key decision-makers
• Cross many markets and broaden your international appeal
• Be associated with industry-wide publicity
• Enjoy well-targeted networking opportunities
• Have your company logo and URL featured on our website

BENEFITS OF ATTENDANCE:

• Hear how heritage and traditional buildings have been updated for their current or new purposes
• Discover how the energy efficiency of older and valued building has been improved, using new, novel or existing energy sources
• Explore how modern refurbishment techniques have been successfully applied to older buildings
• Meet and network with experts in construction, energy efficiency and architecture
## Programme

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<thead>
<tr>
<th>Time</th>
<th>Session</th>
<th>Speaker/Presenter</th>
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<tbody>
<tr>
<td>9:00</td>
<td>Welcome</td>
<td>Wednesday 20/11</td>
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<tr>
<td>9:30</td>
<td>Chairmen’s Welcome and Introduction</td>
<td>Bruce Arnold, Director, Inspexions</td>
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<td>9:45</td>
<td>Keynote: Drivers for the Refurbishment of Heritage Buildings</td>
<td>Ant Wilson, Director, AECOM</td>
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<td>• Energy efficient heritage buildings</td>
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<td></td>
<td>• Government drivers for conservation of fuel and power</td>
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<td></td>
<td>• Can heritage buildings be more efficient?</td>
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<td>• Comfort and conservation</td>
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<td>• Building fabric, HVAC systems, control systems for improved performance</td>
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<tr>
<td>10:15</td>
<td>Route 2050: Cutting Energy and Emissions from Historic Churches</td>
<td>Brian Cuthbertson, Head of Environment and Sustainability, Diocese of London</td>
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<td></td>
<td>• Recording and estimating</td>
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<td>• Benchmarking energy savings</td>
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<td>• Generic building solutions</td>
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<td>• How to save</td>
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<td>• Learning and iteration</td>
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<tr>
<td>10:45</td>
<td>Q&amp;A</td>
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<td>11:00</td>
<td>Refreshments</td>
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<td>11:25</td>
<td>Services in Historic Buildings</td>
<td>David Jackson, Senior Architect (Heritage), John McAslan + Partners</td>
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<td></td>
<td>• Background and previous issues</td>
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<td></td>
<td>• Every building is different</td>
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<td>• Common problems and some solutions</td>
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<td></td>
<td>• Conclusion</td>
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<tr>
<td>11:55</td>
<td>Bath Abbey’s Footprint Project: Repairing and Improving the Abbey</td>
<td>Geoff Rich, Architect, Partner and Studio Leader, Feilden Clegg Bradley Studios LLP (Architects)</td>
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<td>• Energy efficiency and sustainability for the historic environment</td>
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<td>• Introducing sophisticated and innovative solutions to Bath’s challenges</td>
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<td>• Tri-strand project: provision of major new spaces, a structural solution for conserving and repairing the Abbey floor and energy efficiency improvements</td>
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<td>12:25</td>
<td>Q&amp;A</td>
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<td>12:35</td>
<td>Lunch Break</td>
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<td>13:20</td>
<td>Tour of St Paul’s Cathedral</td>
<td>The tour explores the cathedral floor and crypt, as well as the history of St. Paul’s, its architecture and decor. Guides will also take the tour into areas not usually accessible to the public including the stairwell of the famous Geometric Staircase, the Chapel of St. Michael &amp; St. George and the Quire.</td>
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</tbody>
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### Speakers and Contributors

**Ant Wilson**
Director, AECOM
Ant has spent 35 years designing, researching, and promoting building services engineering. He has led research projects and worked on some of the most challenging and technically advanced buildings in the world.

**Brian Cuthbertson**
Head of Environment and Sustainability, Diocese of London
Brian practised as an architect for 14 years, before joining the Diocese of London in the 1990s. In his current role, he advises the Bishop of London on the environment and climate change, and supports the Diocese’s church and members to mitigate their energy consumption.

**David Jackson**
Senior Architect (Heritage), John McAslan + Partners
David has 35 years’ architectural experience, in the last 15 years concentrating on conservation and refurbishment of historic buildings, and new building in historic contexts, including the King’s Cross station upgrade.

**Geoff Rich**
Architect, Partner and Studio Leader, Feilden Clegg Bradley Studios LLP (Architects)
Geoff joined FCB in 1996 after training at Newcastle University. He has a keen interest in conservation issues, and is a former Lethaby scholar of the Society for the Protection of Ancient Buildings.
# Programme (Continued)

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
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| 14:30 | Walking A Narrow Path: A New Use and Servicing Strategy for the Grade I-Listed ‘School of Pythagoras’, Cambridge  
Oliver Caroe, Director, Caroe Architecture Ltd  
- Developing a strategically viable scheme: understanding the building historically and environmentally  
- The wider sustainability strategy  
- Exploring options and opinion-forming in the consents stage  
- Minimising impact through the environmental servicing strategy |
| 15:00 | Q&A |
| 15:15 | Refreshments |
| 15:40 | Saving Energy in Chicago’s Major Older Buildings  
David Arnold, Royal Academy of Engineer Visiting Professor, Faculty of Engineering, Science and Built Environment, London South Bank University and Partner, Troup Bywaters + Anders, Consulting Engineers  
- A review of approaches to saving energy in three 50 year old air conditioned buildings that currently retain original air conditioning  
- Different approaches to how each owner/operator reduce their energy, ranging from simple improvements in control strategies to total renovation  
- Difficulties in changes to “landmark” buildings in USA  
- Measures implemented and attempted in last ten years |
| 16:00 | Q&A |
| 16:10 | Heritage Building Performance Feedback  
Barry Austin, Associate Director, Ove Arup & Partners  
- Understanding the opportunities of better energy efficiency, lower operating costs and better occupant satisfaction in heritage buildings  
- Understanding the importance of performance feedback in this process for those people running and using these buildings and to those designing major refurbishment for conservation or change of use  
- How building performance evaluation and feedback has been successfully applied in the heritage building sector to iconic buildings and period buildings with modern uses |
| 16:40 | Q&A |
| 16:50 | Closing Remarks |
| 17:00 | Close |

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**Find out more about our speakers at www.imeche.org/events/S1749**

- This programme is subject to change.
- The Institution is not responsible for the views or opinions expressed by individual speakers.

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**Construction and Building Services Division Organising committee:**

Bruce Arnold, Director, Inspexions
FORWARD THINKING

We are the market leader among professional engineering bodies. We’ve been supporting engineers since 1847 and have 100,000 members in over 120 countries, working in the world’s most dynamic and important industries. Our comprehensive events programme brings you the latest research and best practice from industry and academia.

OTHER EVENTS TO LOOK FOR:

9 October 2013, London
CIBSE BUILDING SERVICES GRADUATE OF THE YEAR.
Supported by ASHRAE and the Institution of the Mechanical Engineers. This annual prize ceremony sees presentations from the Building Services Graduate of the Year finalists as well as the Institution’s CSBD prize winner and ASHRAE President. Networking reception follows.
www.imeche.org/events/L291

17 October 2013, Manchester
17 November 2013, London
MANUFACTURING WITH BIM: ENSURING COST-EFFECTIVE INTEGRATION.
Use of Building Information Modelling (BIM) is increasing and so are the drivers for manufacturers to embrace it. Hear how manufacturers are already benefiting from developing their products into BIM objects, alongside an update from the Construction Industry Council on the Government’s implementation plans.
www.imeche.org/events/S1766
www.imeche.org/events/S1780

7 November 2013, London
HEALTHCARE VENTILATION.
Ventilation and air quality are vital within the various theatres, isolation rooms and wards of hospitals and healthcare buildings – and they present extensive challenges for engineers. This one-day seminar examines the engineering challenges and solutions in meeting modern healthcare ventilation standards and requirements.
www.imeche.org/events/S1799

If you are interested in any of these events, please contact Rhiannon Stuart-Jones on +44 (0)20 7973 1291 or r_stuart-jones@imeche.org

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CONSTRUCTION AND BUILDING
SERVICES DIVISION
HERITAGE BUILDINGS: KEEPING VALUED
BUILDINGS WORKING EFFICIENTLY.
20 NOVEMBER 2013
S1749

REGISTRATION Please complete in capitals.

Family Name
First Name
Membership No
Name of Organisation (for name badge)
Address for correspondence

How did you hear about this event? □ Direct mail □ Website □ Colleague □ Other

FEES AND CHARGES Please complete the appropriate box.

Registration fees include entry to the sessions, refreshments, lunch, and a copy of the event proceedings.

DELEGATE FEES Fee VAT Total £
Institution of Mechanical Engineers Member £250.00 £50.00 £300.00
Member of supporting organisation £250.00 £50.00 £300.00
Non-Member £300.00 £60.00 £360.00
Student / Retired Member £70.00 £14.00 £84.00

EXTRA ITEMS Fee VAT Total £
Invoice Charging (if applicable) £10.00 £2.00 £12.00

PAYMENT DETAILS
Payment must accompany this registration form. Registration will be confirmed only on receipt of full payment.

Please indicate method of payment: □ Cheque □ Credit Card □ BACS □ Invoice (see below)
Cheques should be made payable to IMechE and crossed. Please note international delegates may pay only by credit card, BACS or banker’s draft. A copy of the draft must accompany this form. It is the delegate’s responsibility to pay any bank charges.

Credit Card: □ Visa □ MasterCard (please note we cannot accept American Express, Diners Club or Maestro)

Card No
Name of Cardholder
Billing Address of Cardholder (if different from above)
Postcode
Amount to be Deducted
Signature

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Delegates wishing to be invoiced must provide an order number. If your company does not use order numbers please include a formal request for invoicing on your company’s letterhead. A charge of £15 + VAT will be made to cover additional administration costs. Invoices are payable on receipt and no alterations to these terms will be accepted.

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Name and Address for Invoicing
Postcode
Tel
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BACS bank transfers can be made to: IMechE Current Account, NatWest Charing Cross Branch.
Sort code: 60-40-05 Acc No: 00817767
Swift Code: NWBKGB2L
IBAN Code: GB96NWBK60400500817767

A copy of the draft must accompany this form.

For added convenience you can also book online at: www.imeche.org/events/S1749

Please complete and return this form to:

EVENT REGISTRATIONS
Institution of Mechanical Engineers
1 Birdcage Walk, London SW1H 9JJ
Fax +44 (0)20 7222 9881

For registration enquiries call
Tina Churcher on +44 (0)20 7973 1258
or email t_churcher@imeche.org

Please read the information listed below as each booking is subject to the Institution’s standard terms and conditions.

CONDITIONS OF BOOKING
Completed application forms should be returned to the address above, along with the correct payment.

Attendance at the event will be confirmed on receipt of the full balance. All participants are advised to bring a copy of their confirmation with them on the day, to ensure the fastest possible entry.

SPECIAL REQUIREMENTS
Please inform us of any special requirements, dietary or access, on the relevant section of this form.

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For a refund (minus £25 + VAT admin charge), cancellations must be received at least 14 days prior to the event. Replacement delegates are welcome at any time. The Institution reserves the right to cancel any event. In this case, the full fee will be refunded unless a mutually convenient transfer can be arranged. In the event that the Institution postpones an event for any reason and the delegate is unable or unwilling to attend on the rescheduled date, they will receive a full refund of the fee paid.

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Please note that while speakers and topics were confirmed at the time of publishing, circumstances beyond the control of the organisers may necessitate substitutions, alterations or cancellations of the speakers and/or topics. As such, the Institution reserves the right to alter or modify the advertised speakers and/or topics if necessary without any liability to you whatsoever. Any substitutions or alterations will be updated on the event’s webpage as soon as possible.

SUPPORTING ORGANISATIONS
Members of supporting organisations can register at members’ rates: See page 2 for details.

VENUE
This event will be held at St Paul’s Cathedral, St Paul’s Churchyard, London, EC4M 0AD.

LIABILITY
The organisers do not accept liability for any injuries or losses of any nature incurred by delegates and/or accompanying persons, nor for loss or damage to their luggage and/or personal belongings.

ACCOMMODATION
Quote ID number 8488ME
www.corporateteam.com/events/8488ME

ENQUIRIES
For event enquiries, please contact
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or email cbsd@imeche.org

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