

FIRST WORLD CONGRESS ON

CONDITION MONITORING







LONDON 2017 ILEC CONFERENCE CENTRE

13-16 JUNE

Call for Papers

www.wc-cm.org







Chair's Message

I am delighted to invite the worldwide condition monitoring (CM) community to the First World Congress on Condition Monitoring. The International Society for Condition Monitoring (ISCM), the world organisation for CM, proposed to create this exciting world-class event, which will bring the global CM community together, and the British Institute of Non-Destructive Testing (BINDT) kindly agreed to host the event. I am confident indeed that BINDT, in collaboration with the ISCM and all CM and NDT societies worldwide, will organise the congress to a Professor Len Gelman.

high international standard. On behalf of the ISCM, I would like to thank

BINDT for its kind agreement to be the host of the First World Congress on Condition Monitoring and for its great dedicated efforts in the preparation of the congress. I would also like to thank national CM and NDT societies worldwide for their support of the congress.

I am sure that the First World Congress on Condition Monitoring will be an amazing international proving ground for industrialists, scientists and exhibitors. The congress gives all delegates a unique opportunity to compare and discuss scientific and industrial achievements and CM equipment/ techniques with each other and to strengthen their international standing. This is only achievable through the sheer scale of the First World Congress on Condition Monitoring, with the involvement of representatives from almost all countries throughout the world. I am pleased to invite all of you to participate in the congress and together to make the congress a platform for the greatest worldwide successes in CM and related areas. Finally, I would like to thank all of you for taking part in the event. See you in London, the city of dreams!

Professor Len Gelman, Chair of the First World Congress on Condition Monitoring 2017

Welcome Message

As leaders, engineers and scientists, whether in academia or in industry, we understand that engineering makes science useful and that the ability to determine the fitness-for-service of machinery, systems and structures underpins engineering. We know that condition monitoring is vital to keeping our machinery, systems and structures safe and reliable. And what is it that underpins condition monitoring? Well, there's all the clever hardware and software, but absolutely key is the education and professional development of you: the leaders, engineers and scientists.

Cameron Sinclair, CEO, BINDT

It is the need for continued education and professional development of people that helps create the demand for events such as this, the First World Congress on Condition Monitoring. And such a congress could not happen without high-quality papers, presentations and posters covering the excellent and diverse research and development work being undertaken on condition monitoring around the world. So, I invite you to please submit your papers and help make the First World Congress on Condition Monitoring a truly excellent event for all involved. I look forward to seeing vou there.

Chair





About the World Congress

The International Society for Condition Monitoring (ISCM) and the British Institute of Non-Destructive Testing (BINDT) are delighted to invite you to this global event. This congress is of major significance, being the first world event in its field. Ownership and overall control of the event rests with the ISCM and this premier event is being organised in the United Kingdom by BINDT in collaboration with almost all condition monitoring and NDT societies worldwide. This combination of efforts will create one of the largest events of its kind at a truly international level. The event will provide you with a unique opportunity to network with leading academics and industrialists from all over the world in the field of condition monitoring and related areas.

The congress will embrace all aspects of condition monitoring and related areas and papers are invited from individual contributors, although it is expected that the majority of papers will be submitted from delegates who are members of the national condition monitoring and NDT societies, many of which are already members of the ISCM. The national societies are asked to encourage their members to actively participate in the event. Presenters of papers that are members of the national societies are welcome to attend the congress at discounted 'Member' rates.

The congress technical programme will include:

- Plenary keynote presentations
- Invited overview presentations
- Invited and contributed presentations, including case study presentations
- Industrial sessions for major industrial sectors
- Workshops on advanced topics in condition monitoring, led by recognised scientists and engineers
- Expert panel session on hot topics in condition monitoring
- Exhibition, vendor presentations and plenary spotlight sessions for exhibitors and sponsors.

The Venue

The congress will be held at the Earls Court ILEC Conference Centre, one of the largest conference centres in the city of London. The venue is adjacent to the internationally famous Earls Court and Olympia Exhibition Centre and is within the Royal Borough of Chelsea and Kensington. The tourist attractions of central London are a short tube journey away and delegates are invited to extend their stay in order to experience and enjoy the delights of London, one of the world's most popular tourist destinations.

The congress venue offers state-of-the-art facilities, a capacious and flexible function hall with five additional syndicate rooms and the space to enjoy the congress in a relaxed and professional environment. BINDT has secured a limited number of bedrooms at the conference hotel for an excellent discounted rate. Please see the website for further details of how to take advantage of these rooms. Alternative accommodation will be available nearby, again please see the website for further details at www.wc-cm.org







Congress Participation

Submit an abstract online

Abstracts and papers should be submitted online (http://mc.manuscriptcentral.com/wccm2017). Abstracts/papers should be linked to the appropriate structured or general sessions. Authors are permitted to submit more than one abstract or paper.

Make a presentation at the congress

Authors of accepted abstracts will be invited to submit full papers and present their work at the congress.

Write a paper

Papers that are submitted will be reviewed by an extensive programme panel, chaired by Professor Len Gelman, of Cranfield University (UK), and Professor Tony Hope, of Southampton Solent University. The accepted papers will be published in congress proceedings that will be available at the congress. The congress proceedings will be indexed by Web of Science, Scopus and other appropriate citation databases. The congress requires that at least one of the authors of each accepted paper must register for the congress, otherwise the paper will not be included in the congress proceedings.

The accepted papers will be considered for publication in the BINDT international journals *Insight* and the *International Journal of Condition Monitoring*. Papers related to 'case studies' will be considered for publication in the BINDT international newsletter *Condition Monitor*. With English being the congress language, the contributions must be submitted and presented in English. Translation into other languages will not be provided. Key dates, guidelines for authors and how to submit a paper are available on the congress website at www.wc-cm.org

We encourage papers from both academia and industry on the following major subject areas:

- Instrumentation and ITC for CM
- Certification, education and training for CM
- Maintenance
- Asset management
- Structural health monitoring
- NDT methods and technologies
- Damage, fault and failure
- Prognostics for CM
- Design and manufacturing for CM and maintenance

Root cause analysis of faults/failures

- Sensors and actuators
- Signal and image processing, pattern recognition, finite element modelling and simulation for CM
- CM methods and technologies
- Nano-technologies for CM
- Materials



Other relevant topics are welcome. A more detailed subject breakdown is available on the congress website at www.wc-cm.org

Best paper com<mark>petition for students</mark> and people in the early stages of their career

The winning paper will be selected based on both the quality of the paper and the presentation. Winner(s) will be awarded certificate(s) and the presenting author will receive a cash sum of £250 and free BINDT membership for one year. To enter this competition, please indicate that you wish your paper to be considered when submitting online.



Structured and industrial sessions

Brief proposals for structured sessions should be submitted by recognised professionals. Brief proposals for industrial sessions should be submitted by leading representatives of major trade associations, institutions, corporations, industrial companies and consortiums. Proposals should be submitted by email to: karen.cambridge@bindt.org

A substantial discount is available for organisers of structured sessions in recognition of the hard work involved. Organisers will be awarded the opportunity to present a 'specialised keynote presentation' at the beginning of the session and will be acknowledged on the congress website and proceedings, which will be distributed worldwide.

Sponsorship

The world congress presents the largest forum for international CM. This provides your organisation with an excellent opportunity to offer products and services to the international CM community from all over the world.

Therefore, leading companies may wish to take a more visible sponsor role in this international event and sponsors will be acknowledged on the congress website and in the proceedings, which will be distributed worldwide. Sponsors will have an opportunity to participate in industrial sessions to highlight their activities and give a presentation at the plenary spotlight session. We are pleased to offer five sponsoring packages: Exclusive, Platinum, Gold, Silver and Bronze. Besides the standard sponsorship, other sponsorship opportunities are available, for example congress bags, coffee breaks and so on. Details of all sponsorship opportunities are available on the congress website.

Exhibition

The exhibition will run on the second and third days of the congress. Coffee and lunch breaks will be provided in the exhibition area. Details of exhibition packages are available online. A substantial discount on exhibition fees is available for Corporate Members of all national CM and NDT societies involved in the congress. Exhibitors will have an opportunity to participate in industrial sessions to highlight their activities and give a presentation at the plenary spotlight session.

Social Programme

Full-time delegates of the congress will be able to participate in an evening social programme. The option to book for part-time delegates will be available upon request. On Monday evening there will be a welcome reception, on Tuesday evening there will be a sightseeing tour of London, Wednesday evening will be free for delegates to arrange their own activities and on Thursday evening there will be a gala dinner, with fine food and wine being served in a friendly, relaxed setting.

For participants and accompanying persons, attractive sightseeing tours in and around London will be available. The content of each tour will be published on the congress website. The tours can be booked in advance or on-site.









Registration

For details and costs of full-time and part-time registration please visit the congress website. The full-time delegate registration fee covers your attendance at all sessions and the exhibition, a proceedings CD, abstract book, coffee breaks, lunches and all evening entertainment. The companion fee covers all evening entertainment and lunch on the final day only.

BINDT and the ISCM recognise the importance of encouraging students to participate in this major international event and a major reduction in fees is available for student attendance. Please visit the congress website for details of student fees.

Cancellation penalty: less than two weeks before the event – 50% of congress fees.

About the Organisers

The ISCM is an international forum for individuals and organisations with an interest in condition monitoring and its related areas. Its purpose is to bring together an international community with the common aim of achieving excellence in the development and practice of condition monitoring and related diagnostic technologies. www.bindt.org/iscm

BINDT is an internationally recognised focal point for CM and NDT and it is the professional institute for all those engaged in CM and NDT in the UK. It is concerned with education, training, certification and the advancement of the science and practice of the subjects. www.bindt.org

The Condition Monitoring Technical Committee 'COMADIT' is the specialist committee within BINDT promoting best practice and exchange of knowledge within the condition monitoring community worldwide. www.bindt.org/comadit

Local Organising Committee

| Mrs K Cambridge | BINDT |
|-------------------------------------|-------------------------------|
| Mrs S Creed | BINDT |
| Pro <mark>f L Gelman</mark> , Chair | Cranfield University |
| Mrs K Hickman | BINDT |
| Prof A Hope | Southampton Solent University |
| Mr P Kolbe | BINDT |
| Mrs C Mackle | BINDT |
| Mr S Mills | SpectrumCBM Ltd |
| Mr C Pearson | BSRIA/UKTA |
| Ms S Purdy | BINDT |
| Associate Prof L Wang | University of Southampton |
| Mr D Whittle | RMS Ltd |
| | |

International Scientific Advisory Committee

Chair: Prof L Gelman, UK

Vice Chairs:

Dr M Abulnour, Egypt Mr S Babu, Singapore Mr C Belinco, Argentina Ms C Bull, UK Mr K Cain, South Africa Prof T Chady, Poland Prof L Cheng, Hong Kong Prof F Chu, China Mr T Clausing, USA Mr J Conte, Brazil

- Dr M Farley, UK Mr D Gilbert, UK Mr F Gomez, Spain Prof J Grum, Slovenia Prof E Hristoforou, Greece Mr H Jokinen, Finland Prof M Mihovski, Bulgaria Mr P Milligan, Australia Dr A Nassir, Malaysia Mr C Pomfret, USA
- Prof G Porco, Italy Mr R Rodríguez, Spain Mr C Sinclair, UK Prof R Smith, UK Prof P Trampus, Hungary Prof V Troitskiy, Ukraine Prof T Uhl, Poland Mr D Varde, India Prof J Vizintin, Slovenia Mrs S Zaitova, Kazakhstan

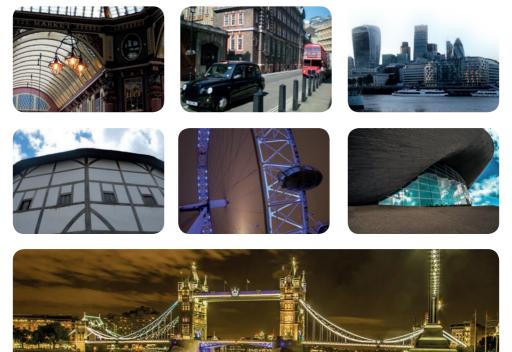
A full list of organising committee members is available on the website at www.wc-cm.org

About London

The city of London, capital of the United Kingdom, is amongst the oldest of the world's great cities with its history spanning nearly two millennia. London's historical landmarks and world-class visitor attractions are plentiful and attract millions of tourists every year.

One of the largest capitals in Europe, stretching for more than 30 miles from east to west and with a population of just under eight million, London is a cosmopolitan metropolis that is incredibly diverse, offering cultural and culinary delights from right across the globe.

See the world – visit London.



Enquiries

The British Institute of Non-Destructive Testing, Newton Building, St George's Avenue, Northampton NN2 6JB, UK. Tel: +44 (0)1604 89 3811; Fax: +44 (0)1604 89 3861; Email: wccm@bindt.org



www.wc-cm.org

