

fib Symposium 2013 in Tel Aviv, Israel: Call for papers



Tel Aviv, venue of the *fib* symposium, seen from Jaffa (photo credit: Rémi Jouan via Wikimedia Commons)

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Abstracts are now being accepted for the upcoming *fib* Symposium in Tel Aviv, which will take place from 19 to 24 April 2013. The deadline is April 2nd 2012; abstracts of up to 200 words should be submitted through the symposium website, www.fib2013tel-aviv.co.il.

The symposium theme, “Engineering a Concrete Future: Technology, Modeling and Construction”, is directed at innovative aspects of concrete engineering in its various stages. Each topic includes several distinct areas of interest.

Symposium topics

1. Advanced and innovative cementitious materials and concrete
2. Constitutive modeling of cementitious and composite materials
3. Design concepts and structural modeling

4. Punching and shear in RC and in PC (prestressed concrete)
5. Challenges in bridge engineering
6. Advances in precast and PC engineering
7. Concrete structures under seismic and extreme loads
8. Pioneering structures and construction methods
9. Structural aspects of tunnel construction and design

The 2013 *fib* symposium will be an excellent opportunity to gain professional state-of-the-art knowledge on recent developments and technologies as well as interesting current projects, share information and ideas and discuss them with experts, form international networks, and re-new old acquaintances.

About the venue

The symposium will be held at the beachside Hilton Tel Aviv Hotel,

which is located about 2 km from the business center of the city and has state-of-the-art conference facilities. Between meetings, visitors can take in sea views, relax at the beach, or enjoy the spa facilities. Ben Gurion International Airport is less than a 15-kilometer drive away.

Tel Aviv is the second largest city in Israel and considered to be the country’s commercial and cultural capital. In 2009 it celebrated its 100th anniversary; in 2003 it was proclaimed a World Cultural Heritage site by UNESCO, for its special “Bauhaus” architectural style. A special blend of Mediterranean ambience, seaside resort, modern facade, and many possibilities for dining and entertainment makes the city uniquely appealing.

For more information about the event and venue, visit www.fib2013tel-aviv.co.il.

ICCS13, Tokyo: Call for papers



Tokyo, venue for ICCS13: view of Shinjuku skyscrapers and Mount Fuji (photo credit: Morio via Wikimedia Commons)

Abstracts are being accepted until 31 May 2012 for the First International Conference on Concrete Sustainability (ICCS13), which will take place from 27 to 29 May 2013 in Tokyo, Japan.

About the conference

Sustainability is an issue of global importance in the 21st century. It has become essential for all industries around the world to take action toward sustainable development. The concrete industry is no exception, as it uses an enormous amount of resources and energy. However, concrete is also essential for the creation of infrastructure and buildings that form the basis of human socio-economic activities. Future concrete use should promote the development of innovative concrete technologies and systems from the perspective of sustainability.

The First International Conference on Concrete Sustainability will provide a forum to encourage such developments and to discuss the future of concrete by exchanging the latest information, technologies, and ideas.

Submission of abstracts

Abstracts are now being accepted for the following topics:

- 1) Environmental impact reduction technologies
- 2) Sustainability aspects in durability
- 3) Environmental design, evaluation, and systems
- 4) Social & economic aspects
- 5) Case studies of sustainable concrete materials and structures
- 6) Other related topics

About the venue

Tokyo is the capital and economic, political, and entertainment center of Japan. With a population of over 13 million in the Tokyo metropolitan area alone, development and construction in Tokyo has produced one of the most land- and energy-efficient cities in the world.

For more information, visit www.jci-iccs13.jp

fib Symposium Stockholm

Registration is now open for the 2012 fib Symposium in Stockholm, taking place on 11-14 June. Early bird rates are available until 31 March 2012. For more information, visit www.fibstockholm2012.se.

The first fib Symposium in Sweden is approaching rapidly. The Swedish Concrete Association and KTH are happy to invite the large fib family to the Swedish capital Stockholm at the time of the year when there is sunlight – we cannot guarantee sunshine – almost 18 hours a day and when the trees are still bright green. The Swedish Concrete Association was founded in 1912 so this Symposium is very suitable as a part of the centennial celebration.

This summer will mark another centennial celebration because it has been 100 years since Stockholm hosted the 5th Olympic Games. The Stockholm Olympic Stadium was designed by the architect Torben Grut for the Olympic Games and this stadium is still used both for national soccer games and international track & field events. The Stockholm Stadium has been the arena for 83 world records through the years since 1912. Despite that the visible parts of the Stadium is structural masonry, concrete was also an important material for the Stadium structure and the continuous use is one evidence of sustainability which, as the reader already knows, is the theme of the Stockholm Symposium.

Currently, the review process of the 180 papers is ongoing. The various topics have received different numbers of submissions. The most popular topics are the following:

- Designing concrete structures for durability & sustainability
- Durability
- Repair, renovation, and upgrading for improved sustainability
- Sustainable concrete materials
- Sustainable concrete structures

SLD of Concret Structures: ICI-fib Workshop, 14-15 November 2011

Other topics that have attracted a number of submissions include alternative binders, case studies, LCC & LCA, recycling, and sustainable concrete pavements, but the topics are not limited to those. The papers will be presented on three parallel sessions totalling 21 sessions including the opening and closing sessions and six keynote lectures.

There will be no poster session, but papers describing ideas, current projects, preliminary results and minor studies will be presented at six special sessions with shorter presentation times in order to provide a platform for these authors who are generally younger and at an earlier stage of their career.

The Organizing Committee has selected the largest Swedish technical university – KTH, the Royal Institute of Technology – as the symposium venue. KTH is nicely located within walking distance from Downtown Stockholm and is neighbouring a green area that also surrounds the Stockholm Stadium.

The Thursday after the three-day symposium will contain an optional technical tour. A great deal of construction work is currently on-going in Stockholm. A 16-km long motorway mostly in tunnels is planned through the west suburban. Through downtown Stockholm a new railway tunnel – Citybanan – for commuting trains is under construction. It contains both rock tunnels, concrete tunnels, and submerged tunnels. The technical visit will focus on Citybanan. The social programme contains a welcoming reception at the famous Vasa Ship museum and a banquet starting with a boat trip in the Stockholm Archipelago.

Johan Silfwerbrand,
Chair of the Organizing Committee
and Deputy Chair of the Scientific
Committee



From left to right: Dr. Harshavardhan Subbarao, Dr. Stuart Matthews, Mr. Steinar Helland, Mr. Jose Kurian and Prof. Mahesh Tandon

A very successful workshop on ‘Service Life Design of Concrete Structures’ was held on 14-15 November 2011 in New Delhi. The workshop was jointly organized by the Indian Concrete Institute (ICI) and *fib* under the leadership of ICI President Mr. *Jose Kurian*. The expert speakers from *fib* were *Stuart L. Matthews* (Building Research Establishment Ltd.) and *Steinar Helland* (Skanska Norge AS) and the material was largely drawn from *fib* Bulletins 34 and 53, International Standards ISO 22966 and 16204, and papers from the 2001 “Duranet” workshop and the *fib* Structural Concrete Journal. Stuart and Steinar provided the delegates with thorough understanding of Service Life Design and durability along with case studies drawn from their experience. The concept of through-life management, birth and rebirth certificates of a structure was also presented by *Harshavardhan Subbarao* of *fib* Commission 5. Prof. *Mahesh Tandon*, Past President of ICI, gave a talk on Indian practice and durability-related standards.

The workshop was attended by consultants, engineers, manufacturers, owner representatives, contractors and academics. The focus was on the complex set of phenomena governing durability and long-term performance of concrete structures and how this forms a basis for service

life design. The material included verification of the design service life according to a limit state and reliability-based methodology, guidance on writing specifications and standards on those subjects, behaviour of concrete structures and their interaction with the environment, measures to improve durability performance and reliability of concrete structures, guidance on the assessment, maintenance and extension of life of existing concrete structures. Case studies covered buildings and offshore marine structures subjected to carbonation and chloride deterioration respectively. Condition control – planned through-life structure management and care with monitoring of durability and performance – was also addressed.

Interaction between the experts and audience was lively; this was to be expected as it was the first time that all these concepts were presented at an event in India. The event went a long way in promoting *fib* in India in partnership with the ICI.

Well done, *Stuart Matthews*, *Steinar Helland* and the organizers of the Workshop!

Harshavardhan Subbarao,
Construma Consultancy
fib Commission 5

60th birthday of Harald Müller



Prof. Dr.-Ing. *Harald S. Müller* celebrated his 60th birthday on 16 December 2011. Born in 1951 in Osterburken, he was a Baden boy surrounded by the influences of Hesse, Franconia and Swabia.

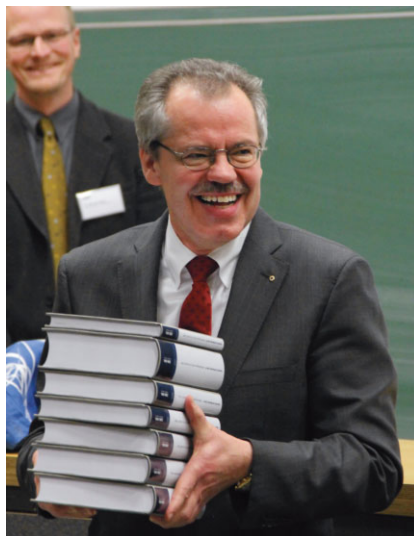
Construction materials caught the attention of *Harald Müller* very early on in his engineering studies. While still a student, he worked as an assistant at the Karlsruhe Institute of Concrete, Masonry & Construction Materials Technology under *Hubert Hilsdorf*, and later as a scientific assistant and doctoral candidate. *Harald Müller's* obvious skills in the exact application of mathematical methods and mechanical principles led *Hubert Hilsdorf* to involve him in his research work at an early stage, and also to his discourse with *Zdenek Bazant* concerning creep in concrete, which appeared in numerous publications. *Harald Müller* quickly advanced to become an international expert on creep; the prediction of creep in concrete was the subject of his highly praised 1986 dissertation, which was awarded the "Honorary Senator Huber Prize".

This author's friendship with *Harald Müller* goes back to those early years. I can remember long telephone calls between Karlsruhe and Braunschweig, exchanging technical details about creep models and personal details about the quirks of our bosses and doctoral advisers!

Harald Müller left Karlsruhe in 1989 to take charge of the Construction Materials Group at the Federal Institute for Materials Research & Testing in Berlin. In 1995 he re-

turned to Karlsruhe to take over the chair of his teacher and doctoral adviser *Hubert Hilsdorf*. He was also appointed head of the Construction Materials Technology Department at the Institute of Concrete, Masonry & Construction Materials Technology and director of the Materials Testing & Research Institute.

It was not long before *Harald Müller* emerged from the shadow of his highly respected predecessor and established himself as an expert on the science of construction materials in Germany and abroad. To this day he has remained faithful to his original scientific interest: describing the properties of concrete in constitutive laws. Testing methods for concrete and masonry became another focus of his research, along with the rheology of fresh concrete, the microstructure and durability of mineral building materials, plus life cycle management issues and the upgrading of structures. So far, that has added up to about 250 publications and some 40 dissertations for which he was either principal advisor or co-advisor. *Harald Müller's* scientific work has always been characterised by high aspirations to achieve a system in terms of content and method



At the celebratory colloquium in his honour, *Harald Müller* was delighted to receive a bound compendium of his work since the beginning of his academic career.

throughout, by clearly defined experimental work, materials models free from contradictions and with easily understandable physics, and mostly highly complex numerical analyses at component level, always prepared bearing in mind practical usability. It almost goes without saying that *Harald Müller* is involved in many national and international bodies; particularly worthy of note are his membership of the board of the German Reinforced Concrete Committee (DAfStb) and the Presidium of *fib*.

Harald Müller is also a devoted teacher. In terms of their didactic concept, the rigorous structure of his courses is not unlike that of his research work, from the mathematical and physical principles to practical application. The construction engineering course in Karlsruhe also bears his hallmark, as he has held the post of Dean of Student Affairs for more than 10 years.

On the occasion of his 60th birthday, it was a pleasure to be able to wish *Harald Müller* many happy returns and the health, creativity and enthusiasm needed to keep accomplishing all his activities.

Harald Budelmann,
TU Braunschweig

Festkolloquium in honour of Harald S. Müller

On Thursday 19 January 2012, a celebratory colloquium ("Festkolloquium") was held at the Karlsruhe Institute of Technology (KIT) in honour of the 60th birthday of Prof. *Harald S. Müller*. The programme, which was organized and moderated by Dr. *Michael Haist* and Dr. *Nico Hermann*, began with welcome addresses by Prof. *Detlef Löhle*, Vice President of Research and Information at KIT, and Prof. *Bernhard Heck*, Dean of Civil Engineering, Geo and Environmental Sciences.

A laudatory speech (“Laudatio”) was then given by Prof. *Franz Nestmann* from KIT, which made clear that *Harald Müller* is not only prolific and successful in his research but also in his personal relationships with friends and colleagues. Also highlighted was his development project in Indonesia. Three 30-minute technical presentations were then given: Prof. *György L. Balázs* (Budapest University of Technology and Economics/President of *fib*),

“*fib* Model Code 2010 as basis of codes for future concrete structures”; Prof. *Manfred Curbach* (TU Dresden), “Wie Baustoffe von heute das Bauen von morgen beeinflussen”; and Prof. *Harald Budelmann* (TU Braunschweig), “Baustofftechnologie in Lehre und Forschung”.

A reception accompanied by music made for a festive closing to this pleasant and convivial event.

many lectures show that he has achieved this goal. He received many honors, including the Swedish Concrete Award in 1991, the *fib* Medal of Merit in 1998, and an honorary doctorate at the University of Kassel in July 2009 (see the September 2009 issue of *fib-news*).

The undersigned has the honor to be working with *Joost Walraven* in *fib* since 1998, especially in the Presidium in the years 1998 to 2006. *Joost Walraven* has achieved several milestones in *fib*, the results of which are published in a number of *fib* Bulletins. Of outstanding importance is the 2010 *fib* Model Code for Structural Concrete, which was prepared under his leadership in recent years and in October 2011 was approved by the General Assembly of *fib*. One can assume that this Model Code as well as the provisions of previous editions in 1978 and 1990 has had a lasting influence on national and international regulations for concrete structures, such as the Eurocodes. *Joost Walraven* played a major role in this.

The portrait of *Joost* would be incomplete without a glimpse of his personality. He is characterized by a strong interest in new developments, by a desire to be practical, fair, open to his colleagues, as well as by infinite diligence. His colleagues also admire his calm; even in critical situations he does not seem to lose either his wonderful sense of humor or his positive spirit. Surely these qualities are also appreciated by wife, *Rose*, who has always supported his commitments.

To us, his friends and colleagues, remains the duty and pleasure of thanking *Joost Walraven* for his great professional commitment and to wish him, his wife *Rose* and his family all the best for the next stage in his life, especially good health.

Hans-Ulrich Litzner

65th birthday of Joost Walraven



On 6 February 2012, Professor Dr.Ir. *Joost C. Walraven* turned 65. He was Professor of Concrete Structures at the Delft University of Technology in the Netherlands until the end of 2011. Through his teaching activities at the Technical University of Darmstadt from 1985 to 1989, his numerous lectures, for example at the Ulmer BetonTage, through his involvement in the Eurocodes, but especially through his many years volunteering for *fib*, *Joost Walraven* has become widely recognized beyond the borders of his home country as a researcher as well as as an engineer.

Joost Walraven was born in 's-Hertogenbosch, Netherlands. He studied Civil Engineering at the Technical Institute of Delft (later renamed Delft University of Technology) at the time, where he earned his diploma in 1972. His former teacher, Professor *A. Bruggeling*, recognized *Joost Walraven's* skills and em-

ployed him as a scientific assistant. From 1981 to 1985 he was at Corsmit, an engineering office in The Hague, to gain practical experience. He then worked as a professor for concrete technology at the Technical University of Darmstadt until 1989. In 1989, he became professor at the Delft University of Technology, which was remained his professional home until his retirement. In addition, he volunteered in various associations and committees, especially *fib* as already mentioned.

The scientific achievements of *Joost Walraven* cannot be described in detail in this short piece. But we can say that he has helped shape modern concrete construction significantly, especially when it comes to new models, new materials and new processes. This journey began with his doctoral thesis at TU Delft on aggregate interlock in concrete, which gained international attention in the concrete community. Other topics that are closely associated with his name are related to high-strength concrete, fiber reinforced concrete, ultra high performance concrete, self compacting concrete and the precast units. His goal was always to make these new technologies for practical applications. His nearly 300 publications and his

Recent activities of *fib* Commission 8

fib Commission 8, *Concrete*, currently consists of the following active Task Groups:

- TG 8.3 “Fibre-reinforced concrete” (Convener: *Lucie Vandewalle*, KU Leuven, Belgium)
- TG 8.6 “Ultra-high performance fibre-reinforced concrete” (Convener: *Joost Walraven*, TU Delft, The Netherlands)
- TG 8.7 “Code-type models for concrete behaviour” (Convener: *Harald S. Müller*, Karlsruhe Institute of Technology, Germany)
- TG 8.8 “Structural design with flowable concrete” (Convener: *Steffen Grünewald*, TU Delft, The Netherlands & *Liberato Ferrara*, Politecnico di Milano, Italy)
- TG 8.9 “Aesthetics of concrete surfaces” (Convener: *Ludger Lohaus*, Leibniz Univ. Hannover, Germany)
- TG 8.10 “Performance-based specifications for concrete” (Convener: *Hans Beushausen*, UCT, South Africa & *Frank Dehn*, MFPA Leipzig, Germany)
- TG 8.11 “Fire resistant concretes and cementitious composites for tunnel construction” (Convener: *Frank Dehn*, MFPA Leipzig)
- TG 8.12 “Constitutive laws for concretes with supplementary cementitious materials” (Convener: *Tor Arne Martius-Hammer*, SINTEF, Norway & *Harald Justnes*, SINTEF, Norway)

New Task Groups 8.11 and 8.12 were approved at the 2011 *fib* Technical Council meeting in Prague. The scopes of these Task Groups are briefly summarized below.

Task Group 8.11

In research and practice – both in the private and public sector – a great requirement is recognized to have information about concretes and cementitious composites which show a significant resistance against extremely high temperatures and temperature gradients as they can

occur during tunnel fire scenarios. Therefore, the new TG 8.11, *Fire resistant concretes and cementitious composites for tunnel construction*, intends to prepare, for publication as a technical report, a collection of available mix designs for concretes and cementitious composites in terms of their performances in fire, based on experimental studies and/or real-life experiences. Task Group 8.11 will cooperate intensively with *fib* Commission 1 and WG 4.3.5 on “Fire Design of Concrete Tunnels”.

Task Group 8.12

The use of Supplementary Cementitious Materials (SCM) as a binder in concrete is increasing, mainly driven by the need of the concrete industry to make concrete more environmentally friendly and in particular to meet official requirements for lower CO₂ emissions. Today’s codes for concrete and concrete structures allow the use of SCM but limit which materials can be used and the amount of SCM (e.g. fly ash, silica fume, blast furnace slag, natural pozzolans, fine powders, etc.). Hence, the new Task Group intends to prepare the basis for an extension of *fib* MC 2010 which includes the assessment of lesser-known SCM and to verify, validate and extend the constitutive laws/models when SCM are used, e.g. on mechanical and durability properties.

The launch meeting of Task Group 8.12 was held in Leipzig, Germany, in November 2011. In the future, it will strongly liaise with RILEM TC 238-SCM “Hydration and microstructure of concrete with supplementary cementitious materials” (Chair: *Nele de Belie*, Gent University, Belgium).

Contribution of Commission 8 to MC2010, and Bulletins in progress

One of the major targets during recent months was the preparation and finalization of chapters 5.1 “Concrete”, 5.6 “Fibres and fibre-reinforced concrete” and 7.7 “Verification of safety and serviceability of FRC structures” for the new *fib* Model Code 2010 (MC2010). This very important and voluminous work was accomplished by Task Group 8.3 “Fibre-reinforced concrete” and Task Group 8.6 “Code-type models for concrete behaviour”. Each Task Group is now preparing a bulletin which will provide background information and explanations for the content of the above-mentioned MC2010 chapters. The drafts of both bulletins will be targeted for completion by the end of 2012.

Also by the end of 2012, Task Group 8.7 will finalise its work on the design of “Ultra-high performance fibre-reinforced concrete” (UHPFRC). Also Task Group 8.8 and 8.9 intend to provide their state-of-the-art reports on flowable concretes and SCC – with and without fibres – and on concrete surface aesthetics, respectively.

Short Courses and workshops

In June 2011 *fib* Task Group 8.10 hosted a successful workshop on “Performance-based specifications for concrete”. Intensive discussions amongst the 60 workshop participants together with 35 written contributions published in workshop proceedings established the basis for further Task Group work. Persons interested in purchasing a copy of the workshop proceedings can contact the organisers (www.mfpa-leipzig.de).

In March 2012 *fib* Commission 8, especially Task Group 8.10, will hold a series of one-day workshops on technological issues for con-

fib Bulletins



fib Bulletin 61: *Design examples for strut-and-tie models*. Technical report, September 2011, 220 pages, ISBN 978-2-88394-101-4. Non-member price: 150 CHF.

fib Bulletin 61 is a continuation of *fib* Bulletin 16 (2002). Again the bulletin's main objective is to demonstrate the application of the FIP Recommendations "Practical Design of Structural Concrete", and to illustrate the use of strut-and-tie models to design discontinuity regions (D-regions) in concrete structures.

Bulletin 61 presents 14 examples, most of which are recently built existing structures. Although some of them can be considered to be quite important and, in some instances, complex, the chosen examples are not intended to be exceptional. The main aim is to look at specific design aspects, by selecting D-regions of the presented structures that are designed and detailed according to the proposed design principles and specifications for the use of strut-and-tie models.

Two papers deal with the role of concrete tension fields in modelling with strut-and-tie models, and summarize the experiences of the Working Group in applying strut-and-tie models to the examples.

It is hoped that *fib* Bulletin 61 will encourage the use of more consistent design and detailing tools such as strut-and-tie models.

To order this and other *fib* Bulletins: www.fib-international.org/publications.

cretes exposed to high temperatures and fire. The workshops will take place in South Africa on 5, 7 and 8 March 2012 in Cape Town, Durban, and Johannesburg, respectively. The workshops will provide in-depth information to the local South African technical community and are part of the strong efforts to foster the relationship with South Africa, which is a new National Member Group in *fib* as of this year.

Further Commission 8 *fib* short courses are planned in New Zealand and Croatia during 2012, on "Perfor-

mance-based specifications for concrete" and "Modern concrete technology" as these courses were successfully hosted by the *fib* Australian National Member Group and the "Concrete Institute of Australia" in Sydney and Brisbane in January 2011.

Further information about the activities of *fib* Commission 8 Concrete is given on the *fib* website (www.fib-international.org).

Frank Dehn, MFPA Leipzig
Chairman of *fib* Commission 8
dehn@mfpa-leipzig.de

Honorary doctorate to M. Curbach



Prof. Dr. Dr. h.c. *Helmut Schmidt*, President of the Technical University of Kaiserslautern (left), and Prof. Dr.-Ing. Dr.-Ing. E. h. *Manfred Curbach* at the ceremony in Kaiserslautern

On 15 November 2011, Prof. Dr.-Ing. *Manfred Curbach* (Technical University Dresden, Germany) received an honorary doctorate from the Faculty of Civil Engineering at the Technical University of Kaiserslautern, Germany.

His outstanding scientific achievements in structural engineering, his services in enforcing the implementation of research results in the construction practice and his exemplary personality were essential criteria for the award of an honorary doctorate to Prof. *Manfred Curbach*. As the

spokesman of the German Research Foundation's special research program on textile reinforced concrete, he has contributed significantly to basic research on a new type of construction. He is currently coordinator of the DFG priority program 1542 "Light construction with concrete – Basics for building the future with bionic and mathematical design principles", substantially initiated by himself, in which over 50 scholars from eleven technical universities cooperate in Germany.

In addition, Professor *Curbach* has held a variety of honorary positions. As Vice-President, he was responsible at the Technical University Dresden for its strategic direction for several years.

Since 2004 he is President and CEO of the German Committee for Reinforced Concrete and also head of the German delegation in *fib*.

Jürgen Schnell
TU Kaiserslautern

Congresses and symposia

Date and location	Event	Main organiser	Contact
14 March 2012 Rio de Janeiro, Brazil	Latin America seminar on conceptual design and applications of precast concrete structures	Abcic <i>fib</i> Commission 6	www.abcic.org.br/ latinamericaseminar
29 May - 1 June 2012 Aix-en-Provence, France	International Conference on Numerical Modeling Strategies for Sustainable Concrete Structures (SSCS 2012)	AFGC	www.sscs2012.com
11-14 June 2012 Stockholm, Sweden	<i>fib</i> Symposium: Concrete Structures for a Sustainable Community	<i>fib</i> group Sweden	www.fibstockholm2012.se
17-20 June 2012 Brescia, Italy	Bond in Concrete 2012: Bond, anchorage, detailing	University of Brescia, Italy	www.bondinconcrete2012.org
22-25 July 2012 Karlsruhe, Germany	9th <i>fib</i> International PhD Symposium in Civil Engineering	KIT Karlsruhe, Germany	http://fib-phd.imb.kit.edu/
19-21 September 2012 Guimaraes, Portugal	8th International Symposium on Fibre Reinforced Concrete	University of Minho RILEM	www.befib2012.civil.uminho.pt
28-30 January 2013 ta_2013 Johannesburg, S. Africa	Int. Conf. on Advances in Cement and Concrete Technology in Africa (ACCTA 2013)	SPIN	www.spin.bam.de/en/acc-
20-24 April 2013 Tel-Aviv, Israel	<i>fib</i> Symposium: Engineering a Concrete Future: Technology, Modeling and Construction	<i>fib</i> group Israel	www.fib2013tel-aviv.co.il
27-29 May 2013 Tokyo, Japan	1st International Conference on Concrete Sustainability	JCI	www.jci-iccs13.jp
2-4 October 2013 Marseille, France	2nd International Symposium on UHPFRC	AFGC	www.afgc.asso.fr/
10-14 February 2014 Mumbai, India	4th International <i>fib</i> Congress and Exhibition	<i>fib</i> group India	website and email address to be announced

The calendar lists *fib* congresses and symposia, co-sponsored events and, if space permits, events supported by *fib* or organised by one of its National Groups. It reflects the state of information available to the Secretariat at the time of printing; the information given may be subject to change.

Acknowledgement

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National Member Groups

AAHES - Asociación Argentina del Hormigón Estructural, Argentina
 CIA - Concrete Institute of Australia
 ÖVBB - Österr. Vereinigung Für Beton und Bautechnik, Austria
 GBB - Groupement Belge du Béton, Belgium
 ABECE - Associação Brasileira de Engenharia e Consultoria Estrutural, Brazil
 ABCIC - Associação Brasileira da Construção Industrializada de Concreto, Brazil
fib Group of Canada
 CCES - China Civil Engineering Society
 Hrvatska Ogranak *fib*-a (HOFIB), Croatia
 Cyprus University of Technology
 Ceska betonarska spolecnost, Czech Republic
 Dansk Betonforening DBF, Denmark
 Suomen Betoniyhdistys r.y., Finland
 AFGC - Association Française de Génie Civil, France
 Deutscher Ausschuss für Stahlbeton e.V., Germany
 Deutscher Beton- und Bautechnik-Verein e.V. - DBV, Germany
 FDB - Fachvereinigung Deutscher Betonfertigteilbau, Germany
 Technical Chamber of Greece
 Hungarian Group of *fib*
 The Institution of Engineers (India)
 Technical Executive (Nezam Fanni) Bureau, Iran
 IACIE - Israeli Association of Construction and Infrastructure Engineers
 Consiglio Nazionale delle Ricerche, Italy
 JCI - Japan Concrete Institute

PCEA - Prestressed Concrete Engineering Association, Japan
 Admin. des Ponts et Chaussées, Luxembourg
fib Netherlands
 New Zealand Concrete Society
 Norsk Betongforening, Norway
 Committee of Civil Engineering, Poland
 Polish Academy of Sciences
 GPBE - Grupo Português de Betão Estrutural, Portugal
 Society for Concrete and Prefab Units of Romania
 Technical University of Civil Engineering, Romania
 University of Transilvania Brasov, Romania
 Association for Structural Concrete (ASC), Russia
 Association of Structural Engineers, Serbia
 Slovak Union of Civil Engineers
 Slovenian Society of Structural Engineers
 University of Stellenbosch, South Africa
 KCI - Korean Concrete Institute, South Korea
 ACHE - Asociacion Cientifico-Técnica del Hormigón Estructural, Spain
 Svenska Betongföreningen, Sweden
 Délégation nationale suisse de la *fib*, Switzerland
 ITU - Istanbul Technical University
 Research Inst. of Build. Constructions
fib UK Group
 ASBI - American Segmental Bridge Institute, USA
 PCI - Precast/Prestress. Concrete Institute, USA
 PTI - Post Tensioning Institute, USA

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