

International Federation for Structural Concrete  
Fédération internationale du béton



# *fib* HU - General Assembly

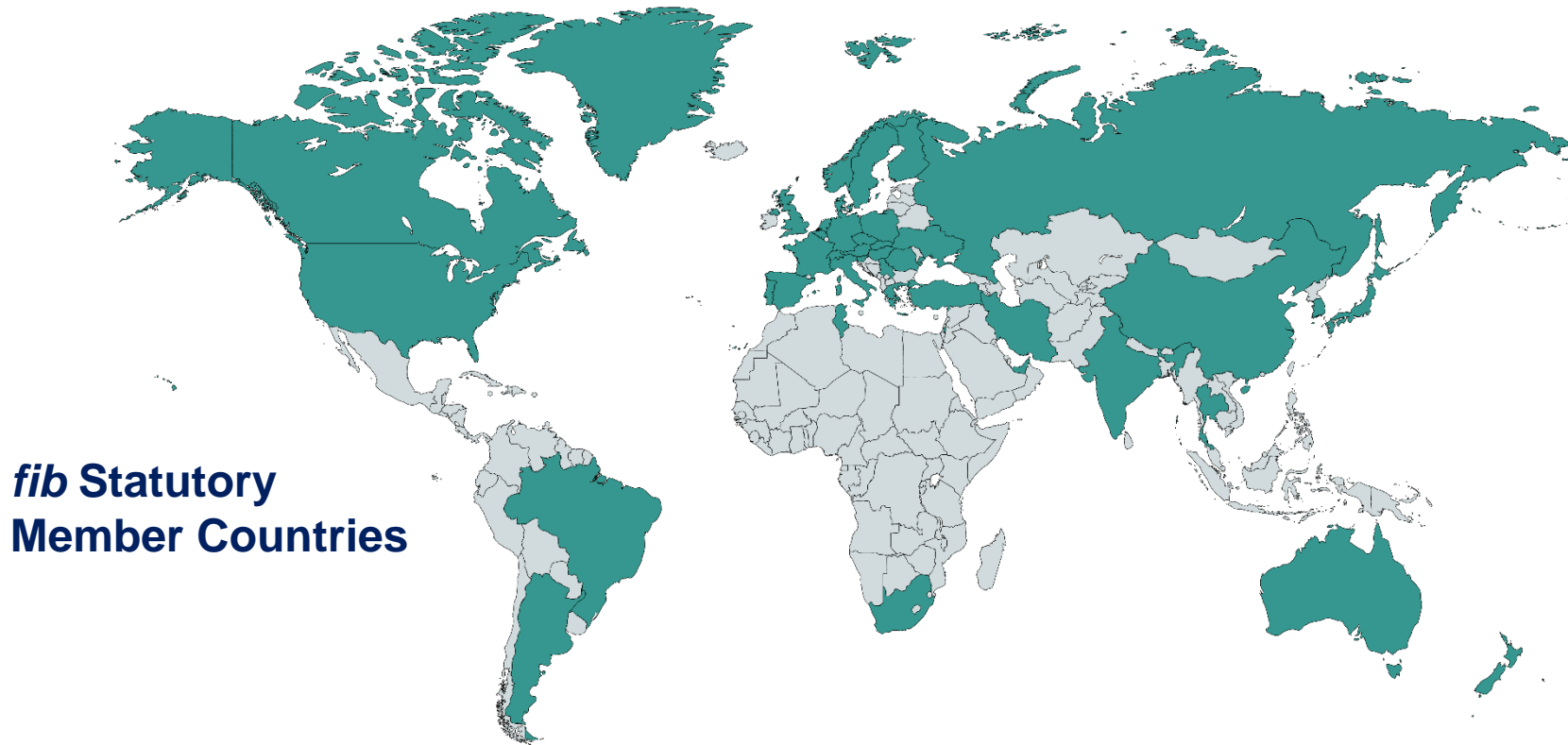


Photo ©Loic Gardiol

**Balázs L. György**  
*Honorary President*

**2 Dec 2019, BME Budapest**

# 2019 Statutory member countries



Created with mapchart.net ©

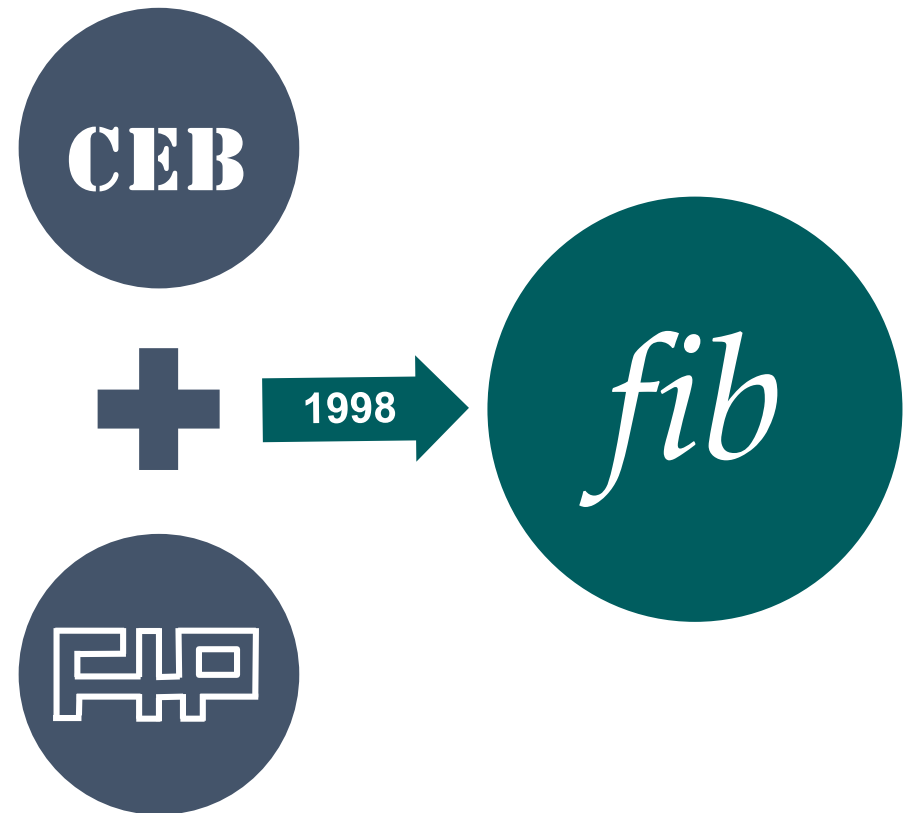
## 45 *fib* Statutory Member Countries

Argentina – Australia – Austria – Belgium – Brazil – Canada – China – Cyprus – Czech Republic – Denmark – Finland – France – Germany – Greece – Hungary – India – **Indonesia** – Iran – Israel – Italy – Japan – Lebanon – Luxembourg – Netherlands – New Zealand – Norway – Poland – Portugal – Romania – Russia – Serbia – Slovakia – Slovenia – South Africa – South Korea – Spain – Sweden – Switzerland – **Thailand** – Tunisia – Turkey – **UAE** – Ukraine – United Kingdom – United States

# Creation of the *fib*

**Euro-International  
Committee for Concrete**  
Comité euro-internationale du béton  
**1953**

**International Federation  
for Pre-stressing**  
Fédération internationale  
de la précontrainte  
**1952**



# Mission and Objectives of the *fib*



“To develop at an international level the study of scientific and practical matters capable of advancing the technical, economic, aesthetic and environmental performance of concrete construction.” *Statutes of the fib*

Stimulation of research and synthesis of findings

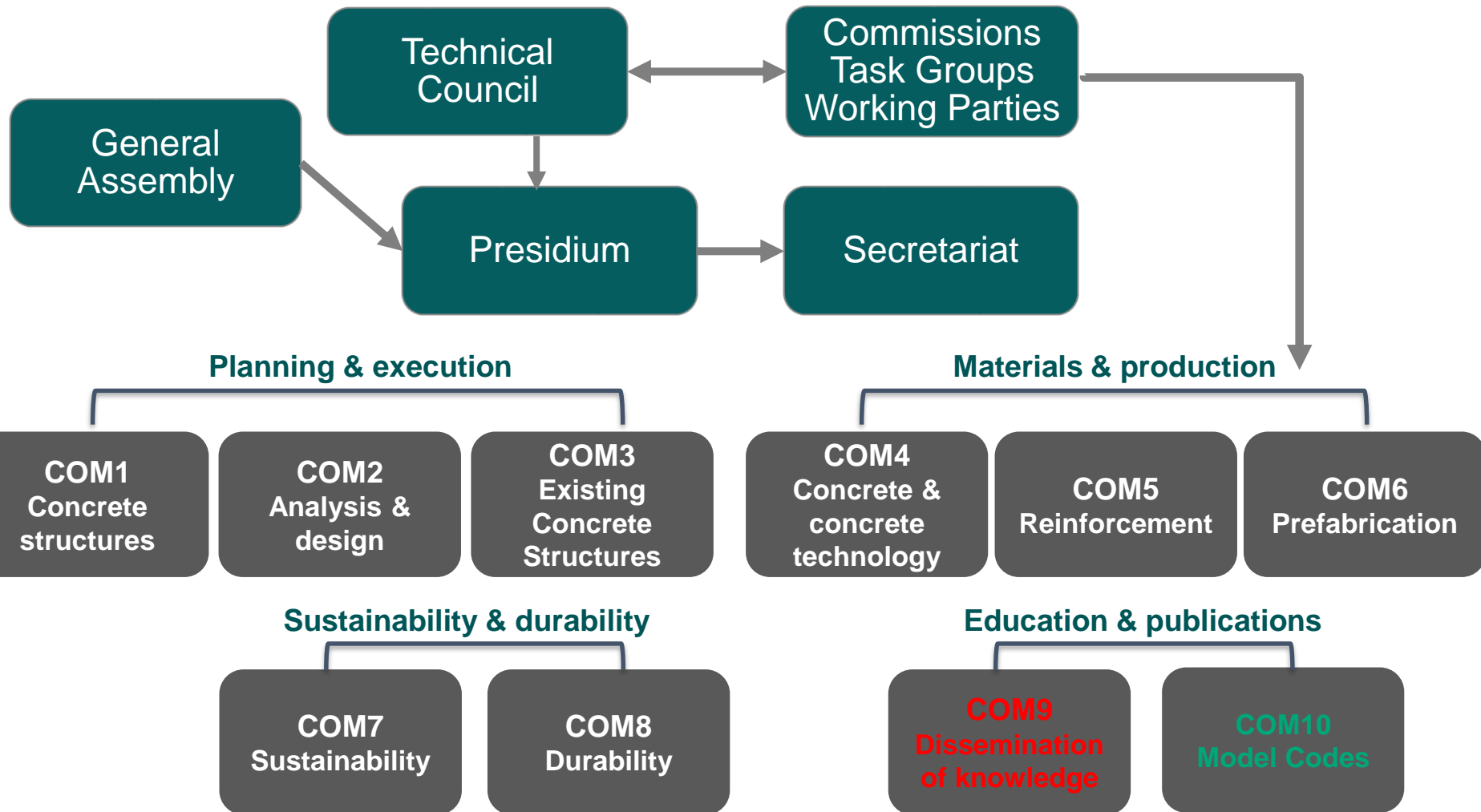
Transfer into design and construction practice

Dissemination by publications, conferences, etc.

Production of recommendations and codes

Dissemination of information to members

# The *fib*'s structure



# 2019-20 *fib* presidium members

**Tor Ole Olsen**  
Norway  
President



**Akio Kasuga**  
Japan  
Dep. President



**Hugo Corres**  
Spain  
Immediate Past  
President



Josée Bastien  
Canada



Frank Dehn  
Germany



Marco di Prisco  
Italy



Iria Doniak  
Brazil



Stephen Foster  
Australia



Aurelio Muttoni  
Switzerland



Larbi Sennour  
USA



**David Fernández-Ordóñez**  
Secr. General



# The *fib*'s Structural Concrete journal

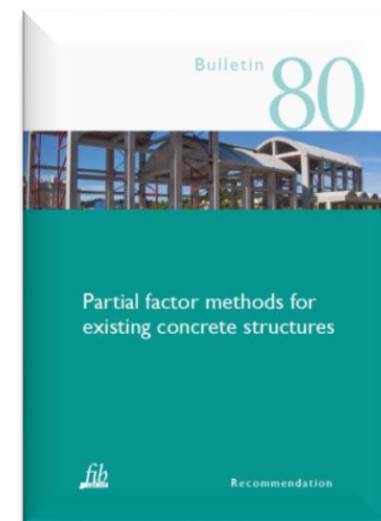
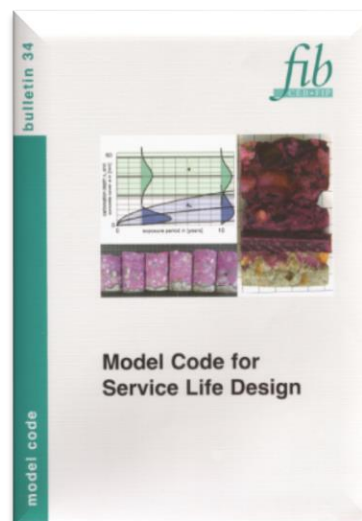
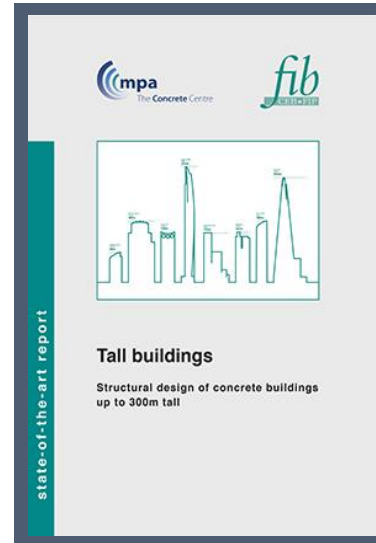
**Impact Factor 2019: 1.885**

**IF 2018: 1.384  
6 issues from 2016**



# Results of commissions and task groups are published as fib bulletins

- Technical reports
- State-of-the-art reports
- Textbooks
- Manuals or guides
- Recommendations
- Model Codes





# Symposia, congresses and supported events



## **2019 Symposium**

**Concrete: Innovations in materials, design and structures**

27-29 May - Krakow, Poland

## **2019 Symposium**

**Conceptual Design of Structure**

26-28 Sept - Madrid, Spain

**2020 PhD Symposium – Abstract deadline 30 Nov 2019**

**13<sup>th</sup> International PhD Symposium in Civil Engineering**

26-28 August – Paris, France

# Symposia, congresses and supported events

**2019 Symposium**  
**Conceptual Design of Structure**  
26-28 Sept - Madrid, Spain

*Kulcsszavak:*  
*Inspiráció*  
*Adatgyűjtés*  
*Kreativitás*  
*Megvalósítás*



PROCEEDINGS OF THE  
INTERNATIONAL *fib* SYMPOSIUM ON  
CONCEPTUAL DESIGN OF STRUCTURES

SEPTEMBER 26-28, 2019  
TORROJA INSTITUTE | MADRID | SPAIN

edited by Hugo Corres, Leonardo Todisco, and Corentin Fivet

# Symposia, congresses and supported events

**2019 Symposium**  
**Conceptual Design of Structure**  
26-28 Sept - Madrid, Spain

*Nagyon sikeres volt.*

*PhD Symposium*  
*mintájára 2 évente*  
*megredezésre kerül*



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# Symposia, congresses and supported events

## 2019 Symposium

### Conceptual Design of Structure

26-28 Sept - Madrid, Spain

*Résztevők:*

*Balázs L. György:*

*Scientific Com*

*Sajtos István:*

„Twisting moment – an unusual balancing mechanism of some historical load-bearing structures”



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# Symposia, congresses and supported events



## 2019 Symposium

### Conceptual Design of Structure

26-28 Sept - Madrid, Spain

## *Résztevő országok:*

Algéria, Anglia, Belgium, Brazília, Kanada, Csehország, Dánia, Egyesült Arab Emírségek, Észtország, Finnország, Franciaország, Hollandia, India, Izrael, Japán, Luxemburg, Kína, Magyarország, Marokkó, Németország, Norvégia, Olaszország, Oroszország, Portugália, Spanyolország, Svájc, Szerbia, Szlovákia, Ukrajna és Uruguay



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26-28 Sept - Madrid, Spain



Torroja Institute, Madrid

# Symposia, congresses and supported events

**2019 Symposium Conceptual Design of Structure**  
26-28 Sept - Madrid, Spain



A madridi ügető lelátója,  
tervezte Eduardo Torroja,  
épült 1935-ben

# Staying informed about the *fib*

- *fib*-news

- Quarterly newsletter published in the *fib's* Structural Concrete journal

- e-newsletter

- Sent by e-mail every 6 weeks

- Follow-us on social media



Website: [www.fib-international.org](http://www.fib-international.org)

e-mail: [info@fib-international.org](mailto:info@fib-international.org)



# Staying informed

Website:

[www.fib-international.org](http://www.fib-international.org)

e-mail: [info@fib-international.org](mailto:info@fib-international.org)



## The International Federation for Structural Concrete

The *fib* (International Federation for Structural Concrete), formed by 43 national member groups and approximately 1,000 individual or corporate members, is a not-for-profit association committed to advancing the technical, economic, aesthetic and environmental performance of concrete structures worldwide.



## 2017 *fib* Presidium



Hugo Corres Piretti, President; Tor Ole Olsen, Deputy President; Harold S. Ficker, Immediate Past President; Javier Baraja, Elected Member; Iris Christl, Elected Member; Alex Krings, Elected Member.



Andreas Pflaum, Elected Member; Henrik B. Hansen, Co-opted Member; Lutz Serber, Co-opted Member; Frank Chert, TC Deputy Chair; Stephen Hesser, TC Deputy Chair; Glenn Serrano, Obitario Secretary General.

The *fib* is pleased to present its new Presidium members. Prof **Hugo Corres Piretti** (Spain) of FHECOR Ingenieros Consultores will be president of the *fib* from 1 January 2017 to 31 December 2018.

[Read more ...](#)

**High tech concrete: Where technology and engineering meet!**

The next *fib* Symposium "High-tech



## Members Menu

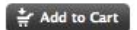
- Members only
- Logout

## Latest Publication

Partial factor methods for existing concrete structures



CHF100.00



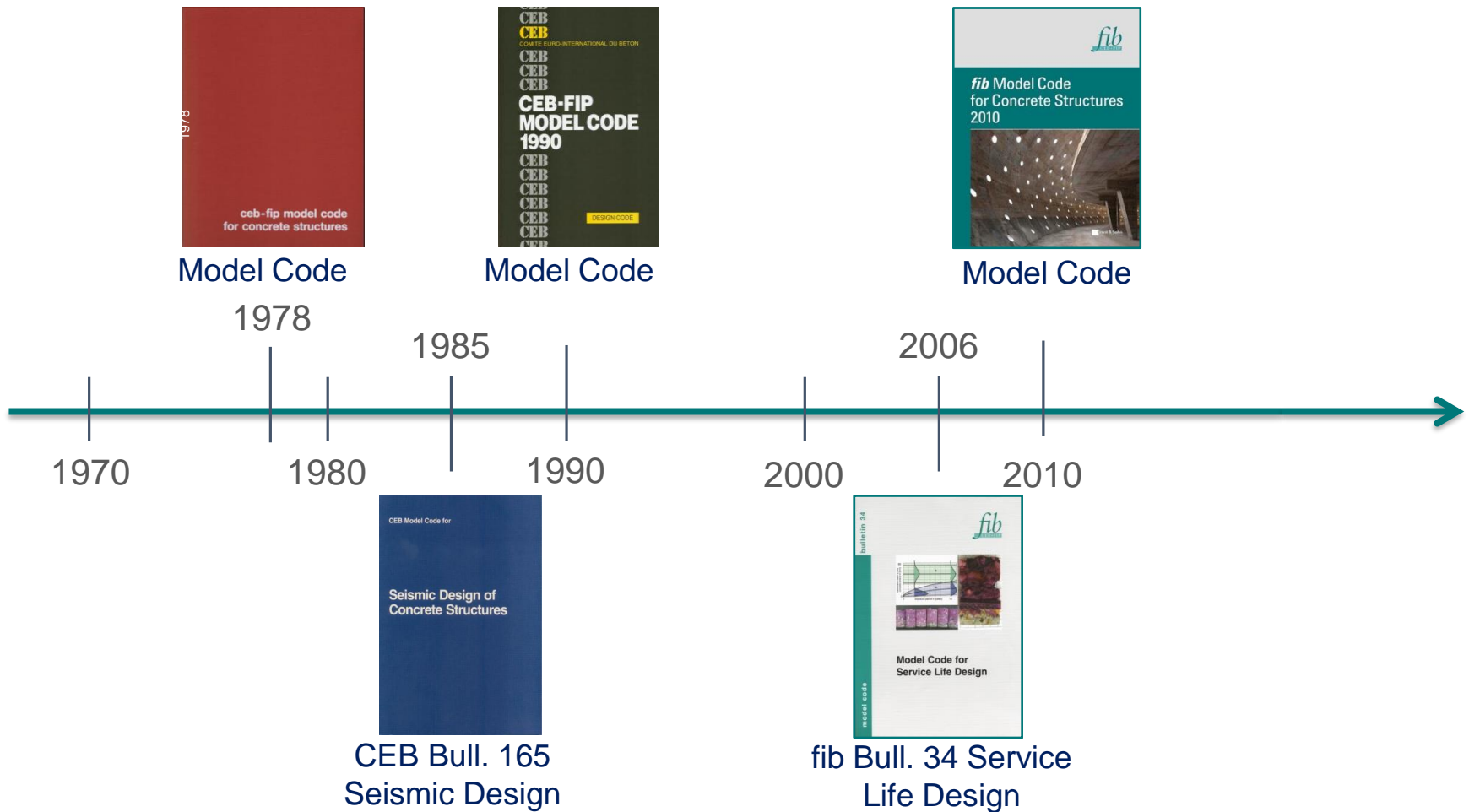
**fib Model Code for Concrete Structures 2010**



In October 2013, the hardcover and e-book editions

The fib, the organisation ar

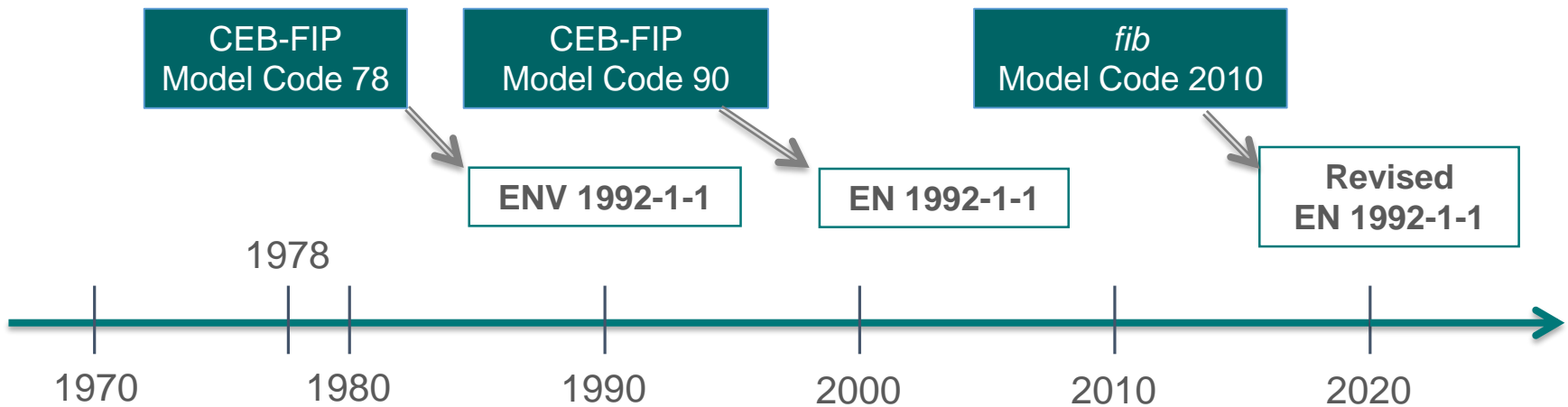
# Impact of *fib* (CEB-FIP) Model Codes



# Impact of *fib* (CEB-FIP) Model Codes



## Strong influence on Eurocodes



## Pronounced influence on Asian and African Model Codes

**Model Codes are used as reference documents  
both in research and in design**

# *fib* Magyar Tagozat Ankétjai 2019

## *fib* HU Seminars in 2019



1. 2019. febr. 22. *fib* Ankét – „Beton tűzállósága”
2. 2019. márc. 29. Ankét **Tor-Ole Olsen**, *fib* President „*Design of marine concrete structures*”
3. 2019. márc. 30. Kárpátia Étterem, *fib* vacsora
4. 2019 ápr. 2. Ankét **Prof Sherif Yehia**, American University of Sharja, United Arab Emirates
5. 2019. szept. 16. Ankét **Prof Harald S. Müller**, *fib* Honorary President
6. 2019. szept. 19. Ankét **Dr. Akio Kasuga**, *fib* Deputy President
7. 2019. dec. 2. BME – **Közgyűlés**, 2019. évi **Palotás-díj átadása**

# Tor-Ole Olsen

President of *fib* 29 March 2019, BME



## DESIGN of marine concrete structures *Tengerben álló vasbeton szerkezetek TERVEZÉSE*



*fib MT in cooperation with: BME Faculty of Civil Engineering*

*Department of Construction Materials and Technologies*

*Department of Structural Engineering*

*Department of Structural Mechanics*

*In cooperation with: BME Faculty of Architecture*

*Department of Mechanics, Materials and Structures and*

*Hungarian Chamber of Engineers, Dept. Structures (MMK TT)*

# Prof. Sherif Yehia

## Deputy Head *fib*-UAE 2 April 2019, BME



### Conductive Concrete for Infrastructure Applications - *Vezetőképes beton közlekedés építési alkalmazásokhoz* -

*fib MT* in cooperation with BME Fac of Civ Eng. -

*Department of Construction Materials and Technologies  
MAUT - Hungarian Road and Railway Association*



**American University  
of Sharjah, Sharjah,  
United Arab Emirates**

Conductive concrete is a material developed to achieve high electrical conductivity and high mechanical strength. Carbon powder, graphite and steel fibers are used to improve the electrical conductivity. In 1998, Yehia and Tuan developed a first-generation conductive concrete mixture. Because of the improved electrical properties, the material can be used in many infrastructure applications. The conductive concrete was successfully implemented in a demonstration project for bridge deck deicing. Yehia and other research teams later evaluated the conductive concrete for cathodic protection electromagnetic shielding, and anti-static flooring applications. Currently, the research team is evaluating the feasibility of utilizing the conductive concrete for self-sensing applications. This will allow the its use in many health monitoring applications.

In this presentation, an overview of the development and evaluation of the conductive concrete for different applications will be shared and discussed. In addition, current research will be presented, and potential collaboration will be discussed.

# Prof. Harald S. Müller

## Honorary President of *fib* 16 Sept 2019, BME



### Freeze-thaw resistance of concrete

### New findings on the mechanisms and prognosis of the degradation



*fib MT* in cooperation with: BME Faculty of Civil Engineering

*Department of Construction Materials and Technologies and NVKP\_016-0019 Project*

**Short summary of presentation:** One of the most relevant environmental exposures for concrete structures in moderate climate zones such as Northern and East Europe is the frost attack. Even though the knowledge about the governing mechanisms has tremendously increased, some key aspects related to their time-development are not yet sufficiently understood. Consequently, no generally accepted model allowing to predict the degradation and spalling behaviour is available. Based on an experimental study using Nuclear Magnetic Resonance (NMR) techniques, the water transport behaviour in hardened cement paste and mortars at different water/cement ratios and different temperature exposures during a freeze-thaw attack was investigated. The obtained results constitute the basis for the development of a reliable physically based frost damage model. Even though the model was validated for hardened cement paste and mortar only, it represents a physically sound approach to describe in principle for the first time the development of the frost damage process in structural concrete. Hence, the model allows for a performance based service life prediction for concrete subjected to frost attack.

# Dr. Akio Kasuga



## Deputy President of *fib* 19 Sept 2019, BME

### BIRTH, DEVELOPMENT AND FUTURE OF EXTRADOSED BRIDGES

### *A függesztett-feszített hidak születése, fejlesztése és jövője*



*fib MT in cooperation with: BME Faculty of Civil Engineering*

*Department of Construction Materials and Technologies*

*Department of Structural Engineering*

*Department of Structural Mechanics*

*In cooperation with: BME Faculty of Architecture*

*Department of Mechanics, Materials and Structures and*

*Hungarian Chamber of Engineers, Dept. Structures (MMK TT)*



**Dr. Akio Kasuga**

**Deputy President of *fib***

***19 Sept 2019, BME***

**BIRTH, DEVELOPMENT AND FUTURE OF EXTRADOSED BRIDGES**

***A függesztett-feszített hidak születése, fejlesztése és jövője***



*Mukogawa Bridge*

***Dr. Balázs L. György***

2019.02.14-16.	Madrid	Presidium Meeting
2019.05.25-26.	Krakow	<b><i>fib</i></b> Technical Council + <b><i>fib</i></b> General Assembly
2019.05.27-29.	Krakow	<b><i>fib</i></b> Symposium
2019.05.28.	Krakow	<b><i>fib</i></b> COM 9 „Dissemination of knowledge”
2019.09.26-28.	Madrid	<b><i>fib</i></b> Symp. Conceptual Design of Structures
2019.02.28-29.	Madrid	Presidium Meeting
2019.11.11-12.	Naples	<b><i>fib</i></b> FRP
2019.11.11-1.	Naples	<b><i>fib</i></b> Workshop
2019.12.13-14.	Tokyo	<b><i>fib</i></b> COM „Dissemination of knowledge”

***Juhász Károly Péter***

2019.03.15.	Madrid	<b><i>fib</i></b> T2.4 - WG 2.4.2
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***Sólyom Sándor***

2019.05.25-27.	Krakow	<b><i>fib</i></b> YMG meeting
2019.05.25-26.	Krakow	<b><i>fib</i></b> TG 5.1 meeting
2019.05.27-29.	Krakow	<b><i>fib</i></b> Symposium
2019.05.28.	Krakow	<b><i>fib</i></b> COM 9 „Dissemination of knowledge”
2019-ben néhány alkalommal		<b><i>fib</i></b> YMG Board meeting (Skype)

***Várdai Attila***

2019.05.27-29.	Krakow	<b><i>fib</i></b> Symposium
2019.05.29.	Krakow	<b><i>fib</i></b> COM 3.2
2019.02.05-06.	Turin	<b><i>fib</i></b> Winter School

## 4. Central European Congress on Concrete Engineering (CCC)

(CCC Member Countries: Ausztria + Csehország + Horvátország + Lengyelország, Magyarország)

1. Konferencia: Graz, 2005. szept. 8-9.
2. Konferencia: Hradec Kralove, Csehország, 2006. szept. 21-22.
3. Konferencia: Visegrád, Magyarország, 2007. szept. 17-18.
4. Konferencia: Opatija, Horvátország, 2008. okt. 2-3.
5. Konferencia: Baden, Ausztria, 2009. szept. 24-25.
6. Konferencia: Marianske Lazne, Csehország, 2010. szept. 30-okt. 1.
7. Konferencia: Balatonfüred, Magyarország, 2011. szept. 22-23.
8. Konferencia: Plitvice Lakes, Horvátország, 2012. okt. 4-6.
9. Konferencia: Wroclav, Lengyelország, 2013. szept. 4-6.
10. Konferencia: Liberec, Csehország, 2014. okt. 1-2.
11. Konferencia: Hainburg, Ausztria, 2015. október 1-3.

**12. Konferencia: Tokaj, 2017. aug. 31 – szept. 1.**

**13. Konferencia: Zakopane, 2021. szept. 2-3. – Hamarosan infot küldünk**

**[www.fib.bme.hu](http://www.fib.bme.hu)**



Young  
Members  
Group



**Hungary**

The *fib* International Young Members Group

- Separate presentation
- Election of Chair of fib YMG HU

Köszönjük az  
együttműködést

Thank you for your  
collaboration