ACI Spring 2019 Quebec City Convention Centre 24 March 2019

# **About JCI**

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International Activities Committee, JCI Associate Professor, Kobe University Japan





# I. Brief History

- 1961 Started as Japan Chapter of ACI
- 1963 Launch of Concrete Journal (in Japanese)
- 1965 Founded as Japan National Council on Concrete (in 1975 name was changed to Japan Concrete Institute)
- 1971 Launch of Certification Program for Authorized Concrete Engineers
- 1979 Start of JCI Annual Convention

# I. Brief History (cont.)

2001 Certification Program for Authorized
 Concrete Diagnosis & Maintenance
 Engineers
 2003 Launch of JCI English Journal
 Advanced Concrete Technology

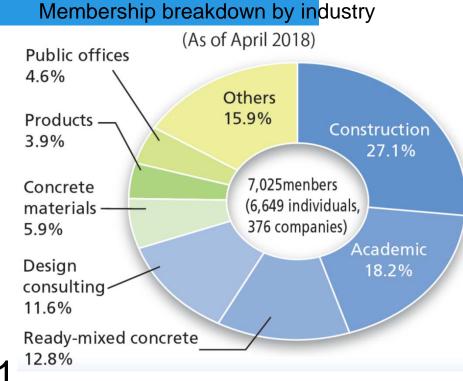
2015 50th Anniversary Ceremony

# II. Organization

#### **Numbers**

- •Members 7,025
- Chapters 8
- Directors 27
- -Staffs 24
- Committees &Subcommittees 61

(Involved members 1,370)



## III. Activities

- 1. Research Committees
- 2. Public Information Committees
- 3. Annual Convention, Symposium and Seminar
- 4. Publication
- 5. Award
- 6. Certification Program
- 7. International Cooperation and Exchange

Technical Committee

The term of committee is generally 2 years.

10 committees are regularly working. Every year half of them are terminated and new committees are established.

Committee for Concrete Technology

A longer term is adopted. 5 committees are working.

Standards Committee

JCI Standard, JIS Drafting, ISO/TC71 in Japan

# **Technical Committees (in 2018)**

- Innovation of Production/Supply/Construction System of Concrete
- Composite Deterioration of RC Structures
- Delayed Ettringite Formation (DEF)
- Test Method for Evaluation of Concrete Performances
- Disposal of Hazardous/Radioactive Wastes
- Repair Materials and Methods for Minimum Maintenance
- Design Concept of Precast and Prestressed Concrete
- Inspection and Assessment of Concrete by Neuron Beam
- 3D Printing

# **Committee for Concrete Technology**

- Concreting Technology
- Computer Software for Long-term Performance of Concrete structures
- Sustainability
- Concrete Structures under Fatal Conditions
- Concrete Pumping Technology

#### 2. Public Information Committees

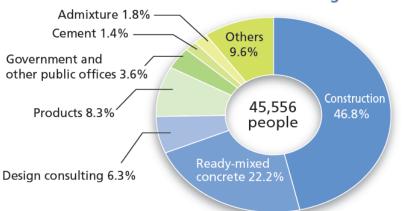
- Information and Communications Technology (ICT) for JCI
- Public Relations Strategy for image improvement of concrete
- Publication of Practical Guideline for Investigation, Repair and Strengthening of Cracked Concrete Structures
- Use of Sea Water in Concrete
- Computer Code for Crack Control in Massive Concrete
- Overseas Dissemination on Concrete Technology
- Promotion of Women's Participation and Advancement in Concrete Industry

## 6. Certification Program

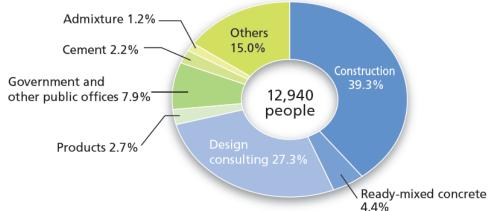
- Authorized Concrete Engineer
   45,556 (+738 in 1 yr) registered since 1971
- Authorized Chief Concrete Engineer
   10,621 (+206 in 1 yr) registered since 1972
- Authorized Concrete Diagnosis &
   Maintenance Engineer
   12,940 (+582 in 1 yr) registered since 2001

## Breakdown of Registrants by Industry (As of April 2018)

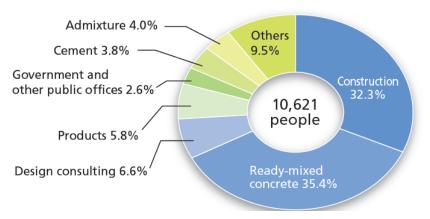
#### **Authorized concrete engineers**



#### **Authorized concrete diagnosis & maintenance engineers**



#### **Authorized chief concrete engineers**



# **Authorized Concrete Engineers**

The majority of the authorized concrete engineers and authorized chief concrete engineers certified by JCI are working in various positions in ready-mixed concrete production, product quality control, construction across Japan, and have earned a high level of trust as engineers with concrete expertise gained through many years of work in their respective fields.

# **Authorized Concrete Diagnosis & Maintenance Engineers**

JCI has been promoting the systematization of engineering knowledge in the fields of diagnosis, maintenance, and repair of existing concrete structures. Along with the publication of Concrete Diagnostic Techniques, a textbook for authorized concrete diagnosis & maintenance engineer workshops, the certification system has started in 2001.

The registered engineers are officially recognized by government and local governments as necessary experts for diagnosis of existing concrete structures.

# 7. International Cooperation and Exchange

JCI has established collaborative relationships with concrete related organizations throughout the world.

**ACI** International partnership agreement in 2004.

fib Delegation 4 Class member since 1998.

**ISO/TC71** P member since 1994.

**RILEM** International partnership agreement in 2007.

ACF (Asian Concrete Federation) strongly committed from the beginning.

Other bodies with international partnership agreement

KCI (Korea Concrete Institute) in 1993.

IMCYC (Mexican Institute of Cement and Concrete) in 2005.

**IBRACON** (Brazilian Concrete Institute) in 2006.

TCA (Thailand Concrete Association) in 2016

CIA (Concrete Institute of Australia) in 2016

# International Conference & Symposium



JCI has held more than 20 international conferences and symposiums since 1967. Recent ones are as follows:

CONCRACKS (Tokyo) April in 2017. http://www.jci-net.or.jp/~concrack5/RCCS (Nagasaki) June in 2015. http://www.jci-net.or.jp/~info-rccs/SCMT3 (Kyoto) August in 2013. http://scmt.org.uk/SCMT3.htm ICCS (Tokyo) May in 2013. http://conference.researchbib.com/view/event/16169 JCI-KCI-TCI Symposium (Hiroshima) July in 2012.

#### 2019 attention!!

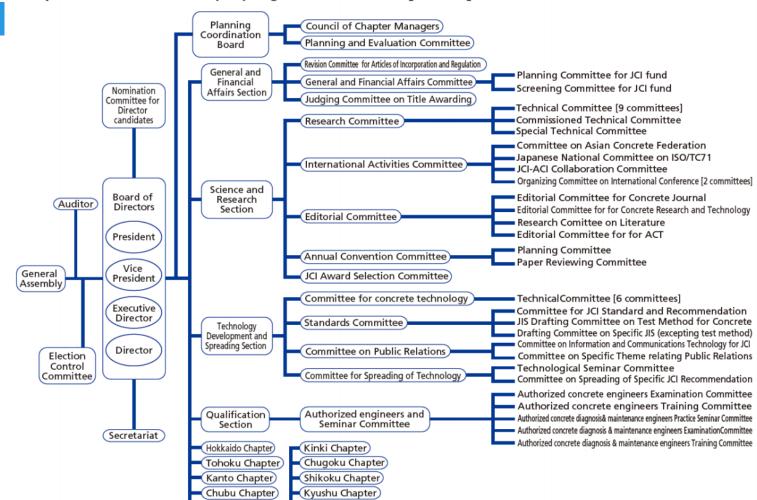
4th JCI-ACI joint seminar and Concrete Sustainability Seminar will be held at 11th and 12th July, 2019, respectively in the JCI Annual Convention in Sapporo, Japan.

# Thank you for your kind attention.

For more information, please visit the JCI website. http://jci-net.or.jp/index-e.shtml

# II. Organization (cont.)

Japan Concrete Institute (JCI) Organizational Chart [FY2018]



### **Standards Committee**

- JCI Standards
- JIS Drafting on Test Method for Concrete
- ISO/TC71 in Japan (73 members involved)

# Required Experience and its certificated documents

#### 表-1 受験に必要な資格等と証明書類

次 · 文本化少安本共和寺C皿列目景							
	資 格				コンクリートの <b>技術関係業務</b> (注 1)の 必要実務経験年数 技士 主任技士		C証明書等
A4 A5 A6	A2 一級建築士 A3 技術士 (建設部門)					実務経歴書の記入お よび勤務先の証明な ど不要	登録証明書. 監 理技術者資格者 証等のコピー
A8	8 1級土木施工管理技士または、 1級建築施工管理技士			監理技術者 資格者証を 有すること			
В1	B1 コンクリートの <b>技術関係業務</b> 実務経験者(学歴·年齢は関係なし)				3年以上	7年以上, またはコン クリート技士合格後 2年以上(注2)	実務経歴書およ びその証明(受 験顧書に記載)
A1 A8	B2 B3	大学 高等専門学校(専攻科)	コンクリート技術に関する科目を 履修した卒業者(注3)		2年以上**	4年以上**	実務経歴書およ びその証明 (受 験顯書に記載) 卒業証明書およ
A:Bの資格がな	B4 B5	短期大学 高等専門学校	コンクリート技術に関する科目を 履修した卒業者(注3)		2年以上	4年以上	
ない場合	В6	高等学校	コンクリート技術に 履修した卒業者(注3		2年以上	5年以上	び 履 修 (成 績) 証明書

<sup>(</sup>注1) コンクリートの技術関係業務:レディーミクストコンクリート・コンクリート製品の製造、コンクリートの品質管理・施工管理、コンクリートの設計ならびにコンクリートの試験・研究等に関する業務をいう。

(在学中のアルバイトなどは実務経験年数に該当しません。)

- (注2) コンクリート技士合格者: 2015 年度(平成 27 年度)までに「コンクリート技士」に合格し、その後2年以上の実務経験を有する人。
- (注3) コンクリート技術に関する科目 (コンクリート工学、土木材料学、建築材料学、セメント化学、無機材料工学、等)

※大学院でコンクリートに関する研究を行った期間を実務経験とする場合は、実務経歴書に研究テーマの記入と、大学院の修了証明書が必要です。

# 3. Annual Convention, Symposium and Seminar

## **Annual Convention**

Once a year (in July), Three days

- Reviewed paper presentation (around 650)
- ★ Technical exhibition (around 80 booths)
- ★ Ready-mixed concrete seminar





# 3. Annual Convention, Symposium & Seminar

## **Annual Convention (cont.)**

## **Participants**

Paper presentation 1,700

Technical exhibition 7,600

Ready-mixed concrete seminar 660







Posters 2015-2017

3. Annual Convention, Symposium & Seminar

## Symposium & Seminar

Symposiums and seminars on specific concrete-related research themes are held to coincide with the publication of Research Committee reports, offering a forum for research presentations and discussions for participants.

Concrete technology seminars are held every year in major cities across Japan for the purpose of spreading concrete technology, teaching new techniques, and fostering human resources.



#### 4. Publication

#### **Journals**

- ★ Concrete Journal (in Japanese), monthly
- ★Concrete Research and Technology (in Japanese)
- ★Advanced Concrete Technology (in English)

(Impact Factor (2016): 0.835)

http://www.j-act.org/

#### 4. Publication



## 4. Publication (cont.)

## Proceedings

Papers presented at JCI annual convention

## Guidelines

- ★ Investigation, Repair and Strengthening of Cracked Concrete Structures
- ★ Control of Cracking of Mass Concrete
- \* Assessment of Existing Concrete Structures

#### 4. Publication

## 4. Publication (cont.)

### **Books**

Fundamentals of Concrete Technology (in Japanese)

JCI Standards (in Japanese)



#### 5. Awards

Honorary Membership Award Lifetime Membership Award JCI Fellow

Meritorious Deed Award

Best Paper Award
Technology Award
Work Award
Encouragement Award

Annual Paper Encouragement Award





**Best Work Award**