

International Forum

Events and activities of KCI



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KCI Conventions

- Korea Concrete Institute (KCI) **Convention** : Spring and Fall
 - 2015 Fall Convention : 805 participants, 371 papers
Spring Convention : 775 participants, 373 papers
 - 2014 Fall Convention : 793 participants, 376 papers
Spring Convention : 919 participants, 497 papers
 - 2013 Fall Convention : 908 participants, 393 papers
Spring Convention : 829 participants, 367 papers

Last 6 Conventions (3 years) : 800~900 participants, 400 papers

- **Coming : 2016 Spring Convention : 11th ~13th May, Yeosu City**



KCI Conventions

- Korea Concrete Institute (KCI) **Convention** : Spring and Fall
 - **Opening ceremony and opening session** for Invited speech & awards
 - **General sessions** : Technical papers
 - **Student sessions** : Research papers presented by **master course graduate students**



KCI President H.M. Shin



Invited speech



Student session



General session



Awards program



KCI Conventions

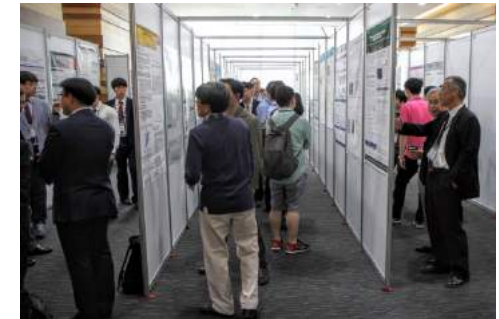
- Korea Concrete Institute (KCI) **Convention** : Spring and Fall
 - **Special sessions** : prepared by KCI's 41 Technical Committees and research organizations
 - **Technical Committee Meetings**
 - **Poster sessions** : Research papers



Special sessions



Committee Meeting



Poster session



KCI Conventions

- Korea Concrete Institute (KCI) **Convention** : Spring and Fall
 - **Exhibits** : contractors, designers, concrete producers, software, etc.
 - **Student Competition** : performance of concrete materials & elements
 - **Banquet**
 - **Social Programs**



Banquet



Student Competition



Social programs

- **2016 Spring Convention**

11th ~13th May 2016

Yeosu City



KCI Journals

- **KCI Journals :**

1. Journal of the Korea Concrete Institute

- Bi-monthly Journal (language-Korean)
- Publish 72 papers per year



2. International Journal of Concrete Structures and Materials

- Quarterly Journals (language-English)
- SCI-E Journal - Impact Factor 1.019

- Editorial Committee decided to increase total number of publishing papers. Since...

In 2012, 48 papers submitted, 28 published.

In 2013, 115 papers submitted, 28 published.

In 2014, 136 papers submitted, 28 published.

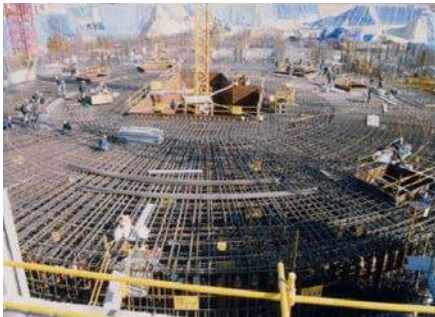
In 2015, 297 papers submitted, 36 published.





KCI Researches

- **One of the KCI Research** : Application of High-Strength Steel
 - KCI Code : By previous research, **600 MPa (85 ksi)** yield strength steel is used for flexure, **500 MPa (71 ksi)** steel for shear.
 - Currently, **too many steel amount** is required in **Nuclear Power Plant**, since the **KEPIC Code** (Korean NPP Design Code) allows to use up to **420 MPa (Grade 60)** yield strength steel.
 - Research project funded by Korean government with **KHNP** (Korea Hydro & Nuclear Power Co.) Research Institute
 - **8 years** (2011~2018) project, **KCI research fund = \$ 5 Million**
 - Experimental Test with **550 MPa (Grade 80)** yield strength steel





KCI Researches

Wall Test (Cyclic Loading)



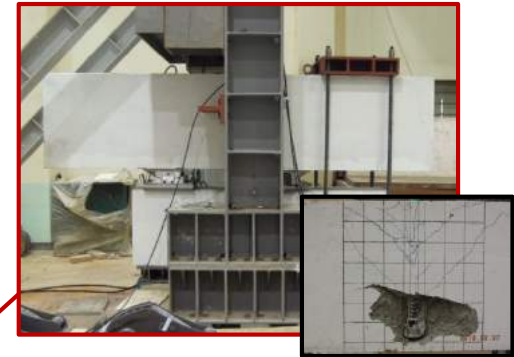
Beam Shear Test



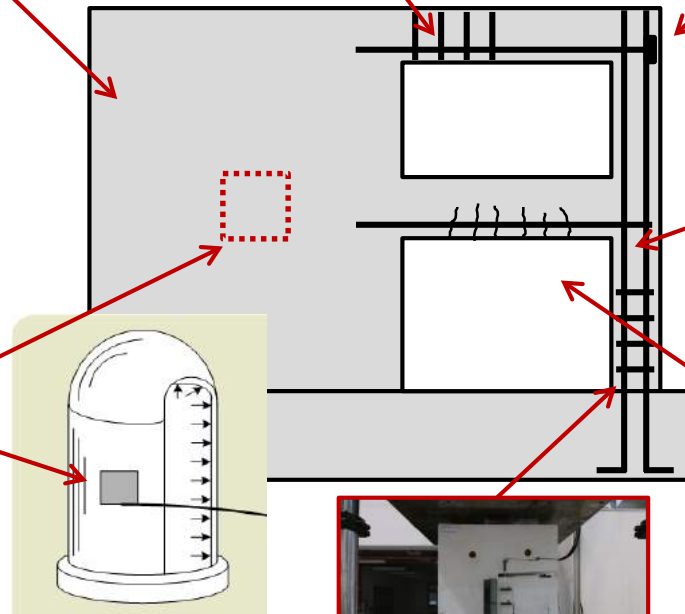
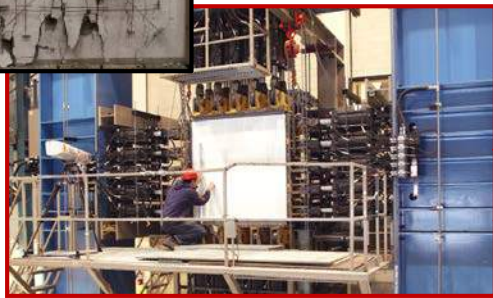
Beam Torsion Test



Headed Bar & Hooked Bar Test



Panel Test



Development Length Test



Crack Behavior Test



Shear Friction Test



KCI Researches

- **One of the KCI Research** : Application of High-Strength Steel
 - 8 professors participate in this project.
 - **Design Code** : re-evaluation and development of code provisions
- **Activities in ACI and Relationship with ACI Experts**
 - **ACI 349 Committee** : attended and presented test results **8 times**
 - **ACI 359 Committee** : attended and presented test results **7 times**
 - **Invited ACI experts** 5 times to discuss :
Dr. Munshi, Dr. Adediran, Prof. Darwin, Prof. Whittaker, Dr. N-H Lee
- **New project** is prepared : 5 years research with 700 MPa (**100 ksi**) steel



21st Plenary Meeting of ISO/TC71

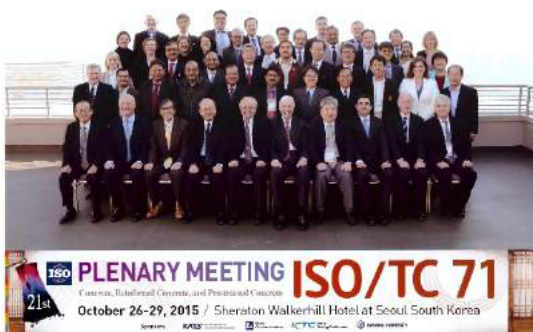


Chair James Cagley

- October 26th -29th, 2015, **Seoul, Korea**
- **Subcommittee 4** : Design Code
 - 3 updated National Codes are re-evaluated and approved.
 - The ISO 19338 Rules and List of Codes Deemed to Satisfy ISO 19338 was updated, March 30, 2016.
 - Updated codes: **Brazil**, ABNT 6118:2014
Korea, KCI Code 2012
United States, ACI 318-14



Chair James Wight



Thanks !