



# Japan Prestressed Concrete Institute



## Message from President Nakamura

The Japan Prestressed Concrete Institute (JPCI) is the only academic organization related to prestressed concrete (PC) in Japan, which was founded in 1958 as the Japan Prestressed Concrete Engineering Association.

PC structures, the subject of this institute, contribute to the formation of national land, economic development, and the enrichment of people's lives through the construction of infrastructures, and to the creation of comfortable and convenient spaces through the construction of buildings, and furthermore, contribute to the safety and security of society.

PC structures play a significant role in society, and for nearly 70 years the JPCI has contributed to and promoted the academic and technological advancement of PC structures in Japan. JPCI is engaged in a variety of activities, such as publishing a journal, books on various technical standards and guidelines, holding the annual Symposium on Developments in Prestressed Concrete and various seminars, and providing certification programs for engineers.

JPCI also participates in fib (The International Federation for Structural Concrete) as a representative of Japan, along with the Japan Concrete Institute (JCI), and plays an important role not only domestically but also internationally.

Today, we face many social issues that need to be addressed, such as preparation for large-scale natural disasters, maintenance and management of existing structures, and decarbonization. We must also address various issues for the next generation, including the development and construction of new structures such as offshore wind power, and the use of new technologies such as AI. In addition, without the utilization and development of human resources based on diversity, we can not preserve, develop, and pass on PC structures and technologies. We would like to carry out activities based on the importance of each of the following again: people (engineers), things (PC structures), and matters (technology).

We sincerely appreciate your continued support and cooperation.

Dr. Hikaru Nakamura, the 37th President of the Japan Prestressed Concrete Institute (Professor, Nagoya University)





## ORGANIZATION

Japan Prestressed Concrete Engineering Association which is the forerunner of JPCI was founded in 1958 to extend prestressed concrete engineering in Japan and contributed over 60 years in prestressed concrete engineering and structural concrete. JPCI co-organizes the national organization of fib (The International Federation for Structural Concrete) with JCI (Japan Concrete Institute). JPCI mainly contributes to activities of national organization in the field of structural concrete. The officer of JPCI becomes a member of the fib presidium as a Japanese representative, participates in planning and administrating of events.

## OUTLINE of ACTIVITIES

JPCI was established for the verification, advancement and promotion of prestressed concrete engineering. Our main activities are as follows.

- (1) Research and promotion of prestressed concrete engineering, and spread of those results
- (2) Publication of journals and reports, and providing technical courses and lectures
- (3) Activities related with domestic and international

#### organizations

- (4) Qualification and education for prestressed concrete
- (5) Various activities to attain our objects and public

# ■COMMITTEE ACTIVITIES

JPCI organizes working committees to carry out various activities functionally. The following list is a part of working committees.

- Technical Standard Committee
- Journal Editorial Committee
- International Committee
- Committee on Prestressing Reinforcements
- Symposium Organizing Committee
- Committee on Certification of Authorized Prestressed Concrete Engineer
- Committee on Certification of Professional Engineer for Concrete Structural Diagnosis and Maintenance
- Committee on Selection of Public Offering Research Committee on Archives of Prestressed Concrete Technology

## ■JOURNAL of Prestressed Concrete

JPCI publishes bimonthly journal. The journal is recognized as a valuable paper in the field of structural concrete. It gives the latest and useful information of prestressed concrete and structural concrete.



National Report of Japan on Structural Concrete 2022

# PUBLICATIONS

JPCI publishes various books on the prestressed concrete

engineering. The following are part of publications in English and Japanese. JPCI and JCI jointly publish "National Report of Japan on Prestressed Concrete Structures" for International fib Congress. "Prestressed Concrete for Beginners" is widely used for

education for college students and young engineers. The Korean edition is also available.

#### **English Publications**

- National Report of Japan on Prestressed Concrete Structures, for The 5th International fib Congress
- Guidelines for Maintenance of Prestressed Concrete Cable-Stayed Bridge and Extradosed
- Specifications for Design and Construction of Cable-Stayed Bridge and Extradosed Bridge
- Recommendation for Design and Construction of Concrete Structures Using Fiber Reinforced Polymer (FRP)

#### Japanese Publications

- Prestressed Concrete for Beginners
- Specifications for Design and Construction of Prestressed Concrete Structures with High Strength
- Specifications for Design and Construction of Hybrid
- Specifications for Design and Construction of Prestressed Concrete Cylindrical Water Tanks
- Specifications for Design and Construction of Prestressed Concrete Bridge using PE Sheath for Internal Bonded Post-Tensioning
- Guidelines for improving durability of Prestressed Concrete Structures
- Guidelines for Design and Construction of Prestressed Concrete Structures with High Strength Prestressing Steel

- Guidelines for Inspection of Prestressing Steels and Repair & Strengthening of Existing Bonded Post-Tensioned Concrete Bridges
- Report of Prestressed Concrete Structures on the Great East Japan Earthquake Disaster
- Anchoring Device for Prestressed Concrete (2010)

### SYMPOSIUM

JPCI holds the annual symposium on prestressed concrete and structural concrete for advancement of prestressed concrete engineering. Numerous technical papers and technical reports are presented.



## **JPCI AWARDS**

JPCI presents annual awards to eminent papers, structures, technical developments and construction technologies. The awards were founded in 1972 and were given for the first time in 1973. The award is one of

the most prestigious awards in the field of prestressed concrete engineering and structural concrete in Japan.



# **ENGINEER QUALIFICATIONS**

#### (1) Authorized Prestressed Concrete Engineer

JPCI certifies Authorized Prestressed Concrete Engineer to secure the quality of prestressed concrete structures and improve the technical ability of engineers concerned with prestressed concrete engineering. It is widely recognized and required as the qualification of prestressed concrete structure construction for public works. As of April of 2025, 4,664 engineers have been registered as Authorized Prestressed Concrete Engineer.

#### (2) Professional Engineer for Concrete Structural Diagnosis and Maintenance

The load of maintenance of structures has been increasing along with the stock of infrastructure. In such circumstances, JPCI has established the program for the Professional Engineer for Concrete Structural Diagnosis and Maintenance program that certifies the engineers with wide and advanced knowledge for diagnosis and maintenance of concrete structures. The wide activities by Professional Engineers for Concrete Structural Diagnosis and Maintenance are highly expected for the maintenance of concrete structures.

More detailed information is found on the website of JPCI.

https://www.jpci.or.jp