



BISCH Philippe, Bernard

Born 16th January 1949 in Paris

Civil engineer graduate of the "Ecole Nationale des Ponts et Chaussées" in 1971

TECHNICAL SPECIALISATION

Static and dynamic structural analysis. Earthquake engineering. Reinforced and prestressed concrete. Steel structures. Antiseismic devices. Design of civil engineering structures and buildings, particularly in the nuclear industry. Risk analysis. Standardisation. Expertise.

PROFESSIONAL EXPERIENCE

Since 1972, in engineering companies:

- has participated in the design of many large civil structures, such as bridges, footpaths, buildings, industrial structures, mainly in the nuclear industry (nuclear power plants, waste treatment plants, laboratories...), hydro-electric installations, etc.
- has been in charge of scientific and technical developments, of theories and calculation methods mainly in the fields of reinforced concrete and structural dynamics.
- has performed expertises of damaged structures.
- has taken successive managerial positions.

Other professional activities (past):

- Previously, president of the Innovation Commission of SYNTEC (Syndicate of the engineering profession).
- Previously, president of « Institut de l'Ingénierie » (R&D Institution of the engineering profession).

Participation to several R&D projects, f. i.:

- CASSBA : Experiment on the seismic behaviour of RC walls.
- CAMUS : Series of experiments on the seismic behaviour of RC walls.
- ECOLEADER (European project) : Experiment on the seismic behaviour of RC walls.
- MIRADOR : Theoretical study on structural robustness.
- ARVISE : Contribution to the seismic behaviour of structures.
- GERMA : Management of risks in civil engineering projects.
- CEOS (technical manager) : French National Project dedicated to early age behaviour and cracking of RC structures. Particularly in charge of reinforced concrete walls submitted to cyclic loadings.
- MAESTRO: definition and testing of reinforced concrete structures for ductility.

TEACHING EXPERIENCE

In parallel with the professional occupation, has been in charge of courses in engineering schools at different periods:

- ECOLE NORMALE SUPERIEURE in CACHAN
- CHEC (Centre for Higher Studies in Construction)
- ECOLE DES INGENIEURS DE LA VILLE DE PARIS (EIVP)

in the fields of fundamental mechanics, structural mechanics, dynamics and earthquake engineering.

Mainly professor at the "ECOLE NATIONALE DES PONTS ET CHAUSSEES" (presently "Ecole des Ponts ParisTech"). In the past and at present:

- From 1972 to 1988, Lecturer, later Assistant Professor for Mechanics courses (fundamental mechanics, continuous medium mechanics, dynamics, solids, fluids).
- From 1987 to 1996, Assistant Professor for the "Structural Mechanics" course.
- From 1987 onwards, in charge of "Plates and Shells" and "Calculation and Design of Industrial Equipment" courses.
- From 2002 to 2012, Professor in charge of the main "Structural Mechanics" course.
- Presently, Professor in charge of "Structural Dynamics and Stability in Industry" and "Plates and Shells" courses.

Also lectures in several schools, f. i. master "Civil engineering of structures for energy" (ENPC & ECP), seismic risk management (ENSAM), in professional training courses, etc.

PARTICIPATION TO STANDARDISATION

- Since the beginning (ENV and EN stages), member of CEN/TC250/SC8 in charge of Eurocode 8 (aseismic design) as French representative, French technical contact, vice-president of the SC. Presently president of the SC.
- Member of Committee P06E (French mirror group to Eurocodes).
- Since the beginning, member of CN-PS, French standardisation committee in charge of aseismic design : member of the PT which wrote the French standard PS92 (before Eurocode 8).
- Member of CEN/TC340 in charge of EN 15129 (standard for aseismic devices).
- Member of GEPP (French governmental group in charge of the preparation of regulations related to protection against earthquakes).
- Member of the sub-commission of AFCEN in charge of design and construction rules for the civil structures of nuclear plants ETC-C and RCC-CW.

SCIENTIFIC ASSOCIATIONS

- Member of AFPS (Association Française de Génie Parasismique) since its foundation (1983). Formerly, President of the association. Presently Honorary President.
- Former President of EAEE (European Association for Earthquake Engineering).
- Member of TG 2.1 of *fib*-CEB.

PUBLICATIONS IN THE FIELD OF STRUCTURAL MECHANICS AND EARTHQUAKE ENGINEERING

Complete list not reproduced.

Books in the recent period:

- P. Bisch & A. Coin : « **Conception des murs en béton selon les Eurocodes. Principes et applications** ». Presses des Ponts (2009).
- Participation to « **Seismic design of buildings to Eurocode 8** ». Spon Press (2009, revised 2017).
- Participation to « **Renforcement parasismique des bâtiments** ». Editions du CSTB (2010).
- Participation to the "**Manual for the seismic design of steel and concrete buildings to Eurocode 8**" produced by AFPS/SECED/IstructE. IstructE (2010).
- Participation to: "**Eurocode 8: Seismic Design of Buildings**". JRC Technical Report of Workshop held on 10-11 February 2011 at Lisbon. Joint Report Center, European Commission (2012).
- P. Bisch : « **Mécanique des coques. Théorie et applications** ». Presses des Ponts (2013).
- Participation to « **Recommandations pour la maîtrise des phénomènes de fissuration** ». Presses des Ponts (2015).
- Participation of « **Control of cracking in reinforced concrete structures - Research project CEOS.fr** ». iSTE, WILEY (2016).