

Michel VIRLOGEUX

Michel Virlogeux graduated from Ecole Polytechnique in 1967 (promotion 1965), and from Ecole Nationale des Ponts et Chaussées in 1970. He became Docteur Ingénieur of the Pierre et Marie Curie University (Paris) in 1973. In 2009 he became Doctor in Technology Honoris Causa of the Loughborough University.

He became Ingénieur des Ponts et Chaussées of the French Civil Service in 1970, and Ingénieur en Chef in 1984.

Between 1970 and 1994, he worked as civil servant, during three years in Tunisia, and between 1974 and 1994 in the S.E.T.R.A., the technical service of the Highways Administration. In 1980, he became head of the concrete bridge division, and in 1987 head of the large bridge division, steel and concrete.

He designed many bridges, among which the Ottmarsheim bridge over the Alsace Canal, the Abbeville and la Flèche bridges, the Moulin sur Escaut rail bridge, the Seyssel cable-stayed bridge over the river Rhone, the Ré Island Bridge, the Cheviré Bridge over the river Loire, the Auray viaduct, the Chateaubriand arch bridge over the river Rance, the Burgundy cable-stayed bridge at Chalon-sur Saône, the Bouran viaduct at Rodez, the overpasses at Antrenas and Le Truc de la Fare or the A75 Motorway, the Morbihan arch bridge at La Roche Bernard over the river Vilaine, the Kerkinstensalmi cable-stayed bridge in Finland, the Grand-Tressan pedestrian bridge at Bordeaux, the bridges over La Rivière des Pluies and La Rivière Saint-Denis in La Réunion island and of course the Normandy Bridge. He also developed the preliminary design of the Millau Viaduct.

He has been expert for the Moosou bridge in Ivory Coast and the Edea bridge in Cameroon, consultant for the Evripos bridge in Greece and many important bridges in France, specially on the A75 Motorway, such as the Truyère Viaduct at Garabit, the Piou and Rioulong viaducts, the bridge over the river Lot at la Mothe, and took part in the preliminary design of the Tanus viaduct over the river Viaur.

With his team he also controlled the execution design of several important bridges in addition to those of which he developed the project : the bridge over the river Marne and the Neuilly Plaisance viaducts and later the Ru de Maubuée viaduct for the Marne-la-Vallée line of the Paris Mass Transit System, the viaducts over the Gouet and Gouedic at Saint-Brieuc, the Fontenoy viaduct over the river Moselle, the Meylan and Illhof pedestrian cable-stayed bridges, the Tricastin bridge over the Donzère-Mondragon canal and the experimental bridges at La Ferté-Saint-Aubin, Cognac, Arbois and Charolles.

He contributed to some technical evolutions, such as for external prestressing, cable-stayed bridges and composite structures.

Between January, 1994, and January, 1995, he worked as consultant for the Highways Direction at the Ecole Nationale des Ponts et Chaussées.

Since February, 1995 he works as a private consultant. As such he developed the conceptual design of the Avignon viaducts for the French Railways (for the High Speed Train) and was later consultant of the French railways for its erection, and he leaded the control of the design of the Vasco de Gama Bridge for the Portuguese administration (GATTEL). He made the preliminary design of the Verrières Viaduct. He developed the Millau Bridge project with Sir Norman Foster, Europe Etudes Gecti, SERF and Sogelerg, and later has been consultant of the Eiffage Group for the erection of this major bridge. He developed for GTM the concept of the continuous, completely suspended deck of the Rion-Antirion bridge. He has been expert for the replacement of the suspension of the Tancarville bridge and for the analysis of cable vibrations in the Saint-Nazaire bridge. He was consultant for Freyssinet in the call for tenders for the replacement of the suspension of the Aquitaine bridge (not selected). He has been also consultant for the Japan Highway Public Corporation for the design and construction of the Ibi and Kiso river bridges. He had some participation as consultant in the Stonecutters Bridge project in Hong Kong, and prepared a proposal for the Chacao Bridge in Chile (two main suspension spans about 1100 metres long each). He has been a member of the Panel of Advisers for the Sutong bridge in China. He also won several design competitions : the Avignon Viaducts, the Sarreguemines pedestrian bridge (a suspension bridge), the bridges on the river Charente at Jarnac, the Givet cable-stayed bridge over the river Meuse, the mobile bridge over the river Seine at Rouen, the bridge over the river Hérault at Gignac, the bridge over the River Vienne at Limoge, the Altiani Bridge over the Tavignano in Corsica, the Saône Bridge at Macon and the mobile Bridge over the River Garonne at Bordeaux. He designed with the SETRA the Térénez curved cable-stayed bridge and is now consultant for the owner during construction.

He received the I.A.B.S.E. Price in 1983, for its first attribution, the Guerite Silver Medal of the British Section of the Ingénieurs et Scientifiques de France in 1985, the Practical Construction Award of the American Concrete Institute in 1992, the Reed and Mallik Medal of the Institution of Civil Engineers in 1994, and the George S. Richardson Medal of the Engineers' Society of Western

Pennsylvania in 1995. In France, he received the silver-gilt medal of the Société d'Encouragement au Progrès in 1993, and one of the five « Vinci de la Construction » which have been attributed in 1994 by the Société d'Encouragement pour l'Industrie Nationale. In February, 1995, he received the Award of Excellence from the Engineering News Record, given for the first time outside America. In February, 1997, he received the Gold Medal of the Institution of Structural Engineers, and, in May, the Silver Medal of the French Académie d'Architecture. Also in 1997 he received the Leadership Award of the American Segmental Bridge Institute; in 1999 the Fritz Leonhardt Price for its first attribution, and the Gustave Magnel Gold Medal. In 2002 he received the Award of the Italian Prefabrication Industry (CTE), in 2003 the Turner Medal of the American Concrete Institute, the International Award of Merit of the International Association for Bridge and Structural Engineering, and the Bridge Design Award of the Bridge Engineering Association (USA). In 2004 he was elected the Engineer of the Year by the French engineering associations, and in 2005 he received the Hills Millenium Award of the Institution of Engineering Designers and the Gold Metal of the Institution of Civil Engineers. In 2006 he received the Freyssinet Medal od the Fédération Internationale du Béton and the Isambard Kingdom Brunel Award of Institution of Civil Engineers, and in 2007 the Albert Caquot Medal of the Association Française de Génie Civil. In 2008 he received the Icarus Award of the la Coruña University.

Several of the bridges which he designed, or for which he has been consultant, have received architectural awards : the Seyssel bridge in 1988 received an Award of the Steel Construction Industry, and the Antrenas bridge was nominated in 1994. At the "Rubans d'or de la Route", the Cheviré, Chateaubriand - over the river Rance - and Bouran bridges received an award in 1991; the Truyère viaduct at Garabit in 1993; the Antrenas overpass and the Normandie Bridge in 1995, with a special award for the latter; the Morbihan Bridge at la Roche Bernard in 1997, the Tanus Viaduct in 1999 and the Verrières viaduct in 2002. In 1998, the Normandie Bridge received a FIP Outstanding Structure Award. The Millau Viaduct received several awards, and the Gustave Flaubert Bridge an Award of the Steel Construction Industry.

He has been Professor of Structural Analysis at the Ecole Nationale des Ponts et Chaussées from 1978 to 1994, of Bridge Design at the Ecole Spéciale des Travaux Publics from 1973 to 1993, and of stability of concrete structures at the Centre des Hautes Etudes de la Construction from 1985 to 2006. In 2008 he became Professor of Bridge Design and Construction at the Ecole Nationale des Ponts et Chaussées.

He has been Secretary, Secretary General and Executive Vice-President of the Association Française Pour la Construction during more than twenty years (1974-1997), and President of the Fédération Internationale de la Précontrainte since September, 1996 until the merger with the Comité Euro-international du Béton in May, 1998 to constitute the Fédération Internationale du Béton, *fib*, of which he has been elected President ; he became Honorary President of *fib* at the end of his term in September, 2000. He was a member of the Comité des Applications de l'Académie des Sciences until the transformation of the CADAS into the new Académie des Technologies in 2000, of which he became member ; he is Fellow of the Institution of Structural Engineers, of the Institution Civil Engineers and of the Indian National Academy of Engineering. He has been elected President of the European Construction Institute in 2008.

He has been nominated expert at the Paris Appeal Court from 2003 to 2007, and at the Versailles Appeal Court since January, 2009.

He was made "Chevalier de l'Ordre National du Mérite" in 1989, "Officier" in 2000 and Chevalier

de la Légion d'Honneur in November 2005.



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