

Raymond LAFITTE

Curriculum Vitae

- Positions :** Expert
Professor at the Swiss Federal Institute of Technology of Lausanne (EPFL).
Teaching on the subjects of Electrical powerplants and Water resources development.
Former Expert for the Swiss Government for dam safety.
- Profession:** Civil Engineer.
- Date of birth :** 13 January 1935.
- Nationality:** Swiss.
- Professional Societies :** Member of the Swiss Society of Engineers and Architects.
Member of the Fédération Romande pour l'Energie (FRE). Chairman of the Scientific Commission.
Honorary Member of the Swiss Committee on Dams and former President.

Chairman of the Committee on the Governance of Dam Projects of the International Commission on Large Dams (ICOLD),
Member of the Advisory Committee to the President of ICOLD,
Member of the Dam Safety Committee of ICOLD and former Chairman,
Former Vice president of ICOLD.

Honorary Member of the International Hydropower Association (IHA), and former President.

Former Member of the Board of Governors of the World Water Council (WWC).
- Education:** Graduate Civil Engineer of the Swiss Federal Institute of Technology in Zurich (1958).

Employment record:	1999	Expert.
	1993-1998	Stucky Consulting Engineers Ltd , Renens, Switzerland. General Manager, Member of the Board.
	1962-1993	Bonnard & Gardel Consulting Engineers Ltd , Lausanne, Switzerland. Engineer, Chief engineer, Vice Manager, General Manager and Member of the Board.
	1959-1960	Compagnie d'Etudes de Travaux Publics , Lausanne, Switzerland Engineer

Participation in or management of the following studies:

Dams:	Switzerland:	Stafel, Hydro-Rhône.
	Algeria:	Koudiat Acerdoune, Fergoug, Zardézas, Deurdeur, Cheffia, Harreza, Boukourdane, Bou-Hallou, Arris.
	Iran:	Jiroft, Shahid Rajaei.
	Morocco:	Boukhalef, Kadoussa, Jbel Lakhel, Bouanane, Martil, Dkhila, Lalla, Aïcha, Sidi Saïd, El Ghrass, Sebou, Ansegmir.
	Ecuador:	Toachi Pilaton.
	Ivory Coast:	San Pedro.
	Turkey:	Deriner.

Expert Reports on dams: Keban (Turkey), Lar (Iran), Al Wahda (Morocco), Sidi Abdelli*, Taksebt* (Algeria), Lessoc*, Fah*, Arnon*, Gebidem*, Ferpècle*, Cleuson* (Switzerland), Ziga* (Burkina Faso), Karabura*, Kirov*, Orto Tokoi*, Papan* (Kyrgyz Republic), Karun IV* (Iran), Kebir*, Moula* (Tunisia).

(*Chairman of the Panel of Experts)

Hydro powerplants:	Switzerland:	pumped-storage plants, Hydro-Rhône, Chippis, Cleuson-Dixence, Pont de la Tine, Aubonne.
	Morocco:	Martil, Ait Messaoud, Afourer.
	Iran:	Jiroft, Shahid Rajaei.
	Turkey:	Deriner.

Underground works in Switzerland:

Caverns for stockpiling liquid fuel.

Tunnels: Rangiers, Arzilier, Chauderon, Flon, Mont Terri, Gornergrat, Moosbach, Lôtschberg.

Various studies in the field of nuclear engineering, lake and sea works, structures and foundations.

Languages: French, English, German

PUBLICATIONS

Dams and hydroelectric power plants

1. Publication no 98. Swiss Society for soils and rocks mechanics. 1978.
"Prestressed anchors for the raising of Zardézas dam - Algeria". (In collaboration with F. Vuilleumier).
2. Q50, R54, XIIIth Congress of the International Commission on Large Dams (ICOLD). New Delhi, 1979.
"Al Ibtissam dam spillway - Algeria". (In collaboration with K. Belba chir).
3. International symposium on the retrofitting and upgrading of hydroelectric schemes - Zurich, 1979.
"Regulation stability analysis for a tail water surge chamber". Application to the Cabora-Bassa - Mozambique hydroelectric scheme.
4. XVth ICOLD Congress. Lausanne, 1985.
General report on question 59 : *"Rehabilitation of Dams to improve Safety"*.
5. XVIth ICOLD Congress. San Francisco. 1988. Q63, R22.
"Safety of Swiss dams against floods; design criteria and design flood" (in collaboration with R. Biedermann, P. Delley, K. Flury, W. Hauenstein and G. Lombardi).
6. Flims-Waldhaus seminar (Wasser, Energie, Luft 11/12, 1988).
"Prospective research on concrete for dams in connection with the theory of fracture mechanic".
7. Water Power & Dam Construction, April 1989.
"Dam safety against Floods".
8. Water Power & Dam Construction, March 1993.
"Probabilistic risk analysis of large dams : its value and limit".
9. Hydropower & Dams, Issue Six, 1996.
"Classes of risk for dams".
10. Hydropower & Dams, Issue One, 1998.
"Hydropower development: a world perspective".
11. 2nd World Water Forum, Session 126 "Dams and Water Management", The Hague, March 2000.
"Dams and energy: the role and benefits of hydroelectric power" (in collaboration with Mrs A. Bartle).
12. Q77, R64, 20th ICOLD Congress CIGB, Beijing, September 2000.
"205 barrages en Suisse, pour le bien-être des populations" (in collaboration with R. Bishof, B. Hagin, W. Hauenstein, L. Mouvet).
13. Renewable Energy Generators of Australia -REGA- Conference on Renewable Energy, Launceston, Australia, June 2001.
" The future of renewable energy and the role of hydroelectricity".
14. 3rd WCD Forum Meeting, Cape Town, 2001.
" IHA statement on the WCD Report".
15. International Conference on Water Resources Development-Flood Control, Irrigation, Waterways, Electric Power and its Evacuation- New Dehli, February 2002.
" Sustainable Development- Limit of a doctrine".
16. 3rd World Water Forum, Theme "Dams and Sustainable Development", World Water Council keynote address, Kyoto, March 2003.
" Water storage for human sustainable development".
17. Workshop on Impacts of Large Dams. Istanbul, Turkey, 2004.
"Impacts of Dams in Switzerland – Direct and Indirect Benefits and Costs" (in collaboration with W. Hauenstein).

Nuclear engineering: 9 publications concerning the structural features of nuclear power plants.

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