

## EMERITUS PROFESSOR COLIN J. APELT

Colin Apelt is Emeritus Professor and Honorary Research Consultant in the department of Civil Engineering at The University of Queensland. He was appointed Professor of Civil Engineering in 1979 and served as Head of Department from 1982 to 1994. After retirement from full time academic staff in 1996, he was appointed Professorial Research Fellow until the end of 1999.

His research fields are in Computational Hydraulics applied to tidal and flood flows, to sediment transport and water quality in estuaries and marinas, to waves and to transients in pipelines; Computational Fluid Mechanics applied to bluff body flows and to flows in open channels; Experimental Fluid Mechanics applied to flows past bluff bodies with relevance for flood and debris loads on bridges and for wind engineering, to efficient passage of flood flows through waterways, to turbulence and energy losses in natural streams and engineered waterways, and to wave forces on berthing structures. He has substantial interests in all aspects of dredging and arranged four specialist courses on dredging in Brisbane since 1987.

He has acted as specialist consultant on hydraulic design of many major projects involving spillways, energy dissipators, bridges, culverts and flood mitigation works; and on computer modelling of flood and tidal flows in design and/or flood plain planning studies associated with many river and estuary systems in Queensland and New South Wales.

Since 1995 he has acted as specialist consultant in several major flood plain planning studies for the Brisbane River system and the Nerang River System. Those most relevant to the proposed work are;

- Review of Hydrodynamic Modelling for Tamar River & North Esk River Flood Study for Launceston City Council. (2008)
- Lord Mayor's Taskforce on Suburban Flooding (Chairman) for BCC. 2005
- Review of Brisbane River Flood Study for BCC as member of Independent Review Panel (R. Mein, C.J. Apelt, J Macintosh, E Weinmann) 2003
- Review of Floodplain Hydraulic Modelling Methodology for Gold Coast City Council (with R Tomlinson). 2001
- Review of Safety Analysis of Wivenhoe, Somerset and North Pine Dams (with Eric Lesleighter (SMEC)). 1992-1995

The details of these and of other recent consultancies can be provided if required.

### Academic Qualifications

- 1952 BE(HonsI) in Civil Engineering, The University of Queensland.  
1957 DPhil (Oxon), Fluid Dynamics and Numerical Analysis, Oxford University.

### Professional Affiliations

Fellow of The Institution of Engineers Australia  
Chartered Professional Engineer (retd)

### Prizes and Awards

- 1952 University of Queensland Medal.  
1954 Rhodes Scholar for Queensland.  
1965 R.W.Chapman Medal of The IEAust.  
1966 Fulbright Fellow, Senior Research Fellow Category.  
1969 National Science Foundation Senior Foreign Scientist Fellowship Award.  
1985 The Hawken Address, Queensland Division of The IEAust.  
2001 Second Henderson Orator.

### **Professional Experience**

1951(Dec)-1954(Jul) Design Engineer, Queensland Irrigation Commission.  
1957(Jun)-1958(Nov) Postdoctoral Research Fellow in Engineering Science, Oxford Univ.  
1958(Dec)-1964(Dec) Senior Lecturer in Civil Engineering, University of Queensland.  
1965(Jan)-1979(Sep) Reader in Civil Engineering, University of Queensland.  
1966(Feb)-1966(Sep) Research Associate, Maths Department, MIT.  
1969(Feb)-1970(Jan) Visiting Professor, Dept of Civil Engineering, Colorado State Univ.  
and Visiting Scientist, Nat. Centre for Atmos. Res., Boulder, Colorado.  
1977(Jan)-1977(Dec) Visiting Prof., Civil Engineering, Univ. Canterbury, Christchurch.  
1979(Sep)-1996(Jul) Professor of Civil Engineering, University of Queensland.  
1982(Jan)-1994(Apr) Head of Department of Civil Engineering, Univ. of Queensland.  
1996(Jul)- 1999(Oct) Emeritus Professor and Professorial Research Fellow, Dept of Civil  
Engineering, Univ. of Queensland.  
1999(Oct)-Present Emeritus Professor and Honorary Research Consultant, Dept of Civil  
Engineering, University of Queensland.

### **Competitive Research Grants**

1972-1981	ARGC	\$68,300
1981-1987	MST/AMSTAC	\$143,200
1985-1990	ARC	\$106,200
1985-1988	ARRB	\$20,000
1993-1995	NCHRP(USA)	\$60,300
1995	MARINAS	\$53,400
1997-1998	CRC-TOURISM	\$29,000
1998-1999	CRC-TOURISM	\$110,000
1999- 2000	CRC-TOURISM	\$120,000

### **Supervision of Postgraduate Research**

PhD: 15 completed; MEngSc: 17 completed.

### **Publications Summary**

2 Books; 90 refereed papers; 24 Commissioned Technical Reports; 2 Technical Movies; 1 Technical Video; 31  
unrefereed papers and research reports.

The details of publications can be provided if required.