

**Dr. George Charles Clifton**

**Present Position (since 2008):**

**Associate Professor in Civil Engineering at the Department of Civil and Environmental Engineering of the University of Auckland (NZ)**

**Biography:**

* **From 1979** **to 1981 he worked for a major New Zealand consulting engineering firm, (now) Beca Consultants, then for other two years for a joint UK/Saudi Arabian consulting engineering firm in London, RH Sanbar Consultants, Ltd**. **In this latter position he was responsible for the structural design of two high profile structures in Riyadh**, Saudi Arabia; the heardquarters of the Arab National Bank and the Entrance Gate to the King Saud University.
* **In 1983, Charles started the Structural Division of the New Zealand Heavy Engineering Research Association** (HERA). **Where he conducted and coordinated research into structural steel and composite steel/concrete buildings, fire engineering and durability** in order to provide robust, dependable design solutions for the performance of structural steel buildings in severe events and for ensuring their durability in all environments.
* The outputs from this research have been presented to the consulting engineering profession; first as design guides, starting in 1984 and then into new and revised Standards, from 1989.
* **A long and productive collaboration with The University of Auckland, whilst at HERA, saw several innovations researched, and also the award of his PhD in 2005**. The principal outcome of his PhD was two new forms of semi-rigid beam to column connections for moment-resisting steel frames which are now used in a number of high profile New Zealand buildings.
* **In 2008, he joined the Department of Civil and Environmental Engineering, specialising in structural steel and composite engineering**. Here he has very successfully continued research optimising the semi-rigid connections developed during his PhD into world recognised low damage solutions for steel buildings, ongoing development of robust solutions for steel framed buildings in severe fires, development of seismic resilient solutions for pallet racking systems and further development of design guidance for durability.
* **During his career he takes 8 Peer Recognition**
* **The Principal Areas of Technical Expertise are** 
  + **-Behaviour and design of steel seismic-resisting buildings and systems, with particular reference to fire conditions, corrosion and coating**
  + **-Behaviour and design of composite steel and concrete elements**
* **He has participated and led many committee and editorial boards to Standards and key end user documents, nationally and internationally, mainly devoted to Seismic Design of steel earthquake resistant structures, corrosion and durability, Earthquake Actions, Composite Structures, Fire Resistance and design.**
* **His last effort was the publication of a commentary to the fire engineering section of Austalian and New Zeland code, concerning Fire Engineering Design of Multi-Storey Steel and Composite Steel/Concrete Structures**.
* **He is authors of more of 220 Refereed Publications since 1984:**