History of the Fuel Cell

Although the Fuel Cell is only just starting to be considered as an alternative to conventional ways of generating power it is not a new concept. The first fuel cell was developed as long ago as 1839. Sir William Grove (1811-1896), a British lawyer and amateur scientist discovered the principle during an unsuccessful electrolysis experiment. However there were a number of problems with this Fuel Cell that rendered it impractical and there was little interest in the development of fuel cells for many more years to come.

Francis Bacon, a chemical engineer at Cambridge University, revived interest in the fuel cell in the 1930's. It took Bacon until the 1950's to develop and produce a practical fuel cell that had an increased power density. Bacons fuel cell electrodes were constructed from Nickel rather than the Platinum that had been used by Grove. This reduced the cost of the fuel cell as Nickel is less expensive than Platinum.

The first practical application of a fuel cell was not witnessed until over a century after discovery when NASA used them in the Gemini and Apollo space programs. Both programs required the fuel cell to provide a source of electricity. The Apollo space program also relied on the fuel cells to provide the astronauts with a source of drinking water. Since NASA adopted the fuel cell as a power source the technology has achieved widespread recognition from industry and governments as a potentially clean energy source for the future.