

**Report of July Meeting  
Royal Society  
Southern Highlands Branch**

**Speaker: Professor D. Brynn Hibbert**  
**B.Sc., Ph.D. Lond. C.Chem FRSC FRACI**  
**Professor of Analytical Chemistry,**  
**School of Chemistry,**  
**University of New South Wales.**

**Topic: *Crooks, Cranks and Charlatans:  
the search for a free lunch***

Professor Hibbert migrated to Australia in 1987. He described himself as a cricketing Yorkshireman with a wide range of interests. Brynn Hibbert's current research interests include electrochemistry sensors, (e-nose, ABC New Inventors People's Choice, November 2008), chemometrics (multiway, multivariate), Bayesian statistics (e.g. heroin signature program – NMI) and measurement chemistry (IUPAC).

A particular topic which has fascinated Brynn Hibbert for many years has been the history and analysis of Perpetual Motion machines, and that was the subject he selected to present to the forty attendees at the Royal Society Southern Highlands Branch meeting on the chilly Highlands evening of July 16.

Professor Hibbert began his lecture asking why people hanker after Perpetual Motion and other scams. Claims for Perpetual Motion were presented as long ago as 1518, when Anthony Zimara produced his plans for a machine which was basically a windmill attached with long strings to bellows. The idea behind this machine was that the wind would turn the windmill, which in turn would operate the bellows, which then would produce more wind to turn the windmill! It was not difficult for Brynn Hibbert to find numerous other examples of claims for Perpetual Motion from 500 years ago to the present time.

Reasons why people throughout the ages have wanted to believe in Perpetual Motion devices were varied. Some wanted cheap energy, others wanted to see established scientists proved wrong, some wanted to get rich, while others saw such ideas as possibilities for never having to die. Whatever the reason, Perpetual Motion machines have always had willing believers who were prepared to ignore the laws of thermodynamics in a quest for the impossible.

It was clear to Brynn Hibbert that scams involving Perpetual Motion machines could readily generate income for the fraudster. Some have sold the plans for such machines for other people to make, then when the machine does not live up to expectations, blame the purchaser for not having followed the plans correctly. Others try patenting bits of the machine, then sell the rights to the invention. People have made money by exhibiting their machine and charging admittance, while others have even managed to obtain grants to study the effect of their invention further.

Professor Hibbert's advice to the audience was to "Run while you have the chance" if the answer to any of the following questions is YES:

- Is it claimed that there is more energy coming out of the device than going in?
- Has God asked the inventor to solve the World's energy problems?
- Have they been working at this for more than ten years?
- Have you been invited to invest in the invention?

Professor Hibbert's wide-ranging interests have frequently made him the obvious choice as an expert witness in scam cases. One such case involved the *Ion Mat* which was marketed in Australia as a cure-all for health problems ranging from insomnia to arthritis and more. The evidence given by Hibbert was that the claimed negative ions were not produced by the mat at all, and that the mat in fact generated the electric field of a toaster!

The final words of this very entertaining and informative lecture were those of Albert Einstein: *All our science, measured against reality, is primitive and childlike – and yet it is the most precious thing we have.*

At the conclusion of the lecture, Professor Hibbert was asked numerous questions by the audience. The vote of thanks was given by Anne Wood.

Anne Wood