

## EPILOGUE

### The Cold Fusion Phenomenon as a Typical Complexity in Hydrated Solids

Science is a human endeavor which began late in the history of civilization. Its activity resides in a thin surface layer of our brain, supported by fundamental, old, and instinctive activities in deep in the brain. Reason is one of the characteristics of human beings, together with others such as righteousness and sensibility. Rationalism, an essential part of science, is a subtle activity governed by emotional movements deep in the brain. Pascal's words express it briefly; "Man is but a reed, the weakest in nature, but he is a thinking reed." (B. Pascal, *Pensées*, 347)

Scandalous events which occurred in connection with the discovery of the cold fusion phenomenon (CFP) were results induced into the scientific world by an underlying old world, as described in great detail by G. Taubes. However, it is shortsighted to conclude that the essence of the CFP is fraud from the tragicomedy played by actors controlled by secular desire and a lack of knowledge. It is similar to the fact that I. Newton's controversy with G.W. Leibniz about the discovery of differential calculus does not spoil his accomplishments.

Consider an example of confusion, which tends to occur during a crisis concerning a new paradigm. The DOE Report of 1989 and the subsequent book by Huizenga, chair of the committee that presented the Report, did not have the foresight to look beyond the limits imposed by the established scientific world. Opponents of the CFP were similarly behaved after the Report, and several scientific papers that denied the possibility of the Fleischmann's hypothesis were published.

On the other hand, proponents were mired in established scientific theory the same as opponents. They adhered to an old frame of reference and used questionable assumptions to change reaction probabilities of  $d-d$  fusion in order to reconcile several uncertain tiny parts of a vast number of facts. These trials remind us of the Lorenz contraction devised to reconcile the result of the Michelson–Morley experiment with classical mechanics instead of the revolutionary assumption proposed by Einstein of the constancy of the speed of light for every reference frame.