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(Back numbers of this News are posted on the above geocities and/or PSU site of the CFRL Websites)

CFP (Cold Fusion Phenomenon) stands for “nuclear reactions and accompanying events occurring in open (with external particle and energy supply), non-equilibrium system composed of solids with high densities of hydrogen isotopes (H and/or D) in ambient radiation” belonging to Solid-State Nuclear Physics (SSNP) or Condensed Matter Nuclear Science (CMNS).

This is the *CFRL News* (in English) No. 79 for Cold Fusion researchers published by Dr. H. Kozima, now at the Cold Fusion Research Laboratory, Shizuoka, Japan.

This issue contains the following items:

- 1. ICCF17 was held in Korea**
- 2. Death of two big men in the Cold Fusion Research.**

Martin Fleischmann (August 3) and Hal Fox (August 20) died in August

- 3. JCF13 will be held in Nagoya on December. Three papers from the Cold Fusion Research Laboratory will be presented there.**

- 1. ICCF17 was held in Korea**

The 17th International Conference on Cold Fusion was held on August 12 – 17, 2012 at DCC, Daejeon, Korea.

Details of the Conference have been posted at following ICCF17 Website:

<http://www.iccf17.org/>

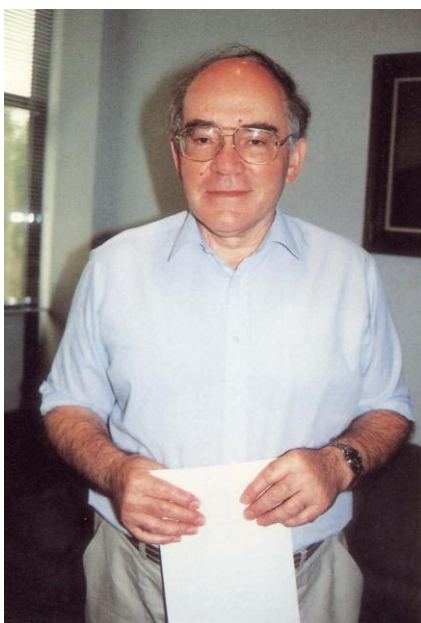
I have edited the papers presented at the Conference from its “The Preprint of the ICCF-17 Proceedings” and posted it at the following pages of CFRL Website after the CFRL News No.79 for your convenience:

<http://www.geocities.jp/hjrfq930/News/news.html>

2. Death of two big men in the Cold Fusion Research.

Martin Fleischmann (at his age 85) and Hal Fox (at his age 89) died in August, 2012.

(1) Martin Fleischmann (March 29, 1927 – August 3, 2012)



Martin Fleischmann showing a paper dedicated to him by H. Kozima at his office in IMRA S.A. Science Center (220 Rue Albert Caquot, Sophia Antipolis, 06560 Valbonne, France).
Photo by Hideo Kozima on April 7, 1995.

Martin Fleischmann has opened the gate to the cold fusion phenomenon (CFP) in the solid-state nuclear physics (SSNP) or condensed matter nuclear science (CMNS) by his paper* published in April 1989. He used the words “cold fusion” to express his presumption that $d-d$ fusion reactions are occurring in their sample PdD_x (x ~ 1.0). His motivation to perform his experiment is explained in another paper published in 1998**. His presumption of $d-d$ fusion reactions, we know now, is not a fundamental for the CFP and a tiny part of various nuclear reactions occurring in the materials composed of transition metals and hydrogen isotopes, which we would like to call the cold fusion phenomenon (CFP), an important part characterized by nuclear reactions in solids consisting SSNP or CMNS. Anyway, we have to accept the remark “Preliminary note” written above the title “Electrochemically induced nuclear fusion of deuterium” of his paper* more seriously when we evaluate his papers.

* M. Fleischmann, S. Pons and M. Hawkins, "Electrochemically induced Nuclear Fusion of Deuterium," *J. Electroanal. Chem.*, **261**, 301 – 308 (1989).

**M. Fleischmann, "Cold Fusion: Past, Present and Future," *Proc. ICCF7*, p.119 (1998). Abstract of this paper (*Abstracts of ICCF7* (1998, Vancouver, Canada), p.60 (1998).) is contained in a book (H. Kozima, *Discovery of the Cold Fusion Phenomenon*, Ohtake Shuppan Inc., Tokyo, 1998. ISBN 4-87186-044-2. as Appendix (17.7)) and also posted at the following page of the CFRL website:

<http://www.geocities.jp/hjrfq930Cfcom/Histry/histry/Flschmnhis.htm>

Steven B. Krivit reports **the death of M. Fleischmann** in his *New Energy Times News Service*. “[Fleischmann Dead at 85: End of an Era.](#)”

<http://blog.newenergytimes.com/2012/08/04/fleischmann-dead-at-85-end-of-a-n-era/>

“Fleischmann died Aug. 3 at his home in Tisbury, U.K., in the presence of his family. He suffered from numerous health problems for many years, including Parkinson’s disease, diabetes and heart disease. He was bedridden

for the last few months. He is survived by his wife, Sheila, son, Nicholas, daughter, Vanessa, and eight grandchildren. A third child, Charlotte, died several years ago.”

Martin Fleischmann is introduced in the following pages of Wikipedia:

http://en.wikipedia.org/wiki/Martin_Fleischmann

Martin Fleischmann explained his motivation to investigate “cold fusion” in a paper presented at ICCF7, Vancouver, Canada on April 1998. A part of his explanation about his motivation is posted at the CFRL Website in the following pages:

<http://www.geocities.jp/hjrfq930/FTEssay/Essays/ecfr.html>

(2) Hal Fox (Aug. 23, 1923 – Aug. 20, 2012)



Hal Fox (1923 – 2012) at ICCF5. (Photo by H. Kozima on April 11, 1995)

Hal Fox organized several conferences and symposiums on the cold fusion phenomenon including “*Institute of New Energy Symposium*” and “*Int. Symposium on Cold Fusion and Advanced Energy Sources*” and published

several journals including *Fusion Facts*, *Journal of New Energy*, *New Energy Times* and *Cold Fusion Source Book*.

He published our papers in his journals and proceedings as follows:

H. Kozima and S. Watanabe, "*t-d* and *d-d* Collision Probability in the Trapped Neutron Catalyzed Model of the Cold Fusion," *Proc. of Int. Symposium on "Cold Fusion and Advanced Energy Sources"* (May 24 – 32, 1994, Minsk, Belarus) (in Russian) pp. 299 – 301 (1994).

H. Kozima, M. Nomura, K. Hiroe and M. Ohta, "Nuclear Transmutation in Cold Fusion Experiments" *J. New Energy* **1-4**, 21 - 25 (1996)

H. Kozima, "The TNCF Model - A Phenomenological Model for the Cold Fusion Phenomenon", *J. New Energy* **2-2**, pp. 43 – 47 (1997)

H. Kozima, "TNCF Model – A Possible Explanation of Cold Fusion Phenomenon," *Journal of New Energy*, **5-1**, pp. 68 – 87 (Summer 2000).

H. Kozima, J. Warner and G. Goddard, "Cold Fusion Phenomenon and Atomic Processes in Transition-metal Hydride and Deuteride," *Journal of New Energy*, **6-2**, pp. 126 – 141 (Fall 2001).

H. Kozima, K. Yoshimoto, H. Kudoh, M. Fujii and M. Ohta, "Analysis of Zn and Excess Heat Generation in Pd/H₂ (D₂) Systems by TNCF Model" *J. New Energy*, **6-3**, pp. 97 – 102 (2002)

H. Kozima, J. Warner and C. Salas Cano and J. Dash, "TNCF Model Explanation of Cold Fusion Phenomenon in Surface layers of Cathodes in Electrolytic Experiments" *J. New Energy* , **7-1**, pp. 64-78 (2003).

Some of these papers are posted at following pages of the CFRL Website:
<http://www.geocities.jp/hjrfq930/Papers/paperb/paperb.html>

Some of Hal Fox's profiles are introduced in the Hal Fox's FIC pages of the *New Energy Times*: <http://www.newenergytimes.com/>

3. JCF13 will be held in Nagoya on December. Three papers from the Cold Fusion Research Laboratory will be presented there.

Date: December 8 – 9, 2012

Place: “Wink Aichi” (Aichi Industry and Labor Center) in front of Nagoya Station.

Details are posted at following JCF website:

<http://jcfrs.org/NEW.HTML>

We will present three papers at the Conference.

- (1) H. Kozima, “Characteristics of Solid-State Nuclear Track Detectors for Heavy Charged Particles”
- (2) H. Kozima and M. Tada, “Emission of Charged Particles in the Cold Fusion Phenomenon”
- (3) H. Kozima, “Cold Fusion Phenomenon in Open, Nonequilibrium, Multi-component Systems”

In paper (1) we will check characteristics of solid-state track detectors, especially CR-39 detector, frequently used in this field recently and make clear its limitation to identify charged particles from the shape of the tracks. In paper (2) we will investigate data of charged particles obtained in the cold fusion phenomenon and speculate physics of nuclear reactions in hydrated and deuterated solids using also other data of neutron emission, nuclear transmutation, excess energy etc. In paper (3) we will discuss the complexity of the cold fusion phenomenon taking necessary conditions for the events into our consideration. The experimental data as a whole investigated in these 23 years after the announcement of the “cold fusion” by Fleischmann et al. shows apparently the complexity of the cold fusion phenomenon if we see it without prejudice.