

Introduction to
**The Hydraulic-Electrostatic
Cold Fusion Method**



Steven B. Krivit, Editor

12th International Conference on Condensed Matter, Yokohama, Japan
Dec. 1, 2005

A New Method

- Demonstrated on June 6, 2005,
 - Edmonton, Canada
- Research Manager:
 - Hyunik Yang, professor of mechanical engineering at Hanyang University, Korea

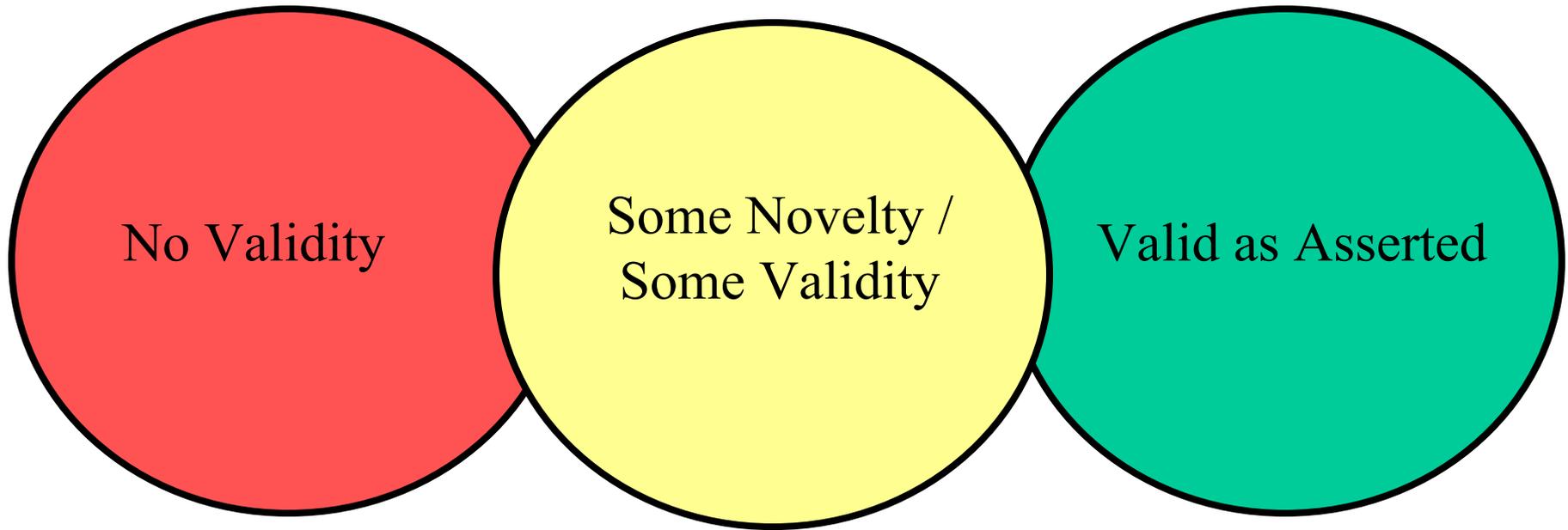
Yang's Research Team

- Alexander Koldamasov, (ret.) Russian National Research Institute of Atomic Engineering
- Andrei Desyatov, deputy director of the Russian Aviation and Space Agency
- Alla Kornilova, Moscow State Univ.
- Vladimir Vysotskii, Kiev Shevchencko Univ.
- Nahm Cho, Hanyang Univ.

Another Russian Team and Patent Holder

- Yevgeny Velikhov, president Kurchatov Research Institute
- Gerasimovich Gnedenko, director Kurchatov Research Institute
- Vital'evich Goryachev, associate director Kurchatov Research Institute

The Claims



Progress of Cold Fusion

- Excess energy $\sim 10\%$
- Milliwatts: High repeatability

- Excess energy $\sim 2500\%$
- Tens of watts: Low repeatability

- Challenge: High power levels, high repeatability

Acoustic Cavitation Fusion Research

- Stringham – Cold Fusion with D and Pd – 40 watts excess power.
- Taleyarkhan – Hot Fusion with deuterated acetone and neutron generator. No excess energy.

Mechanical Cavitation

High hydraulic pressures and velocities, pumping a fluid in a recirculating system combined with electrostatic effects.

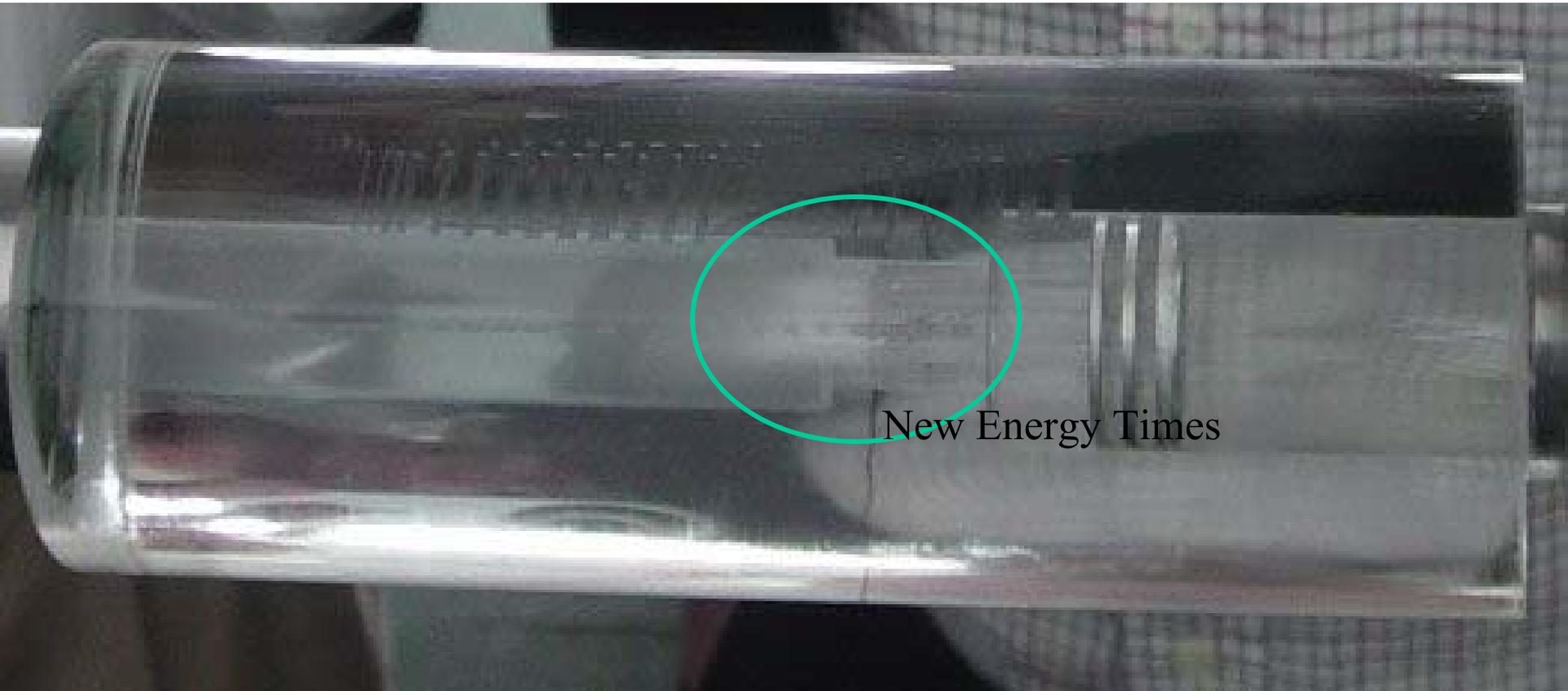
Simplest Description:

“It's a tube and a hole.” (McKubre)

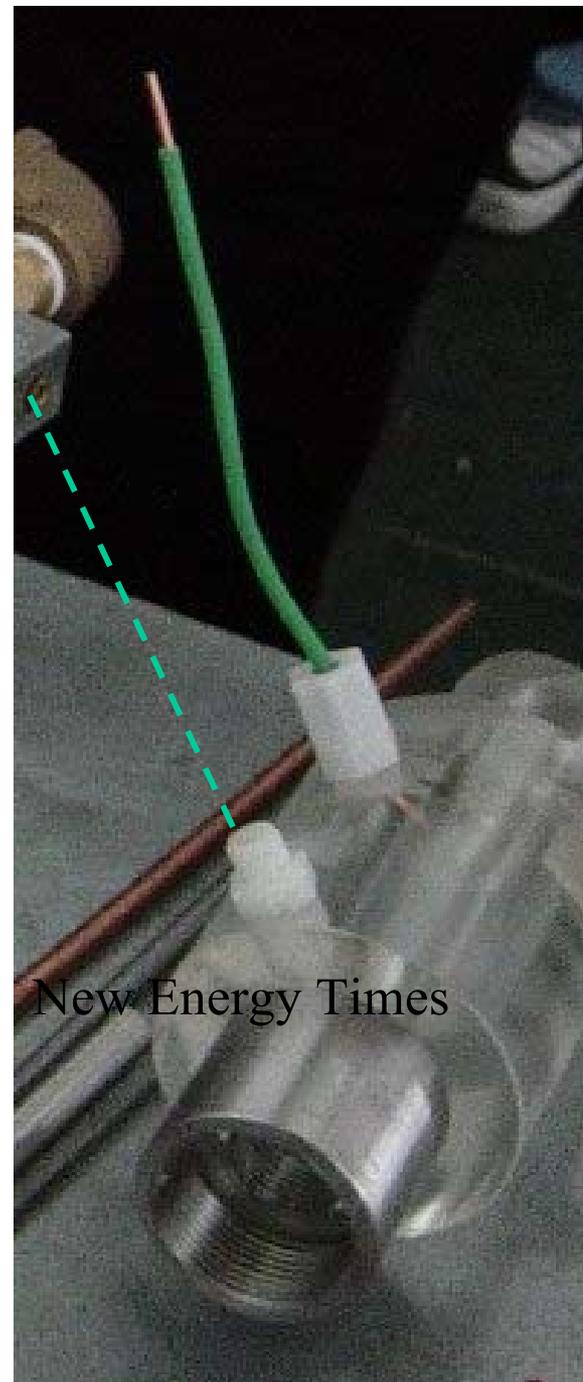


New Energy Times

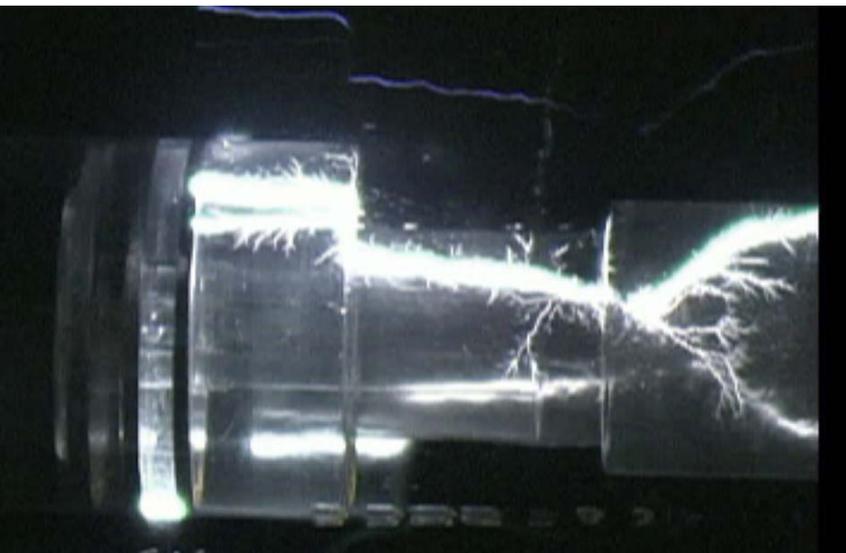
The Cell



Cell with Electrical Taps



Electrical Discharge in Machine Oil



Mechanical Cavitation

100 % Repeatable

Sustainable

Controllable

Apparent Excess Energy

General Characteristics

No host metal (palladium) required

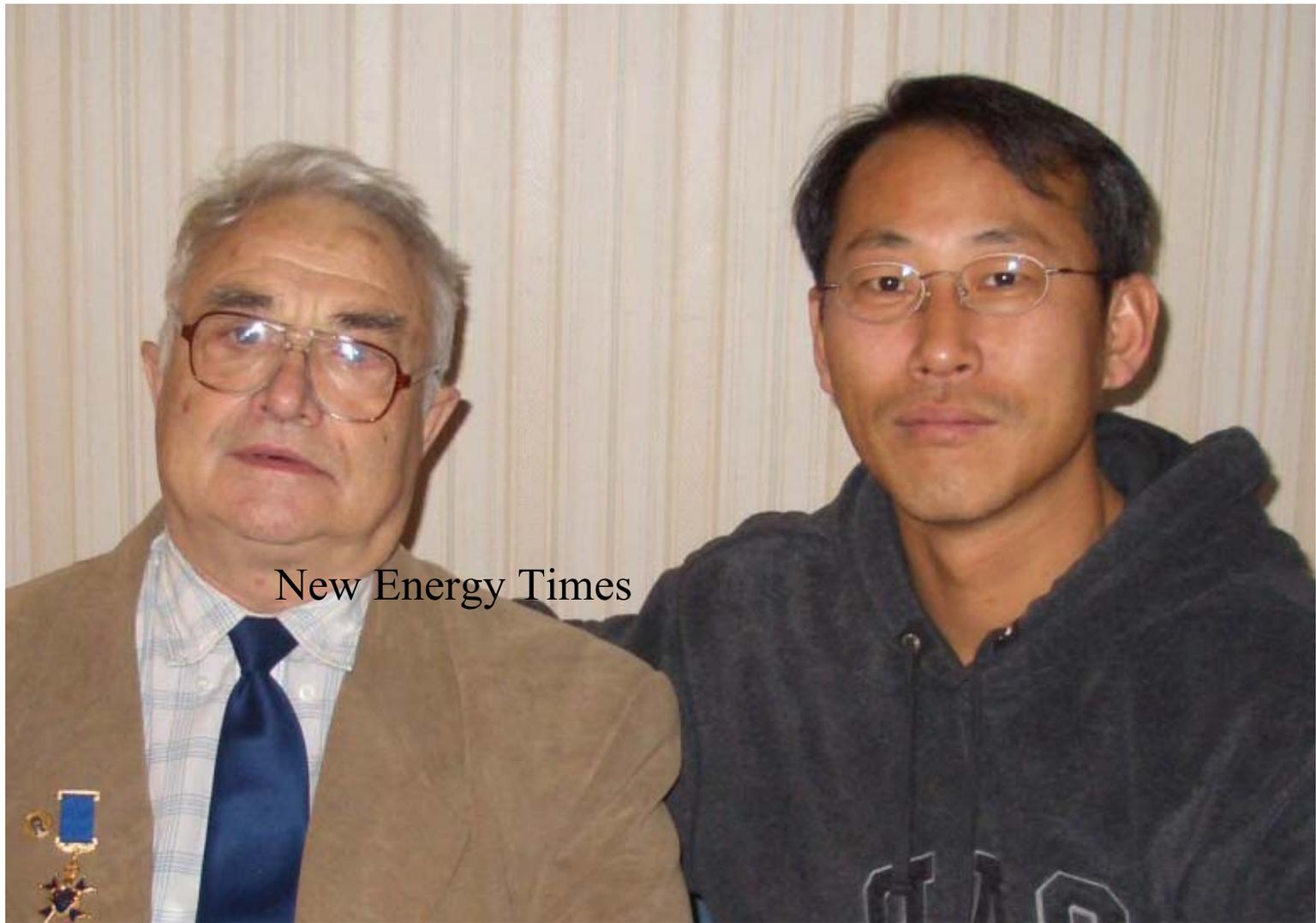
No deuterium / heavy water required

No electrochemistry

Why Is This Cold Fusion?

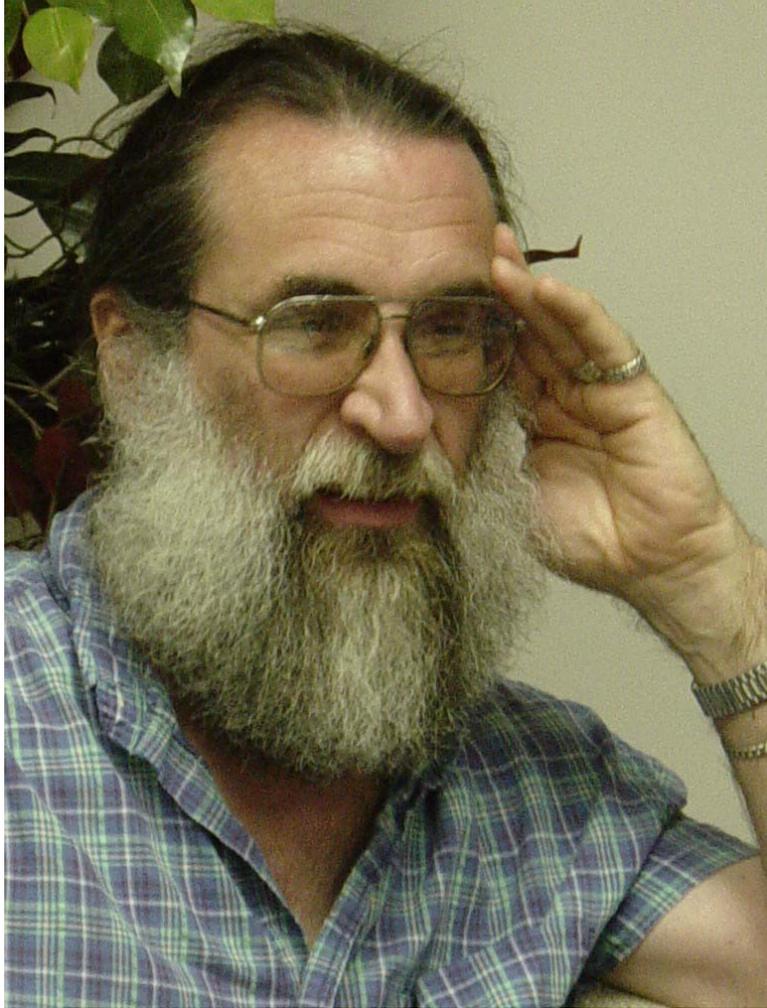
Apparent excess energy from hydrogen at low temperatures

Apparent branching ratio favoring helium and not neutrons or gamma.



New Energy Times

Alexandr Koldamasov - Hyunik Yang



Bill Harrington

Norm Arrison



Technical Briefing

June 6, 2005



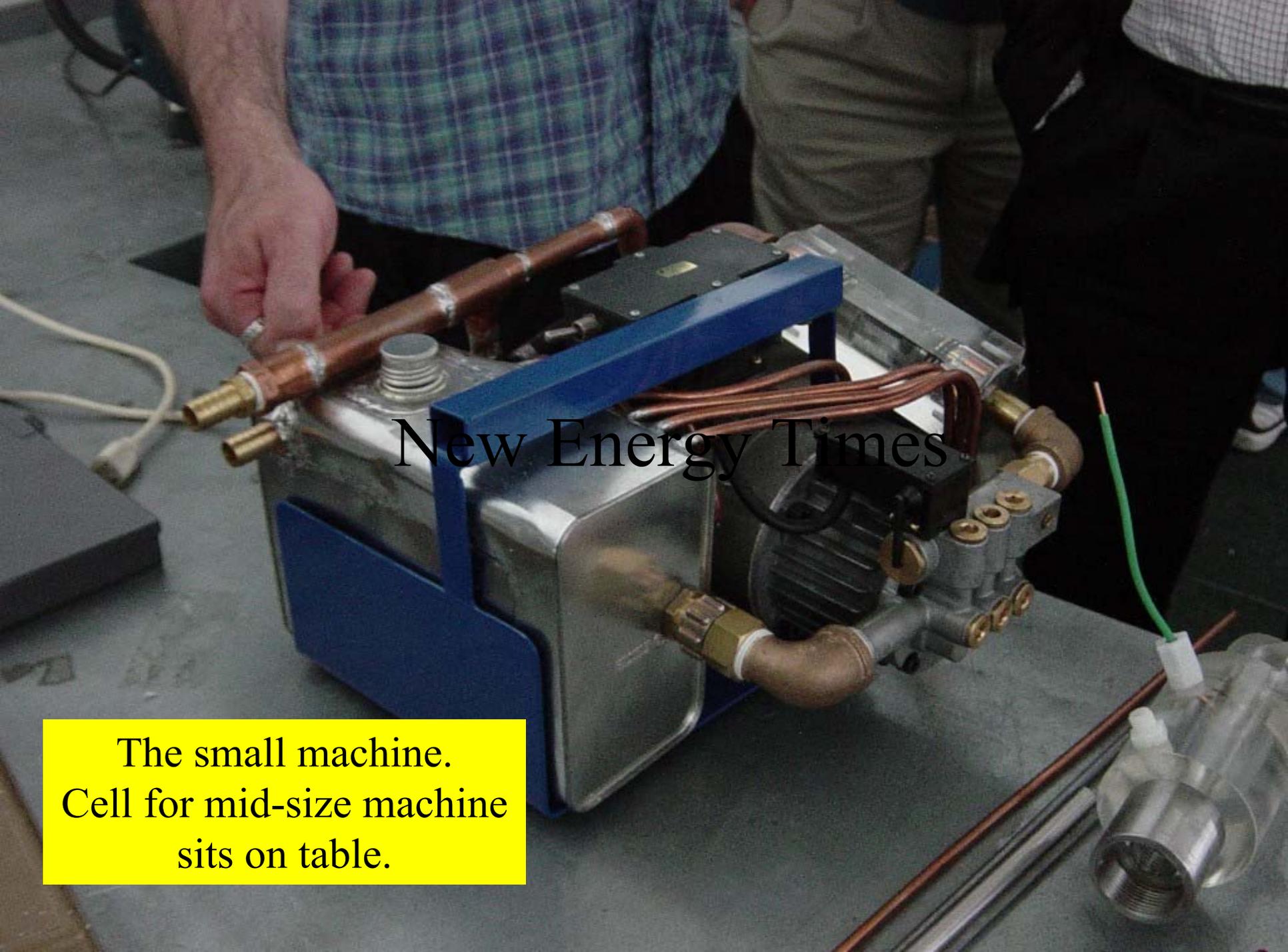
New Energy Times

Edmonton Demonstrations

First: Monday June 6, 2005 (day)

Second: Monday June 6, 2005 (evening)

Third: Tuesday June 7, 2005 (evening)



New Energy Times

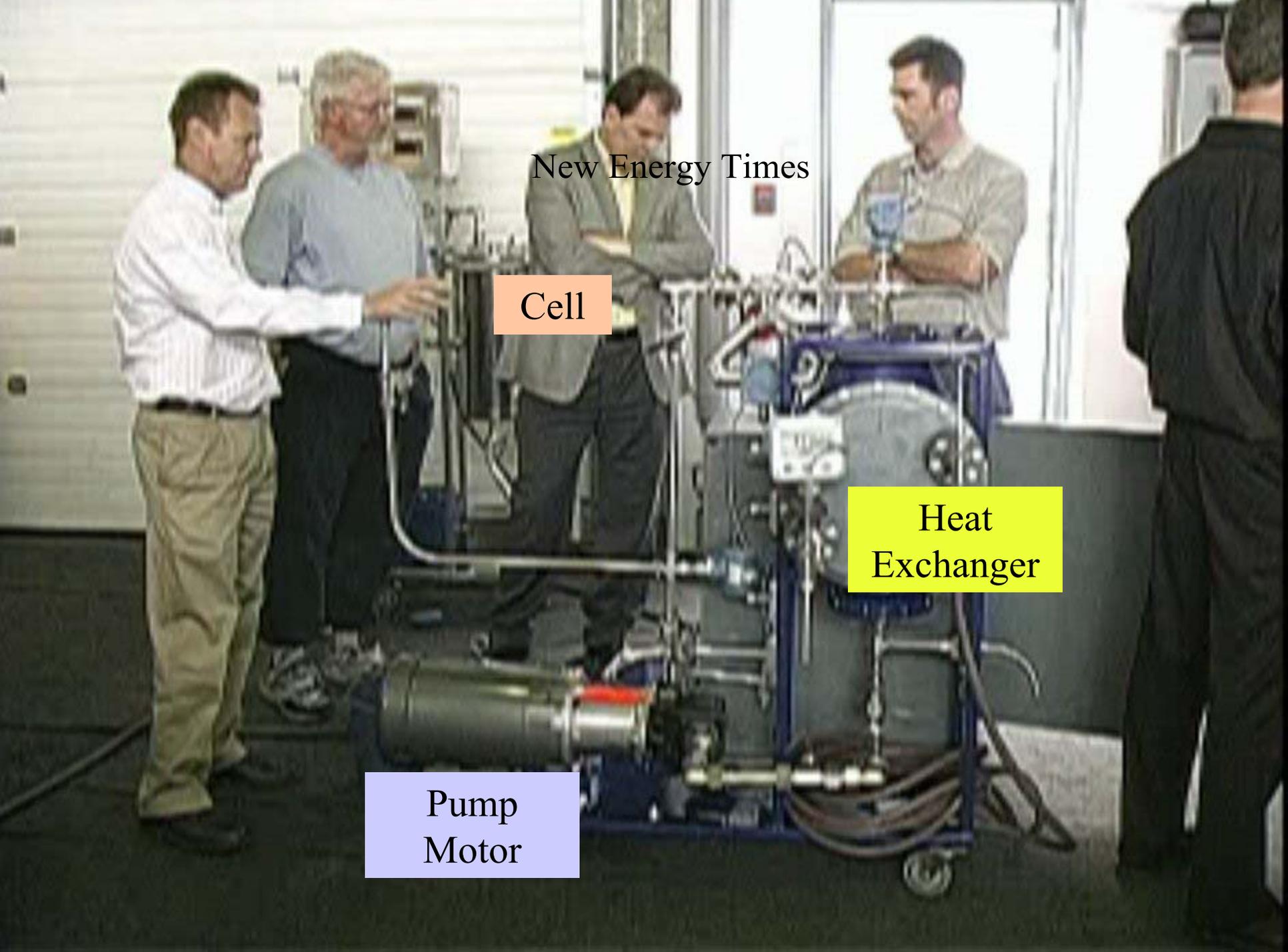
The small machine.
Cell for mid-size machine
sits on table.

New Energy Times

Cell

Heat
Exchanger

Pump
Motor



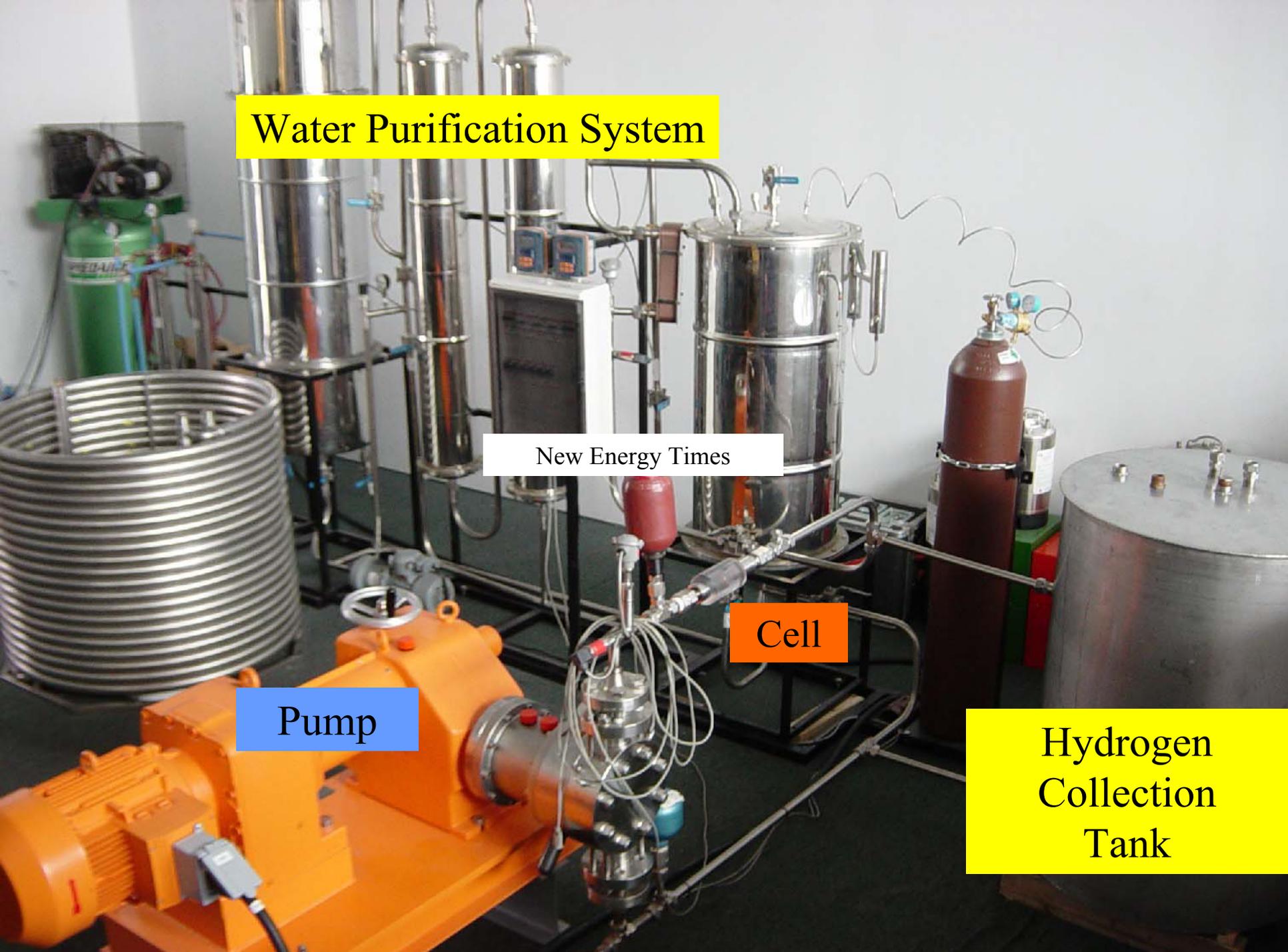
Water Purification System

New Energy Times

Pump

Cell

Hydrogen
Collection
Tank



Observations

1. Three visible effects: Arc, Sparkle, Glow.
2. Appearance of vaporized oil.
3. Tin and Tout Δ is perceptible by touch.
4. Control screen display of 1000% Px (Heat).
5. Start and stop at will.
6. Increase or decrease effect at will, immediate response.
7. Effects start immediately.

Main Products Reported

1. Heat.
2. Electrical discharge.
3. Also Hydrogen, Helium, Steam.
4. Multiple audits performed (private).
5. Control cell $\Delta T = 0.5^\circ$.
6. Test cell $\Delta T = 8^\circ$.

Radiation Reported

1. No radioactive materials used.
2. No long-lived radioactivity produced.
3. Low-level transient radiation produced during low power operation.
4. Shielding required for neutron and gamma emissions produced at higher operating power levels.

Martin Fleischmann

- “It's so simple, I should have thought of it!”
- “I think it's real all right. Assuming that they have instrumented the system properly, there is no doubt it generates excess heat.”
- “Under certain circumstances, a liquid can behave like condensed matter.”
- “Same difficulties as we went through.”

Peter Hagelstein

- Feb. 13, 2005:

“It was possible to verify by touch the presence of a sizeable temperature increase.”

“The basic claims of energy and charge creation correspond to massive effects that are readily observable independent of any of their diagnostics.”

“In the course of my review, essentially no scientific data was presented.”

McKubre -
Mizuno —

No comments “on the record.”

What's Missing

Hard data

None yet.

Replication?

Not Independent.

Machines are in labs in Russia, Canada and Korea.

Scientific Publication?

No.

Resolution?

Good Magic ?

OR

Good News ?

