

The Preprint of the ICCF-17 Proceedings

The 17th International **Conference on Cold Fusion**

August 12~17, 2012 DCC Korea, Daejeon, South Korea





Co-sponsored by



















| Time | Aug. 10 (Fri.) | Aug. 11 (Sat.) | Aug. 12 (Sun.) | Aug. 13 (Mon.) | Aug. 14 (Tue.) | Aug. 15 (Wed.) | Aug. 16 (Thu.) | Aug. 17 (Fri.) | |
|-------------|-----------------------------------|---------------------------------------|------------------------------|--|---|--------------------------------------|-------------------------------------|---------------------------------------|----------------|
| 09:00-09:15 | | | | | [TuM1] [TuM1-1] | [WeM1] | [ThM1] | [FrM1] [FrM1-1] | |
| 09:15-09:30 | - | | | | Mahadeva Srinivasan | [WeM1-1] Akito Takahashi | [ThM1-1] Liu Bin | Thomas W Grimshaw | |
| 09:30-09:45 | | | | [Opening Ceremony] Sunwon Park | [TuM1-2] | | [ThM1-2] | [FrM1-2] | |
| 09:45-10:00 | | WS | | [Martin Fleischmann Memorial] Michael McKubre | Pamela A. Mosier- Boss | Yeong E. Kim | Sakoh Hideyuki | Christian Elsner | |
| 10:00-10:15 | | | | [Plenary Lecture] | [TuM1-3] | [WeM1-3] | [ThM1-3] | [FrM1-3] | |
| 10:15-10:30 | KAIST EEWS | | | Frank Gordon | Melvin H. Miles | Peter L. Hagelstein | John Dash | Jed Rothwell | |
| .0:30-10:45 | Workshop (ICCF-17 Tutorial) | | | Coffee Break | Coffee Break C | Coffee Break | Coffee Break | Coffee Break | |
| .0:45-11:00 | ratorial | | | | | | | | |
| 1:00-11:15 | | | | [MoM1] [MoM1-1] | [TuM2] [TuM2-1] | [WeM2] | [ThM2] | [FrM2] [FrM2-1] | |
| 1:15-11:30 | | | | Francesco Piantelli /Peter Mobberley | Mitchell Swartz /Peter L. Hagelstein | [WeM2-1] Xing Zhong Li | [ThM2-1] Tatsumi Hioki | Tyler van Houwelingen | |
| 1:30-11:45 | | | | [MoM1-2] | [TuM2-2] | [WeM2-2] | [ThM2-2] | 3 | |
| 11:45-12:00 | | | | Menelaos Koulouris (Defkalion) | | Andrew Meulenburg | Yasuhiro Iwamura | [FrM2-2] Commercializatio | |
| 12:00-12:15 | | - | | [MoM1-3] | [TuM2-3] | [WeM2-3] | [ThM2-3] | and Worldwide Impact Panel Discussion | |
| 2:15-12:30 | Lunch | Lunch | | Francis Louis Tanzella/Brillouin | Tadahiko Mizuno | Vladimir Vysotskii | Sanjai Sinha | T UTICE DISCUSSION | |
| 2:30-13:00 | Lunch | | | | | | | Closing Commer Sunwon Park | |
| 3:00-13:30 | | | | Lunch | Lunch | Lunch | Lunch | /Frank Gordon | |
| 3:30-13:45 | | Optional Tour KAIST EEWS Workshop | [MoA1] [MoA1-1] George Miley | Editeri | Lunch | Editori | Lunch | | |
| 13:45-14:00 | | | | | | | | | |
| 4:00-14:15 | | | | | | [TuA1] [TuA1-1] | [WeA1] | [ThA1] | |
| L4:15-14:30 | | | | George Miley /Kyu-Jung Kim | Lawrence P. G. Forsley | [WeA1-1] Michael McKubre | [ThA1-1] Olga Dmitriyeva | | |
| 4:30-14:45 | | | | | [MoA1-2] Mitchell Swartz | [TuA1-2] | Theory Panel Discussion | [ThA1-2] Jean Paul | |
| 4:45-15:00 | | | | | /Peter L. Hagelstein | Jean Paul Biberian | Discussion | Biberian | |
| 5:00-15:15 | KAIST | | | | Break | [TuA1-3] Francesco Celani | [WeA1-2] | [ThA1-3] | |
| 5:15-15:30 | | | | EWS | | | Demo | Dawn D. Dominguez | David J. Nagel |
| 5:30-15:45 | (ICCF-17 Tutorial) | | | Tuesday district | Coffee Break | Coffee Break | Coffee Break | | |
| 5:45-16:00 | | | Registration | Introduction of Poster Session | | [WeA2] | | | |
| .6:00-16:15 | | | | | [TuA2] [TuA2-1] | [WeA2-1] | [ThA2] [ThA2-1] | | |
| 6:15-16:30 | | | | | Akira Kitamura | Alexander Didyk | A. B. Karabut | | |
| 6:30-16:45 | | | | | [TuA2-2] Naoko Takahashi | [WeA2-2] Eric Daniel Lukosi | [ThA2-2] Francesco Celani | | |
| 6:45-17:00 | | | | | Tacker Takariasiii | (Missouri University) | Demo | | |
| 7:00-17:15 | | | | Poster Session & Coffee Break | [TuA2-3] David A Kidwell | [WeA2-3] Yury Bazhutov | | | |
| 7:15-17:30 | | - | | | | | Banquet Speech by | | |
| 7:30-17:45 | | | | | | | Duncan Bockris Award Ceremony | | |
| 17:45-18:00 | | | Wolsens | * Poviou Committee | | | Entertainment | | |
| .8:00-20:00 | | | Welcome Reception | * Review Committee Meeting | * IAC Meeting | | | | |
| | | | | | | | | | |

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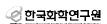
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ICCF-17

The 17th International Conference on Cold Fusion August 12~17, 2012 DCC Korea, Daejeon, South Korea



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The 17th International Conference on Cold Fusion

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I. Welcome Message

Welcome to ICCF-17 from the Conference Chairmen

Welcome to the 17th International Conference on Cold Fusion (ICCF-17) to be held in Daejeon, Republic of Korea during August 12-17, 2012. This is the oldest conference dedicated to "Cold Fusion", also known by several names including Condensed Matter Nuclear Science (CMNS), Low Energy Nuclear Reactions (LENR) and Lattice Assisted Nuclear Reactions (LANR).

ICCF-17 promises to be the most interesting and timely conference. Recent claims that the Nickel-Hydrogen system can produce commercially viable amounts of excess energy have reinvigorated research. As with the initial announcement by Fleischmann and Pons involving Palladium-Deuterium, new groups of scientists are getting involved to conduct experiments using Nickel and Hydrogen, all looking for a safe, low-cost nuclear solution to the world's energy needs. ICCF-17 offers a unique opportunity for scientists from around the world to come together to report experimental results, present new theories, and share ideas in this most interesting and important scientific area. It also represents an opportunity for government agencies, industry, investors, and academia to meet face-to-face with scientists who have kept the dream alive.

Compelling experimental results supporting the Cold Fusion have been presented in the past 16 conferences but most main stream scientists and the general public are not aware of them. ICCF should not be the party only for people who believe in cold fusion. We especially invite skeptics and mainstream scientists from nuclear physics and nuclear engineering to attend and learn about the experimental results and engage in scientific discussions. ICCF-17 session topics will cover basic research, experimental results, applications of the technology, and theoretical developments.

The city of Daejeon, located approximately 100 miles south from Seoul is the ideal setting for the conference. Daejeon is home to many national research institutes in Korea and also the Korea Advanced Institute of Science and Technology, (KAIST) which was identified by Asiaweek in 1999-2000 as the number one university in science and technology in Asia. The city of Daejeon, the Republic of Korea, and the organizing committee are working to make ICCF-17 a special event.

"Cold Fusion" has sometimes been referred to as an example of bad science. We agree. It was bad science when Galileo agreed with Copernicus that the Earth orbited the sun and he was charged with heresy and placed under house arrest. It was bad science with Roemer announced that contrary to the prevailing belief, the speed of light was not infinite but was actually 186,000 miles per second. He was ridiculed by the scientific establishment and driven out of a scientific career. It was bad science when doctors continued to go from patient to patient without washing their hands, leading to childbirth mortality rates as high as 28% even after clinical studies had shown that washing between patients could significantly reduce mortality. It wasn't until many years later after Pasteur had identified bacteria that could be transmitted from patient to patient that hand-washing was widely adopted. These are just three examples of a long list of "bad science."

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In each of these cases, it took in excess of 20 years after the initial announcement and compelling experimental evidence before the mainstream scientific establishment accepted the change. In this light, "cold fusion" is another example of bad science. And as with the examples listed above, after more than 20 years it is getting harder to deny the experimental evidence of "cold fusion." We believe "cold fusion" is well on its way to becoming an accepted scientific fact and that ICCF-17 will be a pivotal event in answering the question of whether "cold fusion" can become the safe, low-cost nuclear energy source to meet the world's growing energy demand.

Please make plans now to join us in Daejeon for ICCF-17, August 12-17, 2012.

Sunwon Park, Chairman

Professor of Chemical and Biomolecular Engineering Department **KAIST** Daejeon Republic of Korea

Frank Gordon, Co-chairman

Senior VP, Global Energy Corporation Retired Head, Research and Applied Sciences Dept US Navy SPAWAR Systems Center San Diego, CA USA

II. Committees

General Chair

- Sunwon Park (KAIST, Korea)

General Co-chair

- Frank Gordon (SPAWAR (retired), USA)

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- Yury Bazutov (IZMIRAN RAS, Russia)
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- Michael McKubre (SRI International, USA)
- Michel E. Melich (Naval Postgraduate School, USA)
- George Miley (University of Illinois, USA)
- David J. Nagel (George Washington University, USA)
- Sunwon Park (KAIST, Korea)
- Seung Bin Park (KAIST, Korea)
- Vittorio Violante RdA (ENEA, Frascati, Italy)
- Francesco Scaramuzzi (LNF/INFN, Italy)
- Mahadeva Srinivasan (BARC (retired), India)
- Akito Takahashi (Technova, Inc., Japan)

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- Kew-Ho Lee (Korea Research Institute of Chemical Technology/UST, Korea)
- Sung-Chul Shin (DGIST, Korea)
- Seung Bin Park (KAIST, Korea)
- Seung Jong Lee (Seoul National University, Korea)
- Sunwon Park (KAIST, Korea)

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- William Collis (ISCMNS, UK)
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- David J. Nagel (George Washington University, USA)
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- Co-chair, MoonYong Lee (Yeungnam Univeristy, Korea)
- Co-chair, Kwan Young Lee (Korea University, Korea)

Secretariat Committee

- Chair, Woohyun Kim (KAIST, Korea)
- Genicom Co., Ltd. (Korea)

III. Technical Program

1. Information on Technical Program

Oral Presentation Guideline

- The time for oral presentation is 30 minutes and this includes the presentation and Q&A time.
- A LCD projector and a computer with Windows OS, MS PowerPoint and Adobe Acrobat Reader installed will be available in session room for regular presentations. For presenters, please kindly bring your presentation saved on a USB memory stick and load your presentation on the computer prior to the session.
- MAC users, please bring your own cable to connect it to the LCD projector. MAC cables may NOT be available on site, so please be sure to bring the necessary adaptors.
- Please provide your presentation file to info@iccf17.org at least one day before your session begins.
- If the presentation contains video or audio, please let us know when you register so that we can check to be sure that the presentation will work with the systems available at the conference.
- Video recordings will be made of all presentations during the conference for possible distribution including posting on the internet or other uses.

Poster Presentation Guideline

Poster-teaser-session

- On Monday afternoon, you will have an opportunity to promote your poster via 2 slides for 1 minute poster teaser
- Please indicate the Paper No. on the upper center of the presentation slide. Please do not include videos, as we cannot guarantee that they will work.

Poster Presentation Guideline

- Poster will be placed during the whole conference day.
- The poster size shall be limited to 0.9m in width and 1.5m in height.
- Poster number will be placed on the top of each poster board to help presenters easily find the designated spot.
- Adhesive tapes will be available within the poster presentation area but push-pins and double-sided tapes are prohibited.

Guide to Understanding Session Numbering

Each session in the technical program is assigned a unique number which clearly indicates when the session is presented.

| | Day | | Time | | Session Order | | |
|----|--------------|----|----------|---|---------------|---|----------------|
| Мо | Monday | Th | Thursday | М | Morning | 1 | First Session |
| Tu | Tuesday | Fr | Friday | А | Afternoon | 2 | Second Session |
| We | Ve Wednesday | | | | | | |

Example) [MoM1]: the 1st session on Monday morning

2. Technical Sessions

| August 13, 2012 [Monday] | | | |
|---------------------------------|---------------|---|--|
| • | | | |
| Opening Ceremony | | August 13, 2012 (Monday) / 09:30 - 09:40 | |
| M. Fleis- chmann Memorial | Date & Time | August 13, 2012 (Monday) / 09:40 – 09:50 | |
| Plenary Lecture | _ | August 13, 2012 (Monday) / 09:50 - 10:30 | |
| Opening | 09:30 - 09:40 | Opening Ceremony | |
| Ceremony | 00.00 00.40 | Sunwon Park (KAIST, Korea) | |
| | | | |
| M. Fleis- chmann | 09:40 – 09:50 | Martin Fleischmann Memorial | |
| Memorial | | Michael McKubre (SRI International, USA) | |
| | | | |
| Plenary Lecture | 09:50 - 10:30 | Cold Fusion-From the Laboratory to the World: Setting the Stage for ICCF-17 | |
| | | Sunwon Park (KAIST, Korea) and Frank Gordon(SPAWAR (retired), USA) | |

| - | | |
|---------------|---------------|--|
| MoM1 | Date & Time | August 13, 2012 (Monday) / 11:00 - 12:30 |
| Session Chair | | Prof. Seungbin Park (KAIST, Korea) |
| MoM1-1 | 11:00 - 11:30 | Anomalous phenomenon in Ni-H Systems F. Piantelli (Italy) *Speaker: Peter Mobberley (Advanced Energy Technologies, UK) |
| MoM1-2 | 11:30 - 12:00 | Technical Characteristics and Performance Issues of Defkalion's Hyperion Pre-Industrial Product and Further Developments John Hadjichristos (Praxen Defkalion Green Technologies (Global) Ltd., Greece) *Speaker: Menelaos Koulouris (Praxen Defkalion Green Technologies (Global) Ltd., Greece) |
| MoM1-3 | 12:00 - 12:30 | Controlled Electron Capture and the Path toward Commercialization Robert Godes, Robert George (Brillouin Energy Corporation, USA), Francis Tanzella, and Michael Mckubre (SRI International, USA) |

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| | August 13, 2012 [Monday] | | | |
|---------------|--------------------------|--|--|--|
| | | | | |
| MoA1 | Date & Time | August 13, 2012 (Monday) / 14:00 - 15:00 | | |
| Session Chair | | Dr. Gun Woong Bahng (Korea Research Institute of Standards and Science, Korea) | | |
| MoA1-1 | 14:00 - 14:30 | Use of D/H Clusters in LENR and Recent Results from Gas Loaded Nanoparticle-Type Clusters | | |
| | | George H. Miley, Xiaoling Yang, Kyujung Kim (University of Illinois, USA), and Heinrich Hora (University of New South Wales, USA) | | |
| MoA1-2 | 14:30 - 15:00 | Demonstration of Energy Gain from a Preloaded ZrO ₂ -PdD Nanostructured CF/LANR Quantum Electronic Device at MIT Mitchell R. Swartz (JET Energy, Inc., USA) and Peter L. Hagelstein (MIT, USA) | | |

| Poster Teaser Session | Date & Time | August 13, 2012 (Monday) / 15:15 - 16:30 |
|--------------------------|-------------|---|
| Session Chair | Prof. E | Byung Yoon Park (Chungnam National University, Korea) |
| | | |
| Poster Session | Date & Time | August 13, 2012 (Monday) / 16:30 - 18:00 |

| | August 14, 2012 [Tuesday] | | | | |
|-----------|---------------------------|---|--|--|--|
| | | | | | |
| TuM1 | Date & Time | August 14, 2012 (Tuesday) / 09:00 - 10:30 | | | |
| Session C | hair | Prof. Kew-Ho Lee (Korea Research Institute of Chemical Technology, Korea) | | | |
| TuM1-1 | 09:00 - 09:30 | Transmutations and Isotopic Shifts in LENR Experiments: An Overview Mahadeva Srinivasan (Bhabha Atomic Research Centre (BARC), India) | | | |
| TuM1-2 | 09:30 - 10:00 | It's not Low Energy - But it is Nuclear Pamela A. Mosier-Boss (MIT, USA) | | | |
| TuM1-3 | 10:00 - 10:30 | Co-Deposition of Palladium and Other Transition Metals in H_2O and D_2O Solutions Melvin H. Miles (Dixie State College, USA) | | | |

| TuM2 | Date & Time | August 14, 2012 (Tuesday) / 11:00 - 12:30 |
|---------------|---------------|--|
| Session Chair | | Prof. Hongjoo Kim (Kyungpook National University, Korea) |
| TuM2-1 | 11:00 - 11:30 | Energy Gain from Preloaded ZrO ₂ -PdNi-D Nanostructured CF/LANR Quantum Electronic Components |
| | | Mitchell Swartz, Gayle Verner, and Jeffrey Tolleson (JET Energy, Inc., USA) *Speaker: Peter L. Hagelstein (MIT, USA) |
| TuM2-2 | 11:30 - 12:00 | Calorimetric Studies of the Destructive Stimulation of Palladium and Nickel Fine Wires |
| | | Michael Mckubre, Jianer Bao, Francis Tanzella (SRI International, USA), and Peter Hagelstein (MIT, USA) |
| TuM2-3 | 12:00 - 12:30 | Theoretical Analysis of Chemically Assisted Nuclear Reactions (CANR) in Nanoparticles Tadahiko Mizuno (Hydrogen Engineering Application & Development Company, Japan) |

| | August 14, 2012 [Tuesday] | | | | |
|------------|---------------------------|--|--|--|--|
| | | | | | |
| TuA1 | Date & Time | August 14, 2012 (Tuesday) / 14:00 - 15:30 | | | |
| Session Cl | hair | Prof. Do Hyun Kim (KAIST, Korea) | | | |
| TuA1-1 | 14:00 - 14:30 | Tickling the Dragon's Tail: Harnessing LENR Lawrence P. G. Forsley (Global Energy Corporation, USA) | | | |
| | | Lawrence 1. G. 1 orsiey (Global Energy Corporation, COA) | | | |
| TuA1-2 | 14:30 - 15:00 | Possible Role of Oxides in the Fleischmann-Pons Effect | | | |
| | | Jean-Paul Biberian (Aix-Marseille University, France), Iraj Parchamazad, and Melvin H. Miles (University of La Verne, USA) | | | |
| TuA1-3 | 15:00 - 15:30 | Cu-Ni-Mn Alloy Wires, with Improved Sub-Micrometric Surfaces, used as LENR Device by New Transparent, Dissipation-Type, Calorimeter | | | |
| | | Francesco Celani, E. F. Marano, A. Spallone, A. Nuvoli (Frascati National Laboratories, Italy), E. Purchi, M. Nakamura (ISCMNS, Italy), B. Ortenzi, S. Pella, E. Righi, G. Trenta, S. Bartalucci (Frascati National Laboratories, Italy), G. L. Zangari (ISCMNS, Italy), F. Micciulla, and S. Bellucci (Frascati National Laboratories, Italy) | | | |

| TuA2 | Date & Time | August 14, 2012 (Tuesday) / 16:00 - 17:30 |
|---------------|---------------|---|
| Session Chair | | Prof. Jin-Hee Yoon (Inha University, Korea) |
| TuA2-1 | 16:00 - 16:30 | Recent Progress in Gas-Phase Hydrogen Isotope Absorption/Adsorption Experiments A. Kitamura, Y. Miyoshi, H. Sakoh, A Taniike, Y. Furuyama (Kobe University, Japan), A. Takahashi, R. Seto, Y. Fujita (Technova Inc., Japan), T. Murota, and T. Tahara (Santoku Corp., Japan) |
| TuA2-2 | 16:30 - 17:00 | Detection of Pr in Cs Ion-Implanted Pd/CaO Multilayer Complexes with and without D2 Gas Permeation Naoko Takahashi, Satoru Kosaka, Tatsumi Hioki, and Tomoyoshi Motohiro (Toyota Central R&D Labs., Inc., Japan) |
| TuA2-3 | 17:00 - 17:30 | Gas Loading of Nanopalladium D. A. Kidwell (Naval Research Laboratory, USA) |

| | August 15, 2012 [Wednesday] | | | |
|-----------|-----------------------------|--|--|--|
| | | | | |
| WeM1 | Date & Time | August 15, 2012 (Wednesday) / 09:00 - 10:30 | | |
| Session C | hair | Prof. Byung-taik Kim (SungKyunKwan University, Korea) | | |
| WeM1-1 | 09:00 - 09:30 | Physics of Cold Fusion by TSC Theory Akito Takahashi (Technova Inc., Japan) | | |
| WeM1-2 | 09:30 - 10:00 | Conventional Nuclear Theory of Low-Energy Nuclear Reactions in Metals: Alternative Approach to Clean Fusion Energy Generation Yeong E. Kim (Purdue University, USA) | | |
| WeM1-3 | 10:00 - 10:30 | A Model for Collimated X-Ray Emission in the Karabut Experiment Peter Hagelstein (Massachusetts Institute of Technology, USA) and Irfan Chaudhary (University of Engineering and Tehcnology, Pakistan) | | |

| WeM2 | Date & Time | August 15, 2012 (Wednesday) / 11:00 - 12:30 |
|---------------|---------------|---|
| Session Chair | | Prof. Hasuck Kim (Daegu Gyeongbuk Institute of Science & Technology, Korea) |
| WeM2-1 | 11:00 - 11:30 | "Excess Heat" in Ni-H Systems and Selective Resonant Tunnelling Xing Z. Li, Zhan M. Dong, and Chang L. Liang (Tsinghua University, China) |
| WeM2-2 | 11:30 - 12:00 | New Visions of Physics through the Microscope of Cold Fusion A. Meulenberg (Universiti Sains Malaysia, Malaysia) and K. P. Sinha (Indian Institute of Science, India |
| WeM2-3 | 12:00 - 12:30 | Application of Correlated States of Interacting Particles in Nonstationary and Periodical Modulated LENR Systems Vladimir Vysotskii, Mykhaylo Vysotskyy (Kiev National Shevchenko University, Ukraine), and Stanislav Adamenko (Electrodynamics Laboratory "Proton-21", Ukraine) |

| August 15, 2012 [Wednesday] | | |
|-----------------------------|---------------|--|
| | | |
| WeA1 | Date & Time | August 15, 2012 (Wednesday) / 14:00 - 15:30 |
| Session Chair | | Dr. Michael McKubre (SRI International, USA) |
| WeA1-1 | 14:00 - 15:00 | Theory Panel Discussion |
| WeA1-2 | 15:00 - 15:30 | Anomalous Results in Fleischmann-Pons Type Electrochemical Experiments D. D. Dominguez (Naval Research Laboratory, USA), L. DeChiaro (Naval Surface Warfare Center, USA), D. A. Kidwell (Naval Research Laboratory, USA), A. E. Moser (Nova Research, Inc., USA), V. Violante (ENEA, Frascati, Italy), G. K. Hubler (Naval Research Laboratory, USA), J-H. He (Nova Research, Inc., USA), and D. L. Knies (Naval Research Laboratory, USA) |

| WeA2 | Date & Time | August 15, 2012 (Wednesday) / 16:00 - 17:30 |
|-----------|---------------|---|
| Session C | hair | Dr. Suk Jae Yoo (National Fusion Research Institute, Korea) |
| WeA2-1 | 16:00 - 16:30 | Nuclear Reactions in Gaseous Deuterium under High Pressure and in Saturated with Deuterium Palladium, Induced by γ -Quanta Alexander Yurievich Didyk (Joint Institute for Nuclear Research, Russia) and Roland Stanislaw Wiśniewski (National Center of Nuclear Research, Poland) |
| WeA2-2 | 16:30 - 17:00 | Diamond-Based Charged Particle and Neutron Sensor for LENR Experiments Eric Lukosi, Mark Prelas, Joongmoo Shim, Haruetai Kasiwattanawut, Charles Weaver, Cherian Joseph Mathai, Shubhra Gangopadhyay (University of Missouri, USA) |
| | | Neutron Emission from Cryogenically Cooled Metals under Thermal Shock Mark A. Prelas and Eric Lukosi (University of Missouri, USA) |
| WeA2-3 | 17:00 - 17:30 | Investigation of Radiation Effects at Loading Ni, Be and LaNi ₅ by Hydrogen Yu. N. Bazhutov (Terrestrial Magnetism, Ionosphere and Radiowave Propagation Institute RAS (IZMIRAN), Russia), E. O. Belousova (Lomonosov Moscow State University, Russia), V. P. Koretsky (retired, Russia), A. G. Parkhomov (Lomonosov Moscow State University, Russia), A. D. Sablin-Yavorsky (retired, Russia), and Yu. A. Sapozhnikov (Lomonosov Moscow State University, Russia) |

| August 16, 2012 [Thursday] | | |
|----------------------------|---------------|---|
| | | |
| ThM1 | Date & Time | August 16, 2012 (Thursday) / 09:00 - 10:30 |
| Session Cl | hair | Dr. Myung Won Seo (Korea Institute of Energy Research, Korea) |
| ThM1-1 | 09:00 - 09:30 | Nuclear Transmutation on a Thin Pd Film in a Gas-Loading D/Pd System Bin Liu (Shenhua Group Corporation Limited, China), Zhan M. Dong, Chang L. Liang, and Xing Z. Li (Tsinghua University, China) |
| ThM1-2 | 09:30 - 10:00 | Hydrogen Isotope Absorption and Heat Release Characteristics of a Ni-Based Sample H. Sakoh, Y. Miyoshi, A. Taniike, Y. Furuyama, A. Kitamura (Kobe University, Japan), A. Takahashi, R. Seto, Y. Fujita (Technova Inc., Japan), T. Murota, and T. Tahara (Santoku Corp., Japan) |
| ThM1-3 | 10:00 - 10:30 | Effect of Recrystallization on Heat Output and Surface Composition of Ti and Pd Cathodes J. Dash and J. Solomon (Portland State University, USA) |

| ThM2 | Date & Time | August 16, 2012 (Thursday) / 11:00 - 12:30 |
|---------------|---------------|---|
| Session Chair | | Prof. Hyunduk Kim (KAIST, Korea) |
| ThM2-1 | 11:00 - 11:30 | Isotope Effect for Heat Generated upon Pressurizing Nano-Pd/Silica with Hydrogen Isotope Gases |
| | | Tatsumi Hioki, Noriaki Sugimoto, Teppei Nishi, Akio Itoh, and Tomoyoshi Motohiro (Toyota Cenyral R & D Labs., Inc., Japan) |
| ThM2-2 | 11:30 - 12:00 | Increase of Reaction Products in Deuterium Permeation Induced Transmutation |
| | | Y. Iwamura, T. Itoh, M. Tsuruga, (Mitsubishi Heavy Industries, Itd., Japan), K. Fukutani (University of Tokyo, Japan), and D. Sekiba (University of Tsukuba, Japan) |
| ThM2-3 | 12:00 - 12:30 | Extraction of Useful Energy from Metal/H (D) Cathodes via Modulation of the Internal Energy of the Hydride System Sanjai Sinha (ChrononixUSA, USA) |

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| August 16, 2012 [Thursday] | | |
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| | | |
| ThA1 | Date & Time | August 16, 2012 (Thursday) / 14:00 - 15:30 |
| Session Chair | | Dr. Woohyun Kim (KAIST, Korea) |
| ThA1-1 | 14:00 - 14:30 | Using Bakeout to Eliminate Heat from H/D Exchange during Hydrogen Isotope Loading of Pd-Impregnated Alumina Powder Olga Dmitriyeva, Richard Cantwell, Matt McConnell (Coolescence LLC, USA), and |
| T I 4.4 0 | 1400 4500 | Garret Moddel (University of Colorado, USA) |
| ThA1-2 | 14:30 - 15:00 | Jean-paul Biberian (Aix-Marseille University, France) |
| ThA1-3 | 15:00 - 15:30 | Statistical Analysis of Transmutation Data from LENR Experiments and Comparison with a Prediction Based on a Widom-Larsen Theory Felix Scholkmann (-, Switzerland) and David J. Nagel (The George Washington University, USA) |

| ThA2 | Date & Time | August 16, 2012 (Thursday) / 16:00 - 17:00 |
|------------|---------------|---|
| Session Cl | nair | Dr. Young Kim (Korea Institute of Machinery & Material, Kore) |
| ThA2-1 | 16:00 - 16:30 | Excess Heat Power Registration in Experiments with High Voltige Electrolisis Cell A. B. Karabut (Samar+ COMPANY, Russia) |
| ThA2-2 | 16:30 - 17:00 | Demonstration Francesco Celani (Frascati National Laboratories, Italy) |

| August 17, 2012 [Friday] | | |
|--------------------------|---------------|---|
| | | |
| FrM1 | Date & Time | August 17, 2012 (Friday) / 09:00 - 10:30 |
| Session Chair | | Prof. Seong Ihl Woo (KAIST, Korea) |
| FrM1-1 | 09:00 - 09:30 | Public Policy Planning for Broad Deployment of Cold Fusion (LENR) for Energy Production Thomas W. Grimshaw (The University of Texas, USA) |
| FrM1-2 | 09:30 - 10:00 | Potential Economic Impact of LENR Technology in Energy Markets Alexander Kleehaus (Ecorium GmbH, Germany) and Christian Elsner (CHM, Germany) |
| FrM1-3 | 10:00 – 10:30 | The Future May Be Better than You Think Jed Rothwell (LENR-CANR.org, USA) |

| FrM2 | Date & Time | August 17, 2012 (Friday) / 11:00 – 12:30 |
|--------|---------------|--|
| FrM2-1 | 11:00 – 11:30 | Is Commercial Low Energy Nuclear Reaction (LENR) the Real Deal? Tyler van Houwelingen (AzulStar, Inc., USA) |
| FrM2-2 | 11:30 – 12:30 | Commercialization and Worldwide Impact Panel Discussion |

August 13 - 17, 2012 [Monday - Friday]

| P_1005 | Anomalous Metals in Electrified Vacuum Edward Esko (Quantum Rabbit LLC, USA) |
|--------|---|
| P_1006 | Geological Aspects of Cold Fusion Tarasenko G. (KGUTI name Sh. Esenov., Kazakhstan) |
| P_1012 | LENR and Nuclear Structure Theory Norman D. Cook (Kansai University, Japan) and Valerio Dallacasa (Verona University, Italy) |
| P_1018 | Examples of Isoperibolic Calorimetry in the Cold Fusion Controversy Melvin H. Miles (University of LaVerne, USA) |
| P_1020 | Neutron Burst Emissions from Uranium Deuteride and Deuterium-Loaded Titanium Songsheng Jiang, Xiaoming Xu, Liqun Zhu, Shaokang Gu, Xichao Ruan, Ming He, Bujia Qi (China Institute of Atomic Energy, China), and Xing Zhong Li (Tsinghua University, China) |
| P_1021 | Evidence-Based Public Policy for Support of Cold Fusion (LENR) Development Thomas W. Grimshaw (The University of Texas, USA) |
| P_1023 | Quasi-Stability Theory: Revealing Various Atomic Breakups and Cold Fusion Ken Naitoh (Waseda University, Japan) |
| P_1026 | Search for Advanced Simulation Model of Cascade Vortices under Beneath the Electrode Surface Hiroo Numata (Tokyo Institute of Technology, Japan) |
| P_1027 | Numerical Simulation of Vortex and Cascade of Vortices Appeared under Beneath the Sub- Surface Layer Hiroo Numata (Tokyo Institute of Technology, Japan) |
| P_1029 | A Self-Consistent Iterative Calculation for the Two Species of Charged Bosons Related to the Nuclear Reactions in Solids Ken-Ichi Tsuchiya (Tokyo National College of Technology, Japan) |
| P_1030 | Features and Giant Acceleration of "Warm" Nuclear Fusion at Interaction of Moving Molecular Ions (DD)+ with the Surface of a Target Vladimir Vysotskii (Kiev National Shevchenko University, Ukraine), Alla Kornilova, and Vladimir S. Chernysh (Moscow State University, Russia) |
| P_1031 | On the Possibility of Application of Widom-Larsen Theory for Analysis and Explanation of Rossi Experiments Vladimir Vysotskii (Kiev National Shevchenko University, Ukraine) |

| P_1033 | Phase Transfer Point Vladimir Vysotskii (Kiev National Shevchenko University, Ukraine), Alla A. Kornilova, Vladimir S. Chernysh, Nadezhda D. Gavrilova, and Alexander M. Lotonov (Lomonosov Moscow State University, Russia) |
|--------|--|
| P_1038 | Femto-Atoms and Transmutation Andrew Meulenberg (National Advanced IPv6 Centre, Malaysia) and William Collis (ISCMNS, Italy) |
| P_1039 | Deep-Orbit-Electron Radiation Emission in the Decay from 4H*^ to 4He A. Meulenberg (Universiti Sains Malaysia, Malaysia) and K. P. Sinha (Indian Institute of Science, India) |
| P_1040 | Excess Heat Triggered by Current in a D/Pd Gas-Loading System Jian Tian, Bingjun Shen, Lihong Jin, Xinle Zhao, Xin Lu, and Hongyu Wang (Changchun University of Science and Technology, China) |
| P_1044 | Nuclear Reactions in Liquid Metal: An Approach to Dense Plasma Fusion J. Kasagi (Tohoku University, Japan) |
| P_1045 | Models for Excess Heat in PdD and NiH Peter Hagelstein (Massachusetts Institute of Technology, USA) and Irfan Chaudhary (University of Engineering and Tehcnology, Pakistan) |
| P_1047 | |
| P_1048 | Basic Physics Model for PdH and PdD Thermodynamics Peter Orondo and Peter Hagelstein (MIT, USA) |
| P_1049 | Empirical Models for Excess Power in Two-Laser Experiments Dennis Letts(none, USA) and Peter L. Hagelstein (MIT, USA) |
| P_1050 | Detecting Energetic Charged Particle in D ₂ O and H ₂ O Electrolysis using a Simple Arrangement of Cathode and CR-39 H. Aizawa, K. Mita, D. Mizukami, H. Uno, and H. Yamada (Iwate University, Japan) |
| P_1054 | Experimental Evidence for Bursts of Heat, Particles and Sound in LENR Experiments David J. Nagel (The George Washington University, USA) and Mahadeva Srinivasan (Bhabba Atomic Reserarch Centre (Retired), India) |
| P_1056 | Cold Fusion Plasmoids Edward Lewis (sciencejunk.org, USA) |
| P_1059 | Cold Fusion is a Scientific Revolution: the Usefulness of this Knowledge Edward Lewis(sciencejunk.org, USA) |
| P_1060 | Nickel Transmutation and Excess Heat Model using Far-From-Equilibrium Blackbody Theory and Reversible Thermodynamics Daniel Szumski (Independent Scholar, USA) |

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| P_1061 | A Change of Tritium Content in D₂O Solutions during Pd/D Co-Deposition Kew-Ho Lee, Hanna Jang, and Seong-Joong Kim (Korea Research Institute of Chemical Technology, Korea) |
|--------|---|
| P_1063 | The Possibility of the Reuse of Nano-Pd Particles for Solid Fusion X. F. Wang and Y. Arata (Osaka University, Japan) |
| P_1064 | Generation of Short-Lived Isotopes in Experiments with Bismuth Salts Dmitry Baranov and Olga Baranova (Russia) |
| P_1070 | Erzion Model Interpretation of the Experiments with Hydrogen Loading of Various Metals Yury Bazhutov (Terrestrial Magnetism, Ionosphere and Radiowave Propagation Institute (IZMIRAN), Russia) |
| P_1072 | Cold Plasma in Multibubble Sonoluminescence Sung Je Hong (Kepco E&C, Korea) and Jae Young Lee (Handong Global University, Korea) |
| P_1075 | Forcing the Pd/ ¹ H- ¹ H ₂ O System into a Nuclear Active State Stanislaw Szpak (Retired, USA) and Frank Gordon (SPAWAR(retired), USA) |
| P_1077 | Deep-Electron Orbits in Cold Fusion A. Meulenberg (National Advanced IPv6 Centre, Malaysia) and K P Sinha (Indian Institute of Science, India) |
| P_1080 | Research into Excited Long Lived 0.6 – 6.0 keV Energy Levels in the Cathode Solid Medium of Glow Discharge by X-Ray Spectra Emission A. B. Karabut (Samar+ COMPANY, Russia) |
| P_1083 | Low-Energy Electroweak (EW) Physics (in cavities) in Lattices and Fluids V. Godbole (unaffiliated, Germany) |
| P_1084 | Surface Effect for Gas Loading Micrograin Palladium for Low Energy Nuclear Reactions LENR Heinrich Hora (University of New South Wales, Australia), George H. Miley (University of Illinois, USA), Mark A Prelas (University of Missouri, USA), Kyu Jung Kim, and Xiaoling Yang (University of Illinois, USA) |
| P_1087 | A Rugged, Isoperibolic Calorimeter for Electrochemical and Gas Loading Experiments D. A. Kidwell, D. D. Dominguez (Naval Research Laboratory, USA), A. E. Moser (Nova Research, Inc., USA), V. Violante (ENEA, Frascati, Italy), and D. L. Knies (Naval Research Laboratory, USA) |
| P_1094 | Sonofusion's Transient Dense BEC Clusters Roger S. Stringham (First Gate Energies, USA) |

P_1095

Patents and Cold Fusion

David J. French (Secound Counsel Services, Canada)

P_1098 Changes in the Element Compositions of Pd and Re Specimens Irradiated in Dense Deuterium by γ -Quanta with Boundary Energy 23 MeV

> Alexander Yurievich Didyk (Joint Institute for Nuclear Research, Russia) and Roland Stanislaw Wiśniewski (National Center of Nuclear Research, Poland)

P_1099 Electrochemical Deuterium Absorbed at Palladium Nanoparticles - Carbon Composite Electrode

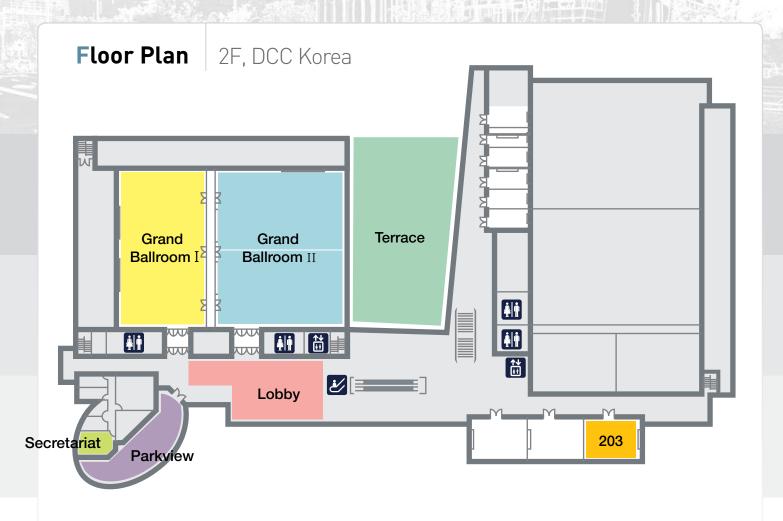
> Dawei Dong (Xiamen University, China), Shan Jin (Huazhong Normal University, China), Yue Wang, and Zhong-Qun Tian (Xiamen University, China)

P 1106 Deposition of Pd Nano-Particle on Silica for High Surface Area and Thermal Stability for Gas **Loading Excess Heat Generation**

Seunghwan Seok and Do Hyun Kim(Korea Advanced Institute of Science and Technology, Korea)

P_1107 Ni-H Replication

Peter Mobberley (Advanced Energy Technologies, UK)



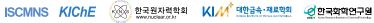
| Grand Ballroom I | | Grand Ballroom II | | Parkview | |
|------------------|------|-------------------|---------|----------|---------|
| Use | Date | Use | Date | Use | Date |
| Banquet | 8/16 | Opening/Plenary | 8/13 | Lunch | 8/13~16 |
| | | Oral Session | 8/13~17 | | |
| | | Poster Session | 8/13~17 | | |
| | | Coffee Break | 8/13~17 | | |

| Lobby | | Terrace | | 203 | |
|-----------------|---------|-----------|------|-------------|------|
| Use | Date | Use | Date | Use | Date |
| Registration | 8/13~17 | Welcome | 8/12 | IAC Meeting | 8/14 |
| Internet Lounge | 8/13~17 | Reception | | | |

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