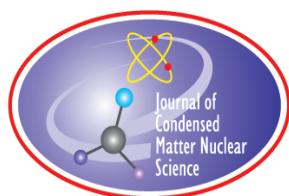


# **JOURNAL OF CONDENSED MATTER NUCLEAR SCIENCE**

**Experiments and Methods in Cold Fusion**

**VOLUME 15, March 2015**



# **JOURNAL OF CONDENSED MATTER NUCLEAR SCIENCE**

Experiments and Methods in Cold Fusion

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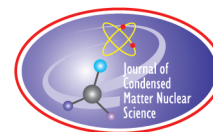
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## Preface

My thanks to everyone who attended ICCF-18, which was held at the University of Missouri. We had a total of 215 registered participants, of whom 125 submitted original work that was presented within the scientific program. This was the first time in many years that ICCF has been held on the campus of a major research university, and we were delighted to have the opportunity to host this important conference.

Instead of summarizing the research highlights of the ICCF-18 meeting in this preamble, I prefer to speak to the evolving style of presentations that were made at this meeting, since I see this progression as being essentially important to the advancement of this exciting discipline of condensed matter nuclear science (CMNS) in the world's scientific agenda. The papers within this volume convey their scientific significance intrinsically, and all have made a contribution to this field, so I will not single out particular presentations in my comments below.

At ICCF-18 scientists presented their own original work and compared and contrasted their results to those of other authors. Far more 'data centric' talks were presented at this conference than 'futuristic opinion' talks, and personally I think that this is an excellent trend that should continue well into the future of the ICCF series. While there were a number of areas of agreement, there were also starkly different results reporting on the same phenomena, all presented by quite credible scientists from around the world. As in any scientific community, this often led to strong emotions and heated debate and exchanges. But it is exactly these tense discussions that are an essential ingredient in the advancement of science. It is essential that we all have confidence in the validity of our work, and that we openly and honestly provide a critical self-assessment of our results. When we independently arrive at differing results, then it is essential that we as a community keep an objective, open mind as we collectively work to resolve these different reports through more data and further study. Yes, eventually some results will be shown to be wrong, possibly do to an unknown experimental artifact at the time, and others will be borne out to be accurate based upon large-scale reproducibility across many different labs world-wide. This is the natural and healthy way that science is conducted. It is impossible to know initially if the positive result or the negative result is accurate, until many others attempt to reproduce the measurements with improved metrology. Hence, both results must be carefully considered and respected until much more data is obtained, hopefully from many other labs that utilize different experimental techniques. This initial ambiguity regarding the early reports on new phenomenology is both natural, and to be encouraged. There is nothing more dangerous to the progression of science than an inferred 'requirement' that our results must agree with each other. I think that we have all suffered severely in the past from journals, funding agencies, and professional societies that have thoughtlessly rejected interesting new work simply because it didn't agree with the prevailing trends and beliefs of the time. Let's be certain that we never make that same mistake within our own ICCF community. As exciting new results emerge from our efforts, the world will rapidly come to view our community as an example of how essential it is to keep an open mind when one encounters new empirical results that initially appear to be inconsistent with the preferred theoretical interpretation of the time.

So please join me in reading the proceedings of ICCF-18 with a critical, open mind. Thanks to everyone who presented their work here, and I look forward to more intense and vigorous scientific exchanges during our future meetings.

Sincerely,

*Rob Duncan*  
(ICCF-18 Conference Chair)  
March 2015