

THE WAVE



The newsletter publication of the International Microwave Power Institute

May 2023



IMPI 57 Hits 100 Registrants, Prepares for Denver, Colorado

The **57th Annual Microwave Power Symposium** is setting early records, with one-hundred (100) registered attendees, to date. IMPI 57 will take place June 27-29, 2023, at the Curtis Hotel in downtown Denver, Colorado, USA. Muegge-Gerling will serve as the Platinum Sponsor.

Led by Dr. Candice Ellison, USDA-ARS and Dr. B. Reeja Jayan, Carnegie Mellon University, the Technical Program Committee has just completed their work on the IMPI 57 Proceedings.

IMPI 57 will offer two (2) optional short courses on Tuesday, June 27th: Dielectric Material Properties Measurement and Solid State RF Energy Applications: Case Studies & Demonstration. Following the Short Courses, the Symposium will officially kickoff with an Exhibitor Showcase, featuring nineteen (19) exhibitors, and a Welcome Reception.

Wednesday, June 28th and Thursday, June 29th will feature three (3) keynote addresses, six (6) invited speakers, two (2) spotlight sessions, over forty (40) oral and poster presentations, a student competition, as well as a Group Dinner and dedicated Poster/Exhibitor sessions.

IMPI Members can still register for \$775; non-members are \$875. The registration fee covers all in-person sessions, a Welcome Reception, two continental breakfasts & luncheons, three coffee breaks, a copy of the conference Proceedings and unprecedented networking opportunities. A very limited number of hotel rooms remain at the Curtis Hotel for the special \$219 rate, so book your room today! Stay up to date with the latest IMPI developments here! See you in Denver!

IN THIS EDITION OF THE WAVE

IMPI 57 Symposium.....	1
President's Message.....	2
Spring Webinar Notice.....	2
Annual Meeting Notice.....	2
Application Open for Schiffmann Memorial Scholarship.....	3
Fall Seminar 2023 Update.....	3
Welcome Trumpf.....	3
Remembering Bernie Krieger.....	4
Solid State RF Energy Section....	4
JMPEE Volume 57 (2).....	5
Board Welcomes Jiajia Chen & Don Haislett.....	5
Member News.....	6
Partner News & Events.....	6
Calendar of Events.....	6

Cover Photos from left: IMPI 57 Keynote Speakers: Dr. Cristina Wildfire, National Energy Technology Laboratory; Dr. Olli Tarvanien, UK Science and Technology Facilities Council (STFC), Rutherford Appleton Laboratory ISIS Neutron and Muon Source and Mr. Mike Wolf, CES Food Tech Conference/Smart Kitchen

PRESIDENT'S MESSAGE

Some of IMPI's esteemed long-time members and symposium attendees may recall our 44th Annual Microwave Power Symposium held in Denver. Not entirely by sheer coincidence, IMPI 57 will be not only in the same city as we were in 2010 but also the same venue, The Curtis. While its unique charm and character are delightfully surprising, the location in the heart of downtown Denver is within walking distance to numerous restaurants situated around Denver's famed Performing Arts Complex, and a short Uber ride to just about any other event or attraction imaginable. The Curtis is also near and dear to our hearts as the venue for the first IMPI event organized by newly appointed Executive Director Molly Poisant. Judging by the outstanding numbers for technical papers, registrations and exhibitors, IMPI 57 is shaping up to be one of the most successful events in recent memory. Kudos not only to Molly and Alicia but also Co-Chairs Candice Ellison and B. Reeja Jayan for their thoughtful planning and hard work!

Projections for a successful IMPI 57 seem to be reliable indicators that things are going well for IMPI. We (i.e., IMPI's Board of Directors) are continually asking ourselves, "are we doing things right?" and "what should we be doing better?" We ask these questions amongst ourselves, but in reality, we are asking them of IMPI's members, the benefit for which IMPI exists in the first place. Occasionally, however, we struggle to find the answers. Over the years IMPI members have shown their appreciation of member benefits mainly by attending events, including the annual symposium, Fall Seminar, and spring and fall webinars. In addition to attending these events, a benefit available to all IMPI professional and corporate members is to host and/or provide the content for them. No doubt many IMPI members are engaged in exciting and novel technologies that would be of keen interest to other members. To the extent that these technologies are not confidential, IMPI encourages all IMPI members to consider, for example, hosting a webinar with the administrative assistance and support of Molly and Alicia.

IMPI members can also help to broaden IMPI's profile in the microwave/RF community by encouraging colleagues and peers to consider becoming a fellow member. It is clear that many non-microwave/RF professionals are involved in emerging applications of microwave/RF technologies. Quite likely many may not even be aware that microwave/RF offers significant advantages over the conventional technologies with which they are familiar. This year IMPI will be conducting outreach by attending application-focused conferences (e.g., National Restaurant Association and IEEE-International Microwave Symposium) and asking IMPI-member exhibitors to display an IMPI promotional banner. If your organization would like to help promote IMPI in a similar way, please contact Molly and/or Alicia for more info.

See you all soon in Denver!



John F. Gerling, IMPI President

SPRING 2023 WEBINAR ANNOUNCEMENT

“Seeking the Lost: Applications of Microwave Holography”

Tuesday, May 30, 2023 (4pm-5pm EST)

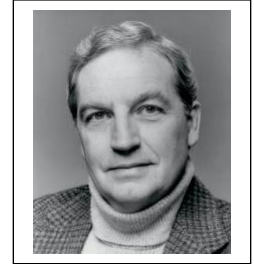
Instructor: Dr. Graham Brodie, James Cook University, Australia

More details, and registration, [coming soon here](#).

IMPI ANNUAL BUSINESS MEETING NOTICE

The Annual Meeting will be held on Wednesday, June 28, 2023, from 4:35pm - 5:15pm at the Curtis Hotel in Denver, Colorado. Board elections will be held at that time. Members will receive an agenda, electronic ballot and candidate statements by mid-May, via email.

Schiffmann Memorial Scholarship Application Open, Donations Being Accepted to Fund Annual Scholarship



Applications are now being accepted for the Robert F. Schiffmann Memorial Scholarship. Learn more about the [scholarship and the application process here](#). Applications are due by May 31st.

Those wishing to make a tax-deductible contribution to the Robert F. Schiffmann Memorial Scholarship [can do so here](#). Thank you in advance for helping IMPI, and the Schiffmann family, as we continue to honor Bob's legacy!

IMPI Fall 2023 Seminar to be Held at Richardson Electronics and the Hotel Baker Outside of Chicago

IMPI's Fall Seminar will be held October 3-5, 2023, at the Richardson Electronics Headquarters and the historic Hotel Baker, located on the waterfront in St. Charles, Illinois. The Fall Seminar Planning Committee has begun working on the program, which will include a new *Microwave Fundamentals Workshop*. Speaker updates and registration details will be [posted here](#) in the coming weeks. A limited number of hotel rooms, at the special \$154 group rate, are now available. Reservations at the Hotel Baker can be made by phone; call +1-630-584-2100 and ask for the IMPI/Richardson rate.



WELCOME TO IMPI'S NEW CORPORATE MEMBER!

TRUMPF



TRUMPF Hüttinger
generating confidence

REMEMBERING BERNIE KRIEGER

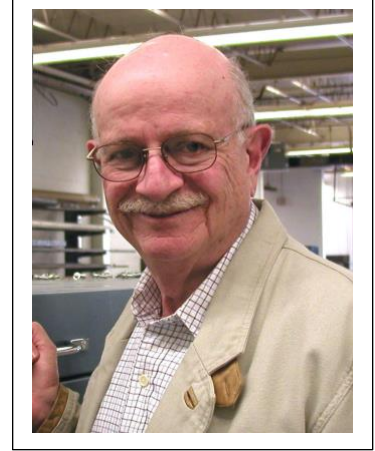
Bernard Krieger (Bernie) died on February 16, 2023, at his home in Stamford, Connecticut, at the age of 93.

Bernie, who previously served as CEO of Cober, was a longtime and devoted member of IMPI, having served in many board positions including President. He was a Fellow of the Institute, and most recently participated in IMPI 53 (Las Vegas), IMPI 50 (Orlando) and IMPI 48 (New Orleans).

Bernie was passionate about advancing microwave heating technologies for the benefit of us all. In the March 2013 edition of this publication, Bernie said, “like the marching song about old soldiers fading away, industrial microwave people don’t fade away, they just radiate.”

Please keep Bernie’s wife, Susan, his son Matthew Krieger who sits on IMPI’s Board, and all of his friends in the Mw/RF community, in your thoughts and prayers. IMPI is planning a remembrance table for Bernie at our upcoming Symposium.

Contributions in Bernie’s memory may be made to JCC of Stamford, 1035 Newfield Avenue, Stamford, CT 06905 US, and Veterans of Foreign Wars.



IMPI SOLID STATE RF ENERGY SECTION

Update Provided by Dr. Klaus Werner, Chairman, IMPI Solid State RF Energy Section

The Section is currently working on a couple of things:

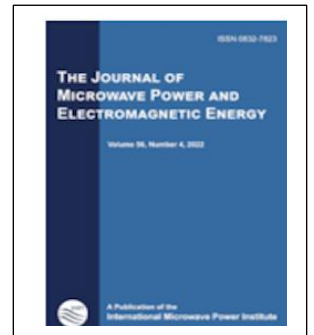
- A workshop during IMPI 57 to include live demonstrations of RF Energy application examples. Being able to see and “play” with the electromagnetic fields real time in the applicator, will make our messaging almost palpable.
- A white paper on the microwave markup (MML) language and its potential use
- Metrics permitting RF energy system designers to take an educated decision for or against the use of solid state RF energy technology (or magnetron based solutions for that matter).
- Compiling questions for a survey together with Mike Wolf (*The Spoon*) to assess the potentiality and beliefs in solid state microwave cooking technology and its market readiness.

Most of all we’re looking forward to IMPI 57 with a smashing program and fruitful discussions and a lot of fun.

Membership in IMPI’s Solid State RF Energy Section is open to all current IMPI Members; there are no additional Section fees at this time. If you are interested in joining the Section, please reach out to Alicia.standridge@impi.org

Journal of Microwave Power & Electromagnetic Energy News

Volume 57, Issue 2 of JMPEE is now available. If you would like access to JMPEE, please contact Alicia.standridge@impi.org



The latest issue includes the following papers:

Editor's message: About Artificial Intelligence as a tool for writing papers
by Juan Antonio Aguilar Garib

Dielectric properties of Sphenarium purpurascens at 2.4GHz

by Alonso Corona-Chavez; Tejinder Kaur; Jose Luis Olvera-Cervantes; Maria Elena Sosa-Morales; Roberto Rojas-Laguna

Permittivity Measurements for Roasted Ground Coffee Versus Temperature, Bulk Density, and Moisture Content

by Rafael Pérez-Campos; José Fayos-Fernández; Juan Monzo-Cabrera

Investigating the Influence of marination and storage on microwave dielectric properties of chicken breast meat

by Samir Trabelsi

An Investigation on Electromagnetic Shielding Effectiveness of Metallic Enclosure Depending on Aperture Position

by Sunay Güler

Microwave-assisted hot air drying of bone broth-based sauce

by Elif Aykin Dinçer; Cüneyt Dinçer; Özer Kütükçü

IMPI Welcomes Two New Corresponding Board Members



Dr. Jiajia Chen
University of Tennessee - Knoxville



Mr. Donald G. Haislet III
TRUMPF Huettinger, Inc.

MEMBER NEWS

Congratulations to Matt Rigney of Panasonic who was recently awarded the “*Spirit Award*” by the Society for Hospitality & Foodservice Management! Read more [here](#).

Make sure to check out the [recent Job Postings](#)!

Email your Member News & Job Postings to molly.poisant@impi.org if you would like them added to our page!

CALENDAR OF EVENTS

Stay up to date with IMPI Events by visiting our [Calendar of Events page](#). If you have an event you would like to add to the Calendar, please contact molly.poisant@impi.org

PARTNER NEWS & EVENTS

The **AMPERE 2023** conference will be held in Cardiff, United Kingdom from September 11-14, 2023. More details are available here: www.ampere2023.com

The **5th Global Congress on Microwave Energy Applications (5 GCMEA)** will be held in Fukuoka, Japan, July 16 -19, 2024. The GCMEA is cooperatively organized by International Federation of Associations in the Field of Microwave and RF Power Engineering (MAJIC), composed of Microwave Working Group (MWG, USA), Association for Microwave Power in Europe for Research and Education (AMPERE Europe), Japan Society of Electromagnetic Wave Energy Applications (JEMEA, Japan), International Microwave Power Institute (IMPI, USA) and China Association of Microwave Power Applications (CAMPA, China).

The International Microwave Power Institute

PO Box 1140

Mechanicsville, VA 23111

info@impi.org www.impi.org

For the Latest News - Follow Us on Social Media

