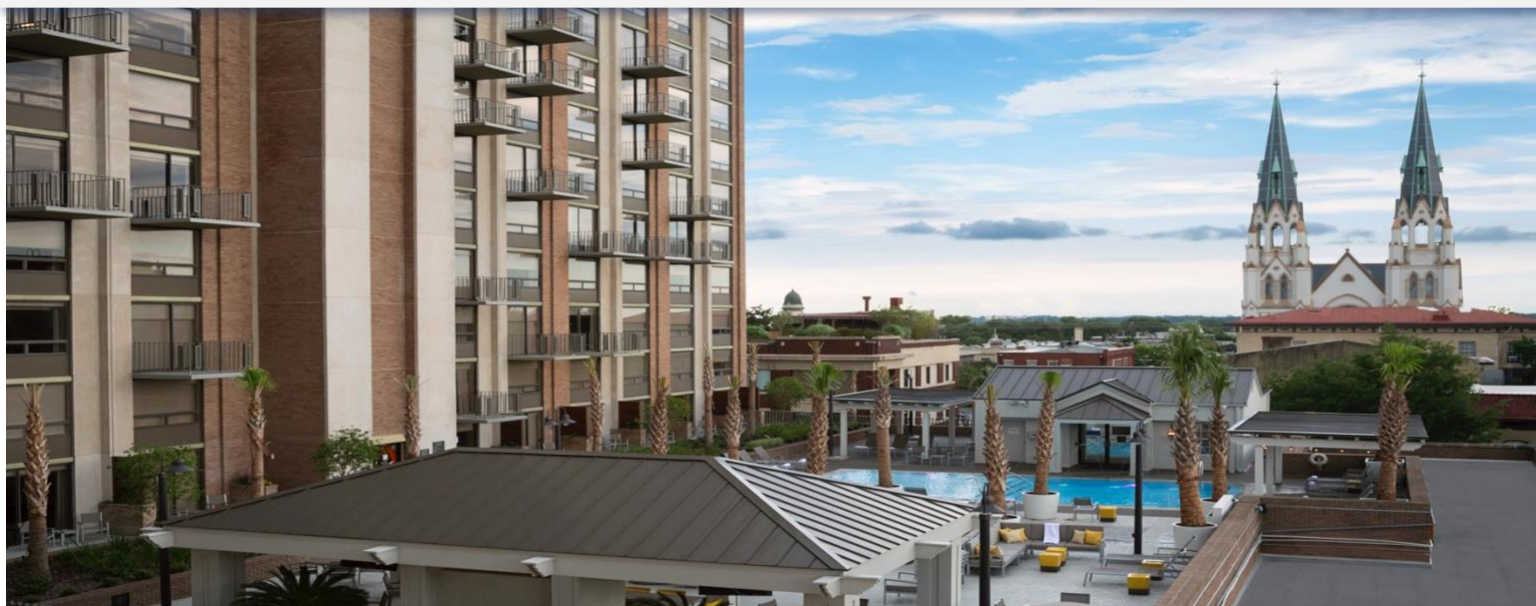


THE WAVE



The newsletter publication of the International Microwave Power Institute

December 2019



Last Call for Papers: IMPI 54 Symposium (Savannah)

Abstracts for the [54th Annual Microwave Power Symposium \(IMPI 54\)](#) are due by January 15, 2020. The Call for Papers and abstract template are available [here](#); authors are required to submit a 2/3 page abstract to be considered for presentation with the option to submit a final paper (up to 3 pages) for the Proceedings. Acceptance notices will be sent out in mid-February.

IMPI 54 will be held June 15-17, 2020 at the historic DeSoto Hotel in downtown Savannah, Georgia, USA. The Solid State RF Energy Section will hold a workshop and its business meeting on June 18, 2020 at the same venue. Hotel rooms at the IMPI group rate and selling quickly and [available here](#).

Dr. Gregory Dudley, Eberly Family Distinguished Professor at the University of West Virginia, will present an invited paper on Microwave Chemistry. Dr. Josip Simunovic, Research Professor at NC State University and Chief Science Officer at SinnovaTek Inc., will present a paper on Microwave Processing.

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Cover Photo: The DeSoto Hotel in Savannah, Georgia

IMPI 54 Symposium Continued

Dr. Vadim Yakovlev of Worcester Polytechnic University will teach a Short Course the morning of June 15: “*Introduction to Multiphysics Modeling for Microwave Power Applications.*”

IMPI 54 will feature an Exhibitor Showcase followed by a Welcome Reception on June 15. There will be keynote presentations, invited, oral and poster presentations, as well as panel discussions on June 16 & 17. Various networking opportunities, including a Group Dinner the evening of June 16th, will be available. Updates on speakers will be added to the Symposium page over the next several months; the full program will be released by March 1. [Registration is now open!](#)

IMPI 54 will also feature a Student Competition with cash awards given for best oral and best poster presentation by a student. A limited number of student travel scholarships will be awarded as well. Dr. Candice Ellison is serving as the Student Competition Chairman.

Muegge GmbH will serve as the Platinum Sponsor and Ferrite Microwave Technologies returns as a Silver Sponsor. The [Sponsorship](#) and [Exhibit Packages](#) are available here. We hope to see all of you in Savannah this June.

EXECUTIVE DIRECTORS REPORT

by Molly Poisant

As 2019 draws to a close, I'd like to start by thanking each of you for the opportunity to serve as IMPI's Executive Director. This year marks my 10th year in this role, and what a year it has been!

This year saw the largest membership increase in years; we started 2019 with 145 members and finished with 200 members. We welcomed 10 new Corporate Members during 2019: TurboChef, Crescend Technologies, Wave PIA, MACOM, pinkRF, Huber & Suhner, Rogers Corporation, UNOX S.p.A., Dipolar and Multek. I'd like to recognize the efforts of my colleague, Ms. Alicia Standridge, who managed membership this year in a remarkable fashion.

The Solid State RF Energy Section of IMPI was born in early 2019. Not only did the Section welcome members of the RF Energy Alliance, but other new members from across the globe who were anxious and eager to be a part of this new technology. I commend Dr. Klaus Werner, Mr. Sanghun Lee, Mr. John Mastela, Mr. David Lester and Mr. John F. Gerling for their leadership of the Section.

The Journal of Microwave Power and Electromagnetic Energy continued to flourish under the leadership of Editor-in-Chief, Dr. Juan Aguilar Garib. The Journal's Impact Factor increased to .850 (from .575 the two years prior). Submissions increased, with 2019 being the first year to top 100 submissions; this led to a decrease in acceptances, a more selective process and a higher quality publication.

IMPI's 53rd Symposium in Las Vegas, Nevada in June of 2019 welcomed 130 international attendees, including 15 exhibitors who participated in our inaugural Exhibitor's Showcase. Many thanks to Dr. Graham Brodie, Mr. Roger Williams and Dr. Ulrich Erle, who led the technical program and food science & technology program committees.

Continued on next page

EXECUTIVE DIRECTORS REPORT Continued

In early November, TurboChef welcomed 50 attendees for the Fall Seminar, “*The Brave New World of Microwave & RF*”, which received stellar reviews on our attendee survey. Special thanks to Mr. Mark Watts for his work on that program and to Mr. James Pool and his team for being such wonderful hosts.

IMPI also held four webinars throughout the year. I’d like to recognize the contributions of Mr. Bob Schiffmann, Dr. Vladimir Bilik, Mr. John F. Gerling for serving as our instructors; I’d also like to thank Dr. Eric Brown and Conagra Brands for sponsoring, and facilitating, our webinar series.

In 2019, we launched our new and improved website: www.impi.org that includes a Member Only Section (with *The Wave* Newsletter archive, membership directory, and more), a Calendar of Events, Student, Professional Corporate Membership pages, and many more user-friendly upgrades. We continued to roll out our Social Media presence with a focus on Facebook, LinkedIn and Twitter.

Financially, we end this year in a very healthy position. The increased membership, higher than expected attendance at our events and a more robust royalty payment from the Journal led to a carryover \$20,000K higher than this same time last year. This will allow us to continue to focus on growing the Institute’s reach and relevancy in 2020.

In closing, I would be remiss if I did not thank IMPI’s Board of Governors and Executive Committee for their dedication to the Institute this year. The future of IMPI is bright because of your efforts.

Alicia and I look forward to serving all of you in 2020 and beyond. Please let us know if there is anything we can do to make your membership more valuable.

Wishing all of you a very Happy New Year,

Molly Poissant

SOLID STATE RF ENERGY SECTION UPDATE

by Dr. Klaus Werner, Section Chairman

Section day follow up in the works: tagging initiative to code “load properties” into smart ovens, amplifier roadmap, website content “stuffing”

- Interested parties are welcome to join either working group
- Another training course held during the Benelux RF Day (November 28) in Nijmegen
- Section budget for 2020 approved. Will be mainly spent on organizing “section days” and invited speakers on those occasions
- Tutorials considered for the IMPI Spring activities; Definitely planned for during IMPI Symposium and Fall Seminar 2020

Section membership is open to all IMPI members; those interested in joining the Section should email alicia.standridge@impi.org

JMPEE UPDATE

Volume 53 of the Journal of Microwave Power and Electromagnetic Energy (JMPEE) is now available to all IMPI Members. The current Volume of JMPEE, along with access to the JMPEE Archive, is available to IMPI Members free of charge, via Taylor & Francis Publishing. If you need your log-in and password reissued, please contact alicia.standridge@impi.org and it will be resent to you.

Volume 53, Issue 4

Editor's message: Communication applications and perception of microwave effect

Juan Antonio Aguilar Garib

Dielectric properties of pulque at different temperatures from 0.1 to 25 GHz

Tejinder Kaur Kataria, Maria Elena Sosa-Morales, Jose Luis Olvera-Cervantes, Roberto Rojas-Laguna & Alonso Corona-Chavez

Effects of power input and food aspect ratio on microwave thawing process of frozen food in commercial oven

Waraporn Klinbun & Phadungsak Rattanadecho

Optimisation of Microwave-Assisted Extraction of Squalene from *Amaranthus* spp. Seeds

María A. Lozano-Grande, Gloria Dávila-Ortiz, Jorge García-Dávila, Gabriel Ríos-Cortés, Eduardo Espitia-Rangel & Alma L. Martínez-Ayala

A computation-driven, energy-efficient and hybrid of microwave and conventional drying process for fast gooseberry candy production

Chanpreet Singh, Nitin Saluja & Rajeev Kamal Sharma

Experimental investigation and design of sectoral waveguide TM₀₁ to TE₁₁ mode converter

Vikram Kumar, Smrity Dwivedi & P. K. Jain

Life is Beautiful
Mold and food borne pathogens not so much

ISN'T IT TIME FOR MICROZAP?

For information contact:
Odyssey Technical Solutions
brian.blackwell@odysseyt.com
www.odysseyt.com

tortillas day 17

Interested in Ad Space? IMPI now offers banner advertising in *The Wave Newsletter* and on IMPI.org
Contact mollyl.poisant@impi.org if interested.

IMPI Spring 2020 Webinars

IMPI's Spring 2020 Webinar series entitled "*Consumer Microwave Cooking: Nutrition, Quality, and Safety*" will take place from February-May 2020. Dr. Sean McKeown of Graphic Packaging International is in the process of finalizing the speakers and dates. If you have a recommendation for future webinar topics and/or speakers, please contact sean.mckeown@graphicpkg.com or molly.poisant@impi.org

Webinars are offered 4-5 times per year, and free of charge, to IMPI Members. The 2020 Webinars will be sponsored by Conagra Brands.

CALENDAR OF EVENTS

IMPI's Calendar of Events is [available here](#).

If you have an event you would like to feature on our Calendar, please send your event details to info@impi.org by the 15th of the month.

PARTNER NEWS

Our colleagues at the **Microwave Technology Association (MTA)** in the UK publish a quarterly Newsletter. The two most recent issues cover materials that are of interest to many of us: an explanation of solid-state technology, and the UK issues regarding the validation of microwave cooking instructions. I urge you to read their [Autumn](#) and [Winter](#) newsletters.

The **4th Global Congress on Microwave Energy Applications (4GCMEA)** will take place August 17-20, 2020 in Chengdu, China. IMPI members are encouraged to review the [2nd Call for Papers](#) and [Sponsorship/Exhibition opportunities](#). IMPI has five members serving on the Technical Program Committee for 4GCMEA: Dr. Ray Boxman, Dr. Graham Brodie, Dr. Ulrich Erle, Dr. Yang Jiao and Dr. Klaus Werner; Mr. Roger Williams will serve as our Chairman of the TPC for the 4GCMEA.

WAVE NEWSLETTER PUBLICATION SCHEDULE

Look for your copy of "*The Wave*" Newsletter on the following dates:

January 31, 2020

March 31, 2020

June 30, 2020 (*Special Symposium Edition*)

August 31, 2020

October 30, 2020

December 31, 2020

NEWS FROM AROUND THE WEB

Microwave-assisted extraction combined with GC-MS for determination of volatile small molecule to evaluate compatibility of anti-microbial peptide PL-5 spray with packaging materials

Researchers Create Ultimate Non-Stick Coating That Repels Everything – Even Viruses and Bacteria

FDA publishes proposed rule to establish laboratory accreditation [program for food testing](#)

In 2020, we would like to continue our MEMBER NEWS & MEET THE MEMBER content. Please consider sending in items, to info@impi.org so that we can share with the rest of our membership!

The International Microwave Power Institute

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