

# THE WAVE



*The newsletter publication of the International Microwave Power Institute*

**September/October 2014**



*Hyatt Regency at the Arcade*

## **Consumer Insight, Market Trends, Product Development and FSMA: Some of the Highlights of IMPI's Fall Short Course**

IMPI's Fall Short Course will be held Tuesday, October 21 - Thursday, October 23, 2014 at the Hyatt Regency at the Arcade in downtown Cleveland, Ohio, USA. The Short Course, which is being sponsored by Nestle, will focus on areas of interest to our members working with microwavable food products. Here's a look at the speakers:

### **What to Expect from Today's Microwave User**

Darren Seifer, The NPD Group

*The microwave oven has long been a standard appliance in our kitchens and has revolutionized the way we prepare foods. Are there new trends on the horizon that will change the way we view and use this appliance? The NPD Group will harness its rich consumption trends information to show you the latest information.*

### **New Product Innovation and Personal Best Practices**

Ricky Singh, PhD, R&D Vice President (formerly with Diageo PLC and ConAgra Foods)

*Ricky Singh offers his personal compilation of best practices in new product innovation providing numerous examples, as Singh draws upon his nearly 20 years of product experience with such manufacturers as Diageo, ConAgra Foods, Schwan's and Nestle Purina.*

### **Innovating with the Menu Adoption Cycle**

Jack Li, Datassential

*Datassential reviews the life cycle of new food and flavor trends at restaurants, which you can then adapt for the at-home consumer. This session also includes a strategic look at how to think about trends -- and how the trend life cycle is changing.*

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## **Letter from the President**

*by Bob Schiffmann*

While the summer of 2014 is almost over, IMPI's activities for the year are just starting. First there is Professor Jeyam Subbiah's webinar "Virtual Test Kitchen for Food Product Design" to be presented on Tuesday, September 16 at 11 AM (EST). This is free to all current IMPI members.

Our webinar series will continue in the Spring with 3 webinars focused upon microwave ovens and including the topics of leakage measurement, cavity design, microwave oven components and other technical issues.

On October 22 and 23 we'll be holding our annual Fall Short Course in Cleveland, Ohio under the sponsorship of Nestlé. Details of the program can be seen on our website [Impi.org](http://Impi.org) and all members will be receiving a blast e-mail with details.

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## **Fall Short Course Continued**

### **FSMA: The New Era of Food Safety – Are You Prepared?**

Kristen Spatz, Grocery Manufacturers Association

*In the past, food safety concepts and programs that seemed like just a good idea are now going to be mandatory, requiring records supporting compliance, and those records will now be available to FDA. As a result, the fundamental question is whether you and your company are prepared for this new era in food safety. This presentation will focus on the following key concepts:*

- *Fundamental Principles of FSMA*
- *Current Status of the FSMA: Proposed Rules and Implementation Dates*
- *What does FSMA Mean to the Industry and What Can be Done to Prepare for FSMA?*
- *With FSMA Comes a New Focus on Food Defense/Intentional Adulteration*
- *Next steps as we transition to a New Era in Food Safety*

### **FSIS Policy Initiatives**

Office of Policy and Program Development, Food Safety Inspection Service (FSIS)

*A representative from the Food Safety Inspection Service will provide an update on current policy initiatives at FSIS that impact microwave foods including validation, generic labeling, and sampling of ready-to-eat foods.*

### **Making the Most of Nutrition with Microwave Cooking**

Amy Jamieson-Petonic, President, Nutrition Today with Amy J

*A licensed dietician and past national media spokesperson for the Academy of Nutrition and Dietetics shares her insights on the effects of microwave cooking on nutrients. Learn how the nutritional value of microwaved food varies from food cooked by other methods, facts about the safety of microwavable food and much more.*

### **RF and Industrial Mw Applications**

Bob Schiffmann, R.F. Schiffmann Associates Inc.

Glenn Blaker, PSC Inc.

*Microwave and Radio Frequency (RF) energy have been employed for industrial processing for over 60 years. What are their differences, how are they generated and used? Each offers specific benefits that will influence the choice of frequency. Their combinations with other heat forms may offer unique benefits and opportunities*

The Thursday afternoon **Packaging Session** is still being finalized. The Course will conclude by 3pm on Thursday, October 23<sup>rd</sup>.

The registration fee for members to attend the Short Course is \$575. This includes all course materials, a Welcome Reception on Tuesday evening, continental breakfasts, lunches and coffee breaks on both Wednesday and Thursday.

**Register today!** Rates increase after October 7<sup>th</sup>. A Microwaves 101 Pre-short course is being offered the morning of Tuesday, October 21<sup>st</sup> for \$150. Bob Schiffmann will teach this course.

Hotel rooms at the Hyatt Arcade are being offered for a special rate of \$149 per night (including in room internet) through September 30<sup>th</sup>. **Click here** to reserve your room today – space is limited.

Special thanks to our Fall Short Course Planning Committee: Ulrich Erle, Nestle; Sumeet Dhawan, Nestle; Justin Balousek, Heinz; Marie Jirsa, Hillshire Brands; Jane Walsh, General Mills; Ric Gonzalez, ConAgra Foods; Corey Crooks, Graphics Packaging International; and Bob Schiffmann, R.F. Schiffmann Associates.

The 2015 Fall Short Course will be held next October in Pittsburgh, PA and will be sponsored by Heinz.

## ***President's Message Continued***

Please be sure to register soon so you can get the best hotel rates and early bird registration rates.

Soon to go out is the Call for Papers for IMPI 49, our annual symposium to be held this year at the beautiful Kona Kai Resort in San Diego California on June 16-18, 2015. We are fortunate that Professor Ray Boxman, our Technical Program Chairman For IMPI 48 agreed to repeat this role at the 2015 symposium. He will be assisted by Dr. Ulrich Erle of Nestlé as a Co-Technical Program Chairman. Also joining the team is Professor Jeyam Subbiah (University of Nebraska @ Lincoln) as the Program Chairman for the Food Science and Technology sessions. All are actively putting their Technical Program Committees together and the Call for Papers will be issued by the end of this month.

We continue to be proud of the fine performance of the Editor of the Journal of Microwave Power and Electromagnetic Engineering, Prof. Juan Aguilar-Garib, who has set high standards for the Journal. We are discussing ways of increasing the submissions of symposium-papers for publication in JMPEE, as well as capturing publications from symposia and conferences held by other microwave related organizations such as AMPERE.

As you can see, things are moving along in IMPI and we continue to grow and expand its activities. As President, I chair both the Executive Committee and Board of Governors and we are pursuing a number of issues:

- Microwave oven standards: it came to our attention that the IEC 60705 standard for measuring the output power of microwave ovens is not mandatory for manufacturers. This partly explains the discrepancy that several of us have seen between the power outputs claimed by manufacturers to that measured by various laboratories. In every case of which I'm aware, the measured power (in watts) is considerably lower than that claimed by manufacturers. Since this is usually the only source of information for consumers, they may be misled to thinking that their ovens are higher power than they actually are, and this may in turn cause them to undercook foods. We are looking into this matter and seeing how we can form a response to the IEC from IMPI and other related microwave organizations.
- Another issue we are addressing relates to a request at IMPI 48 from two delegates from India that we allow the formation of a chapter of IMPI in India. This is a complex issue and is undergoing a great deal of discussion and thought since it involves many managerial and logistical issues as well as considering IMPI's international role and membership.

We are also actively considering how to expand our publication support for our food industry members. At one time, IMPI had a periodical "Microwave World" that was published 6 times a year and contained both technical and non-technical information including marketing, new products, statistics, publications and patents. At this time it is not possible for us to revive this publication, however, we are considering other options.

Just as the summer is coming to a close, so is this message; In doing so, I ask for your Input and assistance regarding these issues and other activities. I know you all are busy with your jobs and other parts of your lives, but I can tell you from having spent a good part of my professional career involved with IMPI, it is both rewarding and fun. So let's hear from you.

All the Best,  
Bob



## Meet the Corporate Member: Richardson Electronics

Richardson Electronics is a global leader in the RF and Microwave World.

We are a leading international manufacturer and provider of complete microwave systems, standard components, and customized solutions for a variety of industrial applications. We design and manufacture high power RF and microwave components for use in CW and pulsed applications, covering the frequency range from 915 MHz to 5800 MHz and pulsed applications from 2998 MHz to 14500 MHz. Our primary customers are OEMs specializing in design and development of, plasma applications, industrial microwave heating systems, linear accelerators or ground, airborne or marine radar

Richardson supports these markets with a full range of products including; CW Magnetrons, Microwave Generators, Microwave Power Supplies, RF Coils, RF Matches and Assemblies, Solid State Generators, and Waveguide Components. Along with hundreds of replacement parts in stock and ready for same-day shipping.

We are an ISO 9001-2000 registered facility based out of LaFox, Illinois, USA with strategically located sales offices and stocking locations

An essential part of our custom engineering and integration capabilities take place in our 225,000 square foot facility using state of the art equipment. Our facilities feature:

- Unique in-house manufacturing capabilities
- Chemical processing and finishing
- Machining
- Brazing, welding and joining

Please contact a Richardson representative to help you with your RF or Microwave requirements.

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***Richardson Electronics Tim Mulhall at their exhibit at IMPI 48 Symposium (shown above.) Richardson Electronics is one of IMPI's 7 Corporate Members. They join ConAgra Foods, Nestle, Heinz, General Mills, Hillshire Brands and Campbell's Soup. For more information about corporate membership contact [molly.poisant@impi.org](mailto:molly.poisant@impi.org)***



## 49th Annual Microwave Power Symposium (IMPI 49) in San Diego, CA, USA

IMPI 49 will take place at the beautiful Kona Kai Resort, June 16-18, 2015 in San Diego, California, USA. Registration will open in January 2015 but you can [reserve your hotel room](#) now at the special \$149 group rate (includes complimentary internet and no resort fee). There are a limited number of rooms at this rate so please book early!

The Call for Papers for IMPI's 49<sup>th</sup> Annual Microwave Power Symposium will be released by the end of September. A blast email will be sent out as soon as the Call for Papers is available for download. See you in San Diego!

### INTERACTIVE IMPI Direct links to Microwave News on the Web

[Packaging One Person Ready Meals](#)

[Microwave Technology Aids Moisture, Density Measurements](#)

[Enjoy Tasty Meals with LG's lightwave charcoal microwave oven](#)

[Microwaves may release higher levels of melamine from tableware](#)

[Microwaves in Taiwan – New Study Released](#)

[Latest Trends in Food and Beverage](#)

*An Important Publication: Measurement of Dielectric Properties in the Frequency Range of 300 MHz to 3 GHz as a Function of Temperature Density, Johanna B. Salsman et al, BUREAU OF MINES TUSCALOOSA AL TUSCALOOSA RESEARCH CENTER, Defense Technical Information Center, 1992 - 12 page Reference: Ceramic Transactions 21 (edited by Dave Clark, Gac and Will Sutton), page 203*

## Calendar of Events

**IMPI Webinar:** [Virtual Microwave Test Kitchen for Food Product Design](#), September 16 at 11am EDT, Free for IMPI Members

**7th International Colloquium on Modeling for Electromagnetic Processing**, September 16 - 19, 2014 Hannover, Germany <http://www.mep2014.uni-hannover.de/151.html>

**IMPI Fall Short Course**, October 21-23, 2014, Hyatt Regency at the Arcade, Cleveland, Ohio, USA [www.impi.org](http://www.impi.org)

**Klystrons, TWTs, Magnetrons, CFAs and Gyrotrons**, Stetson University, January 27-30, 2015

**49<sup>th</sup> Annual Microwave Power Symposium**, June 16-18, 2015, Kona Kai Resort, San Diego, California, USA [www.impi.org](http://www.impi.org)



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