



The 13th JEMEA Workshop

—Microwave medical application with front-line technology—

Co-sponsorship : IEEE MTT-S Japan/Kansai/Nagoya Chapter /JAPAN ELECTRO-HEAT CENTER,

1. Date & Time 23th January, 2020 (Thu) 13:00~17:30

2. Preface (English translation will come soon)

マイクロ波医療は古くからハイパーサーミヤやジアテルミーとして用いられてきたが、近年著しい発展が見られる。次世代テクノロジーとして、マイクロ波を用いた外科手術用デバイスや乳がん検診を劇的に変える世界初の検診機器が開発されている。また、マイクロ波凝固療法では、今までに豊富な治療実績があり、多くの重症患者の命を救ってきている。マイクロ波特有の治療法とは何か、マイクロ波の特徴と課題について、実際に具体例を出していただきながら、参加者のみなさんと情報共有していただきます。当日はマイクロ波医療機器の展示と実演デモがあります。ふるってご参加ください。

3. Program (Tentative)

Chairman (Former part) (Dr. Keiichiro Kashimura (Chubu Univ.))

13:00~13:05 Opening (Introduction: Main purpose of Workshop)

13:05~14:05 **“The world's first realization of microwave mammography for next-generation breast cancer screening”**

Dr. Kenjiro Kimura (Kobe university)

14:05~15:05 **“Microwave introduction into surgical energy devices
—Neither bleeding nor smoking, and no interfere in MR scanner image—**

Dr. Tohru Tani (Shiga University of Medical Science)

- Summary: Nowadays, couples of surgical energy devices have been monopolistically used in surgical operations. They are monopolar electric cautery, tissue coagulation forceps with radiofrequency and coagulate-cutting device with ultrasonic. In these situation, we invented world's first scissors type and tweezers type devices with microwave, and commercialized for the open surgery and endoscopic surgery.
- These devices have strong tissue sealing power due to focusing energy with relative low power. And they have advantages using microwave, immediate on-off switch in heating, less emit smoke and mist and less stimulate to nerve and muscle. Now, devices for another medical fields, forceps for flexible endoscopy, end-arterial forceps, robotic hand and device for MRI guided surgery, have been developed.

15:05~15:20 Break time

Chairman (Latter part) (Dr. Hideoki Fukushima (Toyota Central R&D labo., Inc.))

15:20~16:20 **“Intraoperative microwave coagulo-necrotic therapy (MCN) for Liver Cancers”**

Dr. Yuko Takami (National Hospital Organization Kyushu Medical Center)

Summary: Intraoperative microwave ablation, named microwave coagulo-necrotic therapy (MCN) is very effective and useful for locoregional control of liver cancers; comparable to hepatic resection. Now I introduce “MCN” as one of the first-choice treatments for liver cancers, even for patients with poor liver function or multiple lesions.

16:20~16:50 **“Introduction of Microwave medical equipment”**

Alfresa Pharma Corporation

16:50~17:30 “Panel Discussion”

(Member of the panel: 3 Lecturers Moderator: Dr. Yoshio Nikawa)

17:40~ Banquet (Place: Main Conference room CD(Same room as Work shop))

4. Place 10F Sin-Marunouchi building, 5-1, Marunouchi 1-Chome, Chiyoda-ku, Tokyo 100-6510.

Kyoto Academia Forum in Marunouchi Mail conference room CD

Access : <http://www.kyoto-u.ac.jp/ja/kaf/about/access.html>

Nearest Station: JR, Tokyo Metro subway “Tokyo” station.

(Direct connected) 10 Minutes ‘Walk from Tokyo station “Shinkansen bullet train platform” . In front of Marunouchi North Exit.

5. Attendance fee (Including proceedings) -Tax included, JEMEA issued receipt.

JEMEA or cooperative organization Member (Pre-registration) : 4,000 (JPY)

JEMEA Student member : 2,500 (JPY)

JEMEA or cooperative organization Member(On-site) : 7,000 (JPY)

Non-member (Business man or woman) : 8,000 (JPY)

Non-member (Student) : 3,000 (JPY)

Banquet : 4,000 (JPY)

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6. Registration

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Work Shop (<https://www.jemea.org/?p=13196&lang=en>)

Registration site: : (https://www.jemea.org/?page_id=3522)

Japan Society of Electromagnetic Wave Energy Applications (JEMEA)

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【Map】

