

IEEE MTT-S
Intersocietal Liaison

Barry S. Perlman, Chairman

ADCOM MEETING
June 7-8, 1997

Intersocietal Liaison Committee - 1997

Aerospace Policy

Antenna & Propagation Society

Communications and Information Policy(CCIP)

Defense & Engineering R&D

Energy Policy

GaAs IC Symposium

COMAR/Medical Technology Policy

International Microwave Power Institute(IMPI)

Instrumentation and Measurement Society

PACE

Steering Committee of Journal of Lightwave Tech.

Solid State Circuits Society

Superconductivity

URSI US National Committee

W. C. Brown

F. Ivanek

D. N. McQuiddy, Jr.

W. C. Brown

P. W. Staecker

R. Peterson/A. Rosen

J. M. Osepchuk

S. F. Adams

J. M. Owens

N. R. Dietrich/P.J. Stabile

J. Goel

M. Nisenoff/A. Silver

A. A. Oliner

Change of Address

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Committee Activity

Committee on Man and Radiation - COMAR (R. Peterson)

- A Technical Information Statement(TIS) “RF Interference(RFI) of Medical Devices”, a tutorial on effects of radiated emission from common RF sources(e.g. broadcast, cellular, medical RF, etc...) is pending approval by COMAR
- The TIS “Biological and Health Effects of Electric and Magnetic Fields from Video Display Terminals” was approved and published in May-June 1997 issue of Engineering in Medical and Biology Magazine.
- The TIS on “Powerline Magnetic Fields” failed on first vote and was sent back to committee for re-examination in view of recent NAS/NRC report.
- A TIS on RF dielectric heaters is nearly completed and readied for ballot.

Committee Activity

Committee on Man and Radiation - COMAR (R. Peterson)cont'd

- The IEEE(six societies) plus COMAR and SCC-28 are collaborating with the National Council on Radiation and Protection Measurements(NCRP). NCRP is a non-profit organization charred by Congress to investigate/recommend radiation safety including non-ionizing radiation.
- A COMAR homepage has been setup at:

<http://homepage.seas.upenn.edu/~kfoster/comar.htm>

Committee Activity

International Microwave Power Institute -IMPI (J. Osepchuk)

- **FDA** agrees to revise Food Code requirement that food be superheated when using microwaves.
- IMPI interacting with FCC relative to use of ISM bands and development of new limits for 1-18GHz on out-of-band radiation for MW ovens.
- The 32nd Microwave Power Symposium will be held in Ottawa, CA on July 14-16. Application papers in area of chemistry, ceramics, lighting, waste remediation and food processing.
- Work continues on monograph on “Athermal Effects of Microwaves”. Aim is to emphasize need for critical review of papers alleging deleterious effects of microwaves, especially at low levels of irradiation.

Committee Activity

Instrumentation and Measurement Society (S. Adam)

- An Emerging Technology Workshop was held in Canada (May 18) chaired by Dr. Emil Petriu. The objective was presentation and discussion of recent emerging instrumentation and sensor methodologies and technologies such as genetic algorithms, virtual instruments, neural nets and wavelets.
- The 1997 IMT Conference was held in Ottawa, Canada (May 19-21) approximately 400 papers were delivered with four parallel sessions and large poster sessions over three full days.
- A Magazine is planned to replace IMT Newsletter during 1998.

Bell Labs
Innovations for Lucent Technologies

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Subject: COMAR Report

May 25, 1997

Dear Barry:

The following is an update on COMAR activities:

Progress:

Technical Information Statements

- The Technical Information Statement (TIS) "*RF Interference (RFI) of Medical Devices*" was sent to the members of COMAR for final ballot. The statement is a tutorial on the effects of radiated emissions from common RF sources, e.g., AM, FM, TV broadcast, land mobile radio, TDMA cellular telephones, on various medical devices such as apnea monitors, **electrically-powered wheelchairs**, cardiac pacemakers and defibrillator-s. If approved, the TIS will be published in *IEEE Engineering in Medicine and Biology Magazine*.
- The TIS "*Biological and Health Effects of Electric and Magnetic Fields from Video Display terminals*" was approved and published in the May-June 1997 issue of *Engineering in Medicine and Biology Magazine*.
- The TIS *on* powerline magnetic **fields** failed the first vote. Many of the members who voted against the draft asked that the need for the TIS be **re-examined** in **view** of the recent **NAS/NRC** report on the same issue. The document has been sent back to the committee,
- The TIS on RF dielectric heaters is nearly completed and should be sent for ballot shortly.
- The 1992 statements on cellular radio base stations and hand-held radio transceivers **are** scheduled to be updated shortly.

NCRP

IEEE has agreed to become a collaborating organization of the National Council on Radiation Protection and Measurements (NCRP). So far six **IEEE** Societies plus COMAR and SCC-28 have shown interest in this collaboration. NCRP is a non-profit organization chartered by Congress to investigate and make recommendations regarding radiation safety including non-ionizing radiation. This will be an excellent opportunity to provide to NCRP the technical expertise that resides within the IEEE.

COMAR Home Page

A COMAR home page has been set up by K. Foster. The address is: (<http://homepage.seas.upenn.edu/~kfoster/comar.htm>). The **TISs** that have already been published will eventually be put on the **homepage** once approval is obtained from IEEE.

Sincerely,




R. C. Petersen

MTT Liaison to COMAR

Liaison Report to MTT-S from IMPI

- 1.** As a **result** of **IMPI's** pressure, the FDA has agreed to **revise its** Food Code and remove a **recommendation** that food be heated to extra-high temperature when using microwaves, in order to maximize killing of **pathogens** on the surface of spoiled food.
- 2.** **IMPI** continues to interact **with** the FCC relative to use of EM bands and the development by **CISPR** of new limits for **1 - 18 GHz** on out-of-band radiation from microwave ovens.
- 3.** A **full** program of **2 1/2** days of parallel sessions constitutes the **32nd** annual Microwave power Symposium to be **held** in Ottawa, Canada **on July 14 - 16**. A wide variety of applications **will** be reported **including** the areas of chemistry ceramics, lighting, waste **remediation** and food.
- 4.** Work continues on an **IMPI** monograph on the subject of "**athermal**" effects of microwaves. The aim is to put into perspective the need for critical review of papers **alleging** such effects, especially at very low **levels** of **irradiation**.


John M. Osepchuk
May 19, 1997



MICROWAVE THEORY AND TECHNIQUES SOCIETY



IEEE

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1980 President

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May 26, 1997

Dr. Barry S. Perlman
Chairman,
MTT-S Intersocietal Liaison Committee
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Fort Monmouth. NY 0770345601

Dear Barry:

Thank you for your reminder, and the report you have prepared for **AdCom**. This year I will **not** be able to attend IMS, the first one I will miss since 1966, because my fiftieth high school reunion will be held during the same week, in Budapest. You have guessed, I will be there, instead of in Denver.

I have attached a report of I&M Society activities. Please feel free to cut anything out of it, and modify it to your liking, and format. I was attending, last week in Canada an Emerging Technology Workshop, and following the yearly **IMTC** Symposia, this year in Ottawa. I have attached a brief report on the status of the I&M Technical Committees, and a short summary of the Emerging Technology Workshop. The Society is also battling with a continued loss of membership, and an "identity crisis". Namely, who are their audience, and who do they want to be. There is a possibility of name change, or Charter review. So far every proposal was unsuccessful, and further study is being conducted by **AdCom**.

My best regards

Stephen F. Adam
Intersocietal Liaison to the Instrumentation and Measurements Society
Cc: Bob Rassa
Bob Myers



IEEE



INSTRUMENTATION AND MEASUREMENT SOCIETY

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May 26, 1997

Technical Committee Structure:

TC-1 Measurement Precision, Sensitivity, Noise
TC-2 DC-LF Measurements
TC-3 Frequency and Time
TC-4 High Frequency Measurements
TC-5 Connectors
TC-6 Emerging Technologies
TC-7 Signals & Systems in Measurement
TC-8 ATE Systems
 - Instrument Computer Interface
TC-9 Sensor Technology
TC-10 Waveform Measurement & Analysis
 - Waveform Recorder Subcommittee
 - A/D Converters Subcommittee
 - Pulse Techniques Subcommittee
TC-11 ATLAS Coordination
TC-12 USAB R&D Committee Liaison
TC-13 Wireless & Telecommunications
TC-14 Process Control
TC-15 Virtual Systems
TC-16 Laser & Optical Systems
TC-17 Materials
TC-18 Environmental Measurements
TC-19 Imaging Systems
TC-20 Transportation Systems
TC-21 Self Test & Built-In-Test

Norm Belecki
Barry Bell
John Vig
(Open)
Harmon Banning
Stephen Adam et al
Gabor Pecel i
Marlyn Miner
Bob Cram
Kang Lee
Michael Souders
Michael Souders
Steve Tilden
Otis Solomon
Joseph **Stanco**
Woodward Eicke
Bob Goldberg
Vincent Lalli
Emil Petriu
Thierry Bosch
Devendra Misra
(Open)
George Giakos et al
(Open)
Bob Goldberg

IEEE-I&M Technical Committee Structure

Reports were received from 11 of the 18 "active" Committees. The best Committee Structures are, when they belong to the same geographical area, Chapter so they can meet, and have good communications. It is emphasized to the Committees, to foster Workshops, Joint Meetings, and encourages Papers both to the Transactions and to the new Magazine.

A Magazine replacing the Society Newsletter is planned to be launched in 1998. It will contain articles from Technical Committees, and other technical papers, more destined to a Magazine.

The Technical Committees can be grouped into four different areas:

Metrology:	TC-1, 2, 3, 4, 10
Implementation:	TC-5, 7, 8, 9, 21
Applications:	TC-13, 14, 15, 16, 17, 18, 19, 20
Coordination & Misc.:	TC-6, 11, 12

The Niagara Falls Emerging Technology Workshop was organized by the cooperation of TC-6 and TC-15, Virtual Systems. It was chaired by Dr. Emil Petriu. The objective of this workshop was the presentation and In-depth discussion of recent and emerging methodologies and technologies suitable for realizing instrumentation and sensors, as well as to introduce new research and application areas in which measurements will be required. Among these topics were genetic algorithms, virtual instruments, neural networks, and wavelets.

During the week of May 19, 1997 the Instrumentation and Measurements Technology Conference 1997, was held in Ottawa, Ont. Canada. There were close to 400 papers delivered, including some quite large poster sessions. There were four parallel sessions of technical papers presented for three full days of an average of 20 min. long papers.