

IRMMW-THZ 2008

"TERAHERTZ FOR LIFE"

**PASADENA, CALIFORNIA USA
SEPTEMBER 15TH-19TH 2008**

CALL FOR PAPERS



Photo by Noah Myung, Caltech
Layout by Alex Siegel, Caltech

**ON THE CAMPUS OF THE
CALIFORNIA INSTITUTE OF TECHNOLOGY**

WWW.IRMMW-THZ2008.ORG

IRMMW-THZ 2008

"TERAHERTZ FOR LIFE"

33RD INTERNATIONAL CONFERENCE ON INFRARED, MILLIMETER, AND TERAHERTZ WAVES

CALIFORNIA INSTITUTE OF TECHNOLOGY

Pasadena, California USA

September 15th-19th, 2008

www.irmmw-thz2008.org

Important Dates: Early Registration Opens: Monday Feb. 4, 2008

Abstracts due: Friday April 4, 2008 (1 Page PDF Format)

Notification of Paper Acceptances: Friday May 16, 2008

Final Papers Due: Monday June 30th, 2008 (2 Page PDF)

MAJOR TOPIC AREAS:

1. New IR, THz and MMW applications in Biology and Medicine
2. Astronomy and Earth Science Applications
3. IR, THz and MMW Spectroscopy, Instrumentation and Materials
4. IR, THz and MMW Applications in Security and Defense
5. IR, THz and MMW Imaging and Imaging Applications
6. IR, THz and MMW Industrial Applications
7. MMW and Submillimeter-Wave Radar and Communications
8. Ultra-fast Measurements in Chemistry and Physics
9. Terahertz Instruments; both Frequency and Time Domain
10. Transmission Lines, Waveguides and Antennas
11. Gyro-Oscillators and Amplifiers, Plasma Diagnostics
12. Free Electron Lasers and Synchrotron Radiation
13. Novel devices and Components for IR, THz and MMW applications
14. Modeling and Analysis Techniques
15. IR, THz, and MMW Sources, Detectors and Receivers
16. High Power, Nonlinear and Optoelectronic Effects at THz Frequencies
17. IR, THz and MMW Future Applications, Markets and Directions

INVITED PLENARY SPEAKERS:

Dr. Jean-Lou Chameau, *President, Caltech*
Dr. Charles Elachi, *Director, Jet Propulsion Lab*
Professor Robert G. Griffin, *MIT*
Professor Andrew Lange, *Caltech*
Professor Alexander Litvak, *Nizhny Novgorod*
Professor Frank De Lucia, *Ohio State Univ.*
Professor Dan Mittleman, *Rice University*
Professor Arye Rosen, *Drexel University*
Professor David B. Rutledge, *Caltech*
Professor Maurizio Seracini, *Univ. of Florence*

More than 25 additional Keynote and Tutorial Speakers are planned. Names and topic areas will be posted on the conference website in May.

Conference Technical Co-Sponsor:  IEEE
IEEE Microwave Theory and Techniques

The International Conference on Infrared, Millimeter, and Terahertz Waves (IRMMW-THz), now in its 33rd year, is the oldest and largest continuous forum specifically devoted to the field of ultra high frequency electronics and applications. The IRMMW conference and its long-time accompanying monthly publication, *Journal of Infrared and Millimeter Waves*, were among the very first scientific outlets for the burgeoning field of far infrared components and instruments that arose in the mid 1970s. The scope of the conference extends from millimeter wave devices, components and systems to far-infrared detectors and instruments. It encompasses micro- and nano-scale structures to large accelerators and Tokomaks and applications as diverse as space science, biology and medicine. The conference typically alternates between Europe, Asia and the US on a three year cycle. The theme of the 2008 conference is "THz for Life" emphasizing the cross disciplinary nature of the field, the involvement of the Life sciences, recent emphasis on the search for Life in the universe and the Life long career opportunities working in this unique frequency range. Special outreach sessions on medical and bio applications are planned as well as a number of well known invited tutorial speakers. The opening reception and banquet are in the historic Caltech Athenaeum, frequented by Einstein, Hawking, Millikan, Feynman, Pauling, Moore, Ramo... There will be an evening reception at the Pasadena Asia Pacific Museum on Tuesday. All attendees will be able to participate in a guided tour of the NASA/Caltech Jet Propulsion Laboratory on Friday. Outings to the nearby Huntington Library, the Norton Simon Museum and the renowned J. Paul Getty Center are also being planned.

We hope to see you all in historic Pasadena, California next September!

IRMMW-THz International Organizing Committee: Trevor Bird, Australia • Martyn Chamberlain, UK • Jean Louis Coutaz, France • Bruce Danly, USA • Gian Piero Gallerano, Italy • TV George, USA • Armand Hadni, France • Qing Hu, USA • Martin Koch, Germany • Jean Leotin, France • Alexander Litvak, Russia • Neville Luhmann, USA • Robert Miles, UK • Dan Mittleman, USA • Koji Mizuno, Japan (Chair) • Mitsuhiro Motokawa, Japan • George Neil, USA • Gregory Nusinovich, USA • Michael von Ortenberg, Germany • Terry Parker, UK • Kiyomi Sakai, Japan • Xuechu Shen, China • Liu Shenggang, China • Peter H. Siegel, USA (Vice-Chair) • Richard Temkin, USA • Manfred Thumm, Germany • Minh Tran, Switzerland • Ken Wood, UK • Xi-Chen Zhang, USA



Honorary Chair: Kenneth J. Button Conference Chair: Peter H. Siegel
Conference hosted by JPL Submillimeter Wave Advanced Technology Team (SWAT)
and the Caltech Divisions of Biology and Engineering and Applied Science
For general inquiries please email: irmmw-thz@caltech.edu

