



THE 42 INTERNATIONAL
CONFERENCE ON INFRARED,
MILLIMETER AND TERAHERTZ WAVES

CANCUN, Mexico
August 27 - September 01
2017

Final Report

The main technical program of the 2017 42 International Conference on Infrared Millimeter and Terahertz Waves took place from August 27 to September 1 2017, however, a number of “satellite” events linked to it were scheduled August 25 and 26. The conference ran smoothly without any major problems.

The general time line for the conference organization was:

October 23, 2013: Start preparation of proposal to host the 42 IRMMW-THz 2017.

January 29, 2014: Written application to host the 42 IRMMW-THz 2017 submitted.

February 8, 2014: First round of questions from IOC received (answered Feb 21)

March 10, 2014: Shortlisted selections announced (Cancun and Halifax)

September 16, 2014: Presentation of proposal in Tucson (USA). Cancun is selected to host the 42 IRMMW-THz 2017 conference.

August 2016: Webpage went live.

December 2016: Got training on abstract submission and setup the process.

9 January 2017: Opened submissions.

February 2017: Setup and open the registration system, negotiate PayPal rates.

16 March 2017: Close submissions and start review.

24 April 2017: Announce acceptances.

8 May 2017: End of early bird registration.

30 July 2017: End of regular registration.

The general schedule of the conference looked as follows:



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Schedule at a glance

Saturday 26	Sunday 27	Monday 28	Tuesday 29	Wednesday 30	Thursday 31	Friday 1		
Student Workshop 8:00-18:00	Student Workshop 8:00-16:00	8:00-10:00	Plenary	Plenary	Plenary	Plenary	Plenary	
		10:00-10:30	Coffee					
		10:30-12:00	MAi,j	TAi,j	WAI,j	RAi,j	FAi,j	
		12:00-14:00	Lunch					
		14:00-15:30	MBi,j	TBi,j	WBi,j	RBi,j	Excursion	
		15:30-16:00	Coffee					
		16:00-17:30	MCI,j	TCi,j	WCI,j	RCi,j		
		17:30-19:00	MD	TD	BioMed THz	RD		
	Welcome Reception 19:00-20:00				Banquet 20:00			



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Student Workshop

The student workshop took place on the 26 and 27 of August where the following 7 invited lecturers spoke about the state of the art of various topics in 2-hour slots:

- **Martin Koch** (Philipps Universität Marburg, Germany) Terahertz optics
- **Irl Dulling** (Picometrix, USA) Hands on TDS spectroscopy and imaging
- **Mona Jarrahi** (University of California at Los Angeles, USA) Terahertz optoelectronic devices
- **Frank Hegmann** (University of Alberta, Canada) Tip-based terahertz "nanoscopy"
- **Richard Temkin** (Massachusetts Institute of Technology, USA) Application and development of high power THz sources
- **Andrea Markelz** (State University of New York at Buffalo, USA) Applications of terahertz in biochemistry
- **Michael Johnston** (University of Oxford, United Kingdom) THz spectroscopy of semiconductors

We had a total of 38 students registered in the workshop



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Technical Program

We received a total of 532 submissions including solicited plenary and invited keynotes, after the review process conducted by the TPC the program included 437 of them (rejection rate 18%)

The program included 10 invited Plenary speakers which were:

- **Federico Capasso** Harvard University (USA) *** Button Prize Lecture ****
- **Oleg Mitrofanov** University College London (UK)
- **Igal Brener** Sandia National Laboratory (USA)
- **Peter Jepsen** Technical University of Denmark (Denmark)
- **Aydin Babakhani** Rice University (USA)
- **Marc Scheffler** Universitat Stuttgart (Germany)
- **Iwao Hosako** NICT (Japan)
- **Qing Hu** Massachusetts Institute of Technology (USA)
- **David Hughes** Insituto Nacional de Astrofisica, Optica y Electronica (Mexico)
- **Junichiro Kono** Rice University (USA)

**The speakers in yellow had to present their plenary talks remotely via Skype owing to Hurricane Harvey hitting Houston or other personal circumstances.*

It also included 33 invited keynote talks and 16 submissions that were upgraded to invited talks for a total of 49 keynotes

In addition 222 oral presentations were scheduled and 154 posters.

Attendance

There were 424 registered attendees, however, 7 were refunded owing to Hurricane Harvey. We gave either total fee waivers to the two Societie's price winners (KJB, ESA) in plus 10 total and 12 partial fee waivers to students or academics that requested support. In addition 9 students and 4 academics received support for accommodation during the conference.

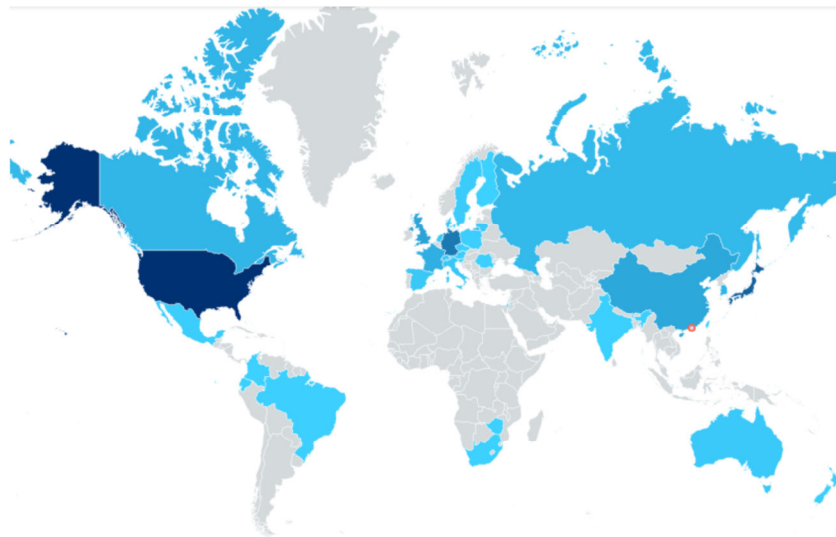
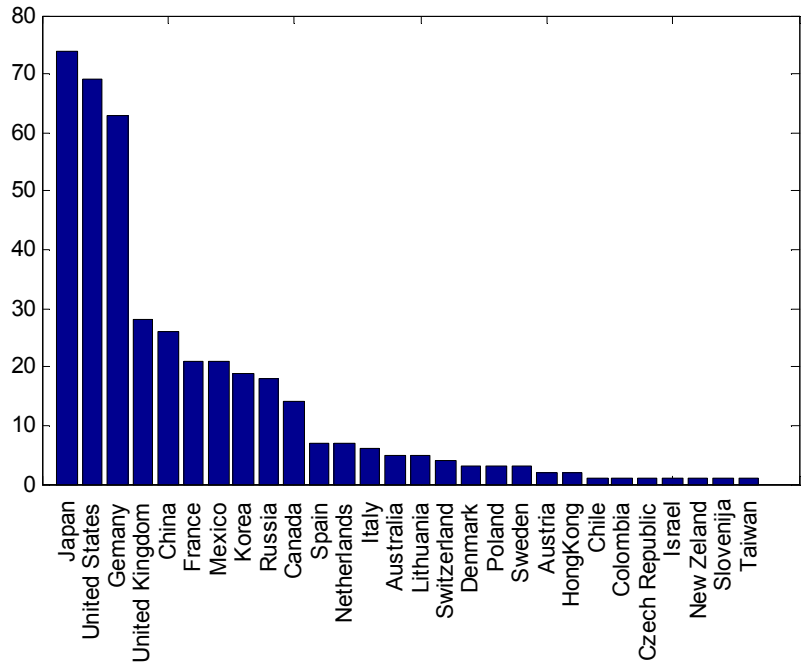
We had 18 companies that took part in the technical exhibit.

The attendance by country is shown in the following bar plot and map



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Finances

The total income for the conference was 5,954,854.56 MXN (~318,441.42 USD)
 The total expenses of the conference were 4,699,036.14 MXN (~251,285.35 USD)
 Final balance +1,255,818.42 MXN (~67,156.07 USD) [PROFIT FOR CIO!]

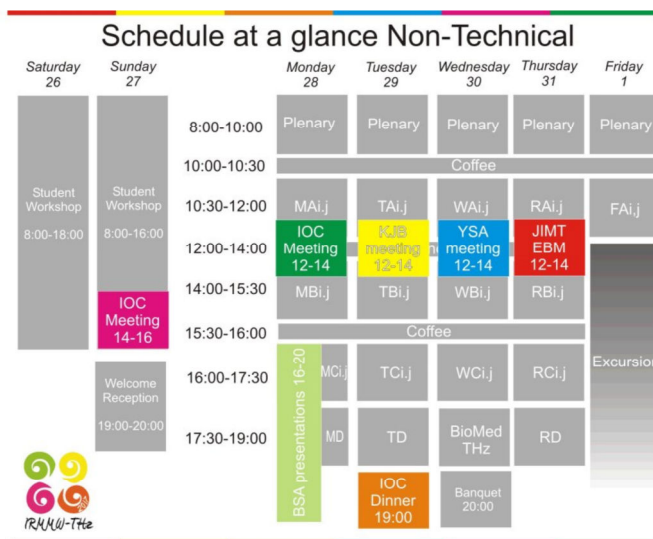


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Additional Events

The events linked to the conference but that were not part of the technical program were scheduled as follows:



Scheduled	Event	Contact	e-mail	Venue	Services	PAX
Sunday 27 14:00-16:00	IOC Meeting	Gun Sik Park Peter Siegel	gunsik@snu.ac.kr phs@caltech.edu	Hotel Kristal Room (ground floor)	Snaks Soft drinks/coffee	25
Monday 28 12:00-14:00	IOC Meeting	Gun Sik Park Peter Siegel	gunsik@snu.ac.kr phs@caltech.edu	Hotel Kristal Room (ground floor)	Lunch Soft drinks	25
Monday 28 16:00-20:00	BSA Presentations	Nuria Llobart	n.llobartjuan@tudelft.nl	Contoy Room ICC 2nd floor	Water/soft drinks	10
Tuesday 28 12:00-14:00	Pan J Dutton Meeting	Peter Siegel	phs@caltech.edu	Contoy room ICC 2nd floor	Lunch Soft drinks	16
Tuesday 29 19:00 -	IOC Dinner	Enrique Castro-Camus	enrique@cio.mx	Restaurant Cocono Pick-up ICC ground floor	Dinner	50
Wednesday 30 12:00-14:00	YSA Meeting	Gian Piero Gallerano	gianpiero.gallerano@enea.it	Contoy room ICC 2nd floor	Lunch Soft drinks	16
Thursday 31 12:00-14:00	JIMT EBM	Martin Koch Tom Spicer	kochmar@staff.uni-marburg.de tom.spicer@springer.com	Hotel Kristal Room (ground floor)	Lunch Soft drinks	30



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Final Remarks

The conference ran successfully and only minor incidents that were kept under control happened during it. For future editions of the conference I would like to recommend the LOCs to take into account the following points which in our case were key in running the conference successfully:

1. Negotiate venue, food, etc prices according to your best estimate of attendance, but include as part of the written contract that you can still decrease the numbers by up to 25% up to 1 month before the event without any penalty and 5% up to 1 week before the event.
2. Discuss with the venue protocols for minor medical help and major emergencies (we did have about 7 requests for minor medical help, 2 that required more than a quick consultation)
3. Take into account that about 60% pay early bird, 20% regular and 20% late fees. we had 17 on site payments (5%) of which 4 where cash in USD, be prepared.
4. Negotiate conditions for cancellation of the even in case of natural disasters such as hurricanes, earthquakes, storms, etc.

There were a number of things to improve and take into account for future events:

1. The temporal importation of equipment and materials from exhibitors was a problem for 4 companies, since we were unprepared for this our in-house purchase department who has most experience with imports helped, but only two of them received their merchandise late, and two more not at all.
2. The Shocklogic systems are expensive and still more or less unfriendly to the user, and quite unfriendly to the administrator, it is worth considering another option in the long term this is a decision that has to be made by the IOC, since the LOC inherits the system from them.
3. The speeches during the banquet were unusually long this time, the LOC should consider a strategy in order to maintain the duration of the speeches as short as possible maintaining the content that has to be made available to the attendees.
4. We could have been a bit more lax with support to students, of course before most of the fees where received we were a bit concerned about this aspect, but in the end it is clear that we could have been a bit more supportive.
5. Start your plenary invitations 24 months before the event if you want to have very high profile speakers, especially if they are not part of the IRMMW-THz community.



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We conducted an online survey where the following questions were asked:

How would you rate the:

Technical program

Abstract and paper submission process

Online registration process

On-site registration or bag & badge collection process

Conference facilities

Coffee breaks and poster-refreshments served during the conference

Banquet

Excursion

Technical exhibit

Webpage

Help from the conference staff (on-site)

E-mail support

Geographic location

Over all conference

About services offered through other suppliers:

Hotels offered through our webpage (quality)

Hotels offered through our webpage (price)

Hotels offered through our webpage (support)

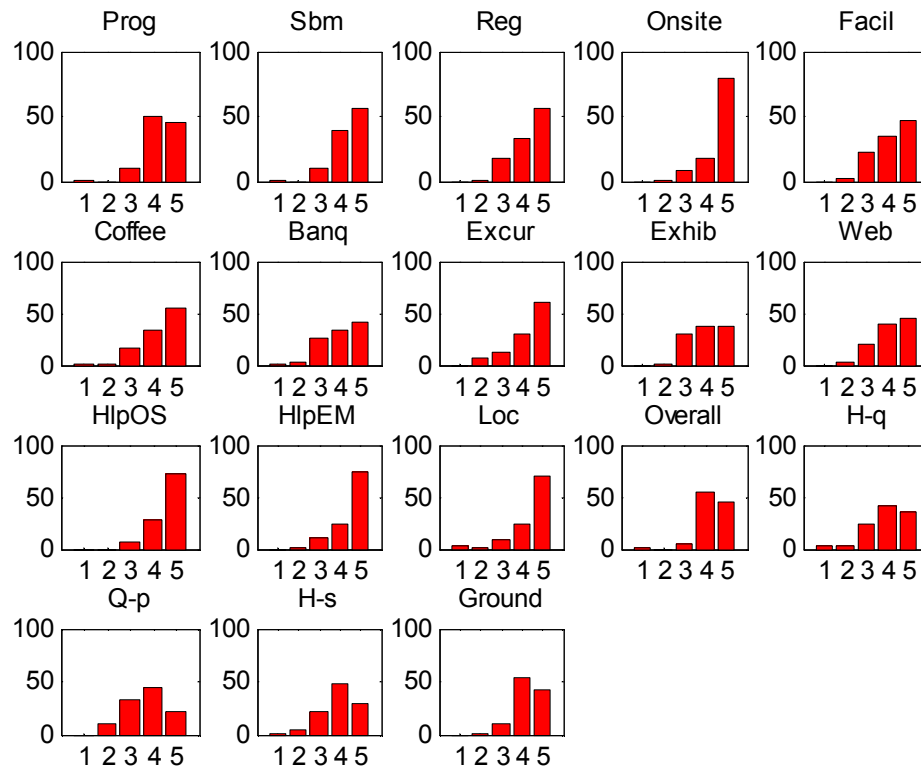
Ground transportation

where the possible answers were 1-very bad, 2 bad, 3 ok, 4 good, 5-very good, plus an open field for comments. We received 76 responses from attendees and the results are summarized in the following percent plots



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We received 14 “free format” comments which I transcribe here:

- Very low quality science, the rest was all good
- Excellent conference! My biggest complaint was that the acoustics in the room where the conference banquet was held were extremely poor. It was difficult to hear anyone speak. It was also too bad that many attendees missed the dancing/singing exhibition as they thought the banquet was over at the end of the speeches. I found it strange that I was able to book the Aloft hotel at a lower rate than the conference rate--normally this would not be the case. There was some confusion in submitting my final two-page paper in that I could not determine if it had been submitted correctly or not, but it ended up ok. Otherwise, everything else went quite smoothly, making for a very informative and enjoyable conference.
- E-mail hotel support was not very responsive.
- Coffee breaks was so nice!
- I found many of the talks given by our Mexican colleagues to be at a lower level than normal. That said, one of our roles as society is to encourage growth in countries with less access to facilities. Mexico is one country in this position and for this reason alone it was appropriate for Mexico to host the meeting and for the IOC to allow Mexican researchers the opportunity to present their results even if some would likely not have been granted oral status had they submitted from another country. At the end of the day if young Mexican students travel overseas for their graduate education the country will find it difficult to establish a strong presence in our field. In this regard I consider the conference a success.
- Excellent location for a conference! Thank you!



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- The electronic program was a bit difficult to see. I prefer to an all pdf program rather than the html style. Anyway, it was an excellent conference and I enjoyed it.
- The main conference room (Opening and Plenary) has no stair-seats. People at rear cannot see the screen completely. The group photo in the photo gallery is too small in size to download. Why not the full-sized photo, especially for the group photo?
- It is a wonderful conference. As a student, I learned a lot. Thanks for the committee.
- Since the hall for the plenary talks was plane (no elevated seats going back) the viewgraph screens could not be fully seen from the back seats.
- Room for plenary talks to long and not high enough for the presentation format: second half of the audience could see the upper half of the transparencies only.
- Personal assistance of Dr. Enrique Castro Ramos was excellent!
- it was great!!!!
- it was a good conference with good selection of topics.

In conclusion the great majority of the attendees were satisfied with the conference, rating it as Very Good or Good, the services provided by the various suppliers and centralized through the PCO were of very good quality. The only recurrent comment received through the survey was that the screen at the plenary room could not be seen well from the back of the room. The conference ran smoothly with only minor incidents. The success of the event was very profitable both in terms of prestige, academic presence both myself as scientist and the Centro de Investigaciones en Optica A.C. who are now recognized internationally in the area of terahertz research, it also brought considerable attention to the broader Mexican community of terahertz researchers, which was relatively unknown in the past benefiting, of course, the CIO, but also various other institutions such as UASLP, UNAM, CINVESTAV, IPN, INAOE who had an unprecedented number of scientific contributions presented in the conference. This event also represented a financial success for the Centro de Investigaciones en Optica A.C. producing a considerable profit. Finally I would like to thank the IOC for the trust invested on us for the organization of this event.

Quick Number Reference

<i>Student Workshop Speakers</i>	7
<i>Student Workshop Attendees</i>	38
<i>Submissions</i>	532
<i>Plenaries</i>	10
<i>Keynote talks (invited + upgraded)</i>	33 + 16 = 49
<i>Oral</i>	222
<i>Poster</i>	154
<i>Registered attendees</i>	424
<i>Exhibitors</i>	18

Dr. Enrique Castro Camus
General Chari 42 IRMMW-THz 2017