

IPAC'22 Reports Scientific Secretariat

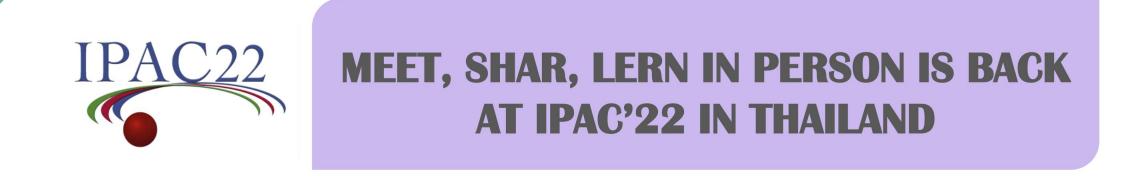
Porntip Sudmuang - SLRI JTM2022 – Tennessee - USA







13th International Particle Accelerator Conference







Local Organizing Committee (LOC)

THA SYNCHROTRON

The IPAC'22 LOC is divided into 5 team composed of:

- Scientific Program (13 members) ٠ Dr. Prapaiwan Sunwong Dr. Thapakron Pulampong Nisarat Wonglek
- Proceeding /Editor (10 members) • Dr.Thakonwat Chanwattana Dr.Nawin Juntong Dr.Krongthong Kamonsuangkasem
- Conference IT (13 members) • Natthawut Suradet Athikarn Thongwat Dr. Keerati Manasatitpong
- Exhibitor and Sponsor (18 members) • Dr. Thanapong Phimsen Dr. Saengduan pimkaew Dr. Ratana Charoenwattanasatien
- Conference Support (15 members) • Sasipun Tritan Churintorn Neti Apiradee Kruajeenteng

Issues:

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- Big size of the LOC! but at the beginning less than 10 committees understand what IPAC is.
- IPAC'20, IPAC'21 was organized as fully online.
- No chance to learn...





Role and Responsibility



LOC/SLRI

- Conference organizing
- Coordination with PCO and IMPACT
- Conference website
- Internet access and IT equipment
- Support SPMS and JACoW team
- Student grants
- Accelerator awards
- Facility tours at SLRI
- Sponsor and exhibition booth sell
- Information support, especially for registration issues
- Official invitation and visa letters for individuals requiring funding support from their laboratories

IMPACT Muangthong Thani

- Conference venue
- Coffee break and lunch
- Food and beverage for welcome reception, and banquet
- General security and cleaning services
- Internet assess

Professional Conference Organizer (PCO)

- Space management, floor plan and decoration
- AV organization, equipment and supervision
- Setting-up of exhibition area and internet café, plenary room, speaker ready room, JACOW proceeding office, author reception area, hospitality suite and student coordinator office
- Design and production of registration system (online and onsite), name badges, sponsoring backdrop, souvenirs and electronic guidebook
- Conference app
- Design and organizing of social events
- Photography and video recording
- Transportation



SPMS Administration



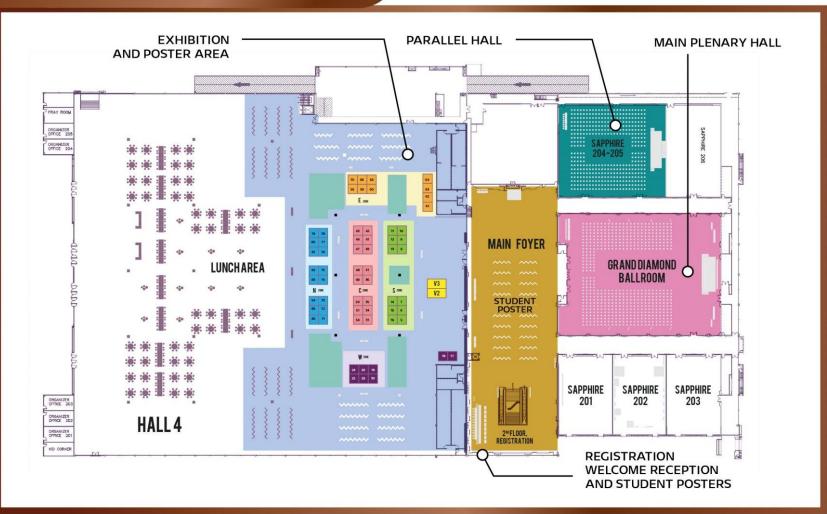
- Much help from Christine, Todd, Ivan, Stefano and Rohan with tasks and interface scripts.
- Prapaiwan and Natthawut handled a lot of the interfacing in SPMS from the LOC side.
- Some functionality in SPMS is no longer working / has missing script, however there is a workaround to do the tasks (thanks to Todd and Rohan for suggestions).
- Corona virus situation and travel restriction affects the schedule/timeline for scientific program activities.
- Use of SPMS email utilities to communicate with delegates. This is especially helpful during the conference for communication with the speakers (to ensure that they upload their slides and visit the speaker ready room).



Venue: Main Conference Area



IMPACT FORUM, 2ND FLOOR

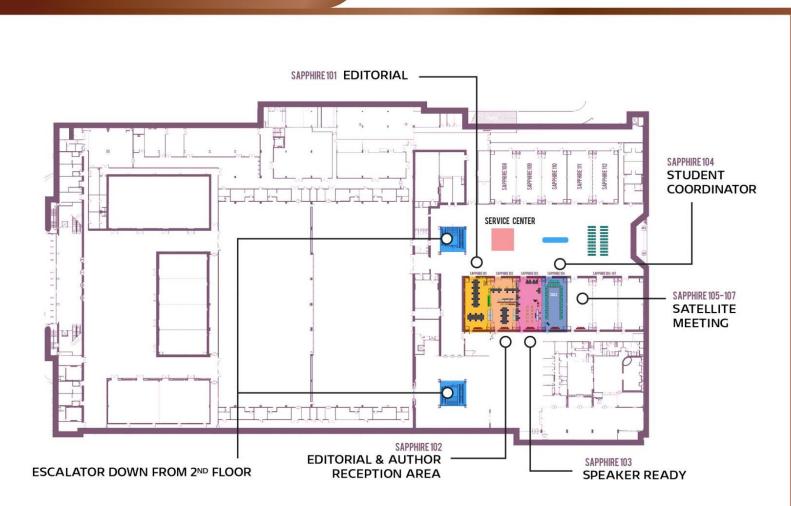


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Venue: Editorial Office and Other Rooms







Registration

THAI SYNCHROTRON NATIONAL LAB

- Use external registration and payment system
- Handled by PCO but needed a strong support by LOC
- Registration data transferred back to SPMS manually by LOC

IPAC 2022 User Profiles IPAC22 Logout Search My Schedule Home ernel Registration and Payment Manage Abstracts Change P User Affiliation Edit Affiliation Synchrotron Light 111 Surapat 3. Un tute (SLRI) Email Address pattha Mail Stop PO Box 93 uranaree Sub-district, M Note: Your profile unwanted one. tion. Create a new affiliation first, then delete the User Informa Citizenship Informatio ast (Family) Name Surad Country Thailand Time Zone Asia/Bangkok First (Given) Name Nat Middle Name Date Format mm/dd/vv hh24:mi Initials N 02/18/22 13:39 (Asia/Bangkok Gender Membersh Mailing Lists er Affiliati lo Ream Cooline No APS DPB International Conference on Cyclotrons and their Application No International Symposium on Electron Beam Ion Sources and Trap. No Electron Cydotron Resonance Ion Source No European P Society No IEEE No International Workshop on Accelerator Science and Technology fo Electron-Ion Collider No IUPAP No Institute of Physic ICFA ABDW Workshop on Energy Recovery Linacs No National Physical Society No International Free-Electron Laser Conference No ICFA ABDW Workshop on Future Light Sources

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The Registration Desk was open at:12:00 -20:00Sunday, June 12, 20228.00 -15:30Monday, June 13, 20228.00 -18:00Tuesday, June 14 – Thursday, June 16, 20228:00 -12:00Friday, June 17, 2022

Issue:

- Underestimated the number of delegates registered on Sunday (more than 80%)

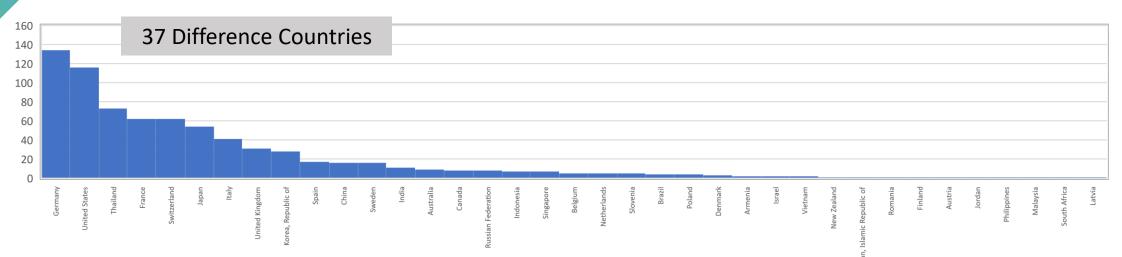






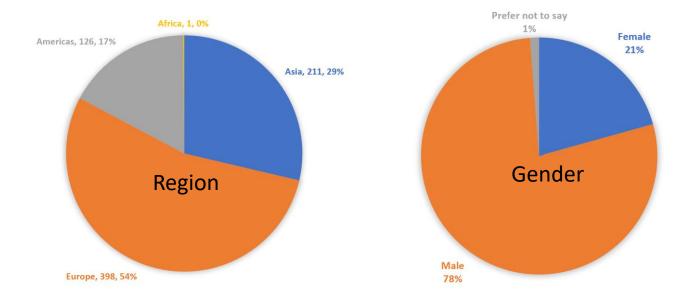
Participants: By Countries





Most participants are from:

Country	Percentage		
Germany	18.64		
United States	16.13		
Thailand	10.15		
France	8.62		
Switzerland	8.62		
Japan	7.51		
Italy	5.70		
United Kingdom	4.31		
Korea, Republic of	3.89		
Spain	2.36		



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Participants: Types and Numbers



Participant Type (based on Registration)	Number
Full regular delegate	378
Day registration delegate	3
Student	169
Exhibitor	118
Companions	19
Guest	18
Editor	26
Staff (excluded delegates)	54
Remote speaker	21
Total	806





Scientific Program Committee (SPC)



SPC Chair: Hitoshi Tanaka RIKEN

	Main Classifications	Asian Coordinators	European/NA Deputies
1.	MC1: Circular and Linear Colliders	Yuhui Li, IHEP	Regelio Tomas, CERN
2.	MC2: Photon Sources and Electron Accelerators	Takahiro Watanabe, JASRI/SPring-8	Timur Shaftan, BNL
3.	MC3: Novel Particle Sources and Acceleration Techniques	Hy Yong Suk, GIST	Ralph Assmann, DESY
4.	MC4: Hadron Accelerators	Tadashi Koseki, KEK	Marie-Helene Moscatello, GANIL
5.	MC5: Beam Dynamics and EM Fields	Rohan Dowd, ANST/AS	Ryan Lindberg, ANL
6.	MC6: Beam Instrumentation, Controls, Feedback and Operational Aspects	Yongbin Leng, SSRF/SINAP	Tim Maxwell, SLAC
7.	MC7: Accelerator Technology	Thapakron Pulampong, SLRI	Anna Grassellino, FNAL -> Mei Bai, SLAC
8.	MC8: Applications of Accelerators, Technology Transfer and Industrial Relations	Chaoen Wang, NSRRC	Peter Mcintosh, STFC/DL/ASTeC

Organizing Commi	ttee	Scientif
Prapong Klysubun Organizing Committee Ch	SLRI air	Hitoshi Ta Scientific
Mark Boland	CLS	Ralph Ass
John Byrd	ANL	Rohan Do
Alessandro Fabris	ELETTRA	Mei Bai
Tetsuya Ishikawa	RIKEN/SPring-8	Tadashi K
In Soo Ko	POSTECH/PAL	Yongbin L
Lin Liu	LNLS	Yuhui Li
Gwo-Huei Luo	NSRRC	Ryan Lind
Stephen Milton	LANL	Timothy M
Toshiyuki Mitsuhashi	KEK	Peter Mcl
Tor Raubenheimer	SLAC	Marie-Hele
Sven Reiche	PSI	Thapakror
Adriana Rossi	CERN	Timur Sha
Saroj Rujirawat	SLRI	Hy Yong S
Fernando Sannibale	LBNL	Rogelio To
Todd Satogata	JLab	Chaoen W
Purushottam Shrivastava	RRCAT	Takahiro V
Cristina Vaccarezza	INFN	
Pei Zhang	IHEP	
Zhentang Zhao	SSRF/SINAP	

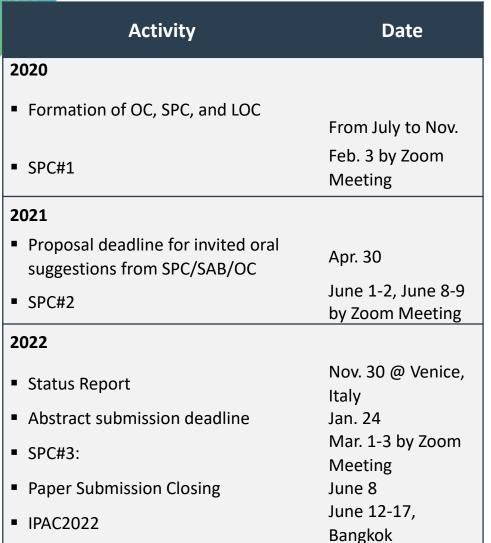
Scientific Program Committee

Hitoshi Tanaka	RIKEN
Scientific Program Committe	e Chair
Ralph Assmann	DESY
Rohan Dowd	ANSTO/AS
Mei Bai	SLAC
Tadashi Koseki	KEK
Yongbin Leng	SSRF/SINAP
Yuhui Li	IHEP
Ryan Lindberg	ANL
Timothy Maxwell	SLAC
Peter McIntosh	STFC
Marie-Helene Moscatello	CEA
Thapakron Pulampong	SLRI
Timur Shaftan	BNL
Hy Yong Suk	GIST
Rogelio Tomas	CERN
Chaoen Wang	NSRRC
Takahiro Watanabe	JASRI/SPring-





Timeline for Scientific Program



Region	Tot	al	Invited (Oral	Contributed	Oral	Poste	er
Europe	580	59.4%	11.5	31.9%	23	44.2%	546	61.5%
Asia	162	16.6%	12.5	34.7%	13	25.0%	136	15.3%
America	234	24.0%	12	33.3%	16	30.8%	206	23.2%
Total	976		36		52		888	

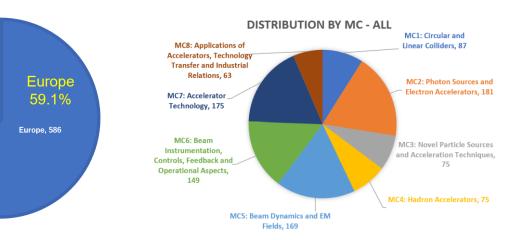
Gender	All C	Drals	Invite	d Oral	Contribu	ited Oral
Male	63	71.6%	28	77.8%	35	67.3%
Female	25	28.4%	8	22.2%	17	32.7%
Total	88		36		52	

Oral presentation	Invited	Contributed	Total
Remote	13	8	21
Onsite	23	44	67
Total	36	52	88

Asia

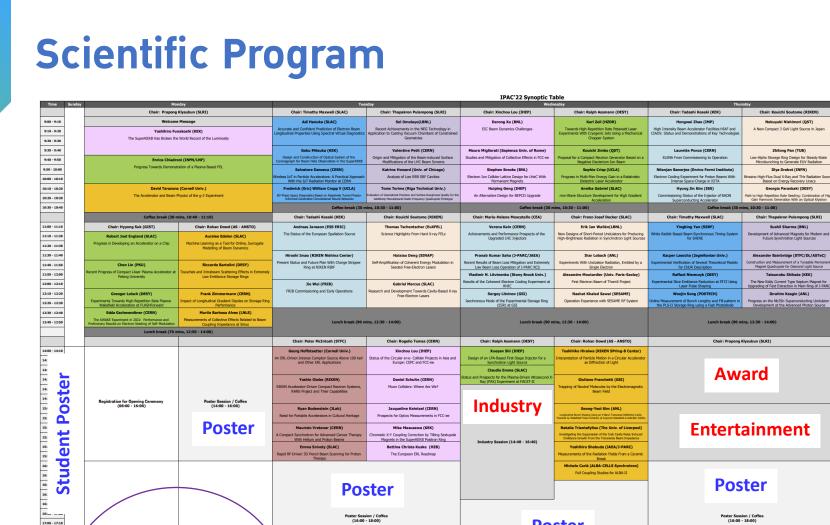
Asia, 165

16.7



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Poster

Poster Session / Coffee (16:00 - 18:00)

Poster Poster Session / Coffee (16:00 - 18:00) Opening Ceremony Presided over by

Conference Banqu

Full Coupling Studies for ALBA-II

Poster

Poster Session / Coffee (16:20 - 18:20)

H.R.H. Princess Maha Chakri Sirindhorn

Facility tour was organized on

Chair: Thapakron Pulampong (SLRI)

Takao Asaka (JASRI)

Chihiro Ohmori (J-PARC, KEK & JAEA)

Jiahang Shao (ANL)

Nuria Catalan-Lasheras (CERN First Operation of a Klystron Fitted With a Superconducting MgB2 Solenoid

(30 mins, 10:30 - 11:00)

Chair: Hitoshi Tanaka (RIKEN)

Mike Seidel (PSI)

Fowards Efficient Particle Accelerators - a Review

Manjit Dosanjh (CERN/Oxford Univ.)

Tomoki Nakamura (Tohoku Univ.)

Synchrotron Light Illuminates the Origin of the Solar System

Closing Remarks (12:30 - 13:00)

a Robust and Affordable Radiation Therapy Treat

onstration of Gradient Above 300 MV/m in Shor e Regime Using an X-Band Single-Cell Structure

ompact RF Electron Gun With a Thermionic Cathode

n on Synchrotron RF Betwee and J-PARC

Chair: Timothy Maxwell (SLAC)

Wolfgang Höfle (CERN)

Tatiana Nechaeva (MPI-P)

Shukui Zhang (JLab)

Hitomi Ikeda (KEK)

MC1 Circular and Linear Colli

MC4 Hadron Accelerators

MC2 Photon Sources and Electron Acc

ticle Sources and Accele

mics and EM Fields

tation, Controls, Fee

ions of Accelerators, Technology Transfer and Industrial Rela

Dual X-Ray and THz Ray

ition Rate Seeding: Combinar Generation With an Optical

Saturday

13



Opening Ceremony

Presided over by H.R.H. Princess Maha Chakri Sirindhon

Chris Polly (Fermilab

Growing Expectations for New Physics

Prapaiwan Sunwong (SLRI) SPS-II: A 4th Generation Synchrotron Light Source in Southeast Asia

17:10 - 17:20 17:20 - 17:30

17:30 - 17:40

17:40 - 17:50

17:50 - 18:0

18:00 - 18:10

18:10 - 18:15 18:15 - 18:20

18:20 - 18:30

18:30 - 18:40 18:40 - 18:50 18:50 - 19:00 19:00 - 19:30 19:30 - 20:00

20:00 - 20:30

20:30 - 21:00 21:00 - 21:30 21:30 - 22:00



Student Poster Session



Student Poster Session

Chair:

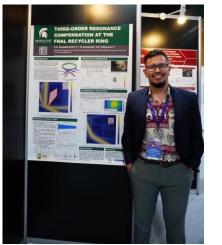
Toshiyuki Mitsuhashi, KEK

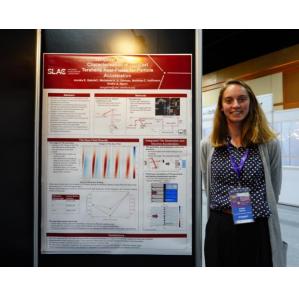
Poster Judges (Two Best Student Poster Awards):

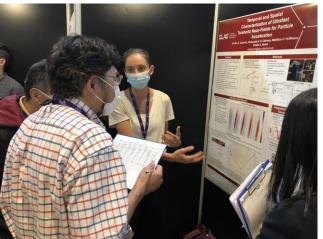
- Located at Main Foyer on Sunday, June 12 (13.00-18.00)
- 27 judges
- 133 Student posters submitted with Code SUSPMFxxx
- 1st round with 111 student posters presented and was judged
- 2nd round only 13 poster, 4 judges, 1 teams.
- Took around 2 hr.

Comments: Should consider to have a semipermanent judging group, process













THAI SYNCHROTRON

Students Grants



Student Grant

Coordinators:

- Local: Siriwan Krainara, SLRI
- Asia region: Eugene Tan, ANSTO
- Europe region: Rogelio Tomas and Jim Clake, STFC UKRI
- America region: Oliver Kester, TRIUMF

71 Recipients (selected from 181 Applicants)

- Asia: 1,921,450 THB (25 students + registration fees for all students)
- Europe: 2,244,000 THB (31 students)
- Americas: 1,284,898 THB (15 students)

3 Declinations

69 Registered (8 students not presented their work)





Poster Areas

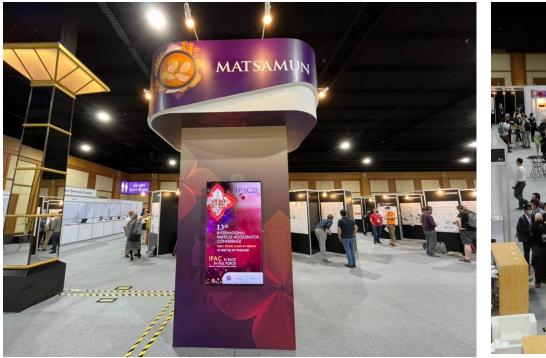


THAI SYNCHROTRON NATIONAL LAB

Manday	Tuesday		Thursday
Monday	Tuesday	Wednesday	Thursday
44 MOPOMS	56 TUPOMS	50 WEPOMS	57 THPOMS
59 MOPOPT	62 TUPOPT	58 WEPOPT	62 THPOPT
48 MOPOST	54 TUPOST	49 WEPOST	45 THPOST
62 MOPOTK	60 TUPOTK	60 WEPOTK	60 THPOTK

Issues:

- Some delegates did NOT read/follow the guidelines for poster session.
- Up to 7 8 posters/presenter due to travel restriction --> large number of disjointed authors and moving of paper ID needed to be done manually.





- WE: Wednesday
- **TH**: Thursday
- SU: Sunday
- Presentation type symbols
 - PO: Poster
 - SP: Student Poster
- Floor symbols
 - ST: Somtum
- PT: Padthai
- **TK**: Tomyam Kung
- **MS**: Matsaman
- **MF**: Main Foyer



Poster Police

- 2 people (only from LOC staff) per poster session. Each doing 90 to 100 posters.
- Completed in 2 hours.
- Poster police re-checked 3-4 rounds because they want to give a chance for presenters who had to present several poster.



THAI SYNCHROTRON



Editorial Team



IPAC'22 Editorial Team: Members

Chief Editor:

Thakonwat Chanwattana

- Invitation letters were sent to 29 JACoW members and LOC of other JACoW conferences (IPAC'23, IBIC'22, etc.) in March – April 2022.
- 17 colleagues join the team in-person
- 6 colleagues join as Remote Editors
- IPAC'22 Editorial team is the first Hybrid Editorial Team for JACoW Conferences.



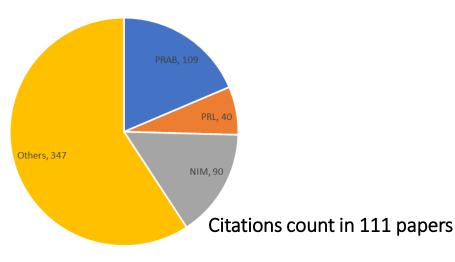


Light Peer review



- IPAC'22 supports light peer review of a limited number of papers to be published as part of the Institute of Physics Journal of Physics: Conference Series.
- Papers are reviewed by the SAB, while the SPC under the leadership of the Scientific Publication Board Chair, Frank Zimmermann, performed the function of editorial board
- Over 117 papers were submitted, many were revised, 112 were approved and 1 was withdrawn.
- Nawin Juntong and Todd Satogata managed the review process within the JACoW SPMS database.
- IOP offered the online publication cost at a rate of GBP42/EUR49/USD56 per submitted article which was increased to 40% from IPAC'19 (USD40)
- 111 papers will be submitted to IOP in November. The publication was decided to postpone from October 2022 to January 2023 with the reason of the citation's indexation period of the Journal Citation Reports (JCR) by Clarivate. The IPAC'22 IOP JPCS will have full 2023 year of citations count for indexing.

Total conf. participants	806
Total submitted papers/abstracts	976 / 1888
Total peer review requested	255
Number of volunteer referees	584 (selected from 754)
Total peer review accepted / Publish	117 / 111





Conference App

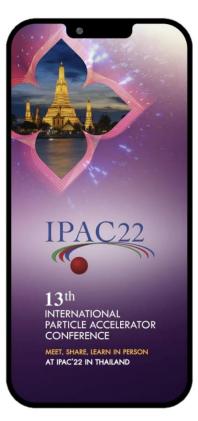


- PAC'22 conference mobile app was created by PCO (Index creative village company).
- The design function was kept interface simple, easy to use and will be based on IPAC'19 to help delegate familiar.
- IPAC'22 app can be download from play store and app store.

Issues:

- Conference app was not successfully submitted by using "IPAC'22" name. The App Store noticed that the app provide the same features set as other apps submitted to the App Store.
- Conference app was not working properly because PCO are professional for event organizer, but they have not fully understood the needs for scientific conference.
- Need to use professional conference app or consider to use similar apps in every





IPAC



Social Events



• Organize many activities during the social events.



Issues:

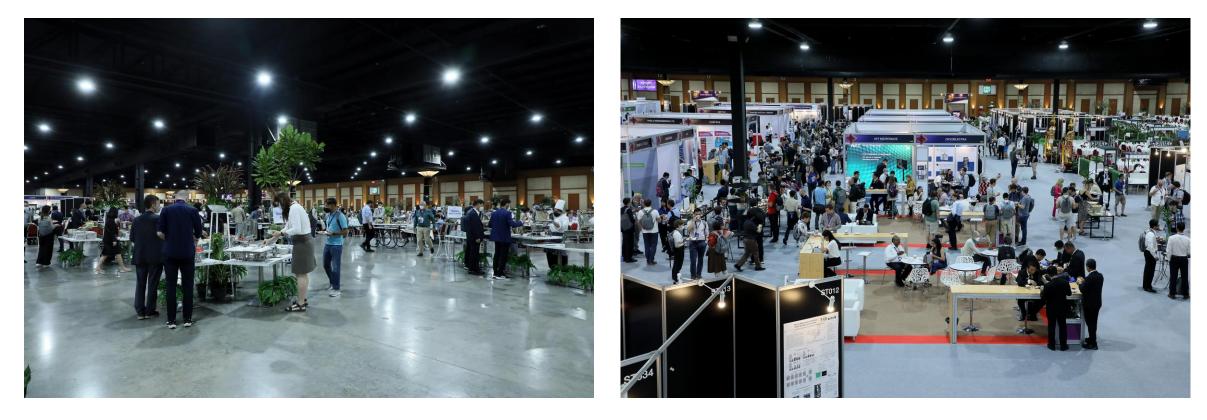
- The student poster session was disturbed by sound testing of welcome activities.
- Need to consider many extra tickets for accompanying of the chair's reception.
- Many delegates had COVID-19 after the events.



Lunch and Networking Lounge



- Provide food and drinks at the exhibitions and poster session. This is the good way to maximize delegate presence in the exhibition area during lunch time.
- Many little islands was well used for discussion.





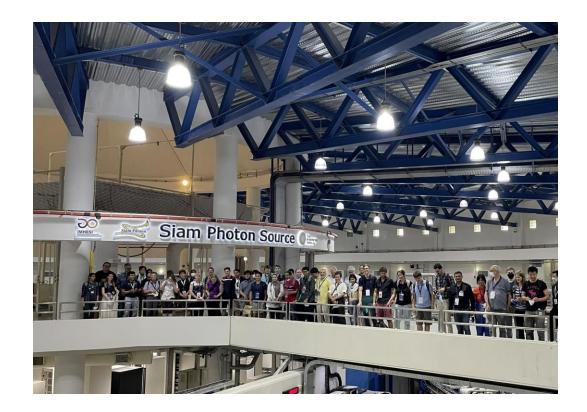
THAI SYNCHROTRON NATIONAL LAB

Siam Photon Laboratory Tour



The tour of Siam Photon Laboratory (SPL Tour), was organized on Saturday, June 18, 2022





Issue:

- Many people cancel facility tour because they understand that it was a similar traditional IPAC facility tour that normally organize after the conference end on Friday afternoon.



THAI SYNCHROTRON

Industrial Exhibit and Sponsorship







Budget Overview

Item	Income THB (million)
Conference fee	10.084
Industrial exhibition booth sell	9.330
Sponsoring	0.500
Booth cancellation charges	0.240
Additional support from Thai industries and institutes	1.246
Additional support from International industries	0.958
Other (T-shirt sell, tour and hotel reservation)	1.420
Student grant from IPAC'19	1.421
Total	25.199
Total (Exclude VAT)	23.342

Issues:

SYNCHROTRON

Budget had been originally set for 1000 delegates and 80 exhibition booths. Reached 60% of the target. Final total loss was 6 million THB

Item	Expenses THB (million)	
Conference venue (IMPACT Muangthong Thani)		
- Venue fee		
- Coffee break and lunch	12.92	
- Food and beverage for welcome reception, chaiman's reecption and banquet		
- General security and cleaning services		
- Internet assess		
Professional Conference Organizer (PCO)		
- Space management, florr plan and decoration	10.00	
- AV organinzation, equipment and supervision		
- Setting up of exhibition area, internet café, plenary room, speaker ready room, JACoW proceeding office, author reception area, hospitality suite and student coordinator office		
- Design and production of registration area, sponsoring backdrop		
- Design and production of signage and name badges		
- Souveniers and booklets		
- Design and organizing of social events		
- Photography and video recordign		
- Conference app		
- Transportation		
LOC (SLRI)		
- Registration	0.50	
- Website	0.05	
- IT equipment	2.29	
- JACoW support	1.00	
- Accelerator award	0.10	
- Light Peer Review publication	0.24	
- Tour at SLRI	0.13	
- Student grant in 2022 (1.42 MTHB supported by IPAC'19)	0.61	
- Other expenses	1.53	
Total expenses	29.38	



Organizing Issues



- **Registration system:** A lot of payment have been not successful processed due to transaction fail which may caused by fraud alert of the card issuing bank
- **Unpredictable situations:** Due to the corona virus situation and travel restriction as well as the ongoing war in Ukraine there was a last-minute change of:
 - scientist program. One contributed oral presentation need to be moved to poster presentation.
 - ability to attend the conference of some speakers, session chairs and participants.

• Conference app:

- Conference app was not successfully submitted by using "IPAC'22" name. The App Store noticed that the app provide the same features set as other apps submitted to the App Store.
- Conference app was developed by PCO who are professional for event organizer, but they have not fully understood the needs for scientific conference.
- **Conference booklet:** A printed conference booklet is still required, especially the program schedule.
- **Financial loss:** Number of participants is not reached as the normal IPAC due to corona virus situation and travel restriction, most Chinese and Taiwanese people cannot attend the conference. Many American and Japanese people also find it difficult to get approval from their laboratory

