



# CALL FOR PARTICIPATION

The 17th Conference on IP + Optical Network (iPOP2021)  
Virtual Web Conference

Sept. 30<sup>th</sup> to Oct. 1<sup>st</sup>, 2021, Japan Standard Time (UTC+09:00)

<https://www.pilab.jp/ipop2021/>

Sponsored by PIL (Photonic Internet Lab) and ISOCORE.

iPOP2021  
COMMITTEE

General Co-Chairs: Naoaki Yamanaka, Keio University, Japan

Hiroataka Yoshioka, NTT, Japan

Bijan Jabbari, ISOCORE, USA

Organization Committee Co-Chairs: Hiroaki Harai, NICT, Japan

Satoru Okamoto, Keio University, Japan

Takehiro Tsuritani, KDDI Research, Japan

Technical Program Committee Co-Chairs: Tomohiro Otani, KDDI Research, Japan

Eiji Oki, Kyoto University, Japan

Exhibition Committee Co-Chairs: Hirofumi Yamaji, TOYO Corporation, Japan

Akihiro Nakamura, Spirent Communications, Japan

Interop Committee Co-Chairs: Shinya Nakamura, UBiqube, Japan

Yusuke Hirota, NICT, Japan

Naoaki Yamanaka,  
Keio University,  
Japan



Hiroataka  
Yoshioka,  
NTT, Japan



Bijan Jabbari,  
ISOCORE,  
USA



## WELCOME REMARKS: NO BOUNDARY ON-LINE! (Aug. 1, 2021)

Dear friends, presenters and supporters of iPOP Conference,

we are now going to recover from severely impacted by the COVID-19 pandemic. Last year, we had iPOP 2020 event by full online style including presentation, poster, booth and showcase demo. We are now planning a virtual conference to be held September 31 to October 1, 2021, following the guidelines of the CDC and local government advice. This year, we are holding iPOP with Netcentric conference which will be hosted and open in US. So, we will have almost 24 hours program for joint conference held virtually.

Against this impact, however, we can overcome many things by changing new life and business style. In other words, it is positive impact on pushing DX in all areas. To support for this new style, this requires sufficient bandwidth and quality and better human interfacing. This is a trend which has started and is giving rise to new businesses such as virtual conference, virtual university, virtual office and eventually remote delivery by autonomous vehicles - New areas for future iPOP events to focus on.

This year marks the 17th anniversary of iPOP International conference, which has been founded and sponsored by Photonic Internet Labs (PIL) and ISOCORE. Since its inception, the conference has enjoyed well attendance with diverse and involved participants. However, we are going to realize virtual iPOP 2021 as same as last year, with virtual presentation, virtual booth demo and virtual interoperability, all realizing by advanced network and cloud systems, given the short time to prepare but a new challenge for the state-of the art high-performance network applications. In addition, iPOP co-develop with vCUBE, new multi-booth system called EventIn will be used. This fancy system, you can join the booth/exhibition and move around and also individual discussion can be possible. The best to understand this virtual booth /exhibition system is to attend iPOP 2021!

This year we are augmenting the existing central theme of the conference with 5G and Beyond 5G network and smart city which includes backbone, platform and services. In addition, we have network topics such as SDN, NFV and service chaining with the focus on reliable, manageable, flexible and cost-effective carrier and/or service provider networks. In the past few years these networks have mostly focused on datacenter, mobile access network integration like 5G and include AI and data analytics aspects. As many people knows well, NTT, Intel and Sony announced IOWN, a new paradigm for networking based on all optical NW. The iPOP conference venue happens to be at the heart of IOWN technology by integrated procession function on the optical NW.

Almost 4 years ago at the iPOP opening ceremony, Prof. Yamanaka indicated that iPOP which started as IP+ OPTICAL, now it stands for Intelligent and Processing over Optical networks. Optical networking puts lower restriction on distance, bandwidth, and delay, allowing easily integrating some functions in the network. Some session resources. This integration of data processing with data transport in networks underscores an importance step. With topics such as multi-layer, multi-technology operation, integrating AI, cloud computing, edge computing, 5G networks with low latency, IoT, and reliable access. iPOP now features advanced physical and sophisticated processing technologies.

The technical program committee has put together an exciting program consisting of virtual technical sessions with emphasis on presentations on SDN, Orchestration with data/network, PCE (Path Computation Element) with data analytic and its applications, network automation and advance data-center network with Optical Devices. In addition, there will be technology virtual showcases and other demonstrations virtually are new challenges.

We hope that you would be able to join us online at iPOP 2021 with virtual presentations and remote technical discussions. We look forward to your remote participation and support to make the event a great success!

iPOP 2021 General Co-Chairs  
Naoaki Yamanaka, Hiroataka Yoshioka, Bijan Jabbari

## REGISTRATION INFORMATION

The participation is **FREE**, but advance registration is required.  
Registration is available at <https://www.pilab.jp/ipop2021/>

## TIMETABLE (TENTATIVE) \* The Session will be held at EventIN. You need to advance registration to attend the session.

Thursday 30, September, 2021		
Exhibition	Session	
9:30-15:00 [Floor 01]	10:00-10:30 [Floor 01]	Opening remarks O-1: 10min. Bijan Jabbari (ISOCORE) O-2: 10min. Hirotaka Yoshioka (NTT) O-3: 10min. Naoaki Yamanaka (Keio Univ.)
	10:30-10:40 [Floor 01]	Introduction to Showcase: 5min Yusuke Hirota (NICT) Introduction to Exhibition: 5min Akihiro Nakamura (Spirent) Break
	10:45-11:35 [Floor 01]	Keynote1 K-1: 50min. Craig Doeden, Uri Cummings (Intel)
		Lunch Break
	13:00-13:50 [Floor 01]	Keynote2 K-2: 50min Satoshi Konishi (KDDI Research)
	13:50-14:10 [Floor 01]	Ubiquite tour 20min Shinya Nakamura (Ubiquite)

Friday 1, October, 2021		
Exhibition	Session	
7:00-17:00 [Floor 01]	7:00-9:00 [Floor 01]	Introduction to Showcase: 5min Yusuke Hirota (NICT) Introduction to Exhibition: 5min Akihiro Nakamura (Spirent)
	9:00-9:30 [Floor 01]	Invited talk 1 Andrea Fumagalli (Univ. of Texas, Dallas)
	9:30-9:40	Intro to Technical posters: 10min
	9:40-11:00 [Floor 01 /Floor 02]	Technical Session 1 : (TBD) Poster session 1 : Network virtualization TP1: Mengfei Zhu (Kyoto Univ.) TP2: Kotaro Mihara (NTT) TP3: Takehiro Sato (Kyoto Univ.) TP4: Pedro Martinez-Julia (NICT) Invited technical poster : Tianliang Zhang (UTexas)
		Lunch Break
	13:00-13:50 [Floor 01]	Keynote3 K-3: 50min Motoo Nishihara (NEC)
	13:55-14:15 [Floor 01]	Yamanaka-lab tour: 20min Taichi Okumura (Keio Univ.)
	14:15-14:25	Intro to Technical posters: 10min
	14:25-15:55 [Floor 01]	Technical Session 2 : (TBD) Poster session 2: Optical networking TP5: Cen Wang (KDDI Research) TP6: Masaki Murakami (Keio Univ.) TP7: Bijoy Charnd Chatterjee (South Asian Univ.)
	16:00-16:30 [Floor 01]	Insider talk
	Break	
17:00-17:10	Closing	

Net-Centric 2021 will also be held on the same day.  
More details here:  
<https://www.isocore.com/2021/index.php>

## VIRTUAL EXHIBITION & SHOWCASE

The Virtual Exhibition & Showcase will be held on the iPOP Web.  
In order to access Exhibitor Booth/Session, you need the User ID listed in the Registration Confirmation e-mail.  
Please check the iPOP2021 website for advance registration.  
<https://www.pilab.jp/ipop2021/>

## PARTICIPANTS



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## ONLINE VENUE

Continuing from 2020, as a countermeasure against infection of COVID-19, iPOP2021 will be held online using EventIN.  
Detailed information will be posted on the iPOP2021 website.  
<https://www.pilab.jp/ipop2021/>