

November 10, 2014 | By Doug Ramsey

Wireless Center at UC San Diego Organizes Forum on Future of 5G



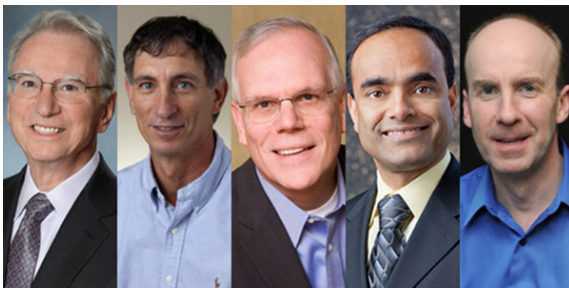
[Register to attend the 5G Forum](#)

Wireless technologies have revolutionized almost every aspect of our lives: the way we work, interact, and socialize. Global adoption and emerging applications are fueling expectations and debate about so-called fifth-generation, or 5G, wireless technologies, and the expectations, needs, and directions for 5G are not as clear as those for the previous digital generations (3G and 4G). The Center for Wireless

Communications (CWC) at the University of California, San Diego is organizing and hosting the 5G Forum on Next-Generation Wireless Systems and Applications, bringing together key experts from industry, government and academia to present and discuss their vision and research roadmaps for 5G.

The 5G Forum will take place over two days, Thursday, November 20 and Friday, November 21, in the Calit2 Auditorium, Atkinson Hall on the UC San Diego campus. Attendance is by registration only.

“Over the next five to 10 years, the communication industry will conceive, design and implement 5G wireless systems,” said CWC incoming director Sujit Dey, a professor of Electrical and Computer Engineering (ECE) in UC San Diego’s Jacobs School of Engineering. “The fundamental overhaul of the communication technology and infrastructure will enable orders-of-magnitude increases in connectivity, capacity and speed.”



Those improvements will also enable a new generation of wireless applications that will revolutionize almost every aspect of our lives: the way we work, interact, socialize and relax.

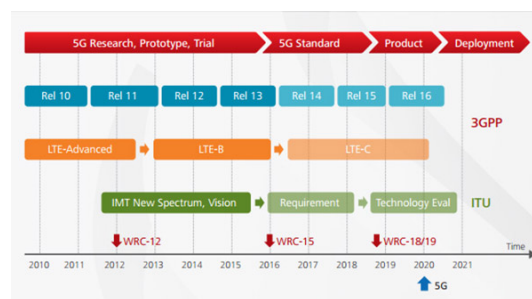
Keynote speakers (l-r): Irwin Jacobs, Mark Dankberg, Phil Fleming, Rajesh Pankaj and Ken Stewart

“As early as 2020, 5G will play a powerful role in health care, education, energy and transportation,” said CWC’s outgoing director, Alon Orlitsky, who

has joint appointments in the ECE and Computer Science and Engineering departments. “As an industry-supported research center, CWC has been at the focal point of innovation in the wireless sector almost from its beginning in the San Diego area. So we recognize the importance of bringing together the best minds from industry and academe to explore the technical barriers to overcome and new commercial opportunities that 5G will open up.”

CWC itself has been around since 1995 – less than a decade after Qualcomm was incorporated by its co-founders, led by former UCSD engineering professor Irwin Jacobs. While he no longer runs the company, Jacobs remains the unofficial patriarch of San Diego’s wireless industry, and on Nov. 20, he will give a talk after the dinner (which Irwin Jacobs will attend with wife Joan Jacobs).

Keynote speakers scheduled for the first half-day session on Thursday will be ViaSat CEO Mark Dankberg, and Phil Fleming, Chief Technology Officer for Nokia Networks in North America. Fleming will specifically spell out Nokia Networks’ 5G research strategy.



Timeline for 5G development and deployment

Other sessions on the first day of the forum will include one on multimedia, the Internet of Things and cloud-driven innovations in 5G, followed by a session on 5G spectrum and radio technologies. Companies represented in the two sessions will include InterDigital, Brocade Communications, Samsung, Qualcomm and Keysight Technologies (which, as of November 3, is a spinoff of the electronic measurement equipment division of Agilent Technologies, which itself was a 1999 spinoff from Hewlett-Packard). Other speakers on Thursday will include: CWC’s Sujit Dey; “The Silent Intelligence” author Daniel Obodovski; as well as government experts from China (Jianhua Zhang from the Beijing Institute of Post and Telecommunications) and the United States (Rangam Subramanian, lead technology and spectrum policy strategist in the spectrum policy division of the National Telecommunications Information Administration in the U.S. Department of Commerce).

Keynote speakers on Friday will include Qualcomm Senior VP of Engineering Rajesh Pankaj on the future of wireless, and Intel’s Chief Wireless Technologist, Ken Stewart. Stewart is also an Intel Fellow, and he will talk about the “Wireless Device of 2020.” Other sessions will focus on:

innovations from CWC faculty, including professors Peter Asbeck and Bhaskar Rao; 5G perspectives from mobile network operators including Japan's NTT DOCOMO and the China Mobile Research Institute; and a panel on diverse 5G perspectives from representatives of Yahoo!, Google, Ericsson, and L-3 Communications.

The forum will close with a CWC planning session on the role of the institute in 5G research and development with industry collaboration. By invitation only, the session will bring together CWC faculty and board members as well as invited industry colleagues. Then, at 4:15pm, CWC will formally convene its Board Meeting for members only.

The 5G Forum is admission free and open to the public for the conference itself. Anyone who wants to attend the dinner on Thursday must register and pay \$150 in advance - registration is required. Those attending the dinner can charge the dinner fee to a credit card through the online registration system.

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