

SSLEEC's 7th Annual Review Conference
Thursday, November 4, 2021
Engineering Sciences Building (ESB), Conference Room 1001

7:30-8:30 REGISTRATION AND BREAKFAST ESB Courtyard

ESB, Room 1001

		Session Chair: Steven DenBaars	Topic	MORNING SESSION I
F01	8:30-8:50	Steven DenBaars, Professor of Materials/ECE; Mitsubishi Chemical Chair in Solid State Lighting and Displays	Overview	Welcome; Center Overview and Key Achievements
S01	8:50-9:05	Philip Chan	LEDs and MicroLEDs	Red InGaN-Based LEDs with High Active Region Growth Temperature
S02	9:05 – 9:20	Jake Ewing	LEDs	Long-Wavelength InGaN LEDs via V-Pit Engineering on Si and sapphire
S03	9:20 – 9:35	Yi Chao Chow	LEDs	Controlling the internal electric field with doped barriers in c-plane InGaN/GaN LEDs
S04	9:35–9:50	Matthew Wong	MicroLEDs	Enabling High Brightness MicroLEDs by MOCVD-Grown Tunnel Junctions

9:50-10:05 SSLEEC Group Photo by Jeff Liang at the ESB steps

10:05-10:25 Coffee Break in the ESB Courtyard

ESB, Room 1001

		Session Chair: Umesh Mishra, Professor of ECE & The Donald W. Whittier Chair	Topic	MORNING SESSION II
S05	10:25–10:40	Panpan Li	MicroLEDs	Micro-LEDs with MOCVD-Grown Tunnel Junctions
S06	10:40–10:55	Jordan Smith	MicroLEDs	Size-Dependent Phenomena in μ LEDs Down to 1 μ m in Diameter
S07	10:55–11:10	Ryan White	MicroLEDs	Red-Emitting InGaN μ LEDs on Semi-Relaxed InGaN Substrates
S08	11:10-11:25	Pavel Shapturenka	MicroLEDs	Low-defect, micron-scale semipolar GaN/InGaN emitters templated by patterned, relaxed InGaN buffers
S09	11:25-11:40	Athith Krishna	Electronics	Acceptor Traps as Sources of Holes in p-GaN/(AlN/AlGaIn) Superlattices
S10	11:40-11:55	Aditya Raj	Electronics	GaN/AlGaIn Superlattice Based p-Channel Power FinFET

11:55-1:00 LUNCH IN THE ESB COURTYARD
Served by UCSB Conference Dining & Catering

ESB, Room 1001

		Session Chair: Stacia Keller, Principal Development Engr.	Topic	AFTERNOON SESSION I
S11	1:00-1:15	Vineeta Muthuraj	LEDs	N-polar InN quantum dots and InGaN quantum wells for infrared and blue LEDs
S12	1:15-1:30	Wan Ying Ho	LEDs	Quantitative Correlation of Hot Electron Emission to Auger Recombination in c-plane III-Nitride LEDs
S13	1:30-1:45	Haojun Zhang	Lasers	From Blue to Green Laser Diodes: Progress and Challenges