# 24th Electronics Packaging Technology Conference, EPTC 2022

## DEC 7, 2022 (Wednesday)

| Time | | | | | | |
|---|---|---|---|---|---|---|
| 08:00am - 09:00am | Registration | | | | | |
| GPW Hotel, Room | Veranda I | Veranda II | Veranda III | Waterfront I | Waterfront II | Waterfront III |
| 09:00am - 10:15am | PDC1 | PDC2 | PDC3 | PDC4 | | PDC5 |
| | Fan-Out Packaging and Chiplet Heterogeneous Integration | Advanced Packaging for MEMS and Sensors | Engineering Testing Methodology for Qualifications of Consumer and Automotive Electronic Components | Photonic Technologies for Communication, Sensing, and Displays | | Reliability of Heterogeneous Integration (HI) Systems - Reliability Needs of HI Stakeholders |
| | Dr John H Lau, Unimicron Technology | Dr Horst Theuss, Infineon Technologies | Dr Fen Chen, Cruise LLC (a GM company) | Dr Torsten Wipiejewski, Huawei Technologies | | Prof SB Park, The State University of New York; and Prof Ganesh Subbarayan, Purdue University |
| 10:15am - 10:35am | Coffee/Tea Break | | | | | |
| 10:35am - 12:00pm | PDC1 (con't) | PDC2 (Con't) | PDC3 (Con't) | PDC4 (Con't) | | PDC5 (Con't) |
| 12:00pm - 01:00pm | Lunch | | | | | |
| | Waterfront Ball Room | | | | | |
| 01:00pm - 1:30pm | Grand Opening Ceremony | | | | | |
| | Welcome address, Dr Chandra Rao Bhesetti, General Chair EPTC 2022 | | | | | |
| | Opening Speech, Dr Kitty Pearsall, IEEE EPS President | | | | | |
| 1:30pm - 02:15pm | **Keynote : Challenges and Opportunities in Heterogeneous Integration** | | | | | |
| | Dr Ravi Mahajan, Intel Fellow, Intel | | | | | |
| 02:15pm - 03:00pm | **Keynote : New Directons and Challenges in the Pakaging of AR/VR Hardware** | | | | | |
| | Dr Raj Pendse, Director of Si Packaging, Meta Reality Lab | | | | | |
| 03:00pm - 03:15pm | Coffee/Tea Break (Waterfront Foyer) | | | | | |
| 03:15pm - 04:00pm | **Keynote : Materials Engineering Innovations to address Next-Gen Electronics Packaging Challenges** | | | | | |
| | Dr Sundar Ramamurthy, VP & GM Advanced Packaging, Applied Materials | | | | | |
| 04:00pm - 05:30pm | **EPTC Panel Session : Chiplet as An Enabler for System Scaling** | | | | | |
| | Ravi Mahajan (Intel), Dielacher Bernd (EVG), Raj Pendse (Meta), Yik Yee Tan (Yole Development) | | | | | |
| 06:30pm - 08:30pm | VIP Dinner (by invitation only) | | | | | |

## DEC 8, 2022 (Thursday)

| Time | | | | | | |
|---|---|---|---|---|---|---|
| | Veranda I | Veranda II | Veranda III | Riverfront I | Riverfront II | Riverfront III |
| 08:30am -9:50am | S1: 2.5D, 3D and WL Packaging | S2: Hybring Bonding Processes and Materials 1 | S3: Wafer Level Processing I | S4: Leadframe and Subsrate Manufacturing I | S5: Electrical Simulations & Characterizations I | S6: Soldered and Sintered Interconnections I |
| 9:50am - 10:20am | Coffee/Tea Break (Waterfront Foyer) | | | | | |
| | Veranda I | Veranda II | Veranda III | Riverfront I | Riverfront II | Riverfront III |
| 10:20am -11:40pm | S7: Thermo-mechanical Modeling & Simulation I | S8: Hybring Bonding Processes and Materials 2 | S9: Wafer Level Processing II | S10: Leadframe and Subsrate Manufacturing II | S11: Thermal Management & Characterization I | S12: Soldered and Sintered Interconnections II |
| 11:40am -1:10pm | EPS Luncheon | | | | | |
| | EPS Presentations; Studemt Travel Grants, EPTC OC Appreciation Ceremony | | | | | |
| | | | Veranda III | | Riverfront II and III (Combined rooms) | |
| 1:10pm - 2:25pm | | | Packaging Education Workshop. Chairs: Jeff Suhling and Andrew Tay; Speakers: K. N. Chiang, Wenhui Zhu, Gu-Sung Kim & Chuan Seng Tan | | Exhibitors Presentations 1 Lam Research, ASE, ERS, PacTech, Indium, RBN | |
| | **Interactive Presentations 1 at Waterrfront Foyer (2:25pm to 3:55pm)** | | | | | |
| | Veranda I | Veranda II | Veranda III | Riverfront I | Riverfront II and III (Combined rooms) | |
| 2:25pm - 3:25pm | S13: Thermo-mechanical Modeling & Simulation II | S14: Advanced Optoelectronics and Displays | S15: Assembly Manufacturing and Tests | S16: Lithography and Laser Direct Imaging | S17: Thermal Management and Characterization II | |
| 3:25pm - 3:55pm | Coffee/Tea Break (Waterfront Foyer) | | | | | |
| 3:55pm - 4:55pm | S18: Fan-Out Packaging | S19: Assembly Materials and Processing I | S20: Quality, Reliability & Failure Analysis | S21: Semiconductor Manufacturing & Deep Learning | S22: Emerging Technologies | S23: Assembly and Manufacturing Technology I |
| 5:30pm - 5:45pm | Transport to VivoCity's Cable Car Station | | | | | |
| 6:00pm - 9:30pm | EPTC Conference Banquet @ Dusk Restaurant, Mount Faber | | | | | |

## DEC 9, 2022 (Friday)

| Time | | | | | | |
|---|---|---|---|---|---|---|
| | Veranda I | Veranda II | Veranda III | Riverfront I | Riverfront II | Riverfront III |
| 08:30am - 09:00am | Invited Presentations A | Invited Presentations B | Invited Presentations C | Invited Presentations D | Invited Presentations E | Invited Presentations F |
| | Understanding of Hybrid Bonding Mechanism by Utilizing Molecule Simulation Approach | Path Finding to Maximization of AI/HPC/GPC System Performance | SAB for 3D and Heterogeneous Integration of Semiconductor Substrates & Devices | Thermal and Failure Analysis of Advanced Sub-Micron Devices | Advanced Fan-Out Packaging for Chiplet Integration, | Hybrid Bonding – State-of-the-Art and Upcoming Requirements in W2W and D2W |
| | Dr Minwoo Rhee, Samsung | Dr Gamal Refai-Ahmed, AMD | Prof Tadatomo Suga, Universiy of Tokyo | Dr Mo Shakouri, Microsanj | Yu-Po Wang, SPIL | Dr Bernd Dielacher, EV Group |
| 09:00am -10:00am | S24: Thermo-mechanical Modeling & Simulation III | S25: RF Modeling, Designs and Characterizations | S26: Wire Bonding and Reliability I | S27: Solder Interconnections Reliability | S28: Wafer Level Processing III | S29: Smart Manufacturing & Equipment Tech |
| 10:00am -10:30am | Coffee/Tea Break (Waterfront Foyer) | | | | | |
| 10:30am -11:50pm | S30: Assembly and Manufacturing Technology II | S31: Hybring Bonding Processes and Materials 3 | S32: Assembly Materials and Processing II | S33: MEMS and Wafer Level Processing | S34: Thermal Management & Characterization III | S35: Antenna Designs and AIP Processing |
| | Waterfront Ballroom | | | | | |
| 11:50pm - 1:20pm | EPTC Luncheon | | | | | |
| | EPTC Highlights; EPTC 2021 Best Papers Announcement & Awards Giving; Sponsorshop/ Exhibition Appreciation Ceremony | | | | | |
| GPW Hotel, Room | | | Veranda III | Riverfront I, II and III | | |
| 1:20pm - 2:35pm | | | Chapter Chairs' Meeting | Exhibitors Presentations 2 TORAY, Advantest, Heraeus, Lightspeed, Microsanj & SHT | | |
| | **Interactive Presentations 2 at Waterfront Foyer (2:35pm to 4:05pm)** | | | | | |
| | Veranda I | Veranda II | Veranda III | Riverfront I, II and III | | |
| 2:35pm - 3:35pm | S36: Electrical Simulations & Characterizations II | S37: Flexible Substrate and Manufacturing | S38: Wire Bonding and Reliability II | Heterogeneous Integration Roadmap (HIR) Workshop | | |
| 3:35pm - 4:05pm | Coffee/Tea Break (Waterfront Foyer) | | | | | |
| 4:05pm - 5:05pm | | | | Heterogeneous Integration Roadmap (HIR) Workshop | | |
| | Waterfront Foyer | | | | | |
| 5:05pm - 5:35pm | Closing Ceremony and Lucky Draw | | | | | |