

4th International Symposium of the Vacuum Society of the Philippines (ISVSP 2022)

Scientific Program (all times are in UTC+8 time zone)

| 20 April 2022 (Wednesday) | | 21 April 2022 (Thursday) | | 22 April 2022 (Friday) | |
|---------------------------|---|--------------------------|---|------------------------|---|
| 8:30 | Session room will be opened | 8:45 | Session room will be opened | 8:45 | Session room will be opened |
| 8:45 | Opening Ceremony and Group Photo | 9:00 | Plenary 3 - Jay HENDRICKS - NIST on a Chip: Quantum-Based Measurements for Pressure and Vacuum - (09:00 PM, 20 April - MD) | 9:00 | Plenary 4 - Mohan SANKARAN - Non-equilibrium, atmospheric-pressure plasmas for synthesis and degradation of chemicals - (08:00 PM, 21 April - Illinois) |
| 9:00 | Plenary 1 - Motoi WADA - Diagnostics tools to study plasma-surface interaction | 9:50 | Coffee Break | 9:50 | Coffee Break |
| 9:50 | Coffee Break | 10:00 | Invited 3 - Gil Nonato SANTOS - The Growth of Functional Nanomaterials Thru High Vacuum Technology | 10:00 | Invited 5 - Benedict SAN JOSE - Plasma and Thin Film Technologies in Advanced Semiconductor Packaging - A review of Recent Developments and Trends |
| 10:00 | Invited 1 - Renato DAVID - Methods, Processes and Dangers of waste gasification | 10:40 | Invited Early Career 3 - Arnold Rey GINES - Evidence of transient thermal load reduction in local gas injection type dielectric window | 10:40 | PST4 - Jose Gabriel ABALOS - Comparative Analysis of Plasma Excitation Parameters of Sheet-Shaped Plasma Using Two Different Microwave Sources |
| 10:40 | Invited Early Career 1 - Juvy A. BALBARONA - Analysis of Drop Size Distribution as a Function of Surface Roughness Properties and Operating Condition | 11:10 | NS&TF1 - Allen Vincent CATAPANG - Effect of substrate condition on the ZnO deposition via DC reactive magnetron sputtering using water vapor plasma | 11:00 | PST5 - James Edward HERNANDEZ II - Optical emission of target-confined plasmas via nanosecond pulsed laser ablation of graphite and aluminum |
| 11:10 | PST1 - Micah Stephanie Annejely ISRAEL - Analysis of the effect of atmospheric plasma on the thermal stability of natural zeolites | 11:30 | NS&TF2 - Rogel Jan BUTALID - Characterization of spin-coated zinc oxide-based macrocantilevers for vibrational energy harvesting | 11:20 | PST6 - Kathrina Lois TAACA - Investigating the Effect of Atmospheric Pressure Plasma on Chitosan-Acrylic Acid Solutions |
| 11:30 | PST2 - Yusaku OTA - Low energy molecular ion beam extraction from a duoplasmatron source | 11:50 | Lunch Break and Cultural Presentation | 11:40 | Lunch Break |
| 11:50 | PST3 - Keith Nealson PENADO - Spatially resolved plasma diagnostics of a discharge-stabilized atmospheric pressure RF plasma source for ion mobility spectrometry | 13:20 | Invited 4 - Satoshi HAMAGUCHI - Plasma process control with machine learning | 13:00 | Plenary 5 - Anton P.J. STAMPFL - Neutron spectroscopy: a tool for hard and soft matter studies - (15h00, Sydney) |
| 12:10 | Lunch Break and Virtual Tour of Holy Angel University | 14:00 | NS&TF3 - Glenison PANGHULAN - Characteristics of Ti-Al-Si-N Thin Films Grown using the Magnetized Sheet Plasma | 13:50 | Invited 6 - Magdaleno R. VASQUEZ, Jr. - Capacity Building in Plasma Research |
| 13:30 | Invited 2 - Randolph FLAUTA - Advantages, Challenges and Limitations of Plasma Cleaning in the Assembly Processes of Semiconductor Packaging Materials | 14:20 | NS&TF4 - Rozen Grace MADERA - Tuning the Deposition Parameters of TiO2 Films for Aesthetic Applications | 14:20 | PST7 - Marina Mercedes MENDOZA - Production of plasma-activated water using atmospheric pressure plasma jet system |
| 14:10 | Invited Early Career 2 - Julius Andrew P. NUÑEZ - High-pressure and high-temperature synthesis of LiMgH3 | 14:40 | NS&TF5 - Arantxa Danielle MONTALLANA - Synthesis of annealed titanium films coupled with electron beam-reduced silver | 14:40 | PST8 - Jerome LAPITAN - Design and development of microwave plasma torch |
| 14:40 | ASS1 - Janella SALAMANIA - Influence of pulsed-substrate bias duty cycle on the microstructure and defects of cathodic arc-deposited Ti1-xAlxN coatings | 15:00 | Coffee Break | 15:00 | Closing Ceremony and Awarding |
| 15:00 | Plenary 2 - Richard E. PALMER - Scaling-up Nanoparticle Beam Deposition for Green Synthesis of Advanced Materials: From Atomic Imaging with Aberration-Corrected STEM to Applications in Catalysis - (08:00 AM, UK) | 15:15 | Short course - Zoltan DONKO - Insights into the capacitively coupled radiofrequency plasmas - (09h15, Budapest) | 15:15 | Coffee Break |
| 15:50 | Coffee Break | | | 15:40 | VSP Business Meeting |
| 16:00 | MS1 - Alyssa Gwell A. LLORIN - A molecular dynamics study of the influence of temperature on the mechanical properties of AlN, GaN and TiN | | Plenary Talks | | |
| 16:20 | MS2 - Daniela Rae SANTOS - Effect of selenium content on the mechanical properties of CdSexTe1-x for flexible solar cells: a molecular dynamics study | | Invited Talks | | PST = Plasma Science and Technology |
| 16:40 | MS3 - Doreen PUA - A molecular dynamics study on the transport properties of 1,2,3-trimethoxypropane as a potential Li-ion battery electrolyte | | Invited Early Career Talks | | MS = Modelling and Simulations |
| 17:00 | Short seminar on how to write a paper for JVSTB? - Eray AYDIL (Editor-in-Chief of J. Vacuum Sci. Technol. B) - (05:00 AM, New York) | | Oral Presentations | | ASS = Applied Surface Science |
| | | | Short courses/seminars | | NS&TF = Nanometer Structures & Thin Films |