

3rd International Symposium of the Vacuum Society of the Philippines (ISVSP 2020)

| Oral Session A (08 January 2020, 13h00-15h00) |  |  |
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| 36  | Cyril Sadia-Salang, Rhenish Simon, Nemesio Mangilia, Rafael Jaculbia, Elmer Estacio, Armando Somintac and Arnel Salvador | Suppression of terahertz generation in AlN/GaAs/GaSb material structure  |
| 37  | Jonathan Patricio, Kim Marie Sisican, Allen Marbert Lee, Imee Martinez, Marlon Conato, Susan Arco and Marianette Vega    | Electrospun Poly( $\epsilon$ -caprolactone)/Poly(Lactic Acid) Composite Nanofibers Reinforced with Magnetic Iron Oxide Nanoparticles: Synthesis, Characterization, and Adsorption of Organic Dye |
| 13  | Kenta Maeshiro and Motoi Wada  | Study of Negative Hydrogen Ion Production near the Plasma Electrode  |
| 35  | Julia Jumalon, Charlotte Basubas and Kathrina Lois Taaca   | Chemical and surface characterization of oxygen-functionalized zeolite/chitosan-based composites   |
| 22  | Allison Arabelo, Quang Thang Trinh and Matthew Peter Sherburne   | DFT+U Simulations of XPS for CuO Catalyst  |
| 15  | Kenneth Roy Rojo, Renz Carlo Arenillo, Janelle Anne Gonzales, Raven Alferes and Ivy Ann Razonado                         | Enhanced Adhesion of Silver Nanoparticles onto Polyvinyl Chloride using Sub-atmospheric Plasma and Enzymatic Surface Functionalization   |
| 47  | Glenon Panghulan, Yasmin Edanol, Leon Jr. Payawan and Magdaleno Jr. Vasquez  | Synthesis of TiN/TiO <sub>2</sub> Composite Film for Visible Light Photocatalysis  |
| 20  | Karl Vincent Alvarez, Bryle Eusebio, Jonard Jairo Reyes and Jason Pechardo   | Fabrication of a Novel Thin Film Material from Pinene via Plasma Polymerization  |
| Oral Session B (08 January 2020, 13h00-15h00) |  |  |
| 23  | Hajime Aki, Naoki Miyamoto, Toshiro Kasuya and Motoi Wada  | Development of a Compact Hydrocarbon Ion Source  |
| 4   | Yuji Shimabukuro, Tatsuhiro Tokai, Keita Bito and Motoi Wada   | Comprehensive Study on the Low-energy Atomic Hydrogen Beam: From Production to Velocity Distribution Measurement   |
| 63  | John Raymund Brusas, Mark Jeffry De Leon, Eleanor Olegario and Magdaleno Vaquez Jr.                                      | REMOVAL OF VOLATILE ORGANIC COMPOUND FROM SPENT SURFACE MODIFIED NATURAL ZEOLITE USING ATMOSPHERIC PLASMA DESORPTION METHOD  |
| 71  | Naoki Miyamoto, Tsutomu Nagayama and Tadashi Ikejiri   | METAL ION BEAM PRODUCTION FROM A BERNAS ION SOURCE   |
| 59  | Samuel Harrison Cerrudo, Giovanni Malapit and Ofelia Giron   | Investigation of Atmospheric Pressure Plasma Jet applications as pretreatments on Processed Lignocellulose biomass and its potential in reducing sugars and bioethanol production.               |
| 45  | Efren Hamoy, Jenica Rozette Uy, Aren Renz Centeno, Elijah Tuprio, Ivan Culaba and Christian Lorenz Mahinay               | Double Langmuir Probe Measurements in a DC Tesla Coil Inductively Coupled Plasma   |
| 32  | Erin Joy Tinacba, Michiro Isobe, Kazuhiro Karahashi and Satoshi Hamaguchi  | Molecular dynamics simulation of surface interactions with high-fluorine content ions such as SF <sub>5</sub> <sup>+</sup> in Si and SiO <sub>2</sub> reactive ion etching                       |
| 12  | Fumiya Ikemoto, Ippei Yamada, Motoi Wada and Toshiro Kasuya  | Study on ion transport system for detection efficiency calibration of a micro-channel plate  |

| Oral Session C (10 January 2020, 10h50-11h50) |   |  |
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| 62  | Mohan Jacob   | VERTICAL GRAPHENE GROWN USING PECVD: METHODS AND APPLICATIONS  |
| 61  | Jeremiah Chan, Alberto Amorsolo Jr., Magdaleno Vasquez Jr., Jose Mario Diaz, Erwin Enriquez, Hideki Nakajima and Motoi Wada | Nitrogen Plasma Modified Spray Deposited Graphene Thin Films   |
| 26  | Camille Victoria Cantor, Dwight Angelo Bruzon, Jenny Lou Sagisi and Marienette Vega   | Electrochemical Synthesis and Characterization of ZnO-Polypyrrole Conducting Polymer Composites  |
| 69  | Sidney Palardonio, Magdaleno Jr Vasquez and Len Herald Lim  | Deposition and morphology of plasma-polymerized aniline  |
| Oral Session D (10 January 2020, 10h50-11h50) |   |  |
| 46  | Joseph Raymund Sanchez, Paulo Rafael Joson and Marienette Morales Vega  | Studying Absorbance Properties and Mercury Remediation Capabilities of Gold-Graphene Oxide-Iron Oxide (Au-GO-Fe <sub>3</sub> O <sub>4</sub> ) Nanoparticle Systems |
| 2   | Juan Carlos Novero, Dindi Remedios Guzon, Ida Aleja Quiapos, Mary Catherine Jane Zoleta and Jason Pechardo                  | Solvent effects on the properties of $\alpha$ -Fe <sub>2</sub> O <sub>3</sub> thin films deposited by spray pyrolysis  |
| 11  | James Edward Hernandez and Motoi Wada   | Time-of-Flight Measurements of Nanosecond Laser Plasmas under Target Induced Confinement   |
| 30  | Ma. Rosario Omega, Gil Felicisimo Cabrera and Magdaleno Jr. Vasquez   | Effect of RF Plasma Treatment on the Thermal and Surface Properties of Poly(lactic acid)/Cellulose Acetate (PLA/CA) Nanofibers                                     |
| Oral Session E (10 January 2020, 13h00-14h00) |   |  |
| 27  | Joefreim Delicano, Rani Lou De Castro and Leo Mendel Rosario  | EFFECTS OF VACUUM DRYING ON THE SORPTION PROPERTIES OF WOVEN NATURAL FIBERS  |
| 56  | Michelle Marie Villamayor, Sajid Husain and Tomas Nyberg  | Highly controllable WS <sub>2</sub> monolayer and few layer deposition by sputtering   |
| 58  | Mel Martinez, Magdaleno Vasquez and Flordeliza Llaneta  | DEPOSITION OF CUPROUS OXIDE FILMS ON PLASMA-MODIFIED POLYTETRAFLUOROETHYLENE SUBSTRATES  |
| Oral Session F (10 January 2020, 13h00-14h00) |   |  |
| 21  | Yuji Shimabukuro, Hidenori Takahashi, Shinichi Iwamoto, Koichi Tanaka and Motoi   | The Forefront Development of Novel Radical Induced Dissociation Techniques toward Realization of Next-generation Medical Diagnostics                               |
| 16  | Takayuki Eguchi, Mamiko Sasao, Masashi Kisaki, Haruhisa Nakano, Katsuyoshi Tsumori, Motoi Wada                              | A compact ECR negative hydrogen ion source to study cesium free plasma grid materials  |
| 34  | Fatima Jenina Arellano and Satoshi Hamaguchi  | 2D Finite Element Simulation of Ionic Wind in Argon Gas  |