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Symposium **Biological Materials Science Symposium**

Presentation Title F24: The Investigation of Wear Resistance of Hydroxyapatite-chitosan Bio Composite Coating on Stainless Steel 316L

Author(s) Sajjad Falaki, Rana Sabouni Tabari, Seyyed Khatiboleslam Sadmezhaad

On-Site Speaker (Planned) Sajjad Falaki

Abstract Scope The use of man made joint is always dealt with a certain amount of wear. In order to increase wear resistance, bio composite coatings which were made of hydroxyapatite(HA)and chitosan on stainless steel 316L by electrophoretic deposition (EPD) method developed. Using of Chitosan lead to room temperature composite materials processing.Wear resistance of coatings were examined by pin on disc wear testing and it was shown that modification of mechanical and abrasive properties achieved. Moreover scanning electron microscope(SEM) tests showed that appropriate porosity and acceptable distribution of particles were obtained.

Proceedings Inclusion? Planned: A print-only volume

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[Experimental and Computational Characterization of Delamination Resistant Bio-Laminates](#)

[Experimental Characterization of Bone and Exoskeleton Fish Scale Structures](#)

[Extraordinary Tear Resistance of Skin](#)

[F24: The Investigation of Wear Resistance of Hydroxyapatite-chitosan Bio Composite Coating on Stainless Steel 316L](#)

[F25: Toughening Mechanisms in Nacre](#)

[F26: Microstructural Analysis of Aristotle's Lantern in Sea Urchins](#)

[F27: Surface Magnetized Colloidal Particles Aligned by Magnetic Freeze Casting](#)

[F28: MoS₂-Ceria Hybrid Nano-composite Based Electrochemical Biosensor](#)

[F29: Advances in the Understanding of the Effects of External Treatments on the Subcellular Structure and Composition of Plant Cell Walls](#)

[F30: Amperometric Detection of Hydrogen Peroxide and Dopamine by Ceria Nanoparticle-Functionalized Self-Assembled Monolayer Biosensor](#)

[F31: Regenerative Nanoporous Gold Biosensor in Harsh Biofouling Conditions](#)
[F32: Dynamic Modeling Approach to Follow Adsorption Kinetics of Engineered Proteins that Self-assembles Through Biomolecular Recognition](#)
[F33: Single Step Biofabrication of Self-Organized Hybrid Molecular Assemblies](#)
[F34: Towards Amperometric Sensors via Self Assembled Metal-specific Enzymes](#)
[F35: Easing the Fabrication of Bioinspired Composites Through the use of Clathrate Hydrates in Freeze Casting](#)
[F36: Microstructure, Mechanical Property of Porous Hydroxyapatite- \$\beta\$ TCP Biomaterial Consolidated by Rapid Sintering using Space Holder](#)
[F37: Silk Fibroin Bio-Polymer Integrated Nanostructures for Energy/Sensing Applications](#)
[F38: The Ganoid Scales of *Atractosteus spatula*: Potential for Bioinspired Flexible Armor](#)
[F39: Response of Osteoblast-Like Cells to Titanium Alloying Elements](#)
[F40: Comparisons of Apetite Deposition on the Surface of Titanium and Ti6Al4V Alloy Powders](#)
[In Vitro Studies of Surface Modified Highly Porous Ti6Al7Nb Alloys](#)
[Injectable Solids: Hydrogel Property and Nanostructure Control Through Peptide Design and Solution Assembly](#)
[Inspirations from Reptilian Eggshells for Novel Polymer-Based Composites](#)
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[Magnetic Nanocomposites for Localized Hyperthermia Treatment of Breast Cancer](#)
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[Production and Characterization of Magnesium Based Composites](#)
[Retaining Catalytic Mimetics of Cerium Oxide Nanoparticle Post Ion Interaction](#)
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[Strength and Toughness of Nacre: Contributions of Mineral and Organic Components](#)
[Structural Analysis of the Woodpecker Tongue](#)
[Synthesis of Biomorphic TiO₂ Using Leaf Vein as Template](#)
[Systematic Design of Bio-Inspired Materials: Exploring Synergies between Micro-Architecture and Interfaces for Simultaneous Stiffness, Strength and Toughness](#)
[Teleost Fish Scales Amongst the Toughest Collagenous Materials](#)
[Thermodynamic and Mechanical Properties of Bamboo in Nano-Scale](#)
[Time Dependent Behavior of Human Dentin](#)
[Toughening Mechanisms in Naturally-Occurring Helicoidal Composite Materials](#)
[Translation of Mg Alloy Properties to Stent Performance](#)
[Underwater Attachment and Functional Adaptations of River Loach](#)

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