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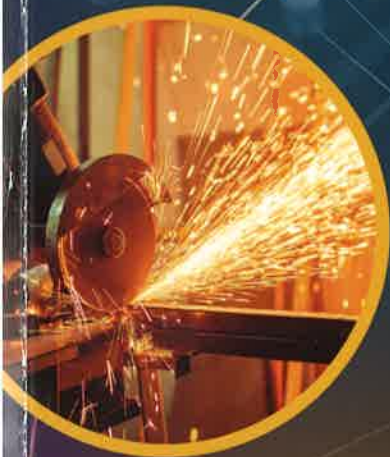
COMMITTEE
MEETINGS
& SPECIAL EVENTS
NOV 8-14, 2019

EXHIBITION
NOV 10-13, 2019

TECHNICAL
CONFERENCE
NOV 11-14, 2019

Calvin L. Rampton Salt Palace Convention Center,
Salt Lake City, Utah

2019 Program



<https://event.asme.org/IMECE>

| *The American Society of Mechanical Engineers*[®]
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SETTING THE STANDARD

8:57am - Design of Surface-Enhanced Raman Spectroscopy (SERS) Based on Transformation Optics for Probe Sensing

Technical Presentation. IMECE2019-12531
 Mohammadrahim Kazemzadeh, Weiliang Xu, Neil Broderick, Kamran Zargar, University of Auckland, Auckland, New Zealand

9:18am - An Integrated Nanofluidic System for Blood Sample Ion Current Rectification (ICR) Biosensing

Technical Presentation. IMECE2019-13047
 Haidong Feng, University of Utah, Salt Lake City, UT, United States, Eric Ervin, Sean German, Jack Wisniewski, Mike Krupka, Electronic Biosciences, Inc., Salt Lake City, UT, United States, Bruce Gale, University of Utah, Salt Lake City, UT, United States

12-4 COMPUTATIONAL STUDIES ON MEMS AND NANOSTRUCTURES

12-4-1 Computational Studies on MEMS and Nanostructures

Convention Center, 355E

10:15AM-12:00PM

Session Organizer: Daniel Kaplan, U.S. Army RDECOM-ARDEC, Picatinny Arsenal, NJ, United States

Session Co-Organizer: Gregory Hader, U.S. Army RDECOM-ARDEC, New Jersey, NJ, United States, Muhammad Akbar, Tennessee State University, Nashville, TN, United States, Jungkyu Park, Kennesaw State University, Marietta, GA, United States, Ibrahim Alhomoudi, King Abdulaziz City for Science and Tech, Riyadh, Saudi Arabia

10:15am - First-Principle Calculations of the Binding Energy of the Coating Components of New Generation Dental Implants

Technical Paper Publication. IMECE2019-10059
 Alla V. Balueva, University of North Georgia, Gainesville, GA, United States, Iliia Dashevskiy, Ishlinsky Institute for Problems in Mechanics RAS, Moscow, Russia, Patricia Todebush, Chasen Campbell, Eduardo Valdez, University of North Georgia, Gainesville, GA, United States

10:36am - First Principle Analysis of the Effect of Strain on Electronic Transport Properties of Dumbbell-Shape Graphene Nanoribbons

Technical Paper Publication. IMECE2019-11107
 Takuya Kudo, Qinqiang Zhang, Ken Suzuki, Hideo Miura, Tohoku University, Sendai, Miyagi, Japan

10:57am - Optimization of a Manifold Microchannel Heat Sink Using an Improved Version of the Augmented Epsilon Constraint Method

Technical Paper Publication. IMECE2019-11496
 Lagouge Tartibu, Modestus Okechukwu Okwu, University of Johannesburg, Johannesburg, South Africa

11:18am - A Novel Direct-Write UV-Photolithography Based One-Dimensional Optical Birefringence in Electro-spun Microfiber

Technical Presentation. IMECE2019-13115
 JongHyun (Joe) Kim, Dongwoon Shin, Abiral Regmi, Jiyoung Chang, University of Utah, Salt Lake City, UT, United States

12-8 MICROFLUIDICS 2019: MICROFLUIDICS IN MICRO- AND NANOSYSTEMS

12-8-2 Micro/Nanoscale Electrokinetics

10:15AM-12:00PM

Convention Center, 251C

Session Organizer: Nazmul Islam, University of Texas at Grande Valley, Edinburg, TX, United States

Session Co-Organizer: Paul R. Chiarot, State University of New York at Binghamton, Binghamton, NY, United States

10:15am - Scaling Behavior in Electrohydrodynamic of Polymeric Solutions

Technical Paper Publication. IMECE2019-10426
 Abhishek Kumar Singh, Kaushendra Dubey, Rajiv Srivastava, Supreet Singh Bahga, Indian Institute of Technology, New Delhi, New Delhi, India

10:36am - Analysis of Combined Electroosmotic and Pressure Driven Flow of Multilayer Immiscible Fluids in a Narrow Capillary

Technical Paper Publication. IMECE2019-10466
 Juan P. Escandon, David A. Torres, Instituto Politécnico Nacional, SEPI-ESIME Unidad Azcapotzalco, Mexico

10:57am - DC-Biased AC Electrokinetics Effect of V-Shaped Electrode Patterns for Microfluidics

Technical Paper Publication. IMECE2019-11734
 Mohammad Salman Parvez, Mohammad Fazlay Samir M. Iqbal, Nazmul Islam, University of Texas at Grande Valley, Edinburg, TX, United States

11:18am - Microfluidic-Based Fabrication and Dielectrophoretic Manipulation of Microcapsules

Technical Paper Publication. IMECE2019-1190
 Sepehr Maktabi, Jeffrey W. Schertzer, Paul R. Chiarot, University of New York at Binghamton, Binghamton, NY, United States