Day 1 October 02, 2017

09:00-9:30 Registrations

Hampton Events Center B

conferenceseries.com 09:30-9:45 **Opening Ceremony**

Keynote Forum

Introduction

09:45-10:15 **Title: Recent developments in advanced propulsion and the issues of interstellar transport**
James F Woodward, California State University, USA

10:15-10:45 **Title: The effects of rarefaction and thermal non-equilibrium on a blunt body and a bicone in hypersonic flow and their shape optimization for reducing both drag and heat transfer**
Ramesh K Agarwal, Washington University, USA

Group Photo @ 10:45–10:50

Panel Discussion

Networking & Refreshment Break 10:50–11:05 @ Foyer Event Center

11:05-11:35 **Title: Improved hamiltonian adaptive control of rotational mechanics**
Timothy Sands, The Naval Postgraduate School , USA

11:35-12:05 **Title: Future of mobility with autonomous and connected vehicles**
Fred Barez, San Jose State University, USA

12:05–12:35 **Title: Experimental evaluation and computational simulation of structures subject to high velocity impact loading**
Brendan J O Toole, University of Nevada Las Vegas, USA

12:35–13:05 **Title: Uncertainty analysis in engineering: Past, present, and future**
Isaac Elishakoff, Florida Atlantic University, USA

Panel Discussion

Lunch Break 13:05–13:45 @ Bora Bora

Fluid Mechanics | Aerodynamics | Airship Design & Development | Flight Vehicle Navigation | Bio Engineering & Bio-Mechanics | Heat Transfer Systems | Applications of Aerospace Technology | Mechanical Engineering & Management

Session Chair: Fred Barez, San Jose State University, USA

Session Introduction

13:45–14:05 **Title: Discover lagrangian equation for fluid mechanics**
Shuh Jing Ying, University of South Florida, USA

14:05–14:25 **Title: UAS rotor sound pressure level reduction through leading edge, upper surface, and trailing edge modification**
Mark N Callender, Middle Tennessee State University, USA

14:25–14:45 **Title: Numerical and experimental evaluation of novel heat pipe design for use in thermal energy storage applications**
Songgang Qiu, West Virginia University, USA

14:45–15:05 **Title: Dual-rotor vertical axis wind turbine mounted on houses**
Khaled Asfar, Jordan University of Science and Technology, Jordan

15:05–15:25 **Title: Flow mechanism analysis of the Magnus effect for spinning finned projectile**
Jiawei Zhang, Beijing Institute of Technology, China

15:25–15:45	**Title: Effect of elastic deformation on the aerodynamic characteristics of a spinning projectile** **Jintao Yin,** Beijing Institute of Technology, China
15:45–16:05	**Title: One versus two: A different philosophy in simulated combat training** **Antonio O Dourado,** Federal University of Santa Catarina, Brazil

Panel Discussion 16:05-16:15

Networking & Refreshment Break 16:15-16:30 @ Foyer Event Center

16:30-16:50	**Title: Optical sensing based on micro-scale resonators** **Maurizio Manzo,** University of North Texas, USA
16:50-17:10	**Title: Terra response: A subsurface anomaly detection system** **Andrew D Lowery,** Terra Response, LLC, USA
17:10-17:30	**Title: Innovation management case study on aircraft certification from mechanical engineering point of view** **Ahmet Feyzioglu,** Marmara University, Turkey

Panel Discussion

Day 2 October 03, 2017

Hampton Events Center B

Keynote Forum

09:30-10:00	**Introduction** **Title: On the modeling and computer simulation of multiphase flow and heat transfer in thermal systems** **Michael Z Podowski,** Rensselaer Polytechnic Institute,USA
10:00-10:30	**Title: A professional life that took a non-linear path** **Mariusz Ziejewski,** North Dakota State University, USA

Panel Discussion

Networking & Refreshment Break 10:30-10:45 @ Foyer Event Center

10:45-11:15	**Title: Digitalization & aerospace: The next era of engineering simulations** **Rick James,** SimuTech Group, USA
11:15-11:45	**Title: Pulsatile flows in biomedical applications** **Michael W Plesniak,** George Washington University, USA
11:45-12:15	**Title: Magnesium based materials -from bio to light weighting** **Jagannathan Sankar,** North Carolina A&T State University, USA
12:15-12:45	**Title: In-Situ manufacturing in route to space exploration** **Fred Barez,** San Jose State University, USA

Panel Discussion

Lunch Break 12:45-13:35 @ Bora Bora

Design & Development of Rockets | Space Engineering | Energy Processing | Mechanics, Dynamics and Controls | Vehicle Systems and Technologies |Bio Engineering & Bio-Mechanics | Design and Modelling of Aircraft and Helicopter Engines | Robotics and Mechatronics | Material Processing

Session Chair: Vishwas Bedekar, Middle Tennessee State University, USA

Session Introduction

13:35–13:55	**Title: The localized method of approximated particular solutions-a mesh less approach for solving multidimensional in compressible Navier-Stokes equations** **D L Young,** National Taiwan University, Taiwan
13:55–14:15	**Tittle: Study of magneto electric effect for sensing and energy harvesting applications** **Vishwas Bedekar,** Middle Tennessee State University, USA

14:15–14:35	**Title: Nonlinear Lyapunov control improved by an extended least squares adaptive feed forward controller and enhanced Luenberger observer** **Peter Heidlauf,** Air Force Institute of Technology, USA **Matthew Cooper,** Air Force Institute of Technology, USA
14:35–14:55	**Title: Development of continualized models for the analytical study of nanoplates in buckling and vibration: principles and perspectives** **Florian Hache,** Florida Atlantic University, USA
14:55–15:15	**Title: Multi-fuel combustion using a dual signal plasma Igniter** **Andrew D Lowery,** Plasma Igniter, LLC, USA
15:15–15:35	**Title: Development of an eccentric blade rotor rotary engine** **Hsiao Kang Ma,** National Taiwan University, Taiwan
15:35–13:55	**Title: Sensitivity analysis for a single-shoe drum brake** **Salwan Waheed,** University of Missouri, USA

Panel Discussion

Networking & Refreshment Break 13:55-16:15 Foyer Event Center

16:15-16:35	**Title: High level modelling and verification of in-cylinder diagnostics using a dual signal plasma Igniter** **Andrew D Lowery,** Plasma Igniter, LLC, USA
16:35–16:55	**Title: Variational method for the calculation of efficient paths with gravitational assist** **Jorge Luis Nisperuza Toledo,** Fundación Universitaria Los Libertadores, Colombia
16:55-17:15	**Title: Size-controlled colloidal synthesis of monodisperse siloxane-based PDMS nanoparticles** **Taejong Paik,** Chung-Ang University, South Korea

Panel Discussion

Day 3 October 04, 2017

Hampton Events Center B

Keynote Forum

09:45-10:15	**Title: Review of the state of the art and new mathematical formulations for solutions of the incompressible Navier-Stokes equations in velocity and pressure derivatives"** **Shaaban Abdallah,** University of Cincinnati, USA
10:15-10:45	**Title: Multiscale dynamic modelling of thin and periodic structures** **Julius Kaplunov,** Keele University, UK
10:45-11:15	**Title: Vibration and stability analysis of high speed rotating annular disks and rings** **Hamid R Hamidzadeh,** Tennessee State University, USA

Panel Discussion

Networking & Refreshment Break 11:15-11:30 @ Foyer Event Center

11:30–12:00	**Title: Fundamental principles of gyroscope theory** **Ryspek Usubamatov,** Kyrgyz State Technical University, Kyrgyzstan
12:00-12:30	**Title: Solving a half-dozen Sherlock Holmes-style mysteries in space** **Tom Logsdon,** University of California, USA
12:30–13:00	**Title: : Natural fiber for automobile and aerospace components design** **Sheldon Q Shi,** University of North Texas, USA

Panel Discussion

Lunch Break 13:00-13:40 @ Bora Bora

13:40–14:10	**Title: Atomization of liquid jets and droplets: Theory and models** **Prashant Khare,** University of Cincinnati, USA
14:10-14:40	**Title: Theory of electromagnetism and gravity modeling earth as a rotating solenoid coil** **Greg Poole,** Industrial Tests Inc, USA
Robotics and Mechatronics | Material Processing | Airship Design & Development | Mechanics, Dynamics and Controls	
Session Chair: Mark N Callender, Middle Tennessee State University, USA	
	Session Introduction
14:40-15:00	**Title: The machining of Haynes 188 nickel based aero space material with ceramic cutting tool** **Abdullah Altin,** Yuzuncu Yıl University, Turkey
15:00-15:20	**Title: First-principles based multiscale multiphysics approaches for integrated computational materials engineering** **Yao Fu,** University of Cincinnati, USA
15:20-15:40	**Title: Investigation of energy consumption on thread machining of austempered ductile cast iron materials** **Hasan Oktem,** Kocaeli University, Turkey
15:40-16:00	**Title: Effect of engine location on flutter speed and frequency of a tapered viscoelastic wing** **Youssef S Matter,** United Arab Emirates University, UAE
Panel Discussion	
Networking & Refreshment Break 16:00-16:20 @ Foyer Event Center	
Video Presentation	
16:20-16:40	**Tittle: Terrestrial or ambient pressure effects on pore shape in solid** **Peng-Sheng Wei,** National Sun Yat-Sen University, Taiwan
Posters Sessions	
16:40-17:00	**Title: Finite deformation of thin-wall composite spheres** **Gidon Weil,** Ben-Gurion University, Israel
Panel Discussion	
Award Cermony & Closing Ceremony