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Front Matter

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Description

jASA
Journal of Applied Sciences and Arts

THE journal for professionals
The Journal of Applied Sciences and Arts (JASA) is a peer-reviewed journal to publish use-driven research and creative outcomes in the areas, related but not limited to:
• Allied Health: Nursing; Occupational Therapy; Health Informatics; Bioinformatics, Pulbic Health, Dental Hygiene, radiologic sciences, mortuary sciences, or health care management
• Architecture: Art and Design; Urban and Regional Design, industrial Arts; Interior and Fashion Design; Digital Design and Parametrics,
• Automotive Technology: Computerized Engine Controls; Advanced Emissions Controls; Autonomous Vehicles
• Aviation Management and Flight: airports and airlines, and manufacturers and general aviation companies; aviation business analytics
• Aviation Technologies: Flight systems and avionics; Digital flight and avionics
• Information Systems and Applied Technologies: Interaction, Infrastructure,and Informatics as applied to the Sciences and Arts, CyberPysical Systems, information assurance and cybersecurity, web and mobile applications, big data system analytics, informatics, electronic systems, and technical resource management
• Digital Humanities: Digital Storytelling; Digital communications; Social Networks; Digital Anthropology; Digital Archeology, Data and Informational Mapping and Modeling
• Digital Education: Digital Classes; MOOCs; Digital Learning, Informational Collaboration

The Journal of Applied Sciences and Arts (JASA) supports a liberal arts-based professional education through experiential learning to empower graduates to be exemplary citizens and leaders in today and tomorrow's global, digital wider world.

The Journal of Applied Sciences and Arts (JASA) seeks scholarly contributions to inform the practical application of the Sciences and Arts in solving complex societal problems in the areas listed above and more. We make the distinction between basic research and applied research by following the use-driven research paradigm advanced by Donald Stokes in "Pasteur's Quadrant: Basic Science and Technological Innovation:" a model of research done carefully, i.e., good science, but motivated by specific practical needs, hence referred to as need-driven or use-driven.

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GENERAL SUBJECTS

Issue Themes

The Journal of Applied Sciences and Arts (JASA) publishes research and creative outcomes. We make the distinction between basic and applied research by following the use-driven paradigm advanced by Donald Stokes in Pasteur's Quadrant. In this research model Basic Science and Applied Technological Innovation are looked concomitantly. We publish articles where authors do good science while motivated by specific practical needs, featuring experiences in sciences and arts as applied to solving important complex practical societal problems.

This second issue of the JASA brings to you three regular submissions, rigorously double-blind reviewed, as well as two articles selected as best papers presented at the ASA Multidisciplinary Research Symposium that took place in October, 2016 at Southern Illinois University; the focus of the symposium was on innovation and emerging technologies that have served or will serve as a catalyst for progress, change, and evolution in the Applied Arts and Sciences.

Donald Bartlett talks to us about aircraft noise in his article titled *The Effects of Using Noise Reduction Turbofan Engine Nozzle Designs on a Turbojet Engine*, a complex topic projected to gain prominence with the increasing number of aircraft and size of the engines.

In the article *Complexity as a Narrative: Architecture and Chaos*, Giacomo Pala discusses how computers and the introduction of digital media have imposed new conventions to architecture over the last thirty years, forcing architecture to find ways to deal with new technologies and to develop new disciplinary meanings.

The article *Post Occupancy Evaluation an Academic Building: Lessons to Learn* article by Reza T. Ahmadi, Diana Saiki, and Charles Ellis, describes a tool used to determine the users' satisfaction of a building after its completion. This is quite innovative research since most educational facilities do not conduct a post occupancy evaluation.

The last two submissions were best papers selected from the symposium. Qian Huang and Chen Mao in their paper titled *Occupancy Estimation in Smart Building Using Hybrid CO2/Light Wireless Sensor Network*, talk about "demand-driven HVAC control" for smart buildings delivering useful services to residents at the lowest cost and maximum comfort. Their team investigated the issue by using a wireless CO2 sensor network connected to HVAC systems to realize fine-grained, energy efficient smart buildings.

Finally, Blaine M. Heisner, in *The Effects of Electronic Throttle Control Systems on Gasoline Internal Combustion Engine Compression Testing Procedures*, investigated the effects of Electronic Throttle Control (ETC) on engine compression test procedures to make accommodations for these effects to reliably diagnose engine mechanical problems.

I hope you enjoy reading these pieces as much as I did and that you can gain some practical advice useful for your own use-driven research.

Cordially yours,

Prof. Jorge Díaz-Herrera, Ph.D.
Editor-in-Chief