

# Journal of Applied Sciences and Arts

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## Front Matter

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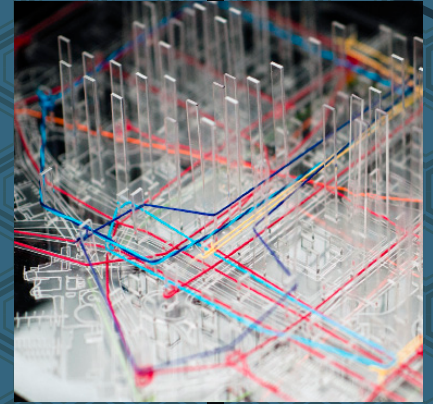
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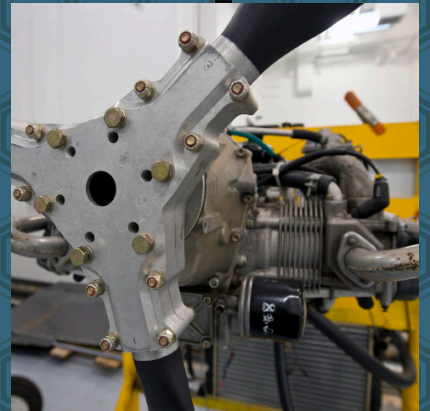
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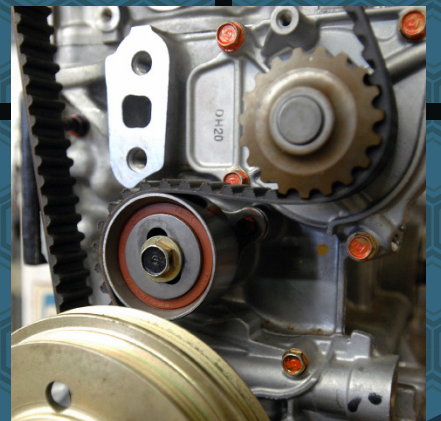
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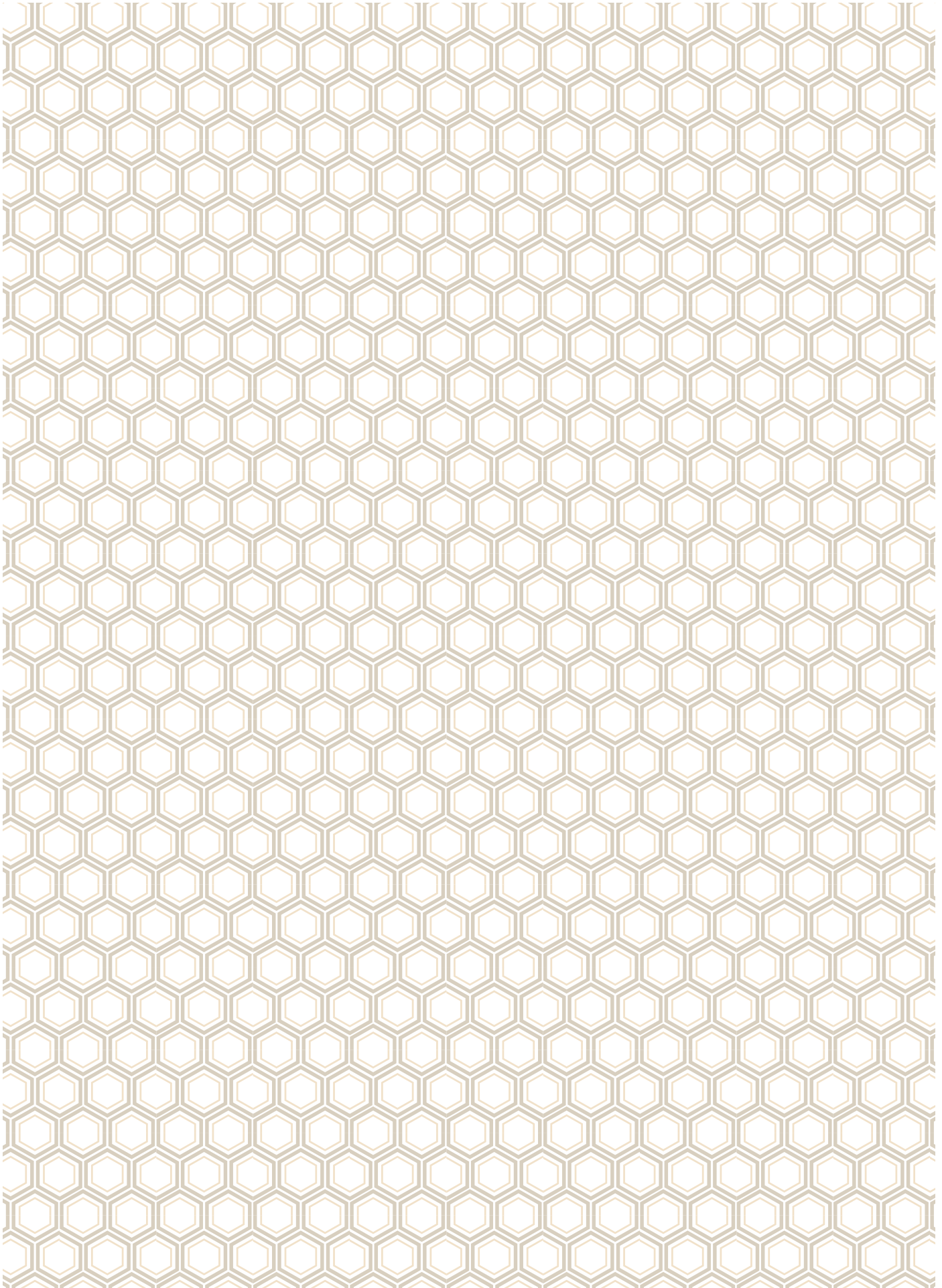
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Applied Sciences and Arts



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## Journal of Applied Sciences and Arts

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### Description

#### Is THE journal for professionals...

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. Its contributors foster scholarly contributions to inform the practical application of the Sciences and Arts in solving complex societal problems in the areas listed below 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. The Journal of Applied Sciences and Arts (JASA) is a peer-reviewed journal to publish such research and creative outcomes in the areas, related but not limited to:

- **Allied Health:** Public Health; Dental Hygiene, Radiologic Sciences, Mortuary Sciences; Health Care Management; Occupational Therapy; Health Informatics; Bioinformatics
  - **Architecture:** Art and Design; Interior and Fashion Design; Digital Architecture and Parametric Systems; Industrial Arts; Fabrication and Production, Urban Design, Applied Building Technologies; Building Information Management; Construction Sciences
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  - **Information Systems and Applied Technologies:** Interaction; Information Technology; Information Assurance and Cybersecurity; Informatics; Cyber-Physical Systems; Web And Mobile Applications; Big Data Analytics; Informatics; Electronic Systems; Technical Resource Management; Infrastructure
  - **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
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# Journal of Applied Sciences and Arts

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## Editorial Notes

**T**he Journal of Applied Sciences and Arts (JASA) is a peer-reviewed journal for publishing use-driven research and creative outcomes. 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. Stokes points out that this interplay of science and technology is not unique, and the history of science and technology abounds with similar stories. JASA provides a unique opportunity to feature experiences in sciences and arts as applied to important technological needs in solving complex practical societal problems in many areas of human endeavor.

This inaugural issue supports a liberal arts-based professional education through experiential learning to empower graduates to be productive citizens and leaders. It includes three important works.

Chad Schwartz focuses on practical pedagogy issues related to architectural technology courses debating the merits of design/build. "The reflection on the past three years has illuminated significant successes, but it has also revealed critical flaws that require further refinement," concludes the author.

The second article, by Shannon S. McDonald and Lucas Shubert, deals with Transportation Conditions and Solutions in Carbondale, a perfect example of use-driven research studying "the potential of a new sustainable macro transit system to create sustainable/resilient transportation at the Southern Illinois University (SIU) campus and city of Carbondale, Illinois."

The third contribution, by Donald R Bartlett, presents the results of applying an "industry-based technique to an academic setting to identify and eliminate root causes that result in damaged laboratory equipment and educational aids by college students or instructors."

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,

**Dr. Jorge Díaz-Herrera**  
**Editor-in-Chief**

