

PAPER • OPEN ACCESS

First International Seminar on Physical Infrastructure (1st ISPI)

To cite this article: Y W Yung-Vargas *et al* 2022 *J. Phys.: Conf. Ser.* **2153** 011001

View the [article online](#) for updates and enhancements.

You may also like

- [SPITZER VIEW OF YOUNG MASSIVE STARS IN THE LARGE MAGELLANIC CLOUD H II COMPLEX N 44](#)
C.-H. Rosie Chen, You-Hua Chu, Robert A. Gruendl *et al.*
- [Quantum transport through a molecular level: a scattering states numerical renormalization group study](#)
Andre Jovchev and Frithjof B Anders
- [A WIDE-FIELD SURVEY OF THE ORION NEBULA CLUSTER IN THE NEAR-INFRARED](#)
M. Robberto, D. R. Soderblom, G. Scandariato *et al.*



The Electrochemical Society
Advancing solid state & electrochemical science & technology

243rd ECS Meeting with SOFC-XVIII

More than 50 symposia are available!

Present your research and accelerate science

Boston, MA • May 28 – June 2, 2023

[Learn more and submit!](#)

First International Seminar on Physical Infrastructure (1st ISPI)

**Y W Yung-Vargas¹, A Rodríguez-Lizcano¹, L F Ortiz-Vasquez²,
J P Rojas-Suárez¹, and E D V-Niño³**

¹ Universidad Francisco de Paula Santander, San José de Cúcuta, Colombia

² Corporación Universitaria Minuto de Dios - UNIMINUTO, Bello, Colombia

³ Foundation of Researchers in Science and Technology of Materials, Bucaramanga, Colombia

E-mail: info@foristom.org

The First International Seminar on Physical Infrastructure (1st ISPI) was an academic and scientific event organized by the Road Infrastructure Research Group and the Road Infrastructure Research Seedbed of the Universidad Francisco de Paula Santander, San José de Cúcuta, Colombia; the 1st ISPI was held from October 13 to 15, 2021.

The purpose of the 1st ISPI was to allow the academic and scientific community, researchers, professors, professionals, and students, to share results and research proposals in the areas of Engineering, Mathematics, and Physics; during the 1st ISPI is presented 29 research work, of which 6 were plenary lectures from Spain, Brazil, Venezuela, and Colombia, and 23 talks, on different topics that allowed to the participants the to learn about the current state of the Physical Infrastructure, the Mathematical Modeling, the Physical and Numerical Modeling, the Physicochemical Phenomena in Engineering, the Advances in Materials Science and Engineering, the Simulation of Physical-Mathematical Problems in Engineering, and the Teaching and Research Techniques in Science and Engineering. The website of the conference is available at <https://foristom.org/1ispi>.

On behalf of the organizing committee of the 1st ISPI, we are extremely thankful to all authors and participants for providing their valuable contributions to this Proceedings volume as well as the reviewers for their constructive recommendations and criticism aiding to improve the presented articles. Likewise, we like to thank the Universidad Francisco de Paula Santander, and the Foundation of Researchers in Materials Science and Technology, for all the support technical and logistical received.

Likewise, the organizing committee 1st ISPI thanks all who attended this edition of the event, and we are very proud to have carried out this event successfully that allowing the generation and effective transfer of new knowledge regarding the topics addressed during the event; we will be waiting for you at the 2nd ISPI in 2022.

Finally, the editor hopes that those interested in the area of physical infrastructure can enjoy this reading, of the volume of the Journal of Physics: Conference Series (JPCS), which reflects a wide variety of current issues.

“Education and expression freedom for anyone”.





Organizing Committee

Yee Wan Yung Vargas (Chairman)

Adriana Rodriguez Lizcano (Co-Chairman)

Jhan Piero Rojas Suárez

National Scientific Committee

- Claudia Helena Muñoz Hoyos
Universidad de Antioquia, Medellín
- Margarita Rosa Gómez Betancur
Universidad Nacional de Colombia, Medellín
- Vanessa Senior Arrieta
Universidad Cooperativa de Colombia, Medellín
- Hugo Alexander Rondón Quintana
Universidad Distrital Francisco José de Caldas, Bogotá
- Carlos Alberto Peña Soto
Universidad Francisco de Paula Santander, San José de Cúcuta
- Adriana Rodríguez Lizcano
Universidad Francisco de Paula Santander, San José de Cúcuta
- Fernando Jaimes Tarazona
Universidad Francisco de Paula Santander, San José de Cúcuta
- Andrea Jovanna Cacique Arias
Universidad Francisco de Paula Santander, San José de Cúcuta
- Jorge Arias
Universidad Francisco de Paula Santander, San José de Cúcuta
- Diana Patricia López Gómez
Universidad Francisco de Paula Santander, San José de Cúcuta
- Jorge Iván Arias Flórez
Universidad Francisco de Paula Santander, San José de Cúcuta
- Yee Wan Yung Vargas
Universidad Francisco de Paula Santander, San José de Cúcuta
- Dr. Ely Dannier V. Niño
Foundation of Researchers in Science and Technology of Materials

International Scientific Committee

- Francisco de Paula Montero Chacón
Universidad Loyola Andalucía, Spain
- Griselda Lopez Maldonado
Universidad Politécnica de Madrid, Spain
- Marcio Muniz de Farias
Universidad de Brasilia, Brazil
- Luis Ángel Moreno Anselmi
Universidad de Brasilia, Brazil
- Linda Elcida Gil Lozada
Universidad Nacional Experimental Politécnica Antonio José de Sucre, Venezuela
- José Rubén Calderas Volcanes
Universidad de Los Andes de Mérida, Venezuela
- Dr. (c) Anderson Sandoval Amador
Universidad Nacional del Centro de la Provincia de Buenos Aires, Argentina

Sponsor

- ✓ Universidad Francisco de Paula Santander

Partners

- ✓ Semillero de Investigación en Infraestructura Vial, Universidad Francisco de Paula Santander
- ✓ Grupo de Investigación en Infraestructura Vial, Universidad Francisco de Paula Santander
- ✓ Foundation of Researcher in Science and Technology of Materials
- ✓ IOP Publishing

Universidad Francisco de Paula Santander
Vanguardia en la Educación

Topics

- **Physical infrastructure**
- **Mathematical modeling**
- **Physical and numerical modeling**
- **Physicochemical phenomena in engineering**
- **Advances in materials science and engineering**
- **Simulation of physical-mathematical problems in engineering**
- **Teaching and research techniques in Science and engineering**

