

# BTSym '21

Brazilian Technology Symposium

## Conference Program

November 8th, 9th, and 10th - 2021

Pontifical Catholic University, Campinas - SP - Brazil

### Organization





# Welcome to the BTSym'2021 as a Virtual Event

The Brazilian Technology Symposium (BTSym), **ISSN 2447-8326**, is an event created by the Laboratory of Visual Communications of the Faculty of Electrical and Computer Engineering at the State University of Campinas. This is an excellent forum for presentations and discussions of the latest results of projects and development research in several areas of knowledge, in scientific and technological scope.

This event seeks to bring together researchers, students, and professionals from the industrial and academic sectors, seeking to create and/or strengthen the linkages between issues of joint interest. Participants are invited to submit research papers, case studies, articles of opinion, or posters, showing studies, methodologies, and results achieved in scientific level research projects, completion of course work for graduation, dissertations, and theses.

The BTSym'21 organizing committee invites researchers to attend and submit papers addressing the current research topics of interest. In 2021, the event will be held on **November 8th, 9th, and 10th at the Pontifical Catholic University of Campinas, SP**. Proceedings of the event will be published by **Springer** publisher through the book **Proceedings of the 7<sup>th</sup> Brazilian Technology Symposium - Emerging Trends and Challenges in Technology**, and will be submitted for indexing by **Scopus, WoS, and EI Compendex database**.

In 2021, we received **120 research works, divided into: 80 articles submitted for option A and 40 articles submitted for option B**.



Dr. Yuzo Iano  
*General Chairman*

# Organizing Committee



Rangel Arthur  
FT/UNICAMP

**Associate-General Chair BTSym**



Cláudia Cotrim Pezzuto  
PUC/CAMPINAS

**Vice-Associate-General Chair BTSym**



Ana Cláudia Seixas  
UNIFAL

**Vice-Associate-General Chair BTSym**



Gabriel Gomes de Oliveira  
LCV/DECOM/FEEC/UNICAMP

**Technical Program and Finance Chair**



Alex R. Ruelas  
LCV/DECOM/FEEC/UNICAMP

**Institutional Relationship Chair**



David Minango  
LCV/DECOM/FEEC/UNICAMP

**Institutional Relationship Chair**



Gabriel Caumo Vaz  
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**Institutional Relationship Chair**



Lisber Arana  
LCV/DECOM/FEEC/UNICAMP  
**Institutional Relationship Chair**



Maria Cecilia Luna  
LCV/DECOM/FEEC/UNICAMP  
**Institutional Relationship Chair**



Alysson Gomes de Oliveira  
LCV/DECOM/FEEC/UNICAMP  
**Marketing Chair**

# Coordinating Committee



Maria Thereza de Moraes Gomes Rosa  
Mackenzie Presbyterian University  
**Panel 1**



Ana Cláudia Seixas  
UNIFAL  
**Panel 1**



Osamu Saotome  
ITA  
**Panel 2**



Euclides Lourenço Chuma  
LCV/DECOM/FEEC/UNICAMP  
**Panel 2**



Cláudia Cotrim Pezzuto  
PUC/CAMPINAS  
**Panel 3**



Lia Toledo Moreira Mota  
PUC/CAMPINAS  
**Panel 3**



Fábio Menegatti de Melo  
PUC/CAMPINAS  
**Panel 4**



Cesar Henrique Cordova Quiroz  
PUC/CAMPINAS  
**Panel 4**



Edgard Luciano Oliveira da Silva  
UEA  
**Panel 5**



Marcius Fabius Henriques de Carvalho  
PUC/CAMPINAS  
**Panel 5**



David Bianchini  
LCV/DECOM/FEEC/UNICAMP  
**Panel 6**



Telmo Cardoso Lustosa  
LCV/DECOM/FEEC/UNICAMP  
**Panel 6**



Victor A. M. Montalli  
SLMANDIC  
**Panel 7**



Gabriela Fleury Seixas  
UEL  
**Panel 7**

# General information

## Conference location:

Virtual via Webex

## Contact Info:

Phone LCV committee:

- Gabriel Gomes: +55 19 982886496

## Contact BTSym Support:

If you have any need for additional information, questions, concerns, and/or system issues, please feel free to contact the Editorial Office via email.

Email Address:

[contact.btsym@gmail.com](mailto:contact.btsym@gmail.com)

## Virtual Oral and Poster Presentations:

The authors are obliged to be present during the panels designated for the presentation, using the time given by the person in charge of the panel discussion or poster session. Such presentations utilize technological solutions to allow you present live.

## Useful Telephone Numbers:

Ambulance: 192

Police: 190

Fire Brigade: 193

These numbers may be dialed from public or mobile phones, even without a card.

# Official Opening – Virtual Event

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**November 8th, 2021 (10:00 - 12:00)**

<b>10:00 - 12:00</b>	<b>Official Opening</b>	
	<b>Opening Speaker</b> <b>Moderator:</b> Kelem Christine Pereira Jordão, PhD	
	<b>Lecture:</b> "AI multidisciplinary" - A influência da IA nos diversos temas da atualidade <b>Speaker:</b> Fabio lima, PhD	

# Plenary Talks - PANEL 1

**November 8th, 2021 (14:00 – 16:00)**

**Panel discussion 1:** Technology and industrial processes.

**Topic covered:** Industrial technological processes, Technology applied to production processes, Innovation models, Digital factory, Quality 4.0, Logistics 4.0, Innovation 4.0, Clean technologies, Industrial automation, Engineering Process Simulations.

**Moderators:**

Maria Thereza de Moraes Gomes Rosa, PhD

Ana Cláudia Seixas, PhD



14:00 - 14:10	<b>Paper: Analyzing optimal operating points of air and water cooled chillers used in an office building</b> Authors: Felipe Yagi Ng, Caique dos Santos, Catarina Gomes dos Santos, Maria Thereza Rosa, and Míriam Tvrzská de Gouvêa.
14:10 - 14:20	<b>Paper: Proposal for a low-cost reader for Chipless RFID tags using PLUTOSDR</b> Authors: Robson João Gregório Rodrigues, Marcelo Frate, Luiz Ariovaldo Fabri Junior, and Leonardo Lorenzo Bravo Roger.
14:20 - 14:30	<b>Paper: Outcomes of a Parameter Sensitivity Analysis of a CT Measurement Process through a Digital Model</b> Authors: Crhistian Raffaelo Baldo and Wim Dewulf.
14:30 – 14:40	<b>Paper: Early detection using a vision system integrated to a die casting equipment</b> Authors: Reinaldo Eduardo dos Santos and Rômulo Gonçalves Lins.
14:40 - 14:50	<b>Paper: Numerical Simulation of Churn and Annular Transient Flows</b> Authors: Vítor Savagnago and Marcus V. C. Alves.



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**Moderators:**

Maria Thereza de Moraes Gomes Rosa, PhD

Ana Cláudia Seixas, PhD



14:50 - 15:00	<b>Paper: eHealth: a focus on software architectures for Brazilian public health</b> Authors: Caroline Luiz Gonçalves, Luciana Pereira, and Alessandra Cristina Santos Akkari.
15:00 - 15:10	<b>Paper: Characterization of the Behavior of LoRa Networks in a Fluvial Environment in the Rio Negro</b> Authors: Danilo Frazão and Edgard Silva.
15:10 - 15:20	<b>Paper: Admittance control study applied in the exercise of proprioception</b> Authors: Bruno Praça Lacerda and Rangel Arthur.
15:20 – 15:30	<b>Paper: Lean-Agile Education: a bibliometric analysis</b> Authors: Julia Yumi Ito, Franciane Freitas Silveira, and Alessandra Cristina Santos Akkari.

# Plenary Talks - PANEL 2

## November 8th, 2021 (19:00 – 20:50)

**Panel discussion 2:** Microelectronics, Sensors, Robotics, Artificial Intelligence, and Real-Time Systems.

**Topic covered:** Microelectronics, MEMS, Reconfigurable Devices and Systems, Sensors, Robotics, Satellites, Aerospace and Defence, Artificial Intelligence, Radar System and Algorithms, Resilient and Robust Systems, Real-Time Systems.

**Moderators:**

Osamu Saotome, PhD

Euclides Lourenço Chuma, PhD



19:00 - 19:10	<p><b>Paper: Industrial Technological Process for Welding AISI 301 Stainless Steel: Focus on Microstructural Control</b></p> <p>Authors: Wandercleiton Cardoso, Thiago A. Pires Machado, Raphael C. Baptista, André Gustavo de S. Galdino, Flavio A. M. Pinto, and Temistocles de Souza Luz.</p>
19:10 - 19:20	<p><b>Paper: Artificial neural network-based committee machine to predict the slag quality of a coke blast furnace</b></p> <p>Authors: Wandercleiton Cardoso, Renzo di Felice, and Raphael Colombo Baptista.</p>
19:20 - 19:30	<p><b>Paper: Lean 4.0: Digital technologies as strategies to reduce waste of Lean Manufacturing</b></p> <p>Authors: Luana Spósito Valamede and Alessandra Cristina Santos Akkari.</p>
19:30 – 19:40	<p><b>Paper: The Adoption of Industry 4.0 Technologies: its benefits for Companies in the Brazilian Automotive Sector</b></p> <p>Authors: Alberto Koda and Cristiane Drebes Pedron.</p>
19:40 - 19:50	<p><b>Paper: Logistics 4.0 for today and tomorrow: how to identify Smart Factory challenges and trends</b></p> <p>Authors: Fábio Luis Fernandes Azarias and Lia Toledo Moreira Mota.</p>
19:50 - 20:00	<p><b>Paper: Utilização de materiais, processos e regulamentações para a indústria de montagem de eletrônicos</b></p> <p>Authors: Márcio José Silva de Oliveira, Eliane M. Grigoletto, and Alcinei Moura Nunes.</p>
20:00 - 20:10	<p><b>Paper: Digital technologies adoption to face COVID-19 pandemic: an exploratory approach</b></p> <p>Authors: Luana Spósito Valamede, Gabriel Gomes de Oliveira, Igor Polezi Munhoz, and Alessandra Cristina Santos Akkari.</p>

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**Moderators:**

Osamu Saotome, PhD

Euclides Lourenço Chuma, PhD



20:10 - 20:20	<p><b>Paper: The integration of Alteryx® and Microsoft Power BI®: a case study</b> Authors: Felipe Silveira Stopiglia, Caio Covre Sierra, Rafael Jordan Franca de Figueiredo, and Massaki Igarashi de Oliveira.</p>
20:20 - 20:30	<p><b>Paper: Modeling an off grid photovoltaic system using Simulink</b> Authors: Jessamine Maria de Lima Azevedo, Beatriz Correia Santos, Leonardo Yuto Suzuki Camelo, Israel Gondres Torné, and Rubens de Andrade Fernandes.</p>
20:30 - 20:40	<p><b>Paper: Aplicativo com reconhecimento de imagem para deficientes visuais</b> Authors: Pedro Angelo Catalini and Denise Helena Lombardo Ferreira.</p>
20:40 – 20:50	<p><b>Paper: Dependable I2C communication with FPGA</b> Authors: Leandro Trujilho, Osamu Saotome, Johnny Oberg</p>
20:50 – 21:00	<p><b>Paper: Sistema de rastreamento para inspeção e análise utilizando o método ToF, apoiado por calibração automática</b> Authors: Glaydson Luiz Bertoze Lima, Osamu Saotome, and Ijar M. da Fonseca</p>

# Plenary Talks - PANEL 3

## November 9th, 2021 (10:00 – 11:00)

**Panel discussion 3:** Technology applied to buildings.

**Topic covered:** Construction 4.0, Automation and Robotics in buildings, Environmental comfort, Energy efficiency in buildings, Constructions, Technologies in Design, BIM, Construction Information Model, Provisional and adapted constructions, Sensors applied to civil construction, Sustainable buildings, Smart buildings.

**Moderators:**

Cláudia Cotrim Pezzuto, PhD

Lia Toledo Moreira Mota, PhD



10:00 - 10:10	<p><b>Paper: Aquecedores Elétricos de Água em vista das Cidades Sustentáveis e Internet das Coisas</b></p> <p>Authors: Francisco de Salles Cintra Gomes, Augusto Marconato Girio, Ludmila Cordeiro Lopes Vitoriano, and Leticia Stefani Da Silva.</p>
10:10 - 10:20	<p><b>Paper: Drying shrinkage of fiber reinforced concrete under restrained conditions: A systematic mapping study</b></p> <p>Authors: Nicolas Jorge Vianna, Nádia Cazarim da Silva Forti, and Gabriela Paioli de Moraes.</p>
10:20 - 10:30	<p><b>Paper: Sustainability indicators for water security management in Watersheds</b></p> <p>Authors: Jakeline Pertile Mendes, Denise Helena Lombardo Ferreira, and Cibele Roberta Sugahara.</p>
10:30 – 10:40	<p><b>Paper: Optimal placement of EV charging stations using a dedicated, two-level Teaching-Learning-Based Optimization algorithm</b></p> <p>Authors: Pablo M. Lima and Carlos A. Castro.</p>
10:40 - 10:50	<p><b>Paper: Electric Vehicle Recharging and Roaming Protocols: A Brazilian Electromobility Case Study</b></p> <p>Authors: Jorge Henrique J. G. Matos, Fabio Kenji Taniguchi, Anderson D. Parreira, Marcos de Marques, and Eduardo Lacusta Junior.</p>
10:50 - 11:00	<p><b>Paper: Numerical analysis of the bonding behavior between a basalt fiber reinforced polymers rebar and concrete</b></p> <p>Authors: Luis Felipe Oliveira Santos and Nádia Cazarim da Silva Forti.</p>

# Plenary Talks - PANEL 4

## November 9th, 2021 (15:00 – 16:40)

**Panel discussion 4:** Product Development and Innovation.

**Topic covered:** Engineering design, Design methods, Design thinking, Sustainable product development, Circular economy, Cradle to Cradle (C2C), Innovation strategies applied to product development, Business model innovation, Digital innovation and transformation, Open innovation.

**Moderators:**

Fábio Menegatti de Melo, PhD

Cesar Henrique Cordova Quiroz, PhD



15:00 - 15:10	<p><b>Paper: Sistema CIAPD: Auxílio a Deficientes para o Mercado de Trabalho</b>            Authors: Bruno Pereira Bannwart, Fernando Ernesto Kintschner, and Denise Helena Lombardo Ferreira.</p>
15:10 - 15:20	<p><b>Paper: A Critical Review on Development and Innovations in Biogas Upgrading</b>            Authors: Wandercleiton Cardoso, Renzo di Felice, and Raphael Colombo Baptista.</p>
15:20 - 15:30	<p><b>Paper: NACA 0012 Aeroacoustic study using ANSYSFluent</b>            Authors: Diogo Cortez and Guilherme de Souza Papini.</p>
15:30 – 15:40	<p><b>Paper: Simulation of the implementation of domestic solar systems using Multi-Agent Systems from Web Scraping</b>            Authors: João Emmanuel D’Alkmin Neves, Paulo Sérgio Martins Pedro, Marli de Freitas Gomes Hernandez, and Luiz Ariovaldo Fabri Junior.</p>
15:40 - 15:50	<p><b>Paper: Mechanism of Collecting Urban Data for Application on Smart Cities</b>            Authors: Jemis Dievas José Manhiça and Ademar Takeo Akabane.</p>
15:50 - 16:00	<p><b>Paper: Aplicação da dosagem por empacotamento de partículas no UHPC com cinzas de casca de arroz</b>            Authors: Jaqueline Andrade Corrêa and Lia Lorena Pimentel.</p>
16:00 - 16:10	<p><b>Paper: Design of a Collision Warning System Using Image Processing and Development of an Android SOS Application</b>            Authors: Jerin Gregory Benny, Kartik Patil, Drupad Ramesh, Diksha B. Shetty, and C. S. Mala.</p>

# Plenary Talks - PANEL 4

**November 9th, 2021 (15:00 – 16:40)**

**Panel discussion 4:** Product Development and Innovation.

**Topic covered:** Engineering design, Design methods, Design thinking, Sustainable product development, Circular economy, Cradle to Cradle (C2C), Innovation strategies applied to product development, Business model innovation, Digital innovation and transformation, Open innovation.

**Moderators:**

Fábio Menegatti de Melo, PhD

Cesar Henrique Cordova Quiroz, PhD



16:10 - 16:20	<p><b>Paper: Adequacy map for offshore wind farm implementation in the Campos Basin region in Brazil</b> Authors: William Sikorsky Medeiros Albuquerque, Raquel Jahara Lobosco, and Nikolas Lukin.</p>
16:20 - 16:30	<p><b>Paper: Numerical analysis of the TMR redundancy method against faults by SEU effect for space missions using FPGA</b> Authors: Farley Igor Martins Balbino and Osamu Saotome.</p>
16:30 - 16:40	<p><b>Paper: Graphene Geology and the Fourth Industrial Revolution</b> Authors: Augusto Gonçalves Nobre, Lara Poliny Nogueira da Silva, and Fabio Ramos Dias de Andrade.</p>

# Plenary Talks - PANEL 5

**November 9th, 2021 (19:00 – 20:20)**

**Panel discussion 5:** Telecommunications, product development and innovation in mobile systems.

**Topic covered:** New products and services, Mobile systems for 4G and 5G cell phones, Visual computing, Image and video processing, Machine learning, Human-computer interaction using image processing, Image processing for real-time control, Medical image processing, new generation of digital TV, Digital TV interactivity, Broadband and transmission systems.

**Moderators:**

Edgard Luciano Oliveira da Silva, PhD

Marcus Fabius Henriques de Carvalho, PhD



19:00 - 19:10	<p><b>Paper: Internet of Things Using Smartphones Sensors to Track Dangerous Goods</b></p> <p>Authors: Luiz Antonio Reis, Sergio Luiz Pereira, Eduardo Mario Dias, and Maria Lúcia Rebello Pinho Dias Scoton.</p>
19:10 - 19:20	<p><b>Paper: Smartphone-based solution to manage hazardous materials transportation: A review</b></p> <p>Authors: Luiz Antonio Reis, Sergio Luiz Pereira, Eduardo Mario Dias, and Maria Lúcia Rebello Pinho Dias Scoton.</p>
19:20 - 19:30	<p><b>Paper: V4α: A new method for CNNs inspired by trichromacy perception</b></p> <p>Authors: Roberto Otsubo Garcia and Osamu Saotome.</p>
19:30 – 19:40	<p><b>Paper: Análise de QoE para Streaming de Vídeo em Redes Aéreas 5G mmWave de Conectividade Dupla</b></p> <p>Authors: Ronilson W. da Silva Pereira, Marcelino S. Silva, and José Jailton.</p>
19:40 - 19:50	<p><b>Paper: Revision of the 6G concept rollout and its application in Smart Cities: A study case in South America</b></p> <p>Authors: Antonio Carlos Demanboro, David Bianchini, Yuzo Iano, Gabriel Gomes de Oliveira, and Gabriel Caumo Vaz.</p>
19:50 - 20:00	<p><b>Paper: Monitoring and control of electrical machines using IoT</b></p> <p>Authors: Pedro Vinícius Rafaim de Lima, André Okihara, and Frank Herman Behrens.</p>

# Plenary Talks - PANEL 5

**November 9th, 2021 (19:00 – 20:20)**

**Panel discussion 5:** Telecommunications, product development and innovation in mobile systems.

**Topic covered:** New products and services, Mobile systems for 4G and 5G cell phones, Visual computing, Image and video processing, Machine learning, Human-computer interaction using image processing, Image processing for real-time control, Medical image processing, new generation of digital TV, Digital TV interactivity, Broadband and transmission systems.

**Moderators:**

Edgard Luciano Oliveira da Silva, PhD

Marcus Fabius Henriques de Carvalho, PhD



20:00 - 20:10	<p><b>Paper: Applying Data Mining Clustering on web server logs to identify and analyze robots' behavior</b></p> <p>Authors: Rafael de Almeida Brochado, Ramon Abilio, Robson João Gregório Rodrigues, and Tiago Ferreira Souza.</p>
20:10 - 20:20	<p><b>Paper: Machine learning applied to harmonic functions in music composition</b></p> <p>Authors: Clenio B. Gonçalves Junior and Murillo R. Petrucelli Homem.</p>



# Plenary Talks - PANEL 6

## November 10th, 2021 (10:00 – 12:20)

**Panel discussion 6:** Technologies applied to urban infrastructure.

**Topic covered:** Smart Cities, Urban environmental comfort, Technologies applied to urban planning, Technology and management of urban infrastructure, Innovation and technology in the urban environment, Intelligent technology and transport, Urban monitoring.

**Moderators:**

David Bianchini, PhD

Telmo Cardoso Lustosa, MSc



10:00 - 10:10	<p><b>Paper: Study of sustainability indicators for environmental management in hydrographic basins</b>            Authors: Débora Akemi Ide Zancanela, Denise Helena Lombardo Ferreira, Lucas Antônio Gomes do Carmo, Maria Luisa Damas Silva, and Cibele Roberta Sugahara.</p>
10:10 - 10:20	<p><b>Paper: Real time Aho-Corasick Implementation of String Matching technique suitable for smart IOT</b>            Authors: Mohammad Equebal Hussain and Rashid Hussain.</p>
10:20 - 10:30	<p><b>Paper: Colete Vibratório Mobilizador de Secreção Pulmonar</b>            Authors: Gustavo Shoiti Sonoda, Leonardo Delforno, Lia Toledo Moreira Mota, Ernesto Richter, Carlos Sanches, Guilherme Valentim, Marcelo Montedori, Marcius Fabius Henriques de Carvalho, João Pedro Creado de Oliveira, and Frank Behrens.</p>
10:30 – 10:40	<p><b>Paper: Particle Swarm Optimization in Smart Grid Load Management</b>            Authors: Neyla Danquá dos Ramos and Ivan R. S. Casella.</p>
10:40 - 10:50	<p><b>Paper: Comparison between PO, PSO and FPA Techniques Applied to MPPT of a Low-Power Photovoltaic System for LPWA Devices</b>            Authors: Celestino Mendes Lopes Junior, Ivan R. S. Casella, Eduardo V. V. Cambero, and Carlos E. Capovilla.</p>
10:50 - 11:00	<p><b>Paper: Spectroscopy technologies for biological samples throughout history</b>            Authors: Talita Cristina Colomeu, Marina De Gea Neves, and Euclides Lourenço Chuma.</p>
11:00 - 11:10	<p><b>Paper: Estudo do comportamento à flexão de vigas de concreto armado com barras de GFRP e BFRP</b>            Authors: Jakeline Dutra dos Santos, Michele Miwa Fugiyama, Isabela Oliveira Duarte, and Nádia Cazarim da Silva Forti.</p>

# Plenary Talks - PANEL 6

## November 10th, 2021 (10:00 – 12:20)

**Panel discussion 6:** Technologies applied to urban infrastructure.

**Topic covered:** Smart Cities, Urban environmental comfort, Technologies applied to urban planning, Technology and management of urban infrastructure, Innovation and technology in the urban environment, Intelligent technology and transport, Urban monitoring.

**Moderators:**

David Bianchini, PhD

Telmo Cardoso Lustosa, MSc



11:10 - 11:20	<p><b>Paper: Caracterização do comportamento mecânico das barras de GFRP e BFRP</b></p> <p>Authors: Isabela Oliveira Duarte, Michele Miwa Fugiyama, Jakeline Dutra dos Santos, and Nádia Cazarim da Silva Forti.</p>
11:20 - 11:30	<p><b>Paper: Privacy concerns on the mobility of smart cities</b></p> <p>Authors: Tatiane Borchers, Victor Garcia Figueirôa-Ferreira, and Ricardo Augusto Souza Fernandes.</p>
11:30 - 11:40	<p><b>Paper: The BFS Method in a Cloud Environment for Analyzing Distributed Energy Resource Management Systems</b></p> <p>Authors: Adolfo Blengini Neto, Yuzo Iano, Gabriel Gomes de Oliveira, Gabriel Caumo Vaz, Fabiana Silva Podeleski, Higor de Paula Kolecha, and Marcius F. H. de Carvalho.</p>
11:40 – 11:50	<p><b>Paper: Semantic Interoperability in Power Companies: An ontology-based asset dossier solution</b></p> <p>Authors: Ismael Ávila and Carlos Alberto de Sousa.</p>
11:50 - 12:00	<p><b>Paper: A Recomposition Method Optimal Current Flow For Distribution System With DG</b></p> <p>Authors: Fabiana da Silva Podeleski, Yuzo Iano, Adolfo Blengini Neto, Lia Toledo Moreira Mota, Gabriel Gomes de Oliveira, and Marcius Fabius Henriques de Carvalho.</p>
12:00 - 12:10	<p><b>Paper: Utility Pole Detector for Inspection of Power Distribution Networks using Faster R-CNN</b></p> <p>Authors: Júlio César Pereira, Rangel Arthur, and Luis Augusto Libório Oliveira Fonseca.</p>

# Plenary Talks - PANEL 7

## November 10th, 2021 (14:00 – 14:40)

**Panel discussion 7:** Applied Biomedicines.

**Topic covered:** Medicine, Covid-19, Dentistry, Biology, Biomedicine, Nursing, Medicines, Vaccines.

**Moderators:**

Victor A. M. Montalli, PhD

Gabriela Fleury Seixas, PhD




14:00 - 14:10	<b>Paper: Exploring research trends in Healthcare 4.0</b> Authors: Bárbara Santiago de Mendonça and Lásara Fabrícia Rodrigues.
14:10 - 14:20	<b>Paper: Processamento e Análise de Sinais Bioelétricos</b> Authors: Lucas Correa de Souza, Amilton da Costa Lamas, and Gloria Maria de Almeida Souza Tedrus.
14:20 - 14:30	<b>Paper: Development of a low-cost open platform for vital signs acquisition and monitoring</b> Authors: Davi F. Buratto and Frank Herman Behrens.
14:30 – 14:40	<b>Paper: Investigation of the influence of turbulence models on cough droplet evaporation: comparing (SST)k-<math>\omega</math>, k-<math>\epsilon</math> and Reynolds Stress (RSM) turbulence models</b> Authors: Nuhu Ayuba and Gabriela Cantarelli Lopes.

# Official Closing – Event Virtual

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**November 10th, 2020 (19:00 – 21:00)**

	<p><b>Official Closing</b> <b>Moderator:</b> Kelem Christine Pereira Jordão, PhD</p> 
<p><b>19:00 - 21:00</b></p>	<p><b>Lecture – “Inteligência Artificial, Metaverso, Singularidade: Onde estamos e para onde podemos ir?”</b> <b>Speaker:</b> Anderson de Rezendo Rocha, PhD</p> 