

# ISSA – ISEAS 2019

International Symposium on Sustainable Aviation



International Symposium On Electric Aviation & Autonomous Systems



SZÉCHENYI 2020



European Union  
European Social  
Fund



INVESTING IN YOUR FUTURE

26 - 29 May 2019

Budapest, HUNGARY

**\*International Symposium on Sustainable Aviation (ISSA-2019)**

**\*International Symposium on Electric Aviation and Autonomous Systems (ISEAS-2019)**

**\*WORKSHOP-1** Developing the Disruptive (Radically New) Technologies

**\*WORKSHOP-2** Developing and Impact of Electric/Hybrid Aircraft on Future Transport

## **CONFERENCE PROGRAM**

**Symposiums Founding Chair** : Prof. Dr. T. Hikmet Karakoc

**Symposiums Chair** : Prof.Dr. Jozsef Rohacs

**Symposiums Technical Chairs** : Assoc. Prof. M.Ziya Sogut, Assoc.Prof. Onder Turan, Utku Kale

ISSA-2019 and ISEAS-2019 Conference Abstract Electronic Proceedings will be available on <http://2019.issasci.org/> and <http://2019.iseasci.org/> main pages during the conference. ISSA-2019 and ISEAS-2019 Conference Full-Paper Electronic Proceedings will be availed after the conference and a special share link will be sent to all symposium authors. *Electronic Proceedings availed only, No Hardcopy format.*

"The Symposiums and Workshops are supported by IDEA-E (Investigation and development of disruptive technologies for e-mobility and their integration into the engineering education)"

Project Identification Number: EFOP-3.6-1-16-2016-00014.

# ISSA/ISEAS-2019 CONFERENCE PROGRAM

**(Sunday, Day<sub>1</sub>)-26 May 2019- Final Conference Program Announcement**

**(Monday, Day<sub>2</sub>)- 27 May 2019 Location: (BME\*)**

*\*BME - (Budapest University of Technology and Economics )*

	<b>11:00-13:00</b>	<b>Keynotes and Committee Meeting-Building J-4th Floor</b>
	<b>13:00-14:00</b>	<b>Registration- Building A</b>

**27 May 2019 (Monday) (DAY<sub>2</sub>)- Building A**

<u>13:30 – 14:15</u>	<p align="center"><b>ISSA/ISEAS-2019 OPENING CEREMONY</b></p> <p align="center"><b><u>Welcome Speech</u></b></p> <p><b>Prof. Dr. T. Hikmet Karakoc</b>, ISSA/ISEAS-2019 <u>Symposium Founding Chair</u> Eskisehir Technical University, TURKEY</p> <p><b>Prof.Dr. Jozsef Rohacs</b>, ISSA/ISEAS-2019 <u>Symposium Chair</u> Budapest University of Technology and Economics (BME), HUNGARY</p> <p><b>Assoc. Prof. Dr. Konstantinos Stamoulis</b>, <u>Chairman of ISATECH-2019</u> Amsterdam University of Applied Sciences, Faculty of Technology, Aviation Academy, Amsterdam, The NETHERLANDS</p> <p><b>Assoc. Prof. Dr. Ir.Ts.Abd. Rahim Abu Talib</b> , <u>Chairman of ISSA-2020</u> University Putra Malaysia, MALAYSIA</p>
<u>14:15-16:00</u>	<p align="center"><b><u>Keynote Speaker-I Talk</u></b></p> <p align="center"><u>Chair:</u> Prof.Dr. Jozsef Rohacs, <u>Co-Chair:</u> Carlos Javier Munoz Garcia <u>Tech.Co-Chairs:</u>Utku Kale, Batuhan Ballı</p>
14:15-14:45	<b>Prof. Dr. Oleksandr Zaporozhets</b> - Technology Readiness Level Assessment Towards Flightpath 2050 Environmental Goals
14:45-15:15	<b>Dr. Ravi Rajamani</b> - New Development in Standards for Aerospace Industry
15:15-15:45	<b>Assoc. Prof. Dr. Konstantinos Stamoulis</b> - Data Analytics in Aviation MRO: Towards Efficient and Sustainable Processes
15:45 – 16:00	<b>Networking Break</b>
<u>16:00 –17:20</u>	<p align="center"><b><u>Keynote-II and Invited Speaker Talk</u></b></p> <p align="center"><u>Chair:</u> Dr. Ravi Rajamani , <u>Co-Chair:</u> Dr. Kateryna Synylo <u>Tech.Co-Chairs:</u>Utku Kale, Batuhan Ballı</p>
16:00-16:30	<b>Prof.Dr. Claudio Scarponi</b> - New Challanges for Civil Aviation in Europe
16:30-17:00	<b>Prof. Dr. Sergii V. Boichenko</b> - Fundamentals of Implementation of Alternative Jet Fuels: Modern Challenges, Problems and Practical Experience
17:00-17:20	<b>Invited Speaker- Dr. Tunc Sirinyıldız</b> – Geographic Information System in Aviation Industry
<p align="center">17:45-20:30 Welcome Party (Main Building- K)</p> <p align="center">18:00 SARES Science Awards Ceremony (Main Building- K)</p>	

**DETAILS**

Paralel Sessions	ROOM 1_JSSA-2019 Session 1: Disruptive (Radically New) Technology Development- (IDEAE*) Chair: Dr. Claudio Scarponi, Co-Chair: Dr. Melih Yildiz Tech. Co-Chairs: Murat Ayar, Sergey Kinzhikeyev	ROOM 2_JSSA-2019 Session 2: Modeling and Design Chair: Dr. Konstantinos Stamoulis, Co-Chair: Dr. Isil Yazar Tech. Co-Chairs: Mehmet E. Cilgin, Veng Lajos Tamas	ROOM 3_IJSEAS-2019 Session 3: Emerging Technologies Chair: Dr. A. Rahim Abu Talib, Co-Chair: Carlos J. M. Garcia Tech. Co-Chairs: Hakan Aygun, Dung Nguyen Dinh
	09:00-09:20 #61- <a href="#">Agnes Wangai</a> , <a href="#">Sergey Kinzhikeyev</a> , <a href="#">Jozsef Rohacs</a> , Influences of Economic Cycles on Future Sustainable Air Transport	#12- <a href="#">Eralp Sener</a> , <a href="#">Gurhan Ertasgin</a> , <a href="#">Isil Yazar</a> , Electrical Architecture Design for a Turbo Electric Aircraft Propulsion System on Matlab / Simulink	(4)- <a href="#">Serhat Burmaoglu</a> , <a href="#">Kemal Yayla</a> , Emerging Technologies in Aviation: Reviewing the Case of Blockchain
	09:20-09:40 #14- <a href="#">Istvan Gal</a> , <a href="#">David Sziroczak</a> , Influences of the Emerging Disruptive Technologies, Solutions on Future Aviation	#16- <a href="#">Shali N. Subramanian</a> , <a href="#">Nikos J. Mourtos</a> , Design of Electric Short-Takeoff and Landing Autonomous Single-Passenger Aerial Vehicle	(25)- <a href="#">Andras Nagy</a> , <a href="#">Attila Szabo</a> , Enhanced Motor Technology for Electric Aircraft
	09:40-10:00 #28- <a href="#">Murat Ayar</a> , <a href="#">Caner Acarbay</a> , <a href="#">T. Hikmet Karakoc</a> , Sustainability Assessment of Flight Training Programs	#40- <a href="#">Marco Fioriti</a> , <a href="#">Guido Pavan</a> , A Design Model for Electric Environmental Control System in Aircraft Conceptual and Preliminary Design	(5)- <a href="#">Serhat Burmaoglu</a> , <a href="#">Kemal Yayla</a> , <a href="#">Darius Miniotas</a> , Scientometric Review of Aviation Safety and Security
	10:00-10:20 #15- <a href="#">Rupa S. Gunnam</a> , Design of a Regional Hybrid Transport Aircraft		(74)- <a href="#">Hakan Aygun</a> , <a href="#">Onder Turan</a> , Effects of Some Design Parameters on Variable Cycle Engine (VCE) Model at Different Flight Conditions
	10:20-10:40	Networking Break	
	ROOM 1_JSSA-2019 Session 4: Performance and Design Chair: Dr. Sergii Boichenko, Co-Chair: Dr. Isil Yazar Tech. Co-Chairs: Murat Ayar, Sergey Kinzhikeyev	ROOM 2_JSSA-2019 Session 5: Environment Chair: Dr. Oleksandr Zaporozhets, Co-Chair: Dr. Melih Yildiz Tech. Co-Chairs: Mehmet E. Cilgin, Veng Lajos Tamas	ROOM 3_IJSEAS-2019 Session 6: Disruptive (Radically New) Technology Development-II (IDEA-E*) Chair: Dr. Ravi Rajamani, Co-Chair: Carlos J. M. Garcia Tech. Co-Chairs: Hakan Aygun, Dung Nguyen Dinh
10:40-11:00	#4- <a href="#">Jozsef Rohacs</a> , Role of Vision, Foresight and Forecast in Maintaining the Future Sustainable Aviation	#21- <a href="#">Larysa Cherniak</a> , <a href="#">Margaryta Radomska</a> , <a href="#">Oleksandr Mikhyeyev</a> , <a href="#">Svitlana Madzhd</a> , The Assessment of Environmental Risks from Airport Fuel Depots	(24)- <a href="#">Agnes Wangai</a> , <a href="#">Dung Nguyen</a> , <a href="#">Daniel Rohacs</a> , Forecasts of Electric Hybrid-Electric Aircraft
11:00-11:20	#2- <a href="#">Chin E. Lin</a> , <a href="#">Yun-Chao Chan</a> , <a href="#">Pei-Chi Shao</a> , <a href="#">Tsung-Cheng Chen</a> , Performance Analysis of Wing-in-Ground-Effect (WIG) UAV	#17- <a href="#">Ozan Ozturk</a> , <a href="#">Melih Yildiz</a> , A Methodology for Calculating Emissions of an Aircraft Throughout Its Flight Phases	(18)- <a href="#">Gorkem Yalin</a> , <a href="#">Emre Ozbek</a> , <a href="#">Levent Akyalcin</a> , <a href="#">Can O. Colpan</a> , <a href="#">T. Hikmet Karakoc</a> , Design and Preliminary Flight Tests of Hydrogen Fuel Cell Hybrid Unmanned Aerial Vehicle
11:20-11:40	#59- <a href="#">Agnes Wangai</a> , <a href="#">Maciej Maczka</a> , <a href="#">Adriaan DeGraaff</a> , <a href="#">Lidia Travascio</a> , <a href="#">Mario Solazzo</a> , <a href="#">Daniel Rohacs</a> , Developing a General Methodology for Forecasting the Demand in Small / Personal Aircraft	#20- <a href="#">M. Ziya Sogut</a> , Investigation of Thermodynamics Performance of Small Scale Turbojet Engine for Different Ambient Temperature	(9)- <a href="#">Diego Lentini</a> , <a href="#">Hernán Emilio Tacca</a> , Opportunities and Challenges for Electric Propulsion of Airliners
11:40-12:00			(1)- <a href="#">Farbod Khoshnoud</a> , <a href="#">Zahir D.</a> , <a href="#">Gerard J.</a> , <a href="#">George G.</a> , <a href="#">Oliver S.</a> , <a href="#">Nejc T.</a> , <a href="#">Robert L.</a> , <a href="#">Marco Q.</a> , <a href="#">Mohamed D.</a> , <a href="#">Daniel P.</a> , Energy Independent Solar-Fuel Cell Multirotor UAVs
12:00-13:15 Networking Lunch			

(Tuesday, Day<sub>3</sub>) 28 May 2019

Video Conference Session (Budapest Local Time)	ISSA/ISEAS-2019 Video Session
	Chair: Dr. M.Ziya Sogut, Co-Chair: Dr. Elif Koruyucu, Technical Co-Chairs: Utku Kale, Batuhan Ballı, Tareq I.Al-Ma'aiteh ROOM 4 ISSA (#) / ISEAS () -2019 * <a href="https://www.facebook.com/saressociety/">https://www.facebook.com/saressociety/</a> for online connection
9:00-9:20	(14)-Vladislav Zitrický, Vladimír Lupták, Ondrej Stopka, Mária Stopková, Comparative Analysis in terms of Environmental Impact Assessment between Railway and Air Passenger Transport Operation: A Case Study
9:20-9:40	(7)-Dominique Mojay, Emerging Technologies and Demands for Electric Aircraft Propulsion Systems and Motors
9:40-10:00	(76)- Goksel Keskin, Seyhun Durmus, Hasim Kafalı, The Developments in Electric-Powered Motor Gliders
10:00-10:20	(72)-Ramazan Atilgan, Onder Turan, Economy and Exergy of a Turboprop Engine at Dynamic Loads
10:20-10:40	#30- Burak Tarhan, Ozge Yetik, Kadir K. Apaydin, T. Hikmet Karakoc, Study on the Electrical Energy of Cylindrical Battery Cells for Hibrit Aircraft
10:40-11:00	#75-Ozge Yetik, T. Hikmet Karakoc, Thermal Analysis of Li-Ion Batteries with Cathode Limn2o4 for Hibrit Aircraft
11:00-11:20	#49-Ozge Yetik, Burak Tarhan, T. Hikmet Karakoc, The Numerical and Experimental Analysis of Thermal Modeling of Li-Ion Batteries Used in Hybrid Aircraft
Poster Session	10:00-12:00-Building J (Tuesday and Wednesday)
13:00-13:15	Gratitude Award Ceremony Burak Pehlivan - Chairman of International Turkish Ukranian Business Association (TUID)
Keynote Session-II	Keynote Speaker-III Talk- BME-Building A Chair: Dr. Claudio Scarponi , Co-Chair: Dr. Konstantinos Stamoulis Tech.Co-Chairs: Murat Ayar, Sergey Kinzhikeyev
13:15-13:45	Mr. Carlos Javier Munoz Garcia - Certification of Lithium Batteries for Electric and Hybrid Aviation
13:45-14:15	Assoc. Prof. Ir. Ts. Dr. Abdul Rahim Abu Talib - Recent Development of Electric and Hybrid Propulsion System: Issues and Challenges
14:15-14:45	Networking Break
Workshop	Moderator: Dr. Jozsef Rohacs , Chair: Dr. Ravi Rajamani Workshop : Round Table Discussion
15:00-16:30	Topic: Developing and Impact of Electric/Hybrid Aircraft on Future Transport, (IDEA-E*) (All the Keynotes are honoured to join the round-table discussion)

Parallel Sessions	ROOM 1 ISSA-2019 Session 7: Fuel and Energy Chair: Dr. Sergii Boichenko, Co-Chair: Dr. Melih Yildiz Tech.Co-Chairs: Sergey Kinzhikeyev, Tareq IAI-Ma'aiteh	ROOM 2 ISSA-2019 Session 8: Emerging Technologies -I Chair: Dr. Michael Herrera, Co-Chair: Carlos J. M. Garcia Tech.Co-Chairs: Mehmet E. Cilgin, Dung Nguyen Dinh	ROOM 3 ISEAS-2019 Session 9: Design/UAV-Hybrid Aircraft Chair: Dr. Arpad Veress, Co-Chair: Dr. Kateryna Synylo Tech.Co-Chairs: Hakan Aygun, Agnes Wangai
09:00-09:20	#42- <a href="#">Valeriia Kameneva</a> , <a href="#">Olena Shevchenko</a> , <a href="#">Alena Shkekina</a> , The Influence of Biodiesel on Structural Materials	#10- <a href="#">Wim Lammen</a> , <a href="#">Jos Vankan</a> , Electrification Studies of Single Aisle Aircraft: A 'Retrofit' Investigation Including Parallel Hybrid Electric Propulsion	(19)- <a href="#">Istvan Jankovics</a> , <a href="#">Istvan Gal</a> , <a href="#">David Szirczak</a> , <a href="#">Arpad Veress</a> , <a href="#">Daniel Rohacs</a> , Conceptual Design of a 4-Seater Electric Aircraft
09:20-09:40	#23- <a href="#">M. Ziya Sogut</a> , Investigation of Emission Inventory Considering Alternative Jet In Flight Processes	#37- <a href="#">Nguyen Dinh Dung</a> , A Developed Particle Swarm Optimization Algorithm for Managing Drones In Smart Cities	(20)- <a href="#">Gyorgy Bicsak</a> , <a href="#">David Szirczak</a> , <a href="#">Jozsef Rohacs</a> , Conceptual Design of a Cargo Hybrid UAV with Morphing Wing
09:40-10:00	#24- <a href="#">Anna Yakovlieva</a> , <a href="#">Sergii Boichenko</a> , <a href="#">Kazimierz Lejda</a> , Characteristics of Properties of Alternative Jet Fuels Based on Camelina Oil	#63- <a href="#">Gabor Horvath</a> , <a href="#">Andor Körmöczi</a> , <a href="#">Tamás Szörényi</a> , <a href="#">Zsolt Geretovszky</a> , Laser Welding and Its Implementation in the Assembly of Hybrid Aircraft Battery Packs	(21)- <a href="#">David Szirczak</a> , Case Study on Development and Building of A Cargo Hybrid UAV Demonstration Model
10:00-10:20	#78- <a href="#">Lajos Végh</a> , <a href="#">István Jankovics</a> , <a href="#">Utku Kale</a> , The Feasibility of Usage of Electric Motors in Aviation / The Feasibility of Apply of The Electric Motor In Aviation at Different Speed and Power Ranges	#62- <a href="#">Andor Körmöczi</a> , <a href="#">Gábor Horváth</a> , <a href="#">Tamás Szörényi</a> , <a href="#">Zsolt Geretovszky</a> , Laser Assisted Filler Based Joining Technologies for Battery Assembly in Aviation	(78)- <a href="#">Guillem Moreno</a> , <a href="#">Arpad Veress</a> , Range Analysis of a 4-Seat Light Aircraft by Means of Conventional, Electric and Hybrid Propulsion Systems
10:20-10:40	<b>Networking Break</b>		
	ROOM 1 ISSA-2019 Session 10: Emerging Technologies -II Chair: Dr. A.Rahim Abu Talib, Co-Chair: Dr. Istvan Gal Tech.Co-Chairs: Sergey Kinzhikeyev, Tareq IAI-Ma'aiteh	ROOM 2 ISSA-2019 Session 11: Disruptive (Radically New) Technology Development-III (IDEA-E*) Chair: Dr. Michael Herrera, Co-Chair: Dr. Isil Yazar Tech.Co-Chairs: Mehmet E. Cilgin, Dung Nguyen Dinh	ROOM 3 ISEAS-2019 Session 12: Energy and Environment Chair: Dr. Arpad Veress, Co-Chair: Dr. Kateryna Synylo Tech.Co-Chairs: Hakan Aygun, Agnes Wangai
10:40-11:00	#27- <a href="#">Murat Ayar</a> , <a href="#">T. Hikmet Karakoc</a> , Examining Additive Manufacturing Processes for Aircraft Interior	#7- <a href="#">Utku Kale</a> , Role of Operators in Future Highly Automated Aviation	(11)- <a href="#">Kateryna Synylo</a> , <a href="#">Andrii Krupko</a> , <a href="#">Oleksandr Zaporozhzhets</a> , Rans Simulation of Exhaust Gases Jet From Aircraft Engine
11:00-11:20	#26- <a href="#">Jerome Leary</a> , Molecular Dynamics Modelling of Slip: Study of the Potential to Reduce Aircraft Drag by Use of Graphene	#70- <a href="#">Michael Herrera</a> , <a href="#">Utku Kale</a> , Avoiding Pragmatic Failure in Aviation Communication	(71)- <a href="#">Hakan Aygun</a> , <a href="#">Onder Turan</a> , Exergetic Sustainability Analysis of Adaptive-Cycle Aero-Engine in Various Bypass Modes
11:20-11:40	#58- <a href="#">Sergey Kinzhikeyev</a> , <a href="#">Agoston Restas</a> , Drone Applications for Supporting the Disaster Strategic Resonse Management the Transport System	#54- <a href="#">Batuhan Balli</a> , <a href="#">Murat Ayar</a> , <a href="#">T. Hikmet Karakoc</a> , Priorization of Safety Culture Components of ATO	(65)- <a href="#">Munir Suner</a> , Contemporary Analysis of Air Plane Related Emission in the Airport Region
11:40-12:00	#6- <a href="#">Melih Yildiz</a> , <a href="#">Savas Mutlu</a> , Electric Ground Support Equipment Use in Civil Aviation: Advantages, Limitations and Recommendations	#48- <a href="#">Vehbi E. Atasoy</a> , The Importance of Maintenance and Repair in the Flight Training Organization	(70)- <a href="#">Oleksandr Zaporozhzhets</a> , <a href="#">Larisa Levchenko</a> , <a href="#">Kateryna Synylo</a> , Risk and Exposure Control of Aviation Impact on Environment
12:00-12:20	#74- <a href="#">Sena Pehlivan</a> , Economic Impacts of Aviation	#3- <a href="#">Mehmet E. Cilgin</a> , <a href="#">Onder Turan</a> , An Exergetic Sustainability Assessment for an Aircraft Turbofan Engine	(6)- <a href="#">Ilhan Aytutuldu</a> , <a href="#">M.Ziya Sogut</a> , Investigation of Pollutant Management of Cabin Air Considering Machine Learning Approach
<b>12:30-12:45 CLOSING CEREMONY</b>			

**IDEA-E\*(Workshops supported by IDEA-E)-** (Investigation and Development of the Disruptive Technologies for E-Mobility and Their Integration into the Engineering Education) is a Hungarian National Project which is supported by the Human Resource Development Operative Programme (EFOP), Contract number. EFOP-3.6.1-16-2016-00014, Budapest, Kecskemét, Szeged, 2017 – 2019

# Poster Session

## ISSA-2019

1. #35-Veli G. Demir, Enver Yalcin, <a href="#">M. Ziya Sogut</a> , T. Hikmet Karakoc, An Overview of Ethanol As a Bio-Jet Fuel Source
2. #64-Stanislav Szabo, <a href="#">Edina Jencova</a> , Iveta Vajdova, Lucia Melnikova, Environmental Impact of Air Accidents of Aircraft Up To 2000kg MTOW
3. #32-Onur Yasar, Enver Yalcin, <a href="#">M. Ziya Sogut</a> , T. Hikmet Karakoc, An Investigation On Pre-Conditioned Air Systems for Aircrafts
4. #25-Valentina Petrusenko, <a href="#">Larysa Chorniak</a> , Tatyana Dmitrukha, Quantitative Risks Assessment at Consumption of Water Contaminated with Toxicants
5. #19-Ahmet Topal, Altug Piskin, Onder Turan, Preliminary Design of a Gas Turbine Combustor Considering Temperature Deviations Due to Manufacturing Tolerances
6. #9-Wei-Cheng Wang, Perspective of Renewable Jet Fuel in Taiwan: Process Evaluation Through Techno-Economic Analysis
7. #11-Guobin Zhang, Yun Wang, Kui Jiao, A Comprehensive Study of Current Density Distribution in Proton Exchange Membrane Fuel Cell
8. #22-M. Ziya Sogut, Investigation of Low Emission Combustion Technologies In Gas Turbine By Force Field Analysis
9. #71-Murat Ayar, Alper Dalkiran, T. Hikmet Karakoc, Assessment of Airport Sustainability Factors
10. #73-Ahmet Topal, Onder Turan, Semi-Empirical Combustion Efficiency Prediction of a Tubular Combustor
11. #76-Hakan Aygun, Mehmet E. Cilgin, Onder Turan, Energy and Performance Optimization of an Adaptive Cycle Engine
12. #18-Kateryna Synylo, <a href="#">Kateryna Ulianova</a> , Oleksandr Zaporozhets, Air Quality Studies at Kyiv International Airport
13. #5-S. Ahmad Fazelzadeh, Abbas Mazidi, Jonathan E. Cooper, Dewey H. Hodges, John E. Mottersheade, Flutter Analysis of Distributed Electric Propulsion Aircraft Wings
14. #18-Kateryna Synylo, <a href="#">Kateryna Ulianova</a> , Oleksandr Zaporozhets, Air Quality Studies at Kyiv International Airport
15. #29-Tuna Karali, <a href="#">Elif Koruyucu</a> , T. Hikmet Karakoc, A Study: Focus the Sustainability within the Scope of Analysing Aircraft Engines
16. #77-Razvan E.Nicoara, Valeriu A. Vilag, Zoltan Kolozsvary, Axial Turbine Performance Estimation During Dynamic Operations
17. #66-Munir Suner, Aerodynamics Performance of the Airfoil Profiles According to Different Length and Thickness
18. #79- Sena Pehlivan, Social and Environmental Impacts of Aviation
19. #80-Orhan Aras, Emre Ozbek, T.Hikmet Karakoc, Energy Consumption Profile of a Mini Electric UAV on Autonomous

## ISEAS-2019

1. (2)-Emre Aras, Ugur Baysal, Investigating the Performance of Enhancement Mode Gan HFETS in Zvs Synchronous Buck Point of Load Converter
2. (16)-Murat Ayar, T. Hikmet Karakoc, Examination of Combustion to Electric Aircraft Transformations
3. (17)-Mine Sertsoz, Mehmet Fidan, Finding Energy Consumption of Light Rail Vehicle with a New Mathematical Model
4. (73)- Ahmet Topal, Onder Turan, Semi-Empirical Emission Correlations for an Experimental Tubular Combustor
5. (75)-Elif Koruyucu, Onder Altuntas, Hasan Yamik, T. Hikmet Karakoc, Applications of Fuel Cells in Aviation
6. (77)-Altug Piskin, Mete Uysal, Onder Turan, Aerothermodynamic Analysis of an AWASC Propulsion System
7. (13)-Murat Ayar, Onur Yasar, T. Hikmet Karakoc, PIV Particle Selection to Be Used For UAV Flow Visualization
8. (81)-Tareq I. Al-Ma'teh, Utku Kale, Thermoelectric Unit Modeling in Aircraft Applications
9. (82)-Tareq I. Al-Ma'teh, Emanuela Ferrero, Ali Gharaibeh, Ayham Aljawabrah, Utku Kale, Review Paper on Development of the Thermoelectric Technology in Aircraft Applications



## Video Conference Session

### ISSA-2019

1.	#30- <a href="#">Burak Tarhan</a> , <a href="#">Ozge Yetik</a> , <a href="#">Kadir K. Apaydin</a> , <a href="#">T. Hikmet Karakoc</a> , Study on the Electrical Energy of Cylindrical Battery Cells for Hibrit Aircraft
2.	#75- <a href="#">Ozge Yetik</a> , <a href="#">T. Hikmet Karakoc</a> , Thermal Analysis of Li-Ion Batteries with Cathode $\text{LiMn}_2\text{O}_4$ for Hibrit Aircraft
3.	#49- <a href="#">Ozge Yetik</a> , <a href="#">Burak Tarhan</a> , <a href="#">T. Hikmet Karakoc</a> , The Numerical and Experimental Analysis of Thermal Modeling of Li-Ion Batteries Used in Hybrid Aircraft

### ISEAS-2019

1.	(14)- <a href="#">Vladislav Zitrický</a> , <a href="#">Vladimír Ľupták</a> , <a href="#">Ondrej Stopka</a> , <a href="#">Mária Stopková</a> , Comparative Analysis in terms of Environmental Impact Assessment between Railway and Air Passenger Transport Operation: A Case Study
2.	(72)- <a href="#">Ramazan Atılğan</a> , <a href="#">Onder Turan</a> , Economy and Exergy of a Turboprop Engine at Dynamic Loads
3.	(7)- <a href="#">Dominique Mojay</a> , Emerging Technologies and Demands for Electric Aircraft Propulsion Systems and Motors
4.	(76)- <a href="#">Goksel Keskin</a> , <a href="#">Seyhun Durmuş</a> , <a href="#">Hasim Kafalı</a> , The Developments in Electric-Powered Motor Gliders

## CONFERENCE GUIDE-I ( Paper List)

### CONFERENCE SUBMISSION LIST (ISSA-2019)

	ISSA-Paper ID #, <a href="#">Author(s)</a> , Title
1	#48- <a href="#">Vehbi E. Atasoy</a> , The Importance of Maintenance and Repair in the Flight Training Organization
2	#27- <a href="#">Murat Ayar</a> , <a href="#">T. Hikmet Karakoc</a> , Examining Additive Manufacturing Processes for Aircraft Interior
3	#28- <a href="#">Murat Ayar</a> , <a href="#">Caner Acarbay</a> , <a href="#">T. Hikmet Karakoc</a> , Sustainability Assessment of Flight Training Programs
4	#12- <a href="#">Eralp Sener</a> , <a href="#">Gurhan Ertasgin</a> , <a href="#">İsil Yazar</a> , Electrical Architecture Design for a Turbo Electric Aircraft Propulsion System on Matlab / Simulink
5	#54- <a href="#">Batuhan Ballı</a> , <a href="#">Murat Ayar</a> , <a href="#">T. Hikmet Karakoc</a> , Priorization of Safety Culture Components of ATO
6	#21- <a href="#">Larysa Cherniak</a> , <a href="#">Margaryta Radomska</a> , <a href="#">Oleksandr Mikhayev</a> , <a href="#">Svitlana Madzhd</a> , The Assessment of Environmental Risks from Airport Fuel Depots
7	#3- <a href="#">Mehmet E. Cilgin</a> , <a href="#">Onder Turan</a> -An Exergetic Sustainability Assessment for an Aircraft Turbofan Engine
8	#35- <a href="#">Veli G. Demir</a> , <a href="#">Enver Yalcin</a> , <a href="#">M. Ziya Sogut</a> , <a href="#">T. Hikmet Karakoc</a> , An Overview of Ethanol As a Bio-Jet Fuel Source
9	#37- <a href="#">Nguyen Dinh Dung</a> , A Developed Particle Swarm Optimization Algorithm for Managing Drones In Smart Cities
10	#5- <a href="#">S. Ahmad Fazalzadeh</a> , <a href="#">Abbas Mazidi</a> , <a href="#">Jonathan E. Cooper</a> , <a href="#">Dewey H. Hodges</a> , <a href="#">John E. Mottersheade</a> , Flutter Analysis of Distributed Electric Propulsion Aircraft Wings
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