The 22th Edition of the International Students Scientific Communications Session of the Engineering Faculty of Aurel Vlaicu University from Arad

June 27 2020, ARAD, ROMANIA

Meeting room: https://aurelvlaicuuniversityofarad.my.webex.com/meet/balas

Section: Energetics, Automatic Control, Computers, Electronics

Evaluation Commission: President: Prof. Marius M. Balas
Members: Prof. Valeriu Beiu
         Prof. Valentina E. Balas
         Assoc. Prof. Simona Dziţac
         Assoc. Prof. Angela Egri
         Assoc. Prof. Gelu-Ovidiu Tirian
         Lecturer Cornelia Victoria Anghel-Drugarin
Secretary: Lecturer Mnerie Corina

10:00 - 10:10
Prof. Valentina E. Balas, Aurel Vlaicu University of Arad, Romania – WELCOME
Rector Prof. Ramona Lile, Aurel Vlaicu Universoty of Arad, Romania - WELCOME

10:10 - 10:30
Prof. Valeriu Beiu, Aurel Vlaicu University of Arad, Romania
„Rise of the AI Chips"

10:30 – 10:40

Prof. Soumya Banerjee, Senior Collaborative Researcher & Professor, INRIA-EVA, Paris and CNAM-Paris, France
Chief Technical Consultant (AI& ML) Start –Up Book, Paris.
Director, Innovation, Workz, Arcklow-Irish Govt. Research,
CONNECT Program
Research Consultant Netflix, Youtube
"Must Virtual Exhibition tour with JoJo"

10:40 – 10:50
Associate Professor Angela Egri, University of Petrosani, Romania
"*Voice Assistant in the Intelligent Room"*

10:50 – 11:00
Associate Professor Gelu-Ovidiu Tirian, Politechnica University of Timisoara, Romania
Faculty of Engineering, Hunedoara
"Advanced Research in Engineering at Faculty of Engineering Hunedoara"

11:00 – 11:15
1. *The Problem of Renewable Sources and Prosumers on the Energy Market. Case Study*
Szfura Claudiu
University of Oradea, Faculty of Energy Engineering, and Industrial Management,
Centre of Scientific and Innovation Creation of Oradea Energy Engineering Students &
Association Cluster of Scientific Research, Innovation and European Studies from Oradea
Scientific coordinator: Assoc. Prof. Dziţac Simona

11:15 – 11:30
2. *Efficiency of Using Alternative Energy Solutions. Case study*
Vadoş Alexandru
University of Oradea, Faculty of Energy Engineering and Industrial Management,
Centre of Scientific and Innovation Creation of Oradea Energy Engineering Students &
Association Cluster of Scientific Research, Innovation and European Studies from Oradea
Scientific coordinator: Assoc. Prof. Dziţac Simona

11:30 – 11:45
3. *Operation Diagrams of a Gas Turbine Installation. Case Study*
Beschiu Valentin
University of Oradea, Faculty of Energy Engineering and Industrial Management,
Centre of Scientific and Innovation Creation of Oradea Energy Engineering Students &
Association Cluster of Scientific Research, Innovation and European Studies from Oradea
Scientific coordinator: Assoc. Prof. Dziţac Simona

11:45 – 12:00
4. *Case Study Regarding the Power Supply of an Isolated Consumer*
Recean Codruţ, Dume Antonia
University of Oradea, Faculty of Energy Engineering and Industrial Management,
Centre of Scientific and Innovation Creation of Oradea Energy Engineering Students &
Association Cluster of Scientific Research, Innovation and European Studies from Oradea
Scientific coordinator: Assoc. Prof. Dziţac Simona

5. *Elements of Mathematical Statistics Applied in Energy Engineering. Case Study*
Mustea Rareş
University of Oradea, Faculty of Energy Engineering and Industrial Management
Scientific coordinator: Assoc. Prof. Dziţac Simona

6. *Integration of the automation pyramid in the Industry 4.0 concept*
Luciana -Cristina Mărginean
Politechnica University of Timisoara, Faculty of Engineering Hunedoara
Scientific coordinator: Assoc. Prof. Gelu-Ovidiu Tirian
7. *Automatic pet food*
Cristina Anamaria SERBAN
Politechnica University of Timisoara, Faculty of Engineering Hunedoara
Scientific coordinator: Assoc. Prof. Gelu-Ovidiu Tirian

7. *Autonomous Irrigation System*
Daniel Durbacă, Daniel Haneş, Eduard Bumbu
Aurel Vlaicu University of Arad
Scientific coordinator: Prof. Valentina Emilia Balas

8. *Self-Balancing Robot with Ardiono*
Bucur Radu, Pavoni Shari, Lungu Daniel, Neamţ Timotei, An II AIA
Aurel Vlaicu University of Arad
Scientific coordinator: Prof. Marius Mircea Balas

9. *Automatic bottle opener*
Kurunczi Cristian, Tamas Marius, Zsambok Zoltan, An III AIA
Aurel Vlaicu University of Arad
Scientific coordinator: Prof. Balas Valentina Emilia and Prof. Balas Marius Mircea

10. *3D Printer*
Sandu Ghinga, Nechiforel Samuel, Raducu Norbert and Sandu Ghinga, an III AIA
Aurel Vlaicu University of Arad
Scientific coordinator: Prof. Balas Valentina Emilia

11. *Dynamic Modeling of biological and chemical systems with Petri nets*
Csillag Attila, An III AIA
Aurel Vlaicu University of Arad
Scientific coordinator: Prof. Valentina Emilia Balas

14:00 – 14:20
Acad. Florin Gheorghe Filip, Academia Romana
  "The Birth of The Romanian I&CT Sector; A Tribute to Acad. Mihai Drăgănescu"

14:20 – 14:40
Prof. Dumitru Băleanu, **Department of Mathematics, Cankaya University, Ankara, Turkey and Institute of Space Sciences, Magurele-Bucharest, Romania**
"The Beauty of the Fractional Calculus: Theory and Applications"

14:40 – 14:50
Associate Professor Vijender Kumar Solanki, Associate Professor at CRM Institute of Technology, Hyderabad, India
"Recent Advances on Big Data Analysis"

14:50 – 15:00
Associate Professor Simona Dzitac, University of Oradea, Romania
"Computational intelligence methods for power engineering"

15:00 - 15:10
Lecturer Cornelia Victoria Anghel-Drugarin, Eftimie Murgu University of Resita, Romania
"Some aspects of Research Activities at Eftimie Murgu University of Resita"

15:10 – 15:20
Prof. Cincar Kristijan, SC Nikola Tesla, Vrsac, Serbia and PhD Student at West University of Timisoara, Romania
Presentation of the online learning platform Petlja.org, Serbia

15:20 – 15:30
12. *Software for a Banking Machine*
Stoianov Ana, Computers, An II
University of Petrosani
Scientific coordinator: Assoc. Prof. Egri Angela

15:30 – 15:45
13. *Autonomus Car*
Berindei Andreea-Anamaria, Buzgau Claudia-Lea, An III AIA
Aurel Vlaicu University of Arad, Romania
Scientific coordinators: Prof. Valentina E. Balas and Prof. Marius M. Balas

15:45 – 16:00
14. *Plotter with two Coordinates with Arduino*
Deian Ardeljan, An III Industrial Informatics and Pomian Amalia An I Industrial Informatics,
Faculty of Engineering, Eftimie Murgu University of Resita, Romania
Scientific coordinator: Lecturer Cornelia-Victoria Anghel Drugărin

16:00 – 16:15
15. *Creating Image with GAN (Generative Adversarial Network)*

Sampurna Mandal
School of Engineering and Applied Sciences, The Neotia University, India
Scientific coordinator: Dr. Ankush Ghosh

  16.   *MANN And SVM based Fault Forcasting of Power Transformer using DGA data*
 Ahmad Hasan, B. Tech student
 School of Electrical, Electronics and Communication Engineering, Galgotias University, India
 Scientific coordinator: Assistant Professor Saravanan D

18. *Conveyor belt sorting parts by color*
Cătălin - Adrian Alexa, Radu – Daniel Țăranu, Ioan Rusu
Aurel Vlaicu University of Arad, Romania
Scientific coordinators: Lecturer Micşa Adriana-Elena and Lecturer Dragu Daniel

19. *Humidity measurement device new approach*
Dusan Mucibabic
SC Nikola Tesla, Vrsac, Serbia
Scientific coordinator: Prof.Nenad Cvetkovic and Prof.Kristijan Cincar

20. *Reliability Coefficients*
Ph.D.Student. Rohatinovici Noemi-Clara
Politechnica University of Timisoara
Scientific coordinators: Prof. Proştean Octavian and Prof. Balas Valentina Emilia

Section: Papers of students from High Schools

Paralel Session

Evaluation Commission:
President: Prof. dr.ing. Valentina Emilia Balas
Members: Rohatinovici Clara-Ecaterina
Deac Florin
Petcut Maria
Deac Lucica
Bors Monica
Pacurariu Anca
Muresan Maria
Chirilas Corina
Dusan Mucibabic
Kristijan Cincar
Lascoi Alexandru
Secretary: drd. ing. Mihaela Popa
drd.ing Noemi-Clara Rohatinovici

Nr.crt.	Titlu Lucrare	Date profesori si elevi
1.	Masurarea timpului	Profesori coordonatori: Deac Florian Elevi: Barbu Albert Clasa: a XI-a A - Liceul Tehnologic de Electronica si Automatizari "Caius Iacob" Arad
2.	Sursa de tensiune continua reglabila	Profesori coordonatori: Deac Florian Elevi: Barbu Albert Clasa: a XI-a A - Liceul Tehnologic de Electronica si Automatizari "Caius Iacob" Arad
3.	Aparat electrogravura pe metal	Profesori coordonatori: Deac Florian Elevi: Cociuban Darius Clasa: a XI-a A - Liceul Tehnologic de Electronica si Automatizari "Caius Iacob" Arad
4.	Amulete electronice	Profesori coordonatori: Bors Monica, Petcut Maria Elevi: Vrabiuta Andrei, Ciobanu Vlad Clasa: a XII-a B - Liceul Tehnologic de Electronica si Automatizari "Caius Iacob" Arad
5.	Joc de nororc electronic	Profesori coordonatori: Petcut Maria Elevi: Boroica Vasile, Ciobanu Vlad Clasa: a XII-a A, a XII-a B - Liceul Tehnologic de Electronica si Automatizari "Caius Iacob" Arad
6.	Solar Factory	Profesori coordonatori: Pacurariu Anca Elevi: Kiraly Erik, Szabo Darius, Sipos Emanuel Clasa: a X-a F, a X-a F, a X-a A - Liceul Tehnologic de Electronica si Automatizari "Caius Iacob" Arad

7.	Sistem de semnalizare acustica electronic	Profesori coordonatori: Petcut Maria Elevi: Tonta Adrian Clasa: a XI-a B - Liceul Tehnologic de Electronica si Automatizari "Caius Iacob" Arad
8	Macara	Profesori coordonatori: Lascoi Alexandru Elevi: Ciordari Ovidiu Gheorghe Clasa: a X-a F - Liceul Tehnologic de Electronica si Automatizari "Caius Iacob" Arad
9.	Sistem de pompare cu circuit inchis	Profesori coordonatori: Lascoi Alexandru, Craivan Vasile Elevi: Grozav Noemi Rebeca Clasa: a X-a F- Liceul Tehnologic de Electronica si Automatizari "Caius Iacob" Arad
10.	Masinuta cu propulsie	Profesori coordonatori: Rohatinovici Clara Elevi: Stepan Catalin Clasa: a X-a C - Liceul Tehnologic de Electronica si Automatizari "Caius Iacob" Arad
11.	Aplicatiile legii lui Faraday	Profesori coordonatori: Rohatinovici Clara, Muresan Maria Elevi: Burcusel Daniel Clasa: a X-a C - Liceul Tehnologic de Electronica si Automatizari "Caius Iacob" Arad
12.	Aplicatii ale electronicii pentru amuzament	Profesori coordonatori: Rohatinovici Clara, Muresan Maria Elevi: Celmare Valentin Clasa: a XI-a B - Liceul Tehnologic de Electronica si Automatizari "Caius Iacob" Arad
13.	Casa verde	Profesori coordonatori: Rohatinovici Clara Elevi: Ciupe Maria Mădălina Clasa: a XI-a B - Liceul Tehnologic de Electronica si Automatizari "Caius Iacob" Arad
14	Proiectarea si constructia unei case independemte energetic	Profesori coordonatori: Rohatinovici Clara, Ienasescu Eugenia Elevi: Kiss Alexandra, Copil Marius, Ban Lorant Clasa: a XI-a C, a XI-a C, a XI-a C - Liceul Tehnologic de Electronica si Automatizari "Caius Iacob" Arad
15	Aplicatii ale fenomenului Joule	Profesori coordonatori: Rohatinovici Clara, Deac Lucica Elevi: Stan Denis Clasa: a XI-a B - Liceul Tehnologic de Electronica si Automatizari "Caius Iacob" Arad
16	Ventilator cu pedala	Profesori coordonatori: Rohatinovici Clara, Chirilas Corina Elevi: Stan Denis Clasa: a XI-a B - Liceul Tehnologic de Electronica si Automatizari "Caius Iacob" Arad
17	Dispozitiv de detectare a luminii	Profesori coordonatori: Rohatinovici Clara Elevi: Cojocariu Gabriel Stelian Clasa: a X-a C - Liceul Tehnologic de Electronica si Automatizari "Caius Iacob" Arad

Section: Mechanical Engineering

(To be announced)