







Space Sciences Committee of the Polish Academy of Sciences, Gdansk Branch, in cooperation with the Baltic Sea&Space Cluster, Polish Space Agency and Gdansk University of Technology

under

the honorary patronage of the Polish Space Agency

invite for a joint conference entitled

An Empirical Exploration of a Human and Technology Rise, Prometheus Unleashed

Gdansk University of Technology Gdansk, 24th March 2022

Conference program

8.30	REGISTRATION
0.50	KLOIDIKATION

9.00 OPENING SESSION – chaired by Prof. dr hab. inż. Edmund Wittbrodt – President of the Space Sciences Committee of the Polish Academy of Sciences

Prof. dr hab. inż. **Krzysztof Wilde** - Rector of Gdansk University of Technology Prof. dr hab. **Grzegorz Wrochna** - President of the Polish Space Agency and

- 9.10 Prof. dr hab. inż. **Tadeusz Uhl**, *A space for sustainable development*, AGH, Cracow
- 9.30 Prof. dr hab. inż. **Marek Moszyński**, Building National Satellite Information System, Polish Space Agency
- 9.50 "YOUNG STARS" Session chaired by Dr. Magdalena Konopacka

Marta Pasternak, *Determination of phenological phases of cultivated cereals using Sentinel-1 and Sentinel-2 data*, Wroclaw University of Environmental and Life Sciences

Artur Łukasik, PW-Sat2 deorbit sail effectiveness analysis from the perspective of orbital parameter measurement, Warsaw University of Technology

Dominik Duda, Mental state of the participants during analog lunar mission, Academy of Physical Education and Sport, Gdansk

Dominika Lech, Michał Kropski, Bartosz Kryński, Jakub Sulewski, 6 wheeled Martian vehicle, Faculty of Mechanical Engineering and Ship Technology, Gdansk University of Technology

Rafał Markowski, *High-performance Grid Fins for missile control*, Faculty of Mechanical Engineering and Ship Technology, Gdansk University of Technology

Mateusz Czapski, Bartosz Rybacki, Wojciech Wysocki, Lessons learned during SRAD hybridrocket motor development, SimLE Student's Organisation, Gdansk University of Technology

The best presentation will be awarded by the President of the Space Sciences Committee

11.30 COFFEE BREAK









11.40 APPLICATIONS' SESSION - chaired by Prof. dr hab. inż. Marek Grzybowski

- Kpt. Alfred Naskret, A Man on an Automated Vessel, Director, Maritime School Gdynia
- Tomasz Lisiecki, A Man in the Virtual World, President, CNCOM, ASE Group
- Maciej Brzozowski, A Man in an Automated Port PORT HAMBURG Case, Head of Representative Office in Poland, Port of Hamburg Marketing
- Maciej Lang, A Man as a utilizer of integrated hydrographic, topographic and photogrammetric data, Owner, CEO, Hydronous

12.50 COFFEE BREAK

13.00 RESEARCH SESSION - chaired by Prof. dr hab. inż. Zbigniew Łubniewski

Prof. **Marek Galewski**, See more see better – neural networks in image processing, Gdansk University of Technology

Prof. **Piotr Szymak**, Autonomous biomimetic underwater vehicles with silent undulating propulsion, Polish Naval Academy, Gdynia

Prof. **Krzysztof Lipiński**, Fundamentals of mechanics towards applications in multibody robot-based manipulatorsystems, Gdansk University of Technology

Prof. **Krzysztof Falkowski**, Some discussion remarks on development of UAV unmanned aerial vehicles, Military University of Technology, Warsaw

Prof. Marcin Dornowski, Neurofeedback EEG in lowering the stress reaction during analog lunar mission, Academy of Physical Education and Sport, Gdansk

Dr. **Paweł Chyc**, *Technological freedom in outer space*, University of Business and Administration, Gdynia

Dr. **Magdalena Konopacka**, *The EU Regulatory Approach to Algorithmic Decision-Making*, University of Business and Administration, Gdynia

- Prof. **Mirosław K. Gerigk**, Challenges associated with control of autonomous underwater vehicles, Gdansk University of Technology
- Dr. **Maciej Henzel**, A voice in discussion on development of unmanned aerial vehicles, Vice-Director of the Aviation Technology Institute, Military University of Technology, Warsaw
- Prof. **Ryszard Kłos**, A voice in discussion on the UUV and AUV unmanned vehicles, Polish Naval Academy, Gdynia

15.00 DISCUSSION AND CLOSING SESSION - by Prof. Edmund Wittbrodt and Prof. Zdzisław Brodecki

Because of the Covid-19 pandemic situation the Conference is treated as hybrid event

