

Protocol of the 23rd Meeting of the Steering Committee of Mutual Funds for Scientific Cooperation among Taiwan, Latvia and Lithuania

Date & Time: 8 October, 2024; 09:00 a.m. ~ 12:00 p.m.

Venue: 2F, Conference Room 4, National Science and Technology Council, Taipei

Participants (delegations from):

- National Science and Technology Council of the Republic of China (Taiwan) (NSTC),
- Ministry of Education and Science of the Republic of Latvia (MoES),
- Latvian Council of Science (LCS),
- Ministry of Education, Science and Sport of the Republic of Lithuania (MoESS),
- Lithuanian Academy of Sciences (LAS),
- Research Council of Lithuania (LMT),

Steering Committee members:

Taiwan: Prof. Bing-Yu Chen (NSTC), Ms. Yu-Chen Huang (NSTC), Ms. Shou-Ling Chen (NSTC), Ms. Ching Kuo (NSTC), Ms. Chun-Yi, Tu (NSTC), Ms. Shu-Hui Yen (NSTC), Prof. Da-Chuan Cheng (NSTC in Lithuania).

Latvia: Mr. Jānis Paiders (MoES), Ms. Lauma Sīka (MoES), Dr. Linda Vecbiškēna (MoES), Dr. Līva Grīneviča (LCS)

Lithuania: Dr. Laima Taparauskienė (MoESS), Ms. Aušra Gribauskienė (MoESS), Ms. Vaida Peciukonienė (MoESS), Prof. habil. dr. Limas Kupčinskas (LAS), Ms. Kornelija Bacvinkienė (LMT)

Other participants:

Mr. Kai-Shyr Wang (NSTC), Mr. Kevin Chuang (NSTC), and Officers of NSTC Academic Affairs Departments

1. The meeting began with welcome words from Prof. Bing-Yu Chen, Deputy Minister of the National Science and Technology Council (NSTC) of Taiwan, Mr. Jānis Paiders, Deputy State Secretary for Human Capital, Science and Innovation Development, Ministry of Education and Science (MoES) of the Republic of Latvia, and Dr. Laima Taparauskienė, Director of Department of Higher Education, Science and Technology (MoESS) of the Republic of Lithuania.
2. After the opening remarks made by the chairpersons, a go-around-the-table self-introduction was carried out by the members of the 3 delegations, followed by a group photography session for all the Steering Committee (hereinafter as the Committee) members, including the 4 invited Taiwanese principal investigators (PI) whose Taiwan-Latvia-Lithuania joint research projects were set to be completed by the end of 2024.
3. Following the group photography session, the Committee adopted the meeting agenda, and 4 presentations on the completing Taiwan-Latvia-Lithuania joint research projects were given by the 4 abovementioned Taiwanese PIs. Members of the Committee commented on the results of such joint research projects and exchanged their perspectives.
4. It was concluded that the implementation and cooperation of the four (4) following projects (2022-2024) were successfully:
 - 4.1. “**Coherent Optical Control of Atomic Systems**”, Wen-Te Liao (National Central University, Taiwan), Gediminas Juzeliūnas (Vilnius University, Lithuania), Marcis Auzinsh (University of Latvia, Latvia).
 - 4.2. “**Molecular Electronics in functionalized Purines: fundamental Study and applications (MEPS)**”, Huan-Tsung Chang (National Taiwan University, Taiwan), Saulius Juršėnas (Vilnius University, Lithuania), Māris Turks (Riga Technical University, Latvia).
 - 4.3. “**Synthesis and study of deep-blue TTF fluorescent emitters to exceed theoretical OLED external quantum efficiency reaching 15%**”, Tien-Lung Chiu (Yuan-Ze University, Taiwan),

Audrius Bučinskas (University of Technology, Lithuania), Pavel Arsenyan (Latvian Institute of Organic Synthesis, Latvia).

- 4.4. **“Factors and Actors Contributing to the Willingness to Defend One's Own Country: the Case of Latvia, Lithuania and Taiwan”**, Nick Lin (Academia Sinica, Taiwan), Ainė Ramonaitė (Vilnius University, Lithuania), Maris Andzans (Riga Stradins University, Latvia).
5. Taking into account the reports on the ongoing projects, the Committee decided to continue funding the eight (8) following projects (four (4) projects in the second year (2023-2025) ** of implementation, and four (4) projects in the first year (2024-2026)* of implementation):
- 5.1. ****Exploring Early Events in the Cold Denatured Apoptotic Bid Protein Using Sensitivity-Enhanced EPR and NMR**, Yun-Wei Chiang (National Tsing Hua University, Taiwan), Vidmantas Kalendra (Vilnius University, Lithuania), Kristaps Jaudzems (Latvian Institute of Organic Synthesis, Latvia)
- 5.2. ****Role of ryanodine receptors in neuroendocrine tumour development: implications in electrophysiological and molecular tumorigenesis mechanisms**, Sheng-Nan Wu (National Cheng Kung University, Taiwan), Arimantas Tamašauskas (Lithuanian University of Health Sciences, Lithuania), Vita Rovīte (Latvian Biomedical Research and Study Centre, Latvia)
- 5.3. ****Dynamic Managerial Capabilities and Organizational Resilience in Family Firms: A Comparative Study of Taiwan, Latvia and Lithuania**, Shyh-Jer CHEN (National Sun Yat-Sen University, Taiwan), Monika Petraitė (Kaunas University of Technology, Lithuania), Ilona Baumane-Vītolīņa (University of Latvia, Latvia)
- 5.4. ****Development of A3B5-Bi nanostructure based double-wavelength microlaser technology for NIR sensing applications**, Yi-Jen Chiu (National Sun Yat-Sen University, Taiwan), Renata Butkutė (State Research Institute Center for Physical Sciences and Technology, Lithuania), Janis Spigulis (University of Latvia, Latvia)
- 5.5. **Structure determination of transthyretin amyloid fibrils**, Tsyr-Yan Yu (Academia Sinica, Taiwan), Vytautas Smirnovas (Vilnius University, Lithuania), Alons Lends (Latvian Institute of Organic Synthesis, Latvia)
- 5.6. ***Microplastics and related persistent organic pollutants in post-glacial Arctic ecosystems and adjacent areas**, Ta-Kang Liu (National Cheng Kung University, Taiwan), Dzmitry Lukashanets (Klaipėda University, Lithuania), Inta Dimante-Deimantovica (Latvian Institute of Aquatic Ecology, Latvia)
- 5.7. ***Synthesis and characterization of new organic emitters exhibiting long-lived emission for brain imaging (SYNERGISM)**, Shi-Wei Chu (National Taiwan University, Taiwan), Rasa Keruckienė (Kaunas University of Technology, Lithuania), Edgars Sūna (Latvian Institute of Organic Synthesis, Latvia)
- 5.8. ***Patterns of Penetration to Democratic Systems from Authoritarian Regimes: comparative analysis of local representation in Lithuania, Latvia, and Taiwan**, Yun-Chu Tsai (Soochow University, Taiwan), Jurga Bučaitė-Vilkė (Vytautas Magnus University, Lithuania), Ina Druviete & Iveta Reinholde (University of Latvia, Latvia)
6. After a short presentation on the 20 eligible applications submitted from the three countries for Joint Research Projects during 2025-2027, the three Parties exchanged information on the evaluation procedures and criteria that were applied to evaluate the quality of the projects on national level.
7. According to the score table with unification into maximum of 15, considering the better scored projects as well as the balance of research fields, the Committee reached the consensus that the following four new projects were approved for implementation starting from 2025:
- 7.1. **“Exploring the Organellar Homeostasis in Senescent Yeast Model: Mechanisms and Implications for Geriatric Health”**, Chuang-Rung Chang (Institute of Biotechnology, National Tsing Hua University, Taiwan), Rimantas Daugelavičius (Research Institute of Natural and Technological Sciences, Vytautas Magnus University, Lithuania), Alexander Rapoport (Institute of Microbiology and Biotechnology, University of Latvia, Latvia)
- 7.2. **“Biopolymer based green thermoplastic foams with improved biodegradability for sustainable material technologies”**, Shu-Kai Yeh (National Taiwan University of Science and

- Technology, Taiwan), Ramune Rutkaitė (Kaunas University of Technology, Lithuania), Remo Merijs-Meri (Riga Technical University, Latvia)
- 7.3. **“Bio-based Polymer NanoPhotonics for Sensors”**, Yeo-Wan Chiang (Department of Materials and Optoelectronic Science National Sun Yat-sen University, Taiwan), Ričardas Makuška (Vilnius University, Lithuania), Sergejs Gaidukovs (Institute of Chemistry and Chemical Technologies, Riga Technical University, Latvia)
- 7.4. **“Development of Advanced NIR-OLED for 3D Sensing Applications”**, Chih-Hao Chang (Department of Electrical Engineering, Yuan-Ze University, Taiwan), Gintarė Kručaitė (Kaunas University of Technology, Lithuania), Kaspars Traskovskis (Riga Technical University, Latvia)
8. The 2024 Call results will be published on the **7th November 2024**.
9. The Call for Proposals of 2025 shall be launched on the **10th of February 2025**. The deadline for project proposal submission in **2025 will be the 14th of April** The Parties agreed to exchange information on the results of project eligibility check by the **5th of May 2025**, and the scientific evaluation results shall be exchanged by **23rd of September 2025**.
10. The Committee reviewed the current “eligibility rule” for joint calls agreed by the Committee in 2018 to not allow the “same project teams” funded in the last 3 years prior to the year of a new call to submit proposals. The objective was to encourage more new joint projects for applying to the mutual funds. In order to further clarify such rule, the Committee agreed to revise the “eligibility rule” as follows: **All the funded principal investigators of the ongoing TW_LV_LT joint research projects are not eligible for submitting proposals to a new call.**
11. The Committee reiterated that a **15-score evaluation form** with the 3 agreed criteria should be adopted by the 3 parties for the respective project evaluations. In addition, it was also agreed that the final scores of the 3 parties should be calculated and rounded to **1 decimal place with 0.5 intervals**, for instance, 1.0, 1.5, 2.5.
12. Three presentations of the latest science and technology overview were given respectively by the representatives of the 3 delegations:
- 12.1. NSTC (Taiwan): “Overview of Taiwan’s Latest R&D Supporting System- A focus on the role of the NSTC” presented by Prof. Wang-Long Li.
- 12.2. MoES (Latvia): “R&D Policy in Latvia: Key Initiatives and Challenges” presented by Mr. Jānis Paiders
- 12.3. MoESS (Lithuania): “R&D Policy in Lithuania” presented by Dr. Laima Taparauskienė
13. The next Steering Committee meeting is expected to be held in Riga in **October 2025**.

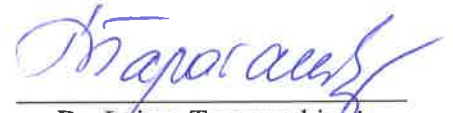
Signatures of the Steering Committee Members:



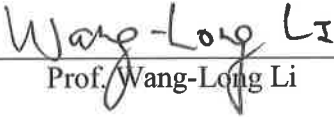
Prof. Bing-Yu Chen



Mr. Jānis Pāiders



Dr. Laima Taparauskienė



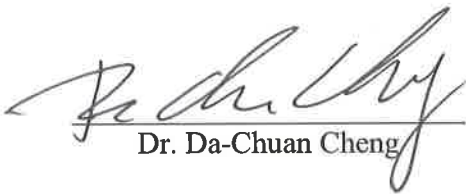
Prof. Wang-Long Li



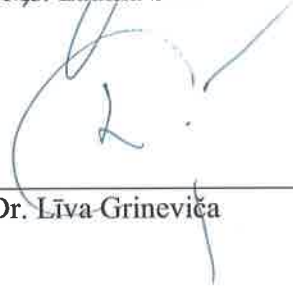
Ms. Lauma Sīka



Prof. habil. dr. Limas
Kupčinskas



Dr. Da-Chuan Cheng



Dr. Līva-Grineviča



Ms. Kornelija Bacvinkienė