



## FUTURE LIVING ENVIRONMENTS AND URBAN EXPERIMENTS LABORATORY

### Contact details

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|--------------------|--|--|
| Name               | Future Living environments and Urban eXperiments Laboratory  |  |
| Acronym            | <b>FLUX Lab</b>  |  |
| Logo               |   |  |
| Site               | <a href="https://research.utcluj.ro/index.php/architecture.html">https://research.utcluj.ro/index.php/architecture.html</a>        |  |
| Address            | 34-36 Observatorului street, Cluj – Napoca, 400489, Romania<br><br>Faculty of Architecture and Urbanism Deanery building, Room 1B, |  |
| Faculty Department | <b>Faculty of Architecture and Urbanism<br/>Dept. of Urbanism and Technical Sciences</b>   |  |
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| Director           | Assoc. Prof. Ph.D. Arch. Silivan Moldovan  |  |
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### Areas of expertise

#### Research and study in the field of:

- Future technologies connected with architecture, urban planning and landscape design
- Transdisciplinary relations between built environment, culture and technology
- Ethics, Aesthetics of care, Ecology and Sustainability in relation with the built environment and the impact of new technologies
- Educational methodologies related to future technologies used in architectural, urban and landscape design.

### Team

#### Assoc. Prof. Ph.D. Arch. Silivan V. MOLDOVAN – director

Assoc. Prof. Ph.D. Arch. Ioana M. MOLDOVAN

Prof. Ph.D. Ing. Cristina CÂMPIAN

Assoc. Prof. Ph.D. Arch. Andreea MILEA

Ph.D. Candidate Arch. Ioana CECĂLĂȘAN

**External Collaborators:** Assoc. Prof. Ph.D. Ing. Nicoleta M. ILIEȘ

### Representative projects

- **EpisTeam - Epistemology in Science, Technology, Engineering, Arts and Maths** - 101129655 - GAP-101129655 - MSCA SE Marie Skłodowska-Curie Staff Exchanges 2022, HORIZON-MSCA-2022-SE-01, HORIZON-TMA-MSCA-SE,
- **EpiCo - Epistemology and Ecology in Technological Education**, Erasmus+ KA220, ID: 2023-1RO01-KA220-HED-000155474,
- **AesThiCo: Aesthetics and Ecology in Technological Education**, Erasmus+ and European Solidary Corps/ Cooperation partnerships in higher education KA220-HED, ID: KA220-HED-6C8E852E,
- **EthiCo: Ethics and Ecology in Technological Education**, Erasmus+ and European Strategic partnership for higher education KA203, ID: 2020-1-IE02-KA203-000762,

## Significant results

### Books:

- Moldovan MS, Moldovan IM, Moldovan SV – Clădiri înalte. Evoluție. Implementare., UTPRESS, Cluj-Napoca, 2012

### Articles in ISI rated journals:

- Moldovan IM, Moldovan SV, Ilieș NM - *Invisible architecture – Sustainable underground architecture*, International Multidisciplinary Scientific GeoConference- SGEM, Nano, Bio and Green - Technologies for a Sustainable Future Conference Proceedings, SGEM 2016, VOL III, 2016, p.555-560, ISSN: 1314-2704
- Moldovan IM, Moldovan SV, Ilieș NM - *Suburbia – From transition architecture to contemporary residential developments in Romania*, International Multidisciplinary Scientific GeoConference-SGEM, Nano, Bio and Green - Technologies for a Sustainable Future Conference Proceedings, SGEM 2016, VOL III, 2016, p.639-646, ISSN: 1314-2704
- Moldovan IM, Moldovan SV, Ilieș NM - *Rural Romanian housing degradation – effect of land restitution and unemployment rates*, Agriculture and Agricultural Science Procedia - 5th International Conference - Agriculture for Life, Life for Agriculture, 2016, p.438-443, ISSN: 2210-7843
- Moldovan IM, Ilieș NM, Moldovan SV - *The reinvention of the traditional home “bordei” and its impact on the rural landscape and environment*, Agriculture and Agricultural Science Procedia - Conference Agriculture for Life, Life for Agriculture, 2015, p.479-485, ISSN: 2210-7843
- Moldovan IM, Moldovan SV, Ilieș NM - *Towards sustainable architecture: Underground and semi-buried houses versus conventional houses*, International Multidisciplinary Scientific GeoConference-SGEM - Nano, Bio and Green - Technologies for a Sustainable Future, Vol II (SGEM 2015), p.607-613, ISSN: 1314-2704
- Moldovan IM, Moldovan SV, Ilieș NM – *Earth-sheltered and underground homes as alternatives for the unfortunate post-communist residential developments*, International Multidisciplinary Scientific GeoConference-SGEM - Nano, Bio and Green - Technologies for a Sustainable Future, Vol II (SGEM 2015), p.421-428, ISSN: 1314-2704
- Ilieș NM, Moldovan IM, Moldovan SV - *Improving the stability of slopes with the aid of underground houses*. Procedia Technology - 8th International Conference Interdisciplinarity in Engineering, INTER-ENG 2014. p.363-370, ISSN: 2212-0173
- Moldovan IM, Moldovan SV, *Structural systems influence the aesthetics of skyscrapers*, Journal of Applied Engineering Sciences, University of Oradea Publishing House, Volume 1 (14), Issue 4/2011 Oradea, ROMANIA, p.117-122, ISSN 2247 – 3769
- Ilieș NM, Fărcaș VS, Coț RV, Moldovan IM - *The control of natural disaster caused by slopes sliding by means of stepped buildings*, Procedia Technology - 9TH International Conference Interdisciplinarity in Engineering, INTER-ENG 2015, p.391-398, ISSN: 2212-0173 (3 citations)

### Presentations:

- Exploring the Aesthetics of Care in Contemporary Architectural Design. Mid-term international seminar Exploring the Aesthetics of Care, AesThiCo, 09.02.2024.
- Aesthetics of Care. Controversies in text-to-image models. - "Human - a measure of all things? The challenge of the post-industrial information society" Technical University of Sofia, Department of Law and Humanities at the Faculty of Management 17–18.10.2023, Sofia, Bulgaria.
- Digital Tools interfering with the Design of the Built Environment - 18th DRC (Danube Rectors' Conference) Summer School on Regional Cooperation "Transformation of post-war Europe: Challenging universities and research in the Danube Region" 16–22.07.2023, Cluj-Napoca, Romania.
- 'Care' understood by AI. Biases and controversies - 18th DRC (Danube Rectors' Conference) Summer School on Regional Cooperation "Transformation of post-war Europe: Challenging universities and research in the Danube Region" 16–22.07.2023, Cluj-Napoca, Romania.
- Perception of Aesthetics of Care. Text-to-image AI generation. The 2nd European Culture and Technology Lab+ Annual Conference. Techne logos, Care and the (Neg) Anthropocene. 18 - 20 January 2023, Dublin, Ireland. Rosia Montana. The journey of 'care' of an endangered site. The 2nd European Culture and Technology Lab+ Annual Conference. Techne logos, Care and the (Neg) Anthropocene. 18 - 20 January 2023, Dublin, Ireland.
- Prompts and Prayers: the rise of GPTheology, 4th Annual Conference ECT Lab+/Eut+ - Transdisciplinary perspectives on AI: Alternative Histories, Current Practices and Possible Futures, Cluj Innovation Park, 18-19.10.2024, UTCN
- Imperfections. A Case Study of Genoa, Italy. MAD Lab, Limassol, Cyprus. Coauthors: MOLDOVAN IM, VAUGHAN C, O'HARA M, MOLDOVAN SV, CECALASAN IR
- Imperfections. A Case Study of Genoa, Italy. UT Hub, Cluj-Napoca, Romania Coauthors: MOLDOVAN IM, VAUGHAN C, O'HARA M, MOLDOVAN SV, CECALASAN IR
- Scars. A Case Study of Nicosia, Cyprus. UT Hub, Cluj-Napoca, Romania. Coauthors: MOLDOVAN IM, VAUGHAN C, O'HARA M, MOLDOVAN SV, CECALASAN IR

### Significant results:

- Intensive Study Program – “Ethics and ecology in technological education.” Student training Module / EthiCo project Febr. 2021 Universidad Politecnica de Cartagena, Spain – hybrid version
- Intensive Study Program – “Ethics and ecology in technological education.” Teacher training Module / EthiCo project March. 2022 Technical University of Cluj Napoca, Romania
- Intensive Study Program – “Aesthetics (of care) and ecology in technological education.” Teacher training Module / Aesthico project May. 2023 Universidad Politecnica de Cartagena, Spain
- Intensive Study Program – “Ethics and ecology in technological education.” Student training Module / EthiCo project July. 2023 Technical University of Troyes, France
- Multiplier event Conference and workshop – Ethico project - Ethics and ecology in technological education, August 2023, Technical University of Sofia, Sofia, Bulgaria

- Intensive Study Program – “Aesthetics (of care) and ecology in technological education.” Student training Module / Aesthico project April. 2024 Cyprus Technical University, Limassol
- Organizer of ECT Lab 4th Conference 2024 – Transdisciplinary perspectives on AI: Alternative Histories, Current Practices and Possible Futures. 18-19 October 2024, Cluj Napoca, CREIC
- Organizer of Aesthico Multiplier event 10-16 November 2024 – Exhibition MAD Lab, Limassol, Cyprus
- Organizer of Multiplier event Conference and workshop – Aesthico project – Aesthetics of Care and ecology in technological education, 15-17 January 2025, Technical University of Cluj - Napoca

**The offer addressed to the economic environment**

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|------------------------|---|
| Research & development | Intersections and interactions between architecture, urbanism, landscape design, art, culture, engineering and technology. Flux Lab can explore the impact of technology, automation and technological advancement on the society and analyse future possibilities of evolution. Exploration and understanding of the perceived reality through digital tools are another field of interest for the members of the lab. |
| Consulting             | Flux lab can provide consultancy and support regarding an ethical and ecological approach in technology development or usage connected to the fields of architecture, urbanism and landscape design. New approaches and methods in educational process are a topic that can be also explored within the lab.  |
| Training               | The research structure has experience and skills to organise transdisciplinary workshops, Intensive study programs (ISP), Blended intensive programs (BIP), summer / winter schools, specialised lectures.  |

Last update on January 2025