

# Phygita

## Cultivating Open-Source Agriculture in Tzoumerka:

A three-day  
retreat of farmers,  
makers and scholars  
*15-17 September*



Tzoumakers rural makerspace, Kalentzi,  
Municipality of Northern Tzoumerka



Phygital Project

[phygitalproject.eu](http://phygitalproject.eu)

Project co-funded by the European Union and  
National Funds of the participating countries

### Day 1 | 15 September 2019

09:00-09:30 **Welcome - registration**

09:30-10:00 **Introduction: A 3-day retreat designed globally, manufactured locally**  
**Alex Pazaitis**, Junior Research Fellow in Technology Governance, Tallinn University of Technology, Scientific consultant for project Phygital

10:00-10:30 **Presentation of open-source solutions by the Makers' teams**  
Facilitation: **Alekos Pantazis**, Junior Research Fellow in Technology Governance, Tallinn University of Technology, P2P Lab core member

10:30-13:00 **Open discussion: Commons, local sovereignty and emancipation**  
Speakers:  
**Alexandros Kioupkiolis**, Ass. Professor in Political Science, Aristotle University of Thessaloniki  
**Anna Chronaki**, Professor in Mathematics Education and Learning Technologies, University of Thessaly  
**Dimitris Dalakoglou**, Professor in Social Anthropology, Vrije University Amsterdam  
**George Papanikolaou**, Greek chapter of P2P Foundation  
**Maro Pantazidou**, Learning and Impact Officer for Amnesty International  
**Panagiotis Antoniadis**, Co-founder of NetHood  
**Sofia Adam**, Program Coordinator, Heinrich Böll Stiftung - Office Thessaloniki, Greece  
Facilitation: **Chris Giotitsas**, Research Fellow in Technology Governance, Tallinn University of Technology, P2P Lab core member

13:00-16:00 **Mid-day break**

16:00-20:30 **Making in Tzoumerka: Manufacturing of open-source agricultural solutions (Part 1)**

20:30-21:00 **Closure of day 1**

### Day 2 | 16 September 2019

09:30-10:00 **Welcome - registration**

10:00-11:30 **Tzoumakers and Sustainability: Assessing community-based distributed production**  
**Katerina Troullaki**, PhD Candidate in Environmental Engineering, Technical University of Crete

11:30-13:00 **Energy self-sufficiency in small farms: A small-scale biogas installation for farming machines**  
**Jean-Philippe Valla**, Engineer, L'atelier paysan

13:00-16:00 **Mid-day break**

16:00-20:30 **Making in Tzoumerka: Manufacturing of open-source agricultural solutions (Part 2)**

20:30-21:00 **Closure of day 2**

#### Together we will make:

- Arduino monitoring tool
- Herb mill/sieve
- Radio-based wireless sensors for precision agriculture & microclimate monitoring
- Hive frame wiring device

### Day 3 | 17 September 2019

09:30-10:00 **Welcome - registration**

10:00-13:00 **Making in Tzoumerka: Manufacturing of open-source agricultural solutions (Part 3)**

13:00-16:00 **Mid-day break**

16:00-20:00 **Making in Tzoumerka: Manufacturing of open-source agricultural solutions (Part 4)**

20:00-21:00 **Closing event: Presentation of solutions and grassroots innovation awards**  
Facilitation: **Alex Pazaitis**, Junior Research Fellow in Technology Governance, Tallinn University of Technology, Scientific consultant for project Phygital

#### Organization:



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