

MSCA PF MASTERCLASS 2022
UNIVERSITY OF LJUBLJANA

The evaluator and the evaluation process

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OUTLINE

- Who are the evaluators
 - How do I qualify as an evaluator
 - The evaluation process
 - A content of submission
-
- How to make life easy for the experts?
 - Some tips



THE EXPERTS

Who: Former MC fellows

- Active researchers from academia

- Active researchers from industry

- Retired researchers

Where from: EU

- Other countries

- Other continents

Expertise: Cover all topics of the call

Each expert gets 10 to 15 proposals

Each proposal gets 3 to 4 experts



- I'm an engineer
- I've graduated at 23
- I've defended PhD at 26
- I was full professor at 38
- I worked 5 years in Germany, France and USA
- I worked 2 years in industry
- I'm ERC grant winner
- Evaluator for Slovenian, Canadian, French, Swiss and Polish research agencies
- **Evaluator of MSCA in 2020**



Expertise

Cavitation ✕

Computational Fluid Dynmaics ✕

? Energy systems (production, distribution, application) [Energy, fuels and petroleum engineering] ✕

Fluid mechanics ✕

? Fluid mechanics, hydraulic-, turbo-, and piston engines [Mechanical engineering] ✕

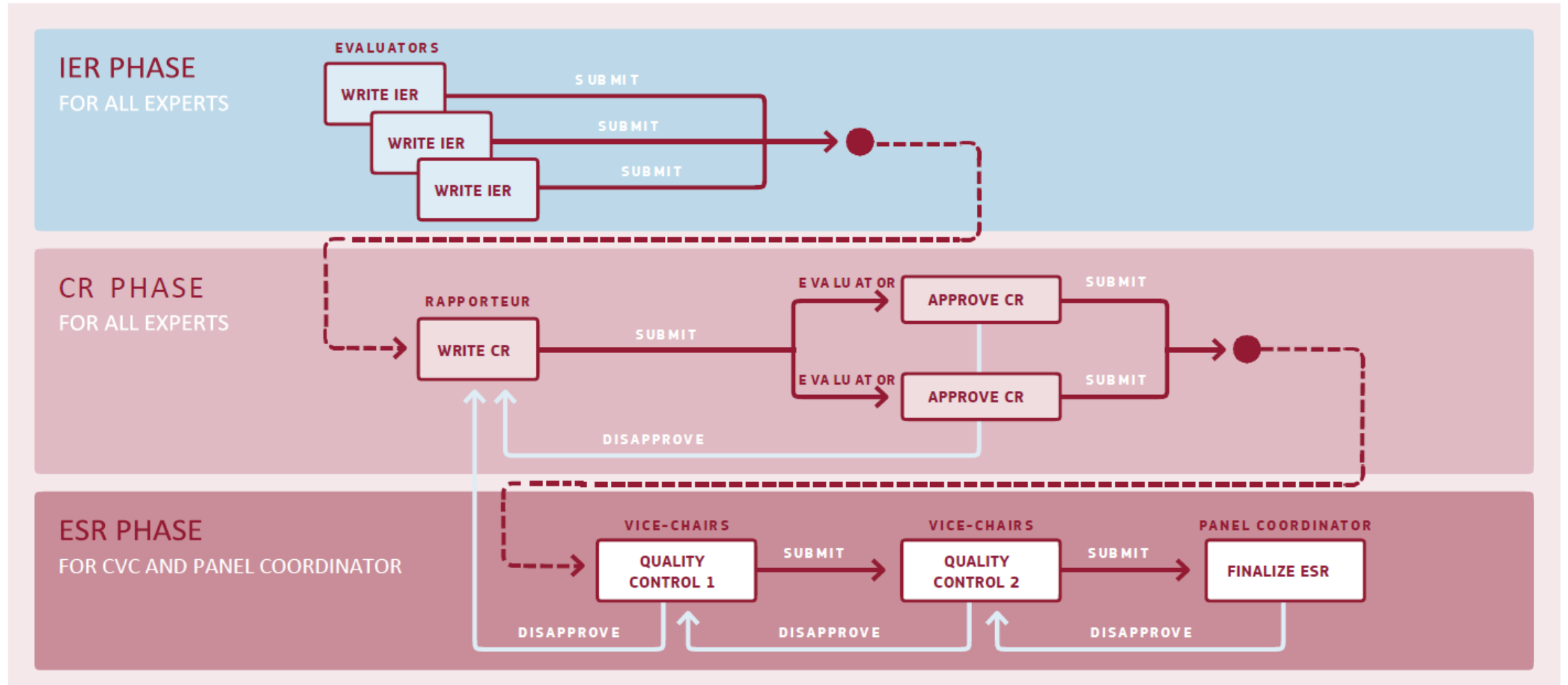
? Wastewater treatment [Water resources] ✕

Projects, which I got to evaluate:

- Compressible Turbulent Flows
- Improving Fuel Evaporation
- Wind Energy Harvesters
- Flowing Gaseous Mixtures
- Convection in Porous Matrials
- Hypersonic Wind Tunnel
- Von Karman Flow
- Turbulent Multiphase Flows
- Liquid Breakup in Spray
- Inertial Microfluidics



THE EVALUATION PROCESS



IER: Individual Evaluation Report

CR: Consensus Report

ESR: Evaluation Summary Report



PROPOSAL

Form A: Just bureaucracy
 Abstract

Form B1: Excellence
 Impact
 Implementation

Form B2: CV of the researcher
 Capacity of the Participating Organisation(s)

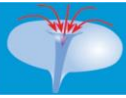


PROPOSAL

Form A: Just bureaucracy
 Abstract

Form B1: Excellence (50%)
 Impact (30%)
 Implementation (20%)

Form B2: CV of the researcher
 Capacity of the Participating Organisation(s)



PROPOSAL

Form A: Just bureaucracy

Abstract

Form B1: Excellence (50%)

Impact (30%)

Implementation (20%)

Form B2: CV of the researcher

Capacity of the Participating Organisation(s)



CRITERION 1 - EXCELLENCE

Quality and credibility of the research/innovation project; level of novelty, appropriate consideration of inter/multidisciplinary and gender aspects

S: The action pursues a new approach to understanding turbulence.

W: Methodology is only partially explained.

Quality and appropriateness of the training and of the two way transfer of knowledge between the researcher and the host

S: The training activities of the researcher are described in detail.

W: The two-way transfer of knowledge is not balanced.

Quality of the supervision and of the integration in the team/institution

S: The supervisors main research topic is closely related to the project proposal.

W: The supervisor has limited experience in supervision.

Potential of the researcher to reach or re-enforce professional maturity/independence during the fellowship

S: The researcher has a good track record in publications.

W: The researcher will bring no new knowledge to the host.



CRITERION 2 - IMPACT

Enhancing the future career prospects of the researcher after the fellowship

S: The fellowship will broaden the researchers knowledge on very specific advanced experimental methods.

W: His research filed will not be broadened significantly.

Quality of the proposed measures to exploit and disseminate the project results

S: He plans to use different social media to promote dissemination of the results.

W: No plan for possible IP rights management is proposed. This is essential for this project.

Quality of the proposed measures to communicate the project activities to different target audiences

S: The researcher will be trained to communicate results to different groups.

W: What will be the added value for the nonspecialists and the project is not well justified.



CRITERION 3 - IMPLEMENTATION

Coherence and effectiveness of the work plan, including appropriateness of the allocation of tasks and resources

S: The work plan is generally sound.

W: Being a very new application, it is not convincing if 9 months would be enough to set up a fully functioning system.

Appropriateness of the management structure and procedures, including risk management

S: The candidate planned progress monitoring phases at several points during the project.

W: The Gantt diagram plans only one month for contingency at the conclusion of each major WP.

Appropriateness of the institutional environment (infrastructure)

S: The institution also offers a number of opportunities for accelerating the personal growth of the researcher.

W: Long term availability of very specific equipment may be an issue.



MAKE LIFE EASY FOR THE EXPERTS

Strictly address the evaluation points in the B1 document

Emphaise the excelence in your CV

Show excitement early in the proposal (Why? How? What?)

Some examples:

„*controlled* gas concentration“

„were *not yet performed*“

„*how* the nanobubbles are detected“

„*blindness* to the very nature of the scattering objects“

„*confused* with pollutants like droplets or nanoparticles“

„stabilization and the properties of bulk nanobubbles *remains controversial*“

„*contradicting* diffusive gas transport theoretical estimates“

„is *not yet available*“

„*provided unambiguous evidence* for the generation of gaseous sub-micron sized bubbles“

„*overcomes* all the mentioned issues“

„mechanism of nanobubble generation is *not fully understood*“

„their working *mechanism is not clear*“

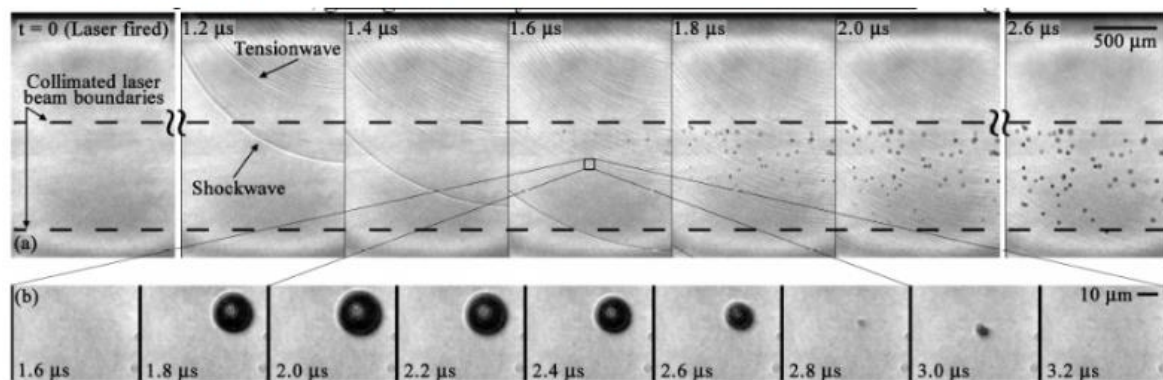
HOPEFULLY IT WILL WORK OUT FOR YOU...

UL FME successful in the Horizon Europe: MSCA PF Call

date: 30.03.2022

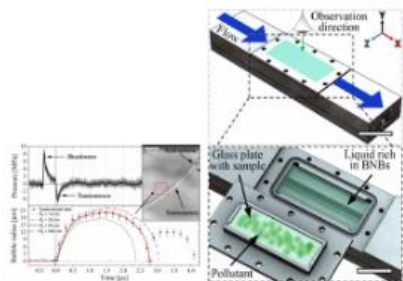
category: Sporočila za javnost

This two-year research project is funded by the European Commission and falls under the Marie Skłodowska-Curie Actions of the Horizon Europe Pillar of Scientific Excellence. It is a postdoctoral fellowship for experienced researchers to accelerate their careers and strengthen research institutions and their international contacts in conducting excellent research and doctoral and postdoctoral research studies.



Source: J. M. Rosselló and C.-D. Ohl, *Phys. Rev. Lett.* 127(4), 044502, 2021

The main objective of the project led by **Prof. Matevž Dular, PhD**, is to answer the following questions: What is the underlying physical mechanics for which such small bubbles may remain stably suspended in liquids for long times and what is the potential of nanobubbles on water/waste treatment and surface cleaning?



The goal is not only of a purely academic nature. In the long term, this project will contribute to the development of devices to remove particulate and non-polar contamination from surfaces. Accordingly, "real" problems will be addressed by laboratory scale trials on bacterial removal from model water distribution network.



As part of the project, Prof. Matevž Dular, PhD, will become the mentor of an experienced foreign researcher, **Juan Rossello**, who is currently working at OvG University Magdeburg in Germany. His research interests are mainly in the field of sonoluminescence, nanomechanisms and dynamics of cavitation bubbles.

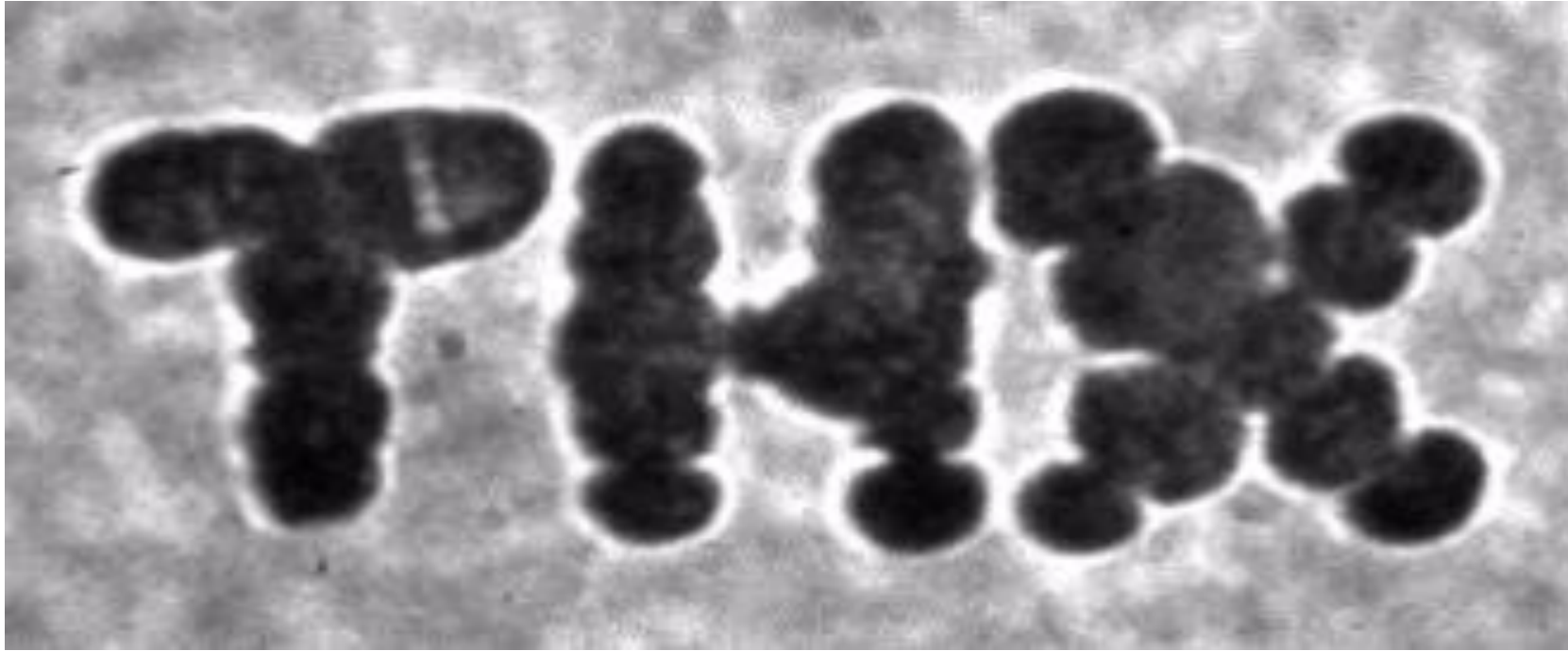
Host institution: University of Ljubljana

See you in Ljubljana!





THANK YOU



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