

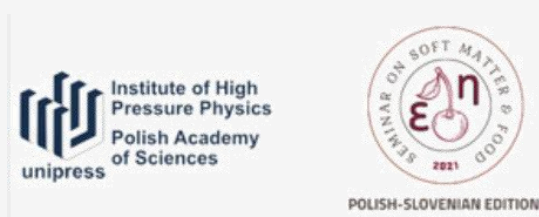
## Międzynarodowe Seminarium Hybrydowe 1st International Seminar on Soft Matter & Food X-PressMatter (NL7 & NL10)

17 Piątek, 05 Listopad 2021 00:37 |

**On 22–23 November 2021, the *1st International Seminar on Soft Matter & Food: Physico-Chemical Models & Socio-Economic Parallels, 1st Polish-Slovenian Edition*, will take place.**

The event will be held in a hybrid format – onsite at the UNIPRESS Innovation Park in Celestynów (Auditorium *Stodola*) and online.

**Directors of the 1st Polish-Slovenian International Seminar on Soft Matter & Food:**  
Dr. habil. Aleksandra Drozd-Rzoska (Poland) and Prof. Dr. Samo Kralj (Slovenia).



It is worth mentioning here that just a few weeks ago, Professor Samo Kralj received the National Award from the Government of the Republic of Slovenia for his outstanding research in the field of soft matter, thus joining the ranks of Slovenia's most distinguished scientists. Our event, the *1st International Seminar on Soft Matter & Food*, will therefore also be a special occasion to extend congratulations to our colleague and friend from Slovenia.

The high scientific level of the Seminar is ensured by the participation of world-renowned keynote speakers and honorary guests, including: Prof. Izabella Grzegory, Prof. Sylwester Porowski, Prof. Stanisław Krukowski, Prof. Krzysztof Czupryński, Prof. Aleš Iglič, Prof. Morten M. Smedskjær, Prof. Aleksander Zidanšek.

The *1st Polish-Slovenian Edition* has a truly interdisciplinary character. The topic proposed for scientific discussion is aligned with current pro-health initiatives undertaken in line with the principles of sustainable development, since it addresses one of the most important global challenges of our time – food. The Seminar will discuss and explore food analysis and research from the perspective of soft matter systems, while also highlighting the fundamental importance of food issues for the modern world.

The results presented during the *1st International Seminar on Soft Matter & Food* by researchers from the X-PressMatter Laboratory, Institute of High Pressure Physics PAS, were obtained thanks to the support of NCN OPUS grants (ref. 2016/21/B/ST3/02203 and ref. 2017/25/B/ST3/02458).

The concept of *soft matter* was officially introduced in 1991 by Pierre-Gilles de Gennes during his Nobel lecture (Nobel Prize in Physics). Physical systems classified as soft matter possess many fascinating properties, including an extraordinary sensitivity to exogenous perturbations such as pressure, electric fields, or nanoparticles. Among these systems we find a wide range

of organic materials: from polymers, glasses, and liquid crystals to colloids, gels, foams, micelles, and amphiphilic structures.

Food is a particularly intriguing soft matter – not only because of the multitude and complexity of its components, internal structures, phase polymorphism, and the correlated dynamic variability, or the abundance of characteristic time and length scales, but also because food plays a key role in our health and well-being.

Understanding the physicochemical properties of food ultimately allows us to improve its quality and nutritional value, while also extending its shelf life – a key concern for today's consumers.

When discussing food, it is necessary to consider the fact that modern society demands health-promoting products manufactured using so-called “green” preservation methods.

On one hand, it is important to examine food through the lens of soft matter physics – including polymer physics, the physical chemistry of surfactants and biosurfactants, phase transition physics, high-pressure physics, as well as molecular engineering and microbiology.

On the other hand, food must also be perceived from a socio-economic perspective, in line with the principles of sustainable development.

The smooth organization and course of the *1st International Seminar* are ensured not only by the Event Directors but also by the members of the **Scientific Committee**:

Prof. Sylwester J. Rzoska and MSc. Szymon Starzonek (Poland)

Prof. Mitja Slavinec and Dr. Georgios Cordoyiannis (Slovenia).

To lift the veil a little, we are pleased to announce that the *2nd Polish-Slovenian Edition* is already being planned for 2022.

Our mission is to create a series of recurring annual international seminars as a platform for interdisciplinary scientific exchange.

We warmly invite all interested participants to join us!