



FOODTECHMEET2022
INTERNATIONAL MEET ON FOOD SCIENCE AND TECHNOLOGY
AUGUST 18-20, 2022 | EDINBURGH, SCOTLAND

Date: June 02nd, 2022

Dr. Nemanja Teslic

Naučni insitut za prehrambene tehnologije, Serbia, Novi Sad ZIP:21000

Formal Invitation Letter to Speak at the FOODTECHMEET2022

Dr. Nemanja Teslic,

You are invited to attend International Meet on Food Science and Technology (FOODTECHMEET2022), which will be held during August 18-20, 2022 in Edinburgh, Scotland, to give an invited talk on **“Natural Deep Eutectic Solvents and their Potential Application in Food Industry”**.

FOODTECHMEET2022 will bring together, from a global perspective, scientists, researchers, end-users, industry, policy makers from several countries and professional backgrounds to exchange ideas, advance knowledge and discuss key issues for Food Science and Technology.

This conference provides a wonderful opportunity for you to enhance your knowledge about the newest interdisciplinary approaches in Food Science and Technology. Moreover, the conference offers a valuable platform to create new contacts in the field, by providing valuable networking time for you to meet great personnel in the field.

For more information, PS: <https://www.albedomeetings.com/2022/foodtechmeet>

We are happy to offer you a warm welcome, and guarantee you will find a most stimulating program of papers, plenary sessions, and oral sessions.

We hope to see you in Edinburgh.

Sincerely,



Best regards

Albert

Meeting Secretary

FOODTECHMEET2022

Albedo Meetings

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FOODTECHMEET2022

International Meet on Food Science and Technology

August 18-20, 2022 | Edinburgh, Scotland



ALBEDO MEETINGS

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FOREWORD

Dear Colleagues,

It is our pleasure to invite all scientists, academicians, young researchers, business delegates and students from all over the world to attend the International Meet on Food Science and Technology (FOODTECHMEET2022), to be held during August 18-20, 2022 in Edinburgh, Scotland.

FOODTECHMEET2022 shares an insight into the recent research, which gains immense interest with the colossal and exuberant presence of young and brilliant researchers, business delegates and talented student communities.

FOODTECHMEET2022 goal is to bring together, a multi-disciplinary group of scientists from all over the world to present and exchange break-through ideas relating to the Food Science and Technology. It promotes top level research and to globalize the quality research in general, thus makes discussions, presentations more internationally competitive and focusing attention on the recent outstanding achievements in the field of Food Science and Technology.

We're looking forward to an excellent meeting with scientists from different countries around the world and sharing new and exciting results in Food Science and Technology.

We look forward to seeing you at FOODTECHMEET2022 in Edinburgh, Scotland

COMMITTEES

Organising Committee

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Natural Deep Eutectic Solvents and their Potential Application in Food Industry

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Abstract

The food industry faces the challenges of sustainable production due to high negative impact of the food industry on the environment and increasing demand for food products due to rising World population. To tackle such challenges food industry requires development of innovative and eco-friendly solutions to exploit agro-food waste and by-products as natural resources for the next generation of nutraceuticals, functional food products, bioenergy, chemicals, pharmaceuticals, and other high value-added products. These solutions should also be aligned with the principles of “green chemistry”¹. One of the potential solutions could be the usage of natural deep eutectic solvents (NADES) composed only of edible, recyclable, less or non-toxic compounds which are predominantly present in nature^{1/2/3}. More precisely, organic acids, water, sugars, fatty acids, organic salts, amino acids, terpenes, alcohols, and other compounds which are already utilized by the food industry, can be mixed in the appropriate ratio to generate solvents with specific features suitable for a wide range of applications in the food industry³. Since large number of possible NADES combinations can be designed these solvents could be utilized as a medium for chemical reactions (e.g. hydrolysis), extraction medium for natural polar or non-polar compounds (e.g. polyphenols, carotenoids), stabilization medium of extracted compounds etc ^{1/2/3/4}. Due to NADES edible and nontoxic properties obtained extracts are ready-to-use and in certain cases may be applied in food products without additional separation technology which reduces cost of food production. One of the examples is application of NADES to recover polyphenols from food by-products such are raspberry seeds and wild thyme herbal dust and extracts direct incorporation in functional ice tea like beverages ^{1/2/5}.

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2. Teslić, N., Santos, F., Oliveira, F., Stupar, A., Pojić, M., Mandić, A., & Mišan, A. (2022).

- Simultaneous hydrolysis of ellagitannins and extraction of ellagic acid from defatted raspberry seeds using natural deep eutectic solvents (NADES). *Antioxidants*, 11(2), 254.
3. Mišan, A., Nađpal, J., Stupar, A., Pojić, M., Mandić, A., Verpoorte, R., & Choi, Y. H. (2020). The perspectives of natural deep eutectic solvents in agri-food sector. *Critical reviews in food science and nutrition*, 60(15), 2564-2592
 4. Stupar, A., Šeregelj, V., Ribeiro, B. D., Pezo, L., Cvetanović, A., Mišan, A., & Marrucho, I. (2021). Recovery of β -carotene from pumpkin using switchable natural deep eutectic solvents. *Ultrasonics Sonochemistry*, 105638
 5. Vrgović, P., Pojić, M., Teslić, N., Mandić, A., Kljakić, A. C., Pavlić, B., & Mišan, A. (2022). Communicating Function and Co-Creating Healthy Food: Designing a Functional Food Product Together with Consumers. *Foods*, 11(7), 961.

Keywords:

NADES; Green Solvents; Food Application; Beverages.

Biography

Dr. Nemanja Teslić is a research associate at the Institute of food technology, University of Novi Sad. In 2012 he finished bachelor studies while in 2013 he earned his master degree, both at the food technology study program, Faculty of Technology, University of Novi Sad. In 2014 he was awarded with JoinEUsee PENTA scholarship for full PhD studies on which he enrolls at the Department of agriculture and food technology and science, University of Bologna, Italy. In 2018 he earned his PhD in agriculture, food and environmental technologies and science. In 2018 he started working at the Institute of food technology with the occupation at national project „New products based on cereals and pseudocereals from organic production“. He is participating on a bilateral project with Slovenia titled „Green extraction techniques for obtaining valuable functional additives to beer“. Also, he is currently a team leader of work package on the national project (PROMIS) titled „Natural Deep Eutectic Solvents for Green Agri-Food Solutions“ and participating on the national project (IDEJE) Novel extracts and bioactive compounds from under-utilized resources for high-value applications“. His current field of research is valorization of bioactive compounds from food industry by-products and agricultural waste by novel green extraction techniques (e.g. supercritical fluid extraction and subcritical fluid extraction) and solvents (NADES). Besides extraction techniques works on HPLC-FLD/DAD, LC-MS/MS, and GC-MS/MS. He is the author and co-author of more than 50 scientific journal manuscripts, book chapters, and publications from scientific conferences. He was twice invited as a speaker. In 2019 he received award “R. Ferrarini” for the best PhD dissertation in viticulture issued by the Italian association of enology and viticulture. In 2021 he received award for the best young investigator issued by the Institute of Food Technology in Novi Sad.



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2nd International Meet on Food Science and Technology

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