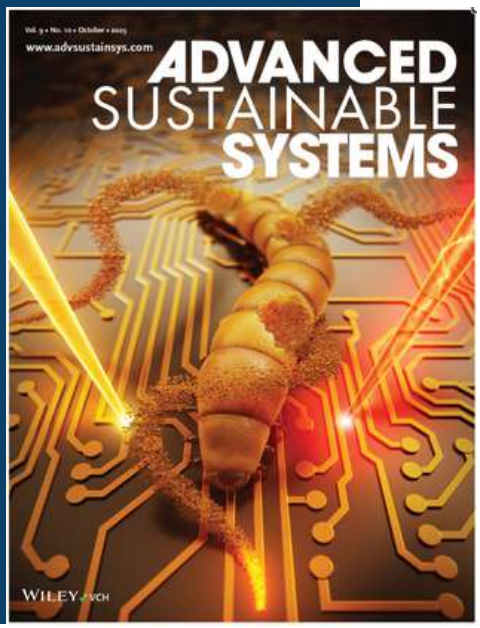
EINSTEIN PROJECT NEWSLETTER

2025

EINSTEIN
EMPOWERING EXCELLENT RESEARCH



Top News

Year of 2025 brought:

- 2 journal cover pages
- 6 journal articles, 3 conference papers
- 2 in-person consortium meetings
- 20 project presentations at festivals, fairs, conferences, makerspace and other events
- 1 podcast episode
- 1 Open Lab day
- 3 webinars and seminars
- 2 workshops
- 2 staff exchanges
- 1 roundtable discussion

Funded by the European Union

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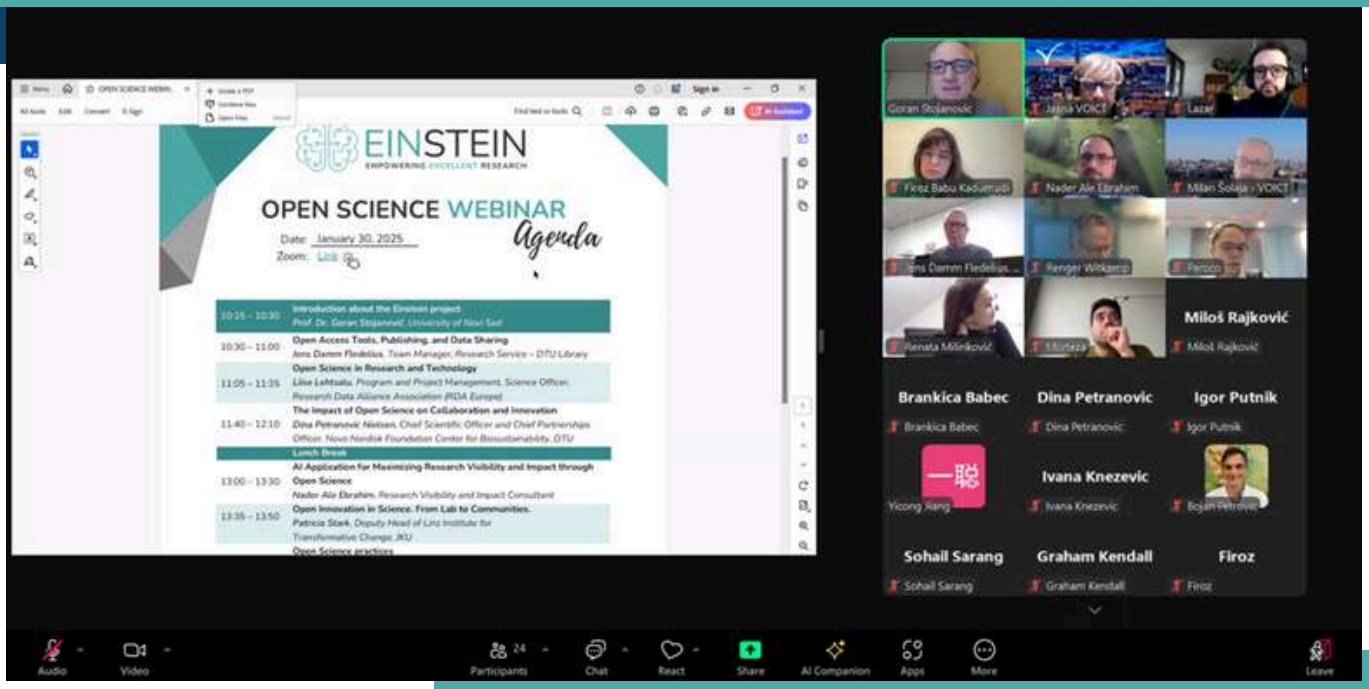
List of Abbreviations

DTU - Technical University of Denmark
ESG - Environmental, Social, and Governance
EU - European Union
FTS-UNS - Faculty of Technical Sciences, University of Novi Sad
IEEE - Institute of Electrical and Electronics Engineers
JKU - Johannes Kepler University Linz
STEM - Science, Technology, Engineering, and Mathematics
STP NS - Science and Technology Park Novi Sad
UNS - University of Novi Sad
VOC - Vojvodina Organic Cluster
VOICT - Vojvodina ICT Cluster
WUR - Wageningen University & Research

WEBINARS



Open Science webinar

On 30 January 2025, the EINSTEIN project organised the Open Science webinar, attended by 34 participants. The event presented the project's progress and focused on open access, publishing practices, data sharing, and the role of open science in research and technology.

The programme covered practical tools for open access publishing and research data sharing, as well as broader questions related to collaboration, innovation, and the use of open science in research environments. Additional presentations addressed AI applications for improving research visibility and impact, open innovation approaches that connect scientific work with communities, and examples of open science practice at both institutional and national level, including experiences from UNS and Serbia.

Gender Equality Webinar

The EINSTEIN Gender Equality Webinar was held on 28 March 2025 and jointly organised by UNS, WUR, DTU, and JKU. Titled “Breaking Barriers: Advancing Gender Equality in Science and Innovation", the event focused on gender equality in research and innovation, combining policy perspectives with institutional practice.

The programme addressed the gender dimension in Horizon Europe, intersectionality in research and innovation, and the development and implementation of Gender Equality Plans in research organisations. It also examined how gender equality is communicated within institutional and public contexts, and how these efforts contribute to more inclusive research environments.

A dedicated session on Gender Equality Plans in practice presented examples from partner institutions, showing how such measures are being implemented in different academic settings. The webinar linked gender equality with broader issues such as research visibility, open innovation, and open science, showing how equality measures can support institutional development, collaboration, and research excellence.

WORKSHOPS

Entrepreneurial Workshop by “Business on High Heels”

On 23 January 2025, an entrepreneurial workshop organised by Business on High Heels was held in Zlatibor, Serbia, at the Innovation Business Centre, bringing together more than 20 participants. The event combined entrepreneurial training for women with an introduction to the scientific and technological background of the EINSTEIN project.

The discussion focused on how advanced technologies can be linked with traditional industries, with particular interest in edible sensors and their potential use in early disease detection. Participants also recognised the relevance of the project for business-oriented fields such as food production, health technologies, and sustainable agriculture, showing its potential beyond the research context.

Workshop for Innovators – How to Apply for EU Funds

The *Workshop for Innovators – How to Apply for EU Funds* was held on 31 March 2025 at STP NS, bringing together innovators active within its ecosystem. The workshop focused on practical guidance for accessing EU funding opportunities and was led by Dr. Vladimir Todorović, Head of the Development Center at STP NS.

The programme covered Horizon Europe, available funding opportunities, the key elements of a successful project proposal, the process from idea to application, and strategies for building strong partnerships. Case studies and examples of successful projects were also presented, giving participants a clearer understanding of EU funding requirements and how to develop more competitive applications.

MEETINGS

The 3rd in-person EINSTEIN Project Management Meeting

On 6 June 2025, WUR hosted the third in-person meeting of the EINSTEIN consortium. The meeting focused on reviewing project progress, assessing the status of ongoing activities, and aligning the next steps for the second year of implementation. The meeting supported coordination across the consortium and provided a clear basis for the next phase of project activities.

4th In-Person Management Meeting

On 11 December 2025, STP NS hosted the fourth meeting of the EINSTEIN consortium. The meeting was dedicated to reviewing project progress, assessing the status of ongoing activities, and defining the planned work for the upcoming third year of the project.

The discussion helped align the partners around priorities for the next project phase and supported continued coordination in the implementation of consortium activities.

The international conference ETRAN

The international conference ETRAN was held in Čačak, Serbia, from 9 to 12 June 2025. As one of the leading conferences in electrical engineering, electronics, telecommunications, and information technology, it provided an important platform for presenting EINSTEIN research results to the scientific community.

Within the Biomedical Engineering Session, two papers developed within the EINSTEIN project were presented by members of the UNS team: “Characterization of Commercial Photopolymers for Microfluidic Applications” (Nastasija Malivuk) and “Machine Learning for Estimating Chronological Age in Children Using the London Atlas and Dental Radiographs” (Ana Savić).

IEEE FLEPS 2025

Mihai Irimia-Vladu from JKU was an invited speaker at IEEE FLEPS 2025 – the IEEE International Conference on Flexible Printable Sensors and Systems, held in Singapore from 22 to 25 June 2025. He delivered the talk *The Avenue to “Green” in Organic Bioelectronics* to an audience of more than 30 attendees. The presentation contributed to the international visibility of EINSTEIN-related research in the field of sustainable and bioinspired electronics and positioned the project within current discussions on green approaches in organic bioelectronics.

E-MRS Fall Meeting in Warsaw, Poland

Mihai Irimia-Vladu from JKU delivered an invited lecture at the E-MRS Fall Meeting, held in Warsaw, Poland, from 15 to 18 September 2025. As part of “Symposium J” on 18 September, he presented the lecture “Natural Dielectrics for Bio-Organic Electronics”.

XXIII B-MRS Meeting 2025, Brazil

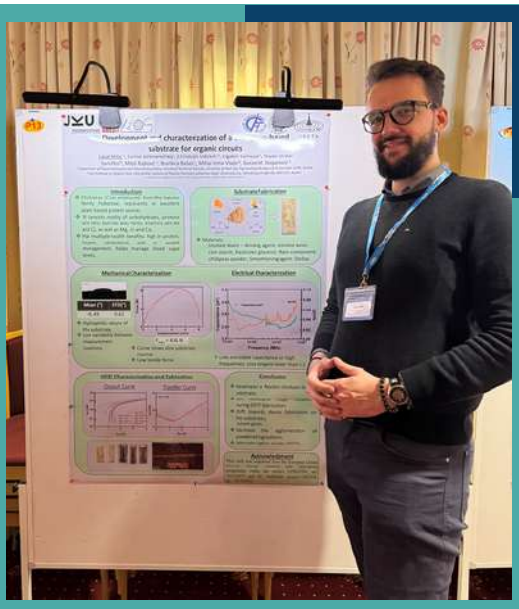
Mihai Irimia-Vladu from JKU delivered an invited lecture at the XXIII B-MRS Meeting 2025 in Brazil. He presented “Natural Dielectrics for Bio-Organic Electronics” as part of the session *Sustainable Electronics: From Materials to Devices*. As a well-established forum for advances in materials science and related technologies, the meeting provided a relevant setting to present EINSTEIN-related research to an international audience of researchers, engineers, and students from academia and industry.

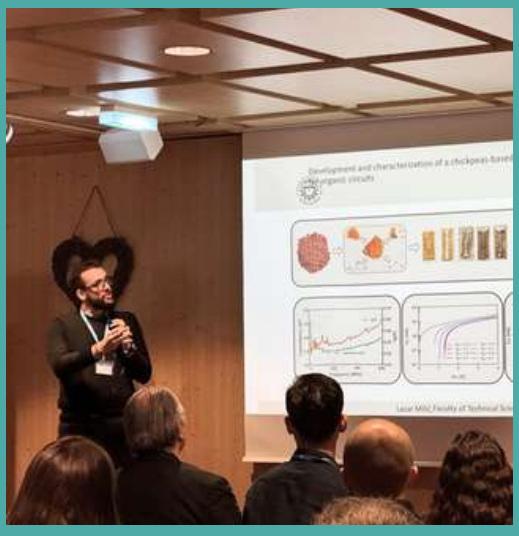
PAMS – 8, Hamamatsu, Japan

Mihai Irimia-Vladu from JKU gave an invited talk at the 8th Autumn School on Physics of Advanced Materials (PAMS-8), held from 16 to 23 November 2025 in Hamamatsu, Japan, and online.

ICPAM – 17, Hamamatsu, Japan, 2025

Mihai Irimia-Vladu from JKU delivered a plenary talk at the 17th International Conference on Physics of Advanced Materials (ICPAM-17), held from 16 to 23 November 2025 in Hamamatsu, Japan. The plenary session took place on 21 November 2025 at the Shizuoka University Hamamatsu Campus and was attended by more than 50 participants.





Poster Session at BioEL2025 Kirschberg

The 10th International Winter School on Bioelectronics (BioEl2025) was held from 14 to 21 March 2025 in Kirchberg in Kirchberg in Tirol, Austria. Organised by JKU, the event brought together researchers, scholars, and early-career scientists working at the intersection of electronics and biological systems. The programme covered a broad range of topics relevant to contemporary bioelectronics, including biomimetic materials, neural interfaces, implantable electronics, biosensing, and biocompatible semiconductors. It also provided a strong international setting for scientific exchange and interdisciplinary discussion.

As part of the poster session, Lazar Milić from UNS presented his work on flexible edible substrates derived from chickpeas. His participation introduced EINSTEIN-related research, supported networking with researchers in the field, and strengthened the project's visibility in an international research environment.

Guest Seminar: Unconventional Electronics – A Gateway for a Sustainable Future

On 27 May 2025, Lazar Milić from the UNS team delivered the seminar “Unconventional Electronics: A Gateway to a Sustainable Future” at the Institute for Molecular Genetics and Genetic Engineering (IMGGI) Library in Belgrade, Serbia. Mr. Milić presented research on edible electronics as an emerging field focused on sustainable and biodegradable electronic components. Particular attention was given to the development of edible electronic substrates based on food-derived materials and their use in the fabrication of organic field-effect transistors (OFETs).

ROUNDTABLES

Roundtable “Sustainable Development in Times of Change: Between Regulatory (ESG) Requirements and Innovative Solutions”

On 29 May 2025, the roundtable “Sustainable Development in Times of Change: Between Regulatory (ESG) Requirements and Innovative Solutions" was held at the Hilton Hotel in Belgrade, organised by the Embassy of Sweden in Serbia and NALED. The event brought together stakeholders from academia, business, public policy, and civil society to discuss the challenges and opportunities of green transition, sustainable supply chains, and the bioeconomy in Serbia. At the event, Dr. Kristina Petrović, EINSTEIN Project Manager, presented the EINSTEIN project with a particular focus on the development of edible sensors made from biowaste.

The presentation placed the project within a broader sustainability context by showing how research, circular economy principles, and technological innovation can be combined to address current environmental and societal challenges.

FAIRS / EXHIBITIONS / SHOWCASE EVENTS

Contributing to Sustainable Agriculture at BIOFACH 2025

At BIOFACH 2025, held from 11 to 14 February 2025, VOC presented activities and developments carried out within the EINSTEIN project, with a focus on sustainable agriculture, technological innovation, and cross-border collaboration in support of organic farming in Vojvodina, Serbia.

A key point of the presentation was VOC's contribution to the EINSTEIN Agro platform, developed to generate insights into sustainable crop production with an emphasis on nutrient-rich and high-quality crops. By presenting this work at BIOFACH, VOC showed how project activities can support smarter farming practices and contribute to the wider development of agro-technological innovation.

Given the scale of BIOFACH, which gathered more than 35,000 visitors from 140 countries and around 2,300 exhibitors from 94 countries, the event also provided strong international visibility for the project and created opportunities to present its results to a broad professional audience from the organic sector.

Innovation Mini Fair

The second Innovation Mini Fair was held on 19 September 2025 at STP NS. The event brought together teams from leading science and technology institutions, including STP NS, BioSense Institute, FINS, the FTS-UNS and the Faculty of Agriculture at UNS, and the Institute for Multidisciplinary Research at the University of Belgrade. The fair provided an opportunity for the EINSTEIN project to present its results alongside other innovations developed in related scientific and technological fields.

Visitors were introduced to the project's achievements and to its broader relevance for future-oriented research and innovation. The event also created space for discussion on potential cooperation between science and industry, helping position EINSTEIN within a wider innovation ecosystem.

EINSTEIN at Devoxx Greece 2025 in Athens

Devoxx Greece 2025 was held in Athens from 10 to 12 April 2025, bringing together more than 60 speakers, over 70 sessions, and more than 1,200 participants. As a major event for developers, engineering managers, DevOps professionals, and technology communities, it offered a strong opportunity to present the EINSTEIN project to an international audience interested in emerging technologies and innovation.

At the event, representatives of VOICT presented the project to attendees, visitors, and exhibitors from more than 25 countries. Through discussions during the conference, they introduced EINSTEIN's objectives, achievements, and development direction, while also engaging with researchers, lecturers, industry stakeholders, and members of the wider developer community. Participation in Devoxx Greece increased the project's visibility beyond academic and research circles, supported exchange with technology-oriented audiences, and opened opportunities for new synergies and future collaboration.

Horizons of Innovation – EU Research Collaboration Forum

Horizons of Innovation – EU Research Collaboration Forum was held on 2 December 2025 at STP NS in Novi Sad, Serbia. Within the Insights & Impact zone, the *EINSTEIN session – Rethinking Innovation* was attended by 31 participants. The session examined how Horizon Europe projects can move beyond research results and generate practical, real-world innovation. Lazar Milić and Ivana Knežević from UNS presented the EINSTEIN project, with particular emphasis on food-waste- and nutrifood-based electronics, showing how scientific research can be translated into solutions with societal and market relevance.

The discussion that followed focused on ways to bridge the gap between research and application, including the role of tools, partnerships, and methodologies that can accelerate impact. In this context, the session further strengthened the visibility of EINSTEIN as a project that connects research, innovation, and practical implementation.

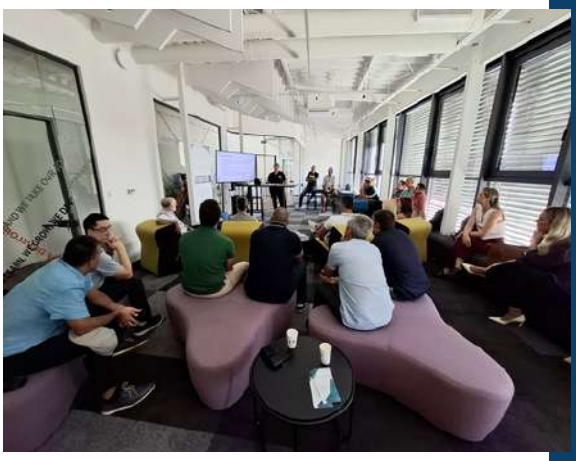
NETWORKING / STAKEHOLDER ENGAGEMENT

Showcasing EINSTEIN to the VOICT members and IT industry stakeholders

On 28 February 2025, SMART, a Noventiq Company, hosted a regular VOICT networking meeting in Novi Sad, Serbia, attended by 26 participants. The event brought together representatives of the IT industry, including company leaders, decision-makers, startup founders, SMEs and MEs, software engineers, HR professionals, and development managers. At the meeting, Jasna Komatović, Communication and Dissemination Manager, presented the EINSTEIN project and its main objectives as an excellence initiative focused on nutrifood-based theranostics for a healthy European society. The presentation also highlighted the project's role in supporting institutional development in widening countries such as Serbia and in promoting sustainable food systems.

Network of Women Entrepreneurs

On 11 June 2025, the EINSTEIN project was presented to a network of women entrepreneurs at an event organised by Business on High Heels. The event provided an opportunity to showcase the project's activities and introduce its technological developments to an audience interested in innovation and entrepreneurship.



Meeting with ICT stakeholders and industry

On 28 August 2025, UNS in collaboration with VOICT, held a meeting with ICT stakeholders and industry representatives. The event brought together 27 participants from software and hardware companies, educational institutions, and other organisations, primarily members of VOICT. During the meeting, Ivana Knežević from UNS presented the EINSTEIN project, its objectives, and its expected results and impact. The discussion that followed gave participants the opportunity to ask questions and exchange views on the project's relevance for industry and innovation. The meeting supported connections that may contribute to future cooperation, knowledge exchange, and broader uptake of project results.

Staff Exchange: UNS → JKU

From 15 January to 15 February 2025, Lazar Milić from UNS completed a one-month research visit to JKU. The visit was organised to support knowledge exchange within the EINSTEIN project, particularly in the area of bioelectronics fabrication and characterization. During his stay, Lazar Milić worked with colleagues at JKU and gained practical insight into new techniques and research approaches relevant to the project. The supervisors during this visit were Mihai Irimia-Vladu and Corina Schimanofsky.

This staff exchange contributed to capacity building by expanding technical knowledge, reinforcing collaboration between partners, and supporting the transfer of expertise that can be applied in further EINSTEIN research activities.

Staff Exchange: UNS → WUR

In the period November 2-30, 2025 Ivana Knezevic from UNS visited WUR. During her month-long mobility stay, Ivana gained valuable insight into how food innovation is developed, structured, and communicated within a leading European research environment.

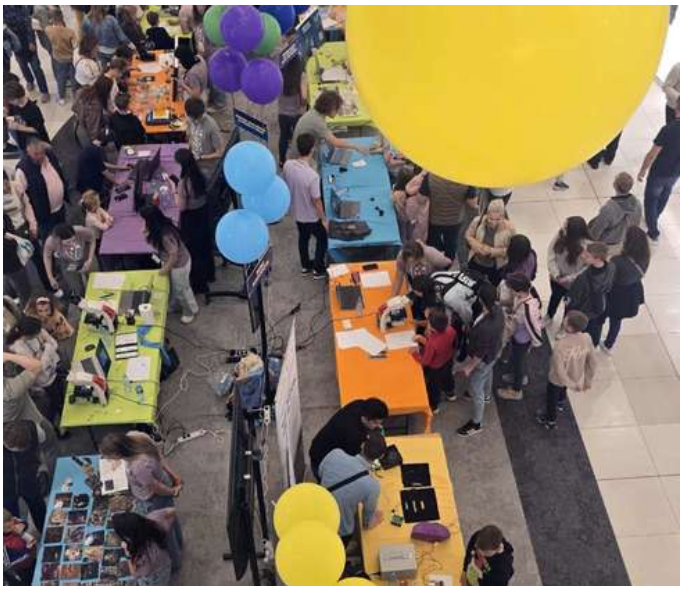
The visit created an important space for learning through exchange, from understanding how nutrifood ideas evolve from regional genetic resources into early-stage product concepts, to observing how user feedback, scientific discussion, and interdisciplinary collaboration shape innovation pathways. The mobility offered a clearer view of how institutional knowledge, research practice, and academic culture can support long-term excellence, providing inspiration for future development at the University of Novi Sad and within the wider region.

Makerspace event

The Makerspace event was held on 15 June 2025 in collaboration with two primary schools from Novi Sad and Stepanovićevo, STP NS, and FTS-UNS. The EINSTEIN team participated with its own booth, where Lazar Milić (UNS) presented sensors and chips developed from edible and food-waste-based materials. Through practical demonstrators developed within the project, EINSTEIN was presented to around 100 attendees, including children and their parents. The strong interest shown by visitors demonstrated the value of hands-on formats in bringing the project's research topics closer to younger audiences and the wider public.

European Researchers' Night

The 16th European Researchers' Night was held on 26 September 2025 across Europe. In Novi Sad, the event took place at three locations. The EINSTEIN project was presented at TC BIG, with a particular focus on younger visitors. Through conversations with the UNS research team, children and other attendees were introduced to edible sensors and edible electronics, which attracted strong interest and curiosity. The event helped make EINSTEIN research more accessible to a wider audience and encouraged early interest in science and innovation.



Open Lab Day

As part of the planned EINSTEIN activities, an Open Lab Day was held on 2 October 2025 for third-year students from FTS-UNS. During the visit, students were introduced to the project's goals and activities, the research equipment used in the laboratory, and the experimental results achieved so far. The tour was led by Dr. Sanja Kojić and Lazar Milić (UNS), who explained the research process in more detail and answered students' questions.

The event gave students a chance to see how the knowledge they gain during their studies can be applied in real research practice. By spending time in the laboratory and learning more about the project's ongoing work, they were able to connect theory with practice and gain a better sense of possible future directions for their own professional development.

EINSTEIN Stars competition

The EINSTEIN Stars 2025 competition was organised to support the development of Industrial PhDs by identifying promising ideas and connecting them with expertise from academia and industry. A total of eight applications were submitted. After the administrative check, one application was found ineligible, while seven advanced to expert evaluation. Each finalist was given 10 minutes to present their research idea, followed by 5 minutes of questions and discussion with the jury, allowing candidates to further explain and defend their proposals.

The final presentations were evaluated by a professional jury composed of:

1. Dr. Firoz Babu Kadumudi (DTU), Denmark
2. Prof. Dr. Renger F. Witkamp (WUR), The Netherlands
3. Dr. Mihai Irimia-Vladu (JKU), Austria
4. Prof. Dr. Nataša Simin (Faculty of Science, UNS), Serbia
5. Prof. Dr. Nataša Jovanović Lješković (Faculty of Pharmacy), Serbia

The awarded participants of the EINSTEIN Stars 2025 competition are:

1. Lenka Brestovački
2. Hima Zafar
3. Milica Abeer

The competition gave participants the opportunity to present their work to an international expert panel, gain visibility for their ideas, and receive recognition that can support their further professional development.

EINSTEIN Project in Magazine and Brochure

Business on High Heels featured the EINSTEIN project in its annual magazine and brochure, which were distributed to entrepreneurs across the region. The publications presented the project's goals, scientific background, and its contribution to innovation in nutrition and health.

This coverage helped increase the project's visibility among entrepreneurial audiences and supported outreach beyond the academic and research community.

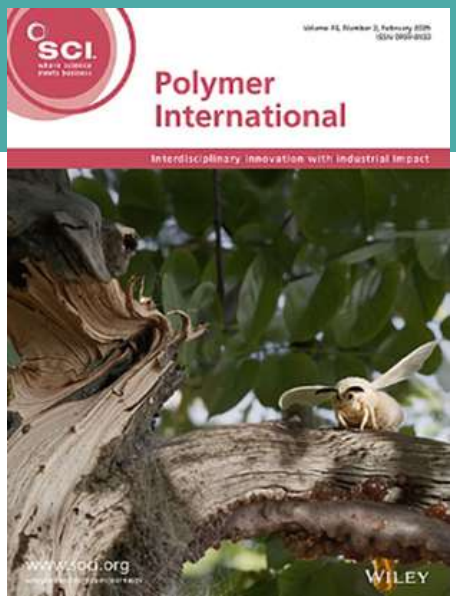
Podcast episode

In collaboration with the Youth Fest organisation, a podcast episode was recorded featuring Kristina Petrović, EINSTEIN Project Manager. In the conversation, she spoke about the project's progress and key innovations, with particular emphasis on the link between organic production, healthy nutrition, and advanced technologies.

The episode also introduced the edible sensor technology being developed within the project for the early detection of colorectal cancer.

On the Cover

In the January 2025 issue (1/2025), the cover image was based on the article “Natural polymers for emerging technological applications: cellulose, lignin, shellac and silk” by Mihai Irimia-Vladu et al. The review examined natural polymers of plant and animal origin, including cellulose, lignin, shellac, and silk, and acknowledged the EINSTEIN project in the article.



A second cover image followed in the October 2025 issue with article “Yellow Mealworm Larvae Derived Eco-Friendly Substrates for Responsible Electronics”. In this article, Monika Gupta and UNS team members presented biodegradable electronic substrates inspired by yellow mealworm larvae. The study showed that these materials combine strong dielectric, mechanical, and thermal performance with rapid biodegradability, offering a sustainable alternative to high-frequency Printed Circuit Boards (PCBs).

Journal Articles

- Schimanofsky C. et al. (2025). Natural dielectrics for organic field effect transistors: a study on resins derived from larch, spruce and Atlas cedar Pinaceae trees. Materials Advances, 6(18), 6269–6290. https://doi.org/10.1039/D5MA00401B

- Gupta M. et al. “Yellow Mealworm Larvae Derived Eco-Friendly Substrates for Responsible Electronics”, Advanced Sustainable Systems (IF: 6.1), e00065 (1 of 12), 2025, doi: 10.1002/adsu.202500065

- Vlad Irimia C. et al. “Natural waxes from plant and animal origin as dielectrics for low-voltage organic field effect transistors”, J. Mater. Chem. C, 13(29), 14767-14786, 2025. https://doi.org/10.1039/D5TC01419K

- Vlad Irimia C. et al. (2025) Natural Alkaloids (Caffeine, Theobromine and Theophylline) as Dielectric Capping Layers for Gold and Aluminum Gate Electrodes in Low Operating Voltage Organic Field-Effect Transistors, IEEE Journal on Flexible Electronics, 2025, doi: 10.1109/JFLEX.2025.3539612

- Alehosseini M. et al. Self-Maintainable Electronic Materials with Skin-Like Characteristics Enabled by Graphene-PEDOT:PSS Fillers. Adv. Sci.2025, 12, 2410539. https://doi.org/10.1002/advs.202410539

- Radovanović M.R. et al. (2025), Fully Degradable Food-Based Solenoids and Radio Frequency Circuits for Green Electronics. Adv. Eng. Mater., 27: 2401790. https://doi.org/10.1002/adem.202401790

- Irimia-Vladu M. & Sariciftci, N. S. (2025), Natural polymers for emerging technological applications: cellulose, lignin, shellac and silk. Polym Int, 74: 71-86. https://doi.org/10.1002/pi.6697

Conference papers

- Putnik I. et al. “Wireless Sensing Platform Using Flexible Loop Antennas and LC Sensors for Dielectric Characterization of Oral Care Media.” 2025 IEEE 34th International Conference on Microelectronics (MIEL), IEEE, October 13, 2025, 1–8. https://doi.org/10.1109/MIEL66332.2025.11261019.

- Savić A. et al. “Machine Learning for Estimating Chronological Age in Children Using the London Atlas and Dental Radiographs.” PROCEEDINGS 12th International Conference IcETRAN, ETRAN Society, Belgrade; Academic Mind, Belgrade, August 21, 2025, 44–48. https://doi.org/10.69994/12Ic25009.

- Malivuk N. et al. “Characterization of Commercial Photopolymers for Microfluidic Applications.” PROCEEDINGS 12th International Conference IcETRAN, ETRAN Society, Belgrade; Academic Mind, Belgrade, August 21, 2025, 49–53. https://doi.org/10.69994/12Ic25010.

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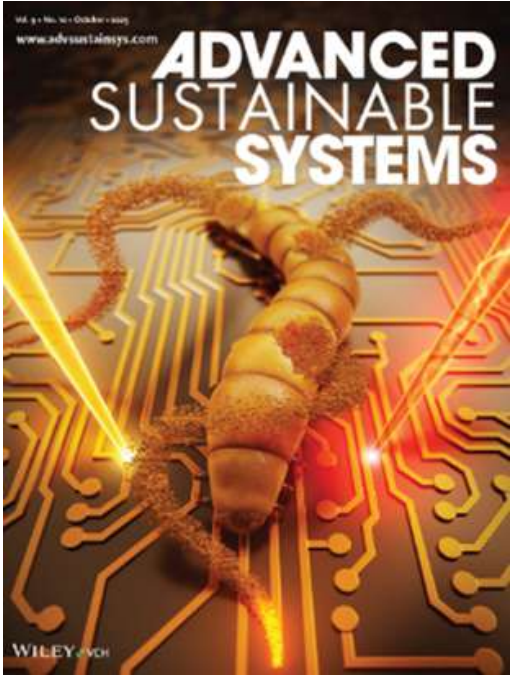
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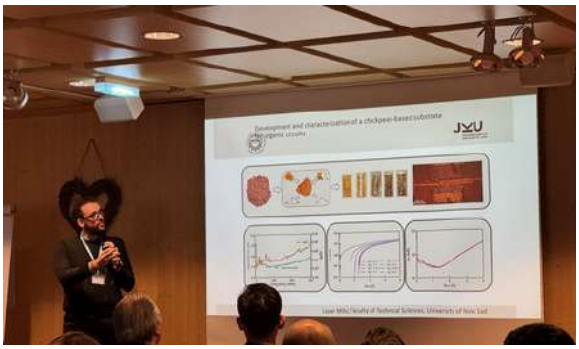
JKU


Fun for Now


BIOFACH


ICETRAN 2025
ETRAN 2025
ETRAN 2025
Од 9. до 12.


EINSTEIN


YOUTH FEST
EINSTEIN