



42nd Conference of Rectors and Presidents of European Universities of Technology

The university's role in global health and well-being

September 20th – 21st, 2024

Final Programme

2024 Conference host: Rector Mihnea Costoiu National University of Science and Technology Politehnica Bucharest

Conference Venue: NUST-Politehnica Bucharest Splaiul Independenței 313, Bucharest, Romania RO-060042

Invitation to the 2024 Conference at NUST-Politehnica Bucharest

Dear colleagues,

We cordially invite you to crp2024, the 42nd Conference of Rectors and Presidents of European Universities of Technology, at National University of Science and Technology Politehnica Bucharest.

The European countries' health and social care systems provide high quality care; however it is crucial for universities of science and technology to innovate and produce new technologies and ways of working to ensure the standards of care are maintained. The work done in universities is started from the students we educate to the research we carry out and through our impact on the global world.

The universities are developing cutting edge research through multi-disciplinary collaborative approaches, thus bringing in research teams from across the health care, social care, academics, private and voluntary sectors which may take forward high-quality research for the benefit of the patients, managers, and policy makers.

Health-related research has extensively improved the lives of our society and contributed to the greater wellbeing of our society. The new technologies and the ultimate scientific discoveries have led to new treatments, new approaches for thinking and the development of new policy.

At crp2024, keynote speakers will discuss the conference topics from different points of views and leaders of European Universities of Technology will share their institution's strategies for approaching enlarged contribution to global health and wellbeing.

Discussions at the 2024 Conference will address issues such as:

- Universities' research strategies for health improvement treatments and the enhancement of wellbeing of the society
- Universities' innovation in healthcare covering microelectronics, sensors, system integration and healthcare technology assessment
- All forms of digital health, data and image analytics, optimizing algorithm, artificial intelligence
- New ways in development of active pharmaceutical ingredients and in production of drugs
- The new curriculum focused on multi-disciplinary courses related to health and general approaches for health innovation
- Institutional strategies to promote a culture of health and wellbeing among students and employees,
- Advanced universities' contributions across electrical and biomedical engineering as well as emerging technologies which are influencing healthcare today: communication systems, computer science, sensing technology, etc.
- Contribution of universities to healthcare engineering education & training as well as for healthcare intervention: technologies for disease prevention, diagnosis, treatment and management, technologies for patient care, technologies for allied health specialties and engineering for dental and medical specialties, engineering for pharmacy.

We are looking forward to meeting you in Bucharest in September 2024!

Mihnea Costoiu Rector, NUST-Politehnica Bucharest crp2024-Host Harald Kainz crp Coordinator TU Austria

Programme, Day 1 September 20th, 2024

- 09:30 10:00 Arrival of participants at Conference Venue
- 10:00 12:30 **Campus Tour**
- 12:30 13:30 Registration and Buffet Lunch
 - 13:30 Accompanying persons' departure for afternoon programme (see page 7)
- 13:30 14:10 **Opening Session**
 - 13:30 13:40 Welcome by the crp2024 host Mihnea Costoiu, President, NUST-Politehnica Bucharest, Romania

13:40 - 14:00 Official Opening

Ligia Deca - Minister of Education and Bogdan-Gruia Ivan - Minister of Research, Innovation and Digitalization, Romania

- 14:00 14:10 **Introducing the Conference** Harald Kainz, crp Coordinator, TU Austria
- 14:10 18:00 **Keynote Speeches**

Chair: Harald Kainz, crp Coordinator, TU Austria

- 14:10-14:40 Continuous Health Monitoring for Preventive Medicine Thomas Deserno, TU Braunschweig, President European Federation for Medical Informatics
- 14:40-15:10 **Ulster's Connected Health Innovation Center** Chris Nugent, Ulster University, Northern Ireland, UK
- 15:10-15:30 Discussion
- 15:30 16:00 Break

Programme, Day 1 (continued) September 20th, 2024

16.00 - 17.30	Keynote Speeches	(continued)	١
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16:00-16:30	Digital Twins and AI in Biomedical Technology
	In-silico meets in-vitro/in-vivo
	Christian Baumgartner, TU Graz, Austria

- 16:30-17:00 **The impact of biomedical engineering and mechanics on vascular health and wellbeing** Stéphane Avril, Saint. Étienne, France
- 17:00-17:30 **Intelligent Health and Physical Sensors** Olga Korostynska, Oslo Metropolitan University, Norway
- 17:30-18:00 Final discussion and round up
- 19:00 Departure from rectorate building or walk from hotel

19:30 Gala Dinner

National Military Cercle, The Marble Hall Constantin Mille 1-3, Sektor 1, Bucharest

Programme, Day 2 September 21st 2024

09:00-11:00	Session 1:
	Chair: John Doran, President, TU Dublin, crp2023 Host
09:00 - 09:30	Technological and systemic approaches of biomechanics and bioengineering: from fundamental science to patient bedside applications at Université de Technologie de Compiègne Claire Rossi, University of Technology Compiegne, France
09:30 - 10:00	The new concept of Bioengineering Valley at Politehnica Bucharest Mihnea Costoiu, National University of Science and Technology Politehnica Bucharest, Romania
10:00 - 10:30	Aalborg Universities new mission-oriented approach to secure a learning healthcare system using digital technologies by 2040 Per Michael Johansen, Aalborg University, Denmark
10:30 - 11:00	New trends in medical robotics Bogdan Gherman, Technical University of Cluj Napoca, Romania
11:00 - 11:20	Discussion
11:20 - 11:40	Break
11:40 - 12:50	Session 2
	Chair: Mihnea Costoiu, Rektor, NUST-Politehnika Bucharest
11:40 - 12:10	Research and education in biomedical engineering at UPV: two decades of successful growth in joint initiatives Jose Capilla-Roma, University of Technology Valencia, Spain
12:10 - 12:40	Chemistry at the service of Health, how to develop a research and education strategy in a novel University context. Christian Lerminiaux, Chimie ParisTech-PSL, France
12:40 - 12:50	Final discussion

Programme, Day 2 (continued) September 21st, 2024

12:50 - 13:10	Conference Conclusions, Outlook and Closing
	Chair: Harald Kainz, crp Coordinator, TU Austria
12:50– 12:55	Conference Conclusions Mihnea Costoiu, Rector, NUST-Politehnika Bucharest, crp2024 Host
12:55 – 13:05	Outlook to crp2025 Rector Arkadius Wójs, Wrozlaw University of Science and Technology
13:05 – 13:10	Conference closing Harald Kainz, crp Coordinator, TU Austria
13:10 - 14:00	Buffet Lunch
14:00 – 18:30	Post-Conference Excursion
19:00	Farewell Dinner (see next page)





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Locations of the Conference Sessions:

September 20th and 21st, 2024 NUST- Politehnica Bucharest Splaiul Independenței 313, Bucharest, Romania RO-060042

Social Programme on September 20th and 21st, 2024

September 20th 2024

Morning (optional) 09:30 – 10:00 Arrival at NUST-Politehnica Bucharest 10:00 - 12:30 Campus tour (CAMPUS, Center of Advanced Research on New Materials, Products and Innovative Processes, PRECIS, Research Center of Innovative Products, Processes and Services)

> Afternoon: 13:30-17:00 Accompanying persons' programme, Bucharest: The Palace of Parliament

Evening: 19:00 Departure from rectorate building or walk from hotel

19:30 Conference dinner at National Military Cercle, Marble Hall (For the routes from the hotels to the dinner location separate information will be provided)

> September 21th, 2024 14:00 Departure from Conference site Post-Conference Excursion for Conference participants and accompanying persons:

> > Visit to Potlogi Castle

(https://www.potlogi.ro/)

and

19:00 informal farewell dinner at university restaurant Return to hotels about 22:00





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2024 Conference Host: Mihnea Costoiu Rector NUST-Politehnica Bucharest, Romania

2024 Conference organisation at NUST-Politehnica Bucharest:

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