



My Academic and Professional Association
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Re: UK–Kazakhstan Academic and Professional Networking Event

Theme: AI, Digital Twins and IIoT: Opportunities for UK–Kazakhstan Academic and Professional Collaborations

Date / time: Monday, 27 July 2026 / 10:00–12:00

Venue: 125 Pall Mall (Embassy of the Republic of Kazakhstan), London SW1Y 5EA

Organised by: My Academic and Professional Association (MyAPA)

Aim: To connect UK and Kazakhstani researchers and industry specialists, develop collaborative project ideas linked to AI, Digital Twins and IIoT, and identify relevant funding opportunities for further steps.

The programme

Time	Session	Speaker
09:45–10:00	Registration, coffee & informal introductions	All participants
Part 1		
10:00–10:05	Welcome and opening remarks	Arman Mazhikeyev, MyAPA and Dilyara Mussabekova, Press Attache, the Embassy of Kazakhstan
10:05–10:15	Development of a Digital Twin for a Food Industry Enterprise Using Artificial Intelligence and IIoT Technologies	Alikhan Amirkhanov, Al-Farabi Kazakh National University
10:15–10:25	Digital Twins for Industrial and Infrastructure Applications	Mahomed Suhale Baksh, Founder and Director, Polygon Project Engineers
10:25–10:35	Hybrid-AI Digital Twins for Industrial Heat-Exchanger Monitoring and Predictive Maintenance (TBC)	Francesco Coletti, CEO, Hexxcell
10:35–10:45	Modelling the Spread of Traffic Congestion Using Epidemic Theory	Assemgul Kozhabek, Heriot-Watt University
10:45–10:50	Joint discussion and Q&As	All speakers and participants
10:50–11:00	Coffee break and informal networking	All participants
Part 2		
11:00–11:05	<u>EPSRC Standard Research Grants: opportunities for UK-led international research collaboration</u>	Arman Mazhikeyev, MyAPA
11:05–11:10	<u>MSCA Doctoral Networks 2026 – Industrial Doctorates</u>	Alfiya Zakimova, East Kazakhstan Technical University
11:10–11:15	Explanation of the small-group exercise and formation of mixed UK–Kazakhstan groups	Nurbek Abdollayev, WMG
11:15–11:30	Small-group project-development exercise: discussion of funding calls, potential project ideas for joint applications	All participants in smaller groups

11:30–11:50	Group presentations: proposed ideas, potential consortium members and follow-up actions and feasibility	Group representatives
11:50–12:00	Consolidation of ideas, agreement on next steps and closing remarks	Arman Mazhikeyev

List of Participants

	Participant	Position	Organisation
1	Alikhan Amirkhanov	Junior Researcher / Computer science	Al-Farabi Kazakh National University alikhhan@fax.kz
2	Bauyrzhan Amirkhanov	Researcher / Computer science	Al-Farabi Kazakh National University baur@fax.kz
3	Gulshat Amirkhanova	Project Manager / Computer science	Al-Farabi Kazakh National University amirkhanova.g@kaznu.kz
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	Alfiya Zakimova	Head of Business School	East Kazakhstan Technical University A.Zakimova@lboro.ac.uk
	Mahomed Suhale Baksh	Founder and Director / Engineer	Polygon Project Engineers msbaksh@polygonprojectengineers.com
2	Francesco Coletti	CEO	Hexxcell
3	Dilyara Mussabekova	Press Attache	Embassy of the Republic of Kazakhstan d.mussabekova@mfa.kz
	Assemgul Kozhabek	Researcher / Transport Machine Learning	Harriot-Watt University A.Kozhabek@hw.ac.uk
	Nurbek Abdollayev	Researcher / Supply Chain Management	WMG, Warwick University Nurbek.Abdollayev.1@warwick.ac.uk
3	Hassan Mahmud	Lead AI/ML Technologist	Digital Catapult, London Hassan.mahmud@digicatatapult.org.uk
	Nasim Dadashiserej	Assistant Professor in AI	University of West London Nasim.Dadashiserej@uwl.ac.uk
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	Antonino Masaracchia	Lecturer in Computer Science	Queen Mary University of London a.masaracchia@qmul.ac.uk

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Automated Scientific Discovery (RAISE)

Call: HORIZON-RAISE-2027-01-01

Type: Horizon Europe Research and Innovation Action

Opening: 22 September 2026

Deadline: 2 February 2027

Funding: Approximately €10 million per project; three projects expected

This forthcoming call supports the development of **AI-enabled, closed-loop scientific experimentation systems**. In these systems, AI helps plan experiments, laboratory instruments or robots conduct them, results are analysed automatically, and the findings inform the next experiment. Human oversight, trustworthy AI, data security and ethical compliance must remain integral to the system.

Potential activities include agentic and adaptive AI, laboratory robotics, real-time analytics, predictive maintenance, interoperable scientific instruments, secure research-data infrastructure and collaborative experimentation across geographically distributed laboratories. The initial emphasis is materials science, with possible applications in batteries, photovoltaics, carbon capture, water purification, soil remediation, sustainable materials and food innovation.

The call is most suitable for laboratories that already have an advanced level of automation and digitalisation. It is **not a general call for ordinary industrial digital twins or IoT systems**. A digital twin would need to support automated scientific experimentation or AI-assisted scientific discovery.

International collaboration is encouraged. However, the eligible core consortium normally requires at least three independent organisations from three EU Member States or Horizon-associated countries, including at least one EU Member State. The UK counts as an associated country. Kazakh organisations can participate and are normally eligible for EU funding, but additional European partners will be required.

Questions for the group: What scientific experiment could be automated? What AI capability would be developed? Which laboratory has suitable equipment, data and automation? Which European partners are needed?

Call information is here https://topictree.ideal-ist.eu/topic/6992?utm_source

Lincoln AI

EPSRC (Responsive Mode)

Funder: UKRI – Engineering and Physical Sciences Research Council

Status: Open, with no fixed closing date

Funding: EPSRC normally funds 80% of the UK project's full economic cost

Duration and value: No prescribed maximum; the request must be proportionate and justified

EPSRC Standard Research Grants support discovery-led research in engineering and physical sciences. Relevant areas include artificial intelligence, digital twins, IIoT, information and communication technologies, manufacturing, infrastructure, energy, mathematical modelling and digital security.

Projects can range from feasibility studies to substantial multidisciplinary research programmes. They must generate significant new scientific or engineering knowledge; straightforward implementation of an existing commercial technology is unlikely to be sufficient. Collaboration with companies is encouraged where industry can contribute practical challenges, data, facilities, specialist knowledge, staff time or co-investment.

The application must be led and submitted by an eligible UK research organisation. Kazakh universities and companies may participate as international collaborators or project partners, but they cannot normally act as formally funded international co-leads. EPSRC funding would principally support the UK research team; substantive Kazakh research costs may require institutional, national or complementary funding.

A possible project could develop and validate AI-enabled digital twins and IIoT methods for predictive maintenance, energy efficiency or resilient industrial infrastructure, using UK and Kazakh case studies.

Questions for the group: What is the original research question? What new AI, modelling or digital-twin methodology would be developed? Who could lead from an eligible UK university? What data, facilities and contributions can the Kazakh and industry partners provide?

Official opportunity is here <https://www.ukri.org/opportunity/epsrc-standard-research-grant-nov-2023-responsive-mode/>

MSCA Doctoral Networks 2026 – Industrial Doctorates

Call: HORIZON-MSCA-2026-DN-01

Status: Open

Deadline: 24 November 2026

Overall call budget: €593.03 million

Purpose: International doctoral research and training

MSCA Industrial Doctorates support international partnerships in which universities, research institutions, companies and other non-academic organisations jointly recruit, train and supervise doctoral researchers. The research theme is flexible and could cover AI, digital twins, IIoT, predictive maintenance, smart manufacturing, energy systems, transport, infrastructure or food production.

Each doctoral candidate undertakes an individual research project within a coherent network-wide programme. Candidates receive joint academic and industrial supervision and must spend at least 50% of their fellowship in the non-academic sector. The programme should also provide research training, transferable skills, international mobility, industry exposure and career-development opportunities.

The minimum consortium normally comprises three independent organisations from three different EU Member States or Horizon-associated countries, including at least one EU Member State. For an Industrial Doctorate, the consortium must include academic and non-academic organisations. The UK is a Horizon-associated country. Kazakh universities and businesses can participate, but additional European partners are required to create the eligible core consortium.

Funding is organised around recruited doctoral candidates and includes living and mobility allowances, research and training activities, networking, management and indirect costs. This is not a conventional commercial R&D grant: doctoral training and researcher development must be central to the proposal.

Questions for the group: What common doctoral research theme connects the partners? What individual PhD projects could be created? Which universities could award the degrees? Which companies can provide supervision, placements, data and industrial facilities?

Official MSCA Doctoral Networks information is here https://rea.ec.europa.eu/funding-and-grants/horizon-europe-marie-sklodowska-curie-actions/msca-doctoral-networks_en

Small-group project-development exercise (15 min): instructions

Purpose

The exercise will bring together UK and Kazakhstani participants to identify shared interests and develop an initial collaborative project idea involving AI, digital twins or IIoT. The objective is not to prepare a complete proposal, but to identify a promising concept, potential partners and practical next steps.

Group exercise – 15 minutes

Participants will work in mixed UK–Kazakhstan groups. Each group should discuss:

- Challenge: What scientific, industrial or societal problem could the group address together?
- Project idea: What research, technology or solution could be developed?
- Funding: Which of the presented funding opportunities is the closest fit?
- Consortium: What expertise, data, facilities or industry cases can each partner contribute?
- Missing partners: What additional academic, industry or European partners are required?
- Next steps: What should happen after the event, who should lead and by when?

Someone from each group will briefly explain what they have achieved from the exercise:

- A provisional project title and central idea;
- The proposed role of AI, digital twins or IIoT;
- The preferred funding opportunity;
- Potential consortium members and missing expertise;
- Two or three immediate follow-up actions.

MyAPA will help consolidate the ideas (one person per small group to facilitate follow-up discussions) and introduce additional partners where required.

MY  APA