

# **IAEA Nuclear Knowledge Management School**

**ICTP Trieste, Italy  
Oct 20<sup>th</sup> - Oct 24<sup>th</sup>, 2025**

## **NKM School Aim**

The aim of the school is to provide specialized education and training on the development and implementation of nuclear knowledge management programmes.

## **Target Audience**

The school is designed for new and/or young professionals involved in nuclear education and training, knowledge management, and human resource development in the nuclear sector and supporting technologies.

## **NKM School Objectives**

1. To raise participants' awareness of knowledge as a key safety and economic asset in the nuclear sector including the importance of implementing an integrated approach to nuclear knowledge management in their organizations;
2. To review various dimensions of nuclear knowledge management as a key business management tool, including human resources, talent and information management;
3. To train participants on different knowledge management methodologies and practices;
4. To provide participants with an international educational experience and an opportunity for worldwide networking with current and future managers of nuclear knowledge management programmes.

## Day 1: Monday, October 20<sup>th</sup>

| Time          | Title                                                                | Speaker/Lecturer                                                                                                 | Room                            |
|---------------|----------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------|---------------------------------|
| 09:30 – 09:50 | Opening Session: Welcoming remarks                                   | <b>Claudio Arezzo</b><br>(Head of Math Section, ICTP)<br><b>Pedro Dieguez Porras</b> (Head of NKM Section, IAEA) |                                 |
| 09:50 – 10:05 | Introduction to the ICTP                                             | <b>Natasa Stojic</b><br>ICTP                                                                                     |                                 |
| 10:05 – 10:15 | Welcoming remarks from the International Atomic Energy Agency (IAEA) | <b>Yihui Dong</b><br>IAEA                                                                                        |                                 |
| 10:15 – 10:30 | Group Photo                                                          | <b>All Participants and Lecturers</b>                                                                            |                                 |
| 10:30 – 11:00 | Introduction of Participants and Lecturers                           | <b>All Participants and Lecturers</b>                                                                            |                                 |
| 11:00 – 11:30 | Coffee Break                                                         |                                                                                                                  |                                 |
| 11:30 – 12:00 | NKM School Objectives and Programme Overview                         | <b>Yihui Dong</b>                                                                                                |                                 |
| 12:00 – 12:30 | An Introduction to Knowledge and Knowledge Management                | <b>Yihui Dong</b>                                                                                                |                                 |
| 12:30 – 13:30 | Lunch Break                                                          |                                                                                                                  |                                 |
| 13:30 – 14:15 | KM Policy and Strategy and the Steps of KM Implementation            | <b>Gary Cairns</b>                                                                                               |                                 |
| 14:15 – 15:00 | National and Organizational Workforce Planning                       | <b>Yihui Dong</b>                                                                                                |                                 |
| 15:00 – 15:30 | Coffee Break                                                         |                                                                                                                  |                                 |
| 15:30 – 16:15 | Definitions and Main Principles of Knowledge Sharing Culture         | <b>Yihui Dong</b>                                                                                                |                                 |
| 16:15 – 17:00 | Project Work Introduction – start group work                         | <b>All Participants and Lecturers</b>                                                                            | <b>Break Out Rooms required</b> |
| 18:30         | Welcome Reception                                                    | <b>All participants and Lecturers</b>                                                                            | <b>Adriatico</b>                |

## Day 2: Tuesday, October 21<sup>st</sup>

| Time          | Title                                                                               | Speaker/Lecturer               | Room                     |
|---------------|-------------------------------------------------------------------------------------|--------------------------------|--------------------------|
| 09:30 – 10:00 | Critical Knowledge                                                                  | Yihui Dong                     |                          |
| 10:00 – 11:00 | NKM Risk Assessment - Theory                                                        | Evgeny Kulikov                 |                          |
| 11:00 – 11:30 | Coffee Break                                                                        |                                |                          |
| 11:30 – 12:30 | NKM Risk Assessment - Practical                                                     | Evgeny Kulikov                 | Break Out Rooms required |
| 12:30 – 13:30 | Lunch Break                                                                         |                                |                          |
| 13:30 – 14:15 | Implementation and the Assignment and Description of NKM Roles and Responsibilities | Yihui Dong                     |                          |
| 14:15 – 15:00 | Case Study 1 Nuclear Knowledge Management Program in Russian Federation             | Evgeny Kulikov                 |                          |
| 15:00 – 15:30 | Coffee Break                                                                        |                                |                          |
| 15:30 – 16:15 | Competency Mapping                                                                  | Gary Cairns                    |                          |
| 16:15 – 17:00 | Importance of Motivation and Communication in NKM                                   | Gary Cairns                    |                          |
| 17:00 – 18:00 | Project work                                                                        | All Participants and Lecturers | Break Out Rooms Required |

## Day 3: Wednesday October 22<sup>nd</sup>

| Time          | Title                                                   | Speaker/Lecturer               | Room                     |
|---------------|---------------------------------------------------------|--------------------------------|--------------------------|
| 09:30 – 10:15 | Knowledge Capture Methods (Theory)                      | Evgeny Kulikov                 |                          |
| 10:15 – 11:00 | Knowledge Capture Methods (Practical)                   | Evgeny Kulikov                 | Break Out Rooms required |
| 11:00 – 11:30 | Coffee Break                                            |                                |                          |
| 11:30 – 12:15 | Succession Management                                   | Gary Cairns                    |                          |
| 12:15 – 13:30 | Lunch Break                                             |                                |                          |
| 13:30 – 14:15 | Coaching and Mentoring for NKM                          | Gary Cairns                    |                          |
| 14:15 – 15:00 | Case Study 2 Risk analysis and expert knowledge capture | Gary Cairns                    |                          |
| 15:00 – 15:30 | Coffee Break                                            |                                |                          |
| 15:30 – 16:15 | Introduction to Information Management                  | Evgeny Kulikov                 |                          |
| 16:15 – 17:00 | Project Work                                            | All Participants and Lecturers | Break Out Rooms required |

## Day 4: Thursday October 23<sup>rd</sup>

| Time          | Title                                                                  | Speaker/Lecturer               | Room                     |
|---------------|------------------------------------------------------------------------|--------------------------------|--------------------------|
| 09:30 – 10:15 | Indicators for a Comprehensive NKM System                              | Gary Cairns                    |                          |
| 10:15 – 11:00 | Use and Importance of Lessons Learned and Corrective Action Programmes | Gary Cairns                    |                          |
| 11:00 – 11:30 | Coffee Break                                                           |                                |                          |
| 11:30 – 12:30 | NKM Self-Assessment (Theory)                                           | Evgeny Kulikov                 |                          |
| 12:30 – 13:30 | Lunch Break                                                            |                                |                          |
| 13:30 – 14:15 | NKM Self-Assessment (Practical)                                        | Evgeny Kulikov                 | Break Out Rooms required |
| 14:15 – 15:30 | Project Work                                                           | All Participants and Lecturers | Break Out Rooms required |
| 15:30 – 16:00 | Coffee Break                                                           |                                |                          |
| 16:00 – 17:00 | Project Work                                                           | All Participants and Lecturers | Break Out Rooms required |

## Day 5: Friday October 24<sup>th</sup>

| Time          | Title                                                                   | Speaker/Lecturer               | Room |
|---------------|-------------------------------------------------------------------------|--------------------------------|------|
| 09:30 – 10:30 | Exam                                                                    | All Participants               |      |
| 10:30 – 11:00 | Coffee Break                                                            |                                |      |
| 11:00 – 12:30 | Group Presentations                                                     | All Participants and Lecturers |      |
| 12:30 – 13:30 | Lunch Break                                                             |                                |      |
| 13:30 – 14:00 | Role of the IAEA                                                        | Yihui Dong                     |      |
| 14:00 – 14:30 | Survey/feedback discussion with all participants                        | All Participants               |      |
| 14:30 – 15:00 | Graduation and Distribution of Certificates Ceremony<br>Closing Remarks | All Participants and Lecturers |      |

# Lecturers

## **Yihui Dong, Knowledge Management Project Officer, IAEA**



Yihui Dong serves as a Knowledge Management Project Officer in the Nuclear Knowledge Management Section at the IAEA. Holding a Ph.D. in Geological Resources and Geological Engineering, she has over 16 years of experience in research and education, with specialized expertise in nuclear technology and its applications. Prior to joining the IAEA, she worked as a lecturer for seven years at the East China University of Technology. Dr. Dong has led and contributed to numerous international and national research projects, authored more than 50 publications, and supervised 13 master's students. Her professional expertise actively supports IAEA initiatives in nuclear education, capacity building, and knowledge management, particularly for the Nuclear Knowledge Management School.

## **Gary Cairns, Self-Employed Freelance Consultant and IAEA Expert**



Gary Cairns has 40 years' experience in the UK nuclear power, defence and allied industries and has held a wide range of senior management positions for various design, safety and risk management organisations in the UK. Gary is regarded by the IAEA as an expert in nuclear knowledge management and has taken part in many assist visits throughout the world helping governments, nuclear power plants, nuclear regulators and nuclear R&D organisations gain real benefit from adopting best practice approaches. Gary is an experienced facilitator and trainer and has developed and delivered MSc course material for nuclear knowledge management for a wide range of learners across Europe, North America and Asia.

## **Evgeny Kulikov, National Research Nuclear University MEPhI**



Evgeny Kulikov is head of laboratory and associate professor at the National Research Nuclear University MEPhI. He has PhD degree in the field of nuclear reactor physics. His professional interests include nuclear fuel cycle, fast reactor safety and non-proliferation. He provides lectures on the following courses: «Non-proliferation of Nuclear Materials», «Nuclear Knowledge Management» and conducts laboratory works of the following courses: «Dynamics and safety of nuclear power plants», «Methods and instruments of physical measurements», «Experimental reactor physics». He is representative of the Russian Federation in the International Forum Generation IV on education and training and serves as the IAEA expert in educational events.

# Joining Instructions

The NKM school will be held in the Abdus Salam International Centre for Theoretical Physics (ICTP) campus, the Giambiagi Lecture Hall (AGH), Strada Costiera, 11, I - 34151 Trieste (Italy).

The [Giambiagi Lecture Hall](#) is located on the Lower Level 1 of the Adriatico Guesthouse (at the top left hand side of the following site picture)



## HOW TO REACH ICTP CAMPUS FROM TRIESTE AIRPORT

- From Trieste "Ronchi dei Legionari" Airport to ICTP by bus:

The bus stops are located in the new "Intermodal Hub" connected to the airport through a footbridge. Check the display screens in the airport for bus departure times. At the airport, bus tickets can be purchased at the Agenzia Turismo FVG on the ground floor or from the automatic machine at the arrivals hall. The current cost of bus tickets is: Airport-Grignano: Euro 3.30.

Bus E51 runs from the airport to Trieste and has a stop at Grignano (pronounced greenah'no) close to the ICTP campus and the Adriatico Guesthouse. The Adriatico Guesthouse is downhill from the bus stop while the Galileo Guesthouse, the Leonardo Building and other ICTP buildings are uphill.

To find your way around ICTP campus and for further travel information, please visit our homepage at: <http://www.ictp.it/visit-ictp.aspx>

- From Trieste "Ronchi dei Legionari" Airport to ICTP by train:

Trieste Airport has recently opened a new train stop at its Intermodal Hub. Trains are run by Trenitalia; fares from the airport to Trieste Centrale cost Euro 4.05, and the trip takes

about half an hour. From Trieste Centrale to ICTP you can take bus 6 (direction Grignano) or a taxi.

Please note that bus tickets must be purchased before you board the bus; you can buy them at the tabacchi shop inside the train station situated by the front entrance.