

# The INSTA Launching!

(the International Nuclear Science and Technology Academy) **Empowering Educators and Advancing NST Education Programs** for the Tertiary Level in Asia Pacific Region

#### What is the INSTA?

The International Nuclear Science and Technology Academy (INSTA), was established in the Asia and the Pacific region with strong support from the International Atomic Energy Agency (IAEA) through the Technical Cooperation (TC) Projects RAS/0/079 and following RAS/0/091 aimed at educating secondary science students and teachers and supporting nuclear science and technology (NST) education at secondary and tertiary levels. The INSTA's vision is to foster empowered nuclear science and technology (NST) educators who can contribute to the safe, secure, peaceful, and beneficial use of nuclear science The INSTA's activities is guided by Steering Committee (SC), and technology globally. As of May 2025, INSTA boasts 50 comprising the Chair, Vice Chair & Executive Secretary, and Heads Institutional Members from 23 countries.

#### Mission of the INSTA

development through regional and inter-regional collaborations, INSTA Schools as Phase-2). Tertiary-level educators, in particular empowering educators, and advancing nuclear science and the newly designated ones, can begin their journey to expand technology education programs at the tertiary level. The key their pedagogical knowledge, interpersonal skills & emotional objectives are:

- education;
- current & emerging needs in NST education; and
- **NST** educators & stakeholders.

### The INSTA Steering Committee

Dr. Irman Abdul Rahman (Chair)

Dr. Maya Al Azri (Vice Chair)

Dr. Takeshi limoto (Executive Secretary)

Dr. Song Feng (WG1 Head)

Dr. Anas A. Alawafi (WG1 Vice-Head)

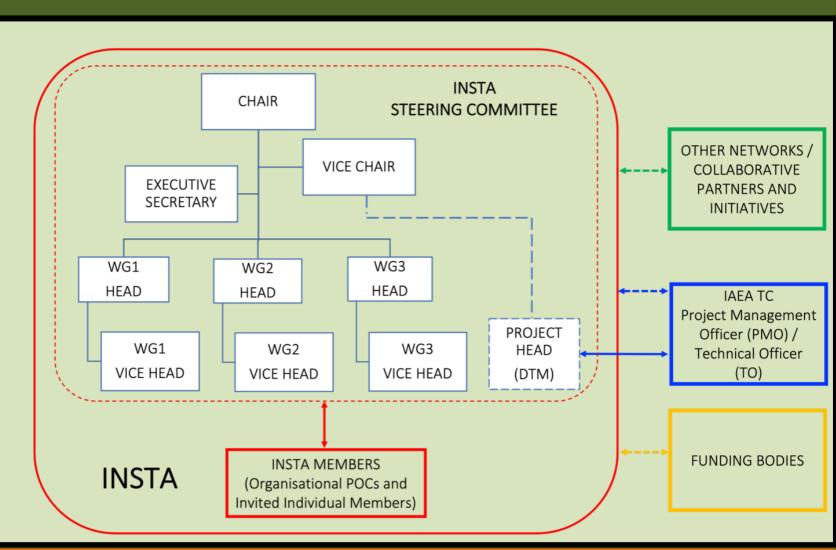
Dr. Keng Yerow Chung (WG2 Head)

Dr. Phanee Saengkaew (WG2 Vice-Head)

Dr. Yaser Kasesaz (WG3 Head)

Dr. Uththara Perera (WG3 Vice-Head)

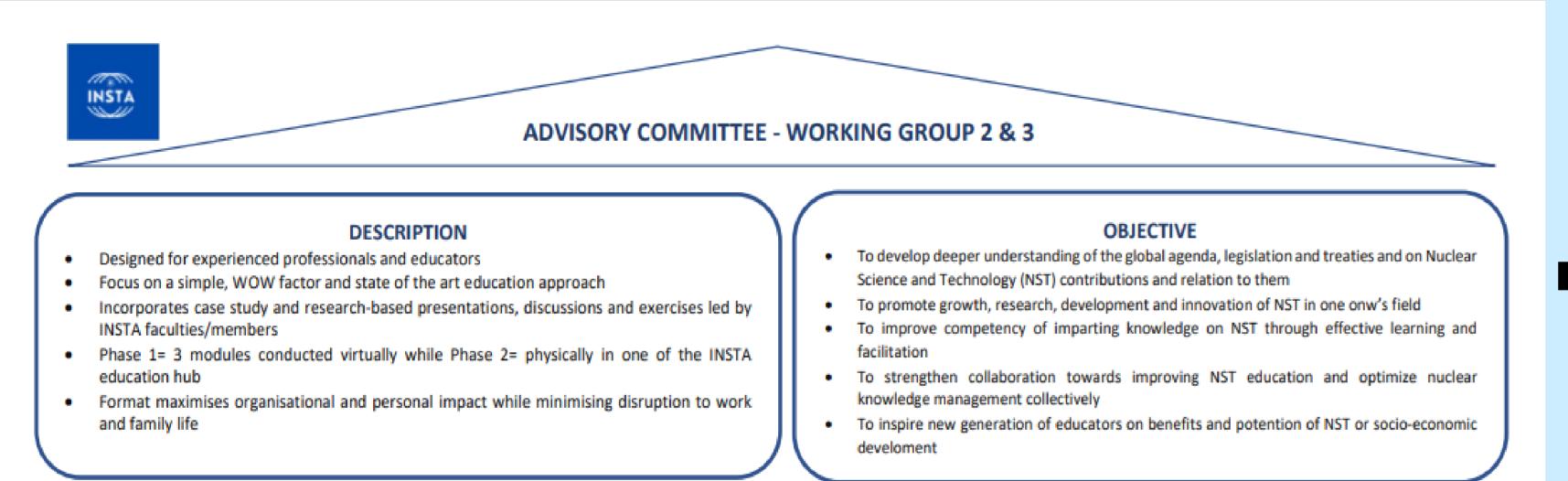
Ms. Ana Elena Conjares (Project Head)



#### **ACTIVITY of the INSTA**

& Vice-heads of three working groups (WGs); 1) WG1 focuses on Technical Coordination; 2) WG2 on Programme- & Platform-Development (including virtual training courses in three Modules The mission of INSTA is to enhance global nuclear manpower as Phase-1); and 3) WG3 on Special Programmes (including the intelligence to inspire and guide their students and of the global 1. Facilitating linkages amongst academic institutions & awareness of NST in Phase-1 through recommendation from stakeholders so as to optimise resources & advance NST another INSTA Institutional Member. Upon completing the courses of Phase-1 and gaining approval from the SC, the 2. Fostering educational programmes & platforms to address participants can proceed to Phase-2 by joining the INSTA on-site schools to be hosted by the INSTA Institutional Members. A 3. Envisioning and organising activities to engage and motivate certificate will be awarded by the SC upon completion of all required courses.

## Overall INSTA Executive Programme Framework



MODULE 1

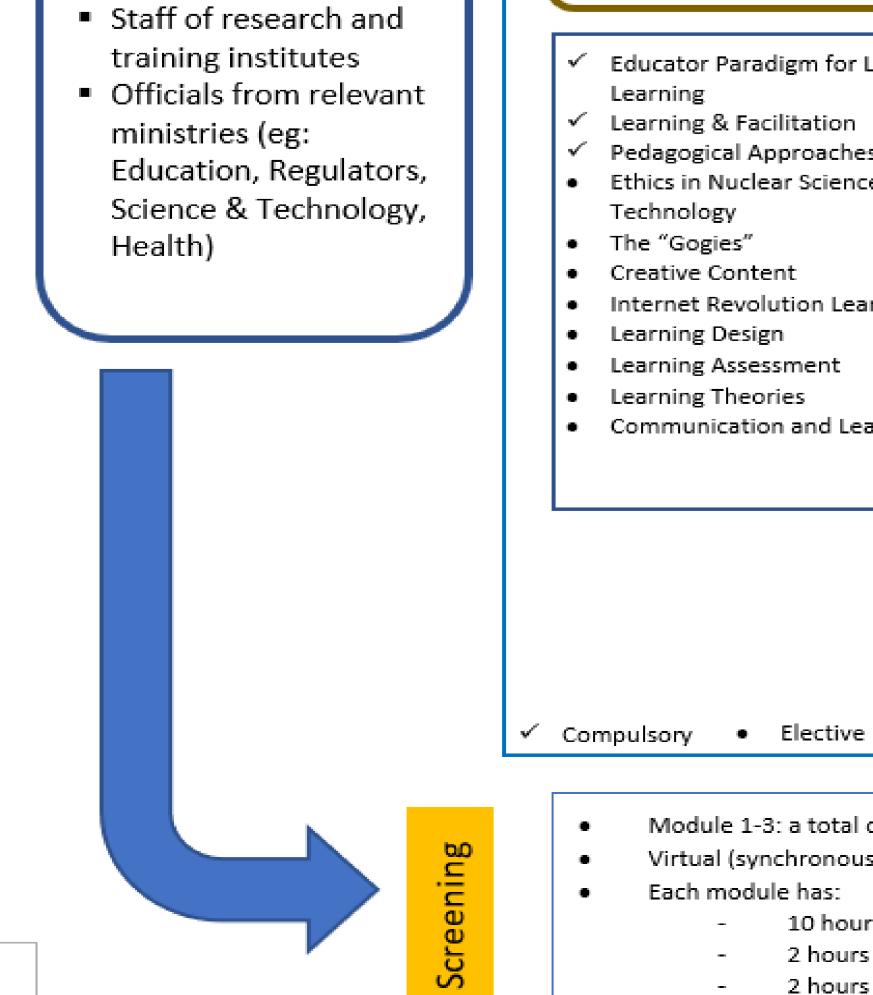
LEARNING APPROACHES &

- A Membership in the INSTA is widely open to any educational, R&D, training & other relevant institutes as well as national competent authorities including education, energy, health involved, or intending to be involved in NST education & training in the region. Each member institution designates a main & an alternate Point of Contact (PoC) for the INSTA.
- The Membership requests can be made in writing to a) INSTA.Contact-Point@iaea.org; and b) with the Membership Application form filled in via MS Teams online (see the top-right Barcode).

Phase 2



- Educators and
- academician



#### STRATEGIES FOR THE 21ST CENTURY TREATIES ✓ Educator Paradigm for Life-long ✓ UN SDGs and NST Contribution International Convention and Learning Treaties

- ✓ Learning & Facilitation Pedagogical Approaches
- Ethics in Nuclear Science and
- Technology • The "Gogies"
- Creative Content

- Learning Design
- Learning Assessment
- Learning Theories Communication and Leadership
- Protection Nuclear Security Internet Revolution Learning
- ✓ International Atomic Energy Agency and Partners Nuclear Safety and Radiation

Phase 1

MODULE 2

GLOBAL AGENDA, LAWS AND

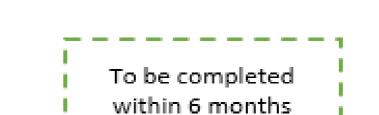
- Nuclear Safeguards
- International Cooperation **Education Networking**
- Contribution of NST in
- Achieving SDGs
- Nuclear Safety culture Cradle to Grave Nuclear Accident
- Technology ✓ Nuclear Knowledge Management Educators' Role in NST Radiation and Realism Human Health

✓ Principle of Nuclear Science &

MODULE 3

ROLES OF NST IN DEVELOPMENT

- Agriculture Food Safety Nuclear Power Plant for Energy and
- Non-electrical Applications Water Management
- Technology
  - Small Modular Reactor (SMR)
- Environmental Preservation Industrial Application of Nuclear Artistic, Archaeology and Heritage Nuclear Forensic
- **MODULE 4 EDUCATION HUB** INSTA SCHOOLS technical Advanced literacy Site visit/attachment
- Discussion/presentation/ report
- From 1 week to several months depending on the
- INSTA education Hub Focused thematic programme prepared by hosting INSTA Member



(≈ 7 hours/month



Option to enroll in Module 4 (Phase 2) ✓ Successful completion of Phase 1.1 ✓ Fast track eligibility through Formal assessment by Advisory Committee

Module 1-3: a total of 42 hours with 14 hours per module Virtual (synchronous & asynchronous)

- Each module has:
  - 10 hours lecture: 3 compulsory topics & 2 elective topics (live stream/recorded) 2 hours participants' presentation
- 2 hours group discussion \*Upon completion of each module, a certificate will also be given.