

# **Third International Conference on Human Resource Development for Nuclear Power Programmes: Meeting Challenges to Ensure the Future Nuclear Workforce Capability**



**Monday, 28 May 2018 - Thursday, 31 May 2018**

**Gyeongju, Republic of Korea**

## **Scientific Programme**

The objectives of the conference are to:

- Review developments in the global situation relating to human resource development (HRD) since the second IAEA conference on this subject (2014);
- Provide the participants with practical solutions that they can use at the organizational, national and international level to develop and maintain the human resources needed to support the safe and sustainable operation of nuclear power programmes;
- Emphasize the role of human resources and capacity building programmes at the national and organizational level for achieving safe, secure and sustainable nuclear power programmes;
- Provide a forum for information exchange on national, as well as international, policies and practices;
- Share key elements and best practices related to the experience of Member States that are introducing, operating or expanding nuclear power programmes;
- Highlight the practices and issues regarding HRD at the organizational and national level; • Consider education and training programmes and practices;
- Emphasize the role of nuclear knowledge management for knowledge transfer and HRD; • Elaborate on the role and scope of various knowledge networks; and
- Discuss practical considerations in the field of organizational culture and leadership in the nuclear sector.

## **Attract, Recruit and Retain a High Quality Nuclear Workforce**

This session will cover the following topics:

- 1)Workforce planning techniques, models and practices, including case studies of best practices and lessons learned in workforce planning for new build, operations and decommissioning;
- 2)Methods of attracting high quality personnel to careers in the nuclear industry, including examples of successes and challenges that have been overcome, instruments to support 'pipeline feeders' and next generation links;
- 3)Recruitment and selection strategies, techniques and processes to help overcome the challenges in the current recruitment climates; and
- 4)Accessing the global nuclear talent pool and multinational workforce challenges, retention strategy, techniques and practices, including use of different employment contract models and flexible contracts that attract part-time workers and nuclear industry retirees.

## **Development of Individuals and Teams within the Organizations**

This session will cover the following topics:

- 1) Managing employee engagement, recognizing and rewarding individuals or teams;
- 2) Ensuring effective teamwork, both internal to the organization and with suppliers and contractors;
- 3) Developing leaders to provide positive coaching when setting and communicating organizational values, ethics and standards; and
- 4) Effective career development for a nuclear worker life cycle.

## **Education, Training and Qualification of a Nuclear Workforce**

This session will cover the following topics:

- 1) The importance of educational courses to develop and support the nuclear workforce;
- 2) Modern developments, including 'co-operation' in initial and continuing training and qualification programmes for a nuclear workforce;
- 3) The role of future innovation and technology in nuclear education and training — opportunities and challenges;
- 4) Authorization, licensing and accreditation requirements for the future nuclear workforce;
- 5) Role of knowledge management and transfer across the HRD life cycle and understanding the challenges of task based vs knowledge based worker programmes;
- 6) Effectiveness of the training programmes in driving performance improvements and the question of 'return on investment'; and
- 7) The role of the nuclear instructor and trainer — models and activities.

## **Organizational Culture and Its Impact on the Workforce**

This session will cover the following topics:

- 1) Establishing a learning culture within organizations;
- 2) Workforce performance and monitoring for performance improvement, identifying performance gaps and their underlying causes;
- 3) Anticipating future staffing, competence and performance needs for the right organizational culture;
- 4) Fitness for duty — requirements for a nuclear workforce;
- 5) Leadership and culture for the nuclear sector
- 6) Organizational culture that sustains operational safety and security; and
- 7) Human performance tools and techniques.