Nuclear High-Temperature Heat for Industrial Processes

Tuesday, 19 September 2017

11:30 – 13:00

Room C4, C Building, 7th floor

The development of high temperature reactors is underpinned not only by its inherent safe design and operating efficiency, but also by its potential use for high-temperature process heat applications. The first advanced high-temperature gas-cooled commercial demonstration reactor will be commissioned soon and could pave the way for further deployments to serve the entire energy market, increasing the role of nuclear power beyond electricity generation.

This advanced nuclear technology is especially suited to support a broader variety for non-electric high temperature applications (e.g. hydrogen production, petro-chemical refineries and other industrial applications) with a consequential impact to reduce CO_2 emissions and to decrease the reliance on depleting hydrocarbon resources.

Member States are considering High-Temperature Nuclear Reactors for near and medium-term deployment and have expressed further interest in the commercial demonstration of high temperature (~300-800 ^{o}C) nuclear heat supply on an industrial scale.

The side event will highlight Member States' planned demonstration projects, review their technical status and inform the audience about IAEA activities in these areas. Speakers will provide information regarding technical features and issues, highlighting activities related to safety, licensing and regulatory oversight.

Chair: **Stefano Monti**
Section Head, Nuclear Power Technology Development Section
Division of Nuclear Power, IAEA Department of Nuclear Energy

Scientific Secretary: **Frederik Reitsma and Ibrahim Khamis**
Nuclear Power Technology Development Section, Division of Nuclear Power, IAEA Department of Nuclear Energy

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Programme

Opening Address	**Mikhail Chudakov** IAEA Deputy Director General Head of the Department of Nuclear Energy
Why nuclear cogeneration?	**Stefano Monti** Section Head Nuclear Power Technology Development Section
Status of HTR-PM construction and future prospects	**Yulong Wu** CEO, Chinergy
Activities in Europe	**Grzegorz Wrochna** International Cooperation Manager National Centre for Nuclear Research
Status of HTTR and Technology Developments for Near Term Deployment of Nuclear Process Heat Applications in Japan	**Xing L Yan** Head of Small-sized HTGR R&D Division Japan Atomic Energy Agency
HTGRs, GEMINI, the PRIME Concept and the U.S. Advanced Reactor Effort	**Donald R Hoffman** President and CEO, EXCEL Services Corporation
The A-HTR project in South Africa	**Dave Nicholls** Chief Nuclear Officer, ESKOM
IAEA activities in Nuclear High Temperature Heat for Industrial Processes	**Frederik Reitsma** Scientific Secretary, Nuclear Power Technology Development Section
Status of the Polish HTGR programme	**Józef Sobolewski** Director of Nuclear Energy, Polish Ministry of Energy
Discussions and Questions	