**NON-DESTRUCTIVE TESTING AND TECHNICAL DIAGNOSTICS**

**IN NUCLEAR INDUSTRY**

**Summer school for students and young specialists**

**Module 1 – Non-destructive testing of pipelines welded joints and equipment at Nuclear Power Plants**

**July 9 – 12, 2018**

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| **Monday** | | |
| - | Arrival of participants, checking into the hotel of INPE NRNU MEPhI |  |
| 10:00 |
| 10:00 | Registration, INPE NRNU MEPhI, Building 3 |  |
| 11:00 |
| 11:00 | INPE NRNU MEPhI, Building 3, 7th Floor, Conference Hall.  LECTURE 1. Obninsk Institute for Nuclear Power Engineering of the National Research Nuclear University MEPhI – History of personnel training for nuclear industry |  |
| 12:00 |
| 12:00 | INPE NRNU MEPhI, Dining Hall  Dinner |  |
| 13:20 |
| 13:20 | LECTURE 2. Non-destructive testing at NPPs: basic regulatory documents and experience gained at NPPs of Russian design in Russian Federation and abroad |  |
| 14:50 |
| 14:50 | INPE NRNU MEPhI, Building 3, Hall  Coffee |  |
| 15:20 |
| 15:20 | Technical tour at training facilities and laboratories of INPE NRNU MEPhI |  |
| 17:00 |
| **Tuesday** | | |
| 08:45 | INPE NRNU MEPhI, Building 3, Entrance  Access with security check |  |
| 09:00 |
| 09:00 | INPE NRNU MEPhI, Building 3, 7th Floor, Conference Hall.  LECTURE 3. Ultrasonic testing: physical fundamentals, data registration and processing, schemes and methods of testing. Instrument devices and automated systems. |  |
| 12:20 |
| 12:20 | INPE NRNU MEPhI, Dining Hall  Dinner |  |
| 13:20 |
| 13:30 | INPE NRNU MEPhI, Building 2, 3th Floor, Non-destructive testing lab.  Practical training 1 |  |
| 15:00 |
| 15:00 | INPE NRNU MEPhI, Building 2, 3th Floor, Non-destructive testing lab.  Practical training 2 |  |
| 17:00 |
| 17:00 | Day summary |  |
| 17:30 |
| 18:00 | Cultural program |  |
|  |
| **Wednesday** | | |
| 08:45 | INPE NRNU MEPhI, Building 3, Entrance  Access with security check |  |
| 09:00 |
| 09:00 | INPE NRNU MEPhI, Building 3, 7th Floor, Conference Hall.  LECTURE 4. Survey of NDT methods regarding to NPP applications (radiographic inspection, eddy current testing, magnetic particle inspection, liquid penetrant testing) |  |
| 10:40 |
| 10:45 | INPE NRNU MEPhI, Building 3, 7th Floor, Conference Hall.  LECTURE 5. Visual and dimensional inspection: basic instruments and regulatory documents |  |
| 12:20 |
| 12:20 | INPE NRNU MEPhI, Dining Hall  Dinner |  |
| 13:20 |
| 13:20 | INPE NRNU MEPhI, Building 2, 3th Floor, Non-destructive testing lab.  Practical training 3and 4 |  |
| 14:50 |
| 15-00 | INPE NRNU MEPhI, Building 2, 3th Floor, Non-destructive testing lab.  Practical training 5 |  |
| 17:00 |
| 17:0017:30 | Day summary |  |
| **Thursday** | | |
| 09:00 | Leypunsky Institute of Physics and Power Engineering – State Scientific Center of Russian Federation. Excursion on the first-in-the-world Nuclear Power Plant |  |
| 12:00 |
| 09:00 | INPE NRNU MEPhI, Building 2, 3th Floor, Non-destructive testing lab.  Practical training 6 |  |
| 10:35 |
| 10:45 | INPE NRNU MEPhI, Building 2, 3th Floor, Non-destructive testing lab.  Practical training 7 |  |
| 12:20 |
| 12:20 | INPE NRNU MEPhI, Dining Hall  Dinner |  |
| 13:20 |
| 13:20 | INPE NRNU MEPhI, Building 2, 3th Floor, Non-destructive testing lab.  Practical training 8 |  |
| 14:50 |
| 15:00 | INPE NRNU MEPhI, Building 3, 7th Floor, Conference Hall.  Presentations of school participants. Feedback and discussion. Summarizing and awarding with certificates.  School closing. |  |
| 17:00 |

Language of school: English

Number of participants: 20

Participation in the school is free. Participants themselves cover the costs associated with travel and accommodation.

**Information**

Registration: 1 March – 30 April 2018

Notification: till 9 May 2018

Duration: 9 – 12 July 2018

# **Contacts**

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