

NCTI is an independent knowledge and advisory centre providing know-how and advice for everyone professionally involved in insulation. It is NCTI's task to disseminate and advise in industrial and HVAC insulation all on behalf of the (petro)chemical industry, process industry, HVAC, power plants, pharmacy- and food processing industry, ship building and offshore, horticulture, cold stores or combinations of these markets.

# **Programme CINI-course**

# A. INSULATION TECHNIQUE I

- 1. Introduction **Insulation systems in the industry** (insulation materials & systems)
- 2. The CINI-manual (basics CINI-manual)
- 3. Use of **digital manual** (hands-on demonstration of the manual's digital possibilities)
- 4. Case **Hot insulation** (insulation case of a refinery)

#### B. INSULATION TECHNIQUE II

- 1. **Corrosion under insulation** (introduction to corrosion, corrosion under insulation and procedures)
- 2. **Quality** (QA/QC) (quality assurance and life cycle quality chain)
- 3. **Measurement specifications** (details of measurement specifications, factors and examples)
- 4. **Model specification** (introduction to an example of a specification with clarification of choices)

# C. INSULATION TECHNIQUE III

- 1. Theory
- 2. Case **Cold insulation** (insulation case in a dairy factory)
- 3. **HSE** (Health, Safety and Environment)

# D. INSULATION TECHNIQUE IV

- 1. **Insulation and energy** (energy savings, reduction of emissions, corporate social responsibility, infrared thermography)
- 2. **Acoustics** (introduction to acoustic specifications: design and installation)
- 3. **'Insulation in the field'** (good & bad practices of technical insulation)
- 4. Latest developments

(It is possible to extend the course with a practical on-site training, specifically developed for end-users. Employees will be trained on-site to review insulation(systems) in the field).

#### Objective and brief content of the CINI-course

In the course the background of the CINI-organization will be explained, as well as the structure of the CINI-Manual. Furthermore, conservation and measurement specifications will be covered. Practical techniques of insulation will be trained using several examples.

After attending the course you will be able to use the CINI-Manual and you will be able to select the application of several techniques, systems, insulation and finishing materials. You will also be able how to use the digital version of the CINI-Manual and how to apply measurement specifications according to the CINI standards. Furthermore an example of a standard specification will be discussed. You will have a better understanding of corrosion under insulation en QA/QC of insulation systems.

A closer look at basic skills of technical insulation and everything (in)directly related will be addressed during the course. The basics of corrosion under insulation and QA/QC will be reviewed thoroughly. The correct application of insulation materials according to issues like energy saving and emission reduction will be reviewed into detail.

# **Target groups:**

In case you are employed in the (petro)chemical and process industry, power generation, HVAC, pharmacy and food processing industry, ship building and offshore, horticulture, cold stores or combinations of these markets or when you are employed for an engineering agency or as a consultant/auditor and willing to broaden your knowledge in technical insulation and/or working with the CINI-Manual. This CINI-course provides the opportunity.

#### **Duration of the course:**

2 days

# **Number of participants:**

The maximum number of participants is 15. Minimum number of participants is 8.

#### Location

The course will be given in Spijkenisse, near Rotterdam, the Netherlands. With enough participants of the same company, the course can be given on location (worldwide).

#### **Costs:**

The costs per person is € 1.290,00. For large groups a quotation will be proposed. Prices are inclusive books, coffee-tea, lunches, exclusive VAT.

#### **General:**

The course will be given by teachers with a broad experience in the industry.

For (more) information, registration and rates, please contact:

