

IAEA Workshop on
“Safety Demonstration & Market Potential for High-Temperature Gas-Cooled
Reactors” (INT/4/141)
Sep. 27-30, 2004
Tsinghua University, China

Monday, Sep. 27, 2004

- | | | |
|-----------------------|------|------------|
| • Registration | INET | 8:30-10:00 |
|-----------------------|------|------------|

1. Opening session - HTR-10 design & safety demonstration test

Chairpersons: IAEA/INET

- | | | |
|---|-----------|-------|
| • Welcome & opening remarks | IAEA/INET | 10:00 |
| • IAEA project INT/4/141 on innovative nuclear reactors & fuel cycles | Kim | 10:10 |
| • Update on IAEA HTGR activities | Methnani | 10:20 |
| • HTR-10 design | Wu | 10:40 |
| • Safety demonstration test | Wu | 11:00 |
| • Discussion | all | 11:20 |
| LUNCH | | 12:00 |

2. Panel on Key HTGR Design Options

Chairpersons: Methnani/Kendall

Core Design & Fuel Management – Design Description, Constraints, Advantages/Disadvantages

- | | | |
|---|---------|-------|
| • Design options for core & fuel management | Kendall | 14:00 |
| • Pebble Bed | Slabber | 14:10 |
| • Prismatic Block | Baxter | 14:30 |
| • Plutonium-fuelled design | MINATOM | 14:50 |
| • Discussion | all | 15:10 |
| • COFFEE BREAK | | 15:30 |

Power Conversion System – Design Description, Constraints, Advantages/Disadvantages

- | | | |
|--|---------|-------|
| • Design options for power conversion system | Kendall | 15:50 |
| • PBMR PCU design | Slabber | 16:00 |
| • GT-MHR PCU design | MINATOM | 16:20 |
| • GTHTR-300 PCU design | JAERI | 16:40 |
| • HTR-PM Steam Cycle | Xu | 17:00 |
| • Discussion | all | 17:20 |
| Adjourn day 1 | | 18:00 |

IAEA Workshop on
“Safety Demonstration & Market Potential for High-Temperature Gas-Cooled
Reactors” (INT/4/141)
Sep. 27-30, 2004
Tsinghua University, China

Tuesday, Sep. 28, 2004

3. HTGR analysis methods & IAEA Coordinated Research Projects (CRPs)

Chairpersons: Ball/Sun

- | | | |
|---|------------|-------|
| • Core physics methods | Mulder | 9:00 |
| • Thermal analysis methods | Ball | 9:20 |
| • Fuel performance modelling methods | Verfondern | 9:40 |
| COFFEE BREAK | | 10:00 |
| • CRP-1&5: Validation of safety-related physics & performance evaluation | Brey | 10:20 |
| • CRP-2&6: HTGR coated fuel particle performance | Verfondern | 10:40 |
| • CRP-3: Heat transport & afterheat removal for gas-cooled reactors under accident conditions | JAERI | 11:00 |
| • Discussion | all | 11:20 |
| LUNCH | | 12:00 |

4. Panel on HTGR safety & licensing

Chairpersons: Gasparini/Brinkmann

- | | | |
|---------------------------------------|-----------|-------|
| • LWR vs. HTGR safety characteristics | Kendall | 14:00 |
| • IAEA licensing guidelines | Gasparini | 14:20 |
| • German licensing experience | Brinkmann | 14:40 |
| • China licensing experience | Zhao | 15:00 |
| COFFEE BREAK | | 15:20 |
| • US licensing experience | Rubin | 15:40 |
| • Panel discussion | all | 16:00 |
| • Adjourn day 2 | | 17:00 |

**IAEA Workshop on
& Market Potential for High-Temperature
Reactors” (INT/4/141)
Sep. 27-30, 2004
Tsinghua University, China**

Wednesday, Sep. 29, 2004

5. Panel on HTGR market potential

Chairpersons: PBMR/JAERI

- | | | |
|---------------------------------|----------|-------|
| • PBMR market potential | Slabber | 9:00 |
| • Hydrogen market potential | JAERI | 9:20 |
| • Desalination market potential | Methnani | 9:40 |
| COFFEE BREAK | | 10:00 |
| • Panel discussion | all | 10:20 |
| LUNCH | | 12:00 |

6. Panel on user requirements

Chairperson: Kupitz/Kim

- | | | |
|---------------------------------|--------|-------|
| • Overview of the INPRO project | Kupitz | 14:00 |
| • GEN-IV vis-à-vis INPRO | INPRO | 14:20 |
| • User requirements & criteria | INPRO | 14:40 |
| • Panel discussion | all | 15:00 |
| COFFEE BREAK | | 15:20 |
| • Panel discussion cont'd | all | 15:40 |
| • Adjourn day 3 | | 17:00 |

IAEA Workshop on
“Safety Demonstration & Market Potential for High-Temperature Gas-Cooled
Reactors” (INT/4/141)
Sep. 27-30, 2004
Tsinghua University, China

Thursday, Sep. 30, 2004

7. HTR-10 visit & safety demonstration results

Chairperson: Xu/Wu

- | | | |
|--|------|-------------|
| • Orientation and safety demonstration results | INET | 10:00-12:00 |
| • Closing remarks | IAEA | 12:00 |
| • Adjourn day 4 | | 12:10 |