

*7/25/01  
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## **Safety Aspects of HTR Technology**

**Visit of the NRC – Delegation to Germany**

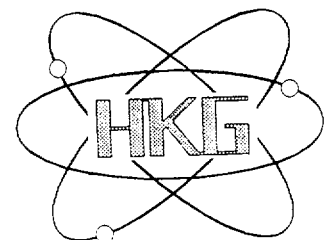
**23 to 27 July 2001**

**THTR operation experience, test programs,  
overview, highlights, lessons to be learned**

Guenther Dietrich  
Ivar Kalinowski

Juelich, 25 July 2001

**HOCHTEMPERATUR-KERNKRAFTWERK**  
GESELLSCHAFT MIT BESCHRÄNKTER HAFTUNG  
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# **THTR operation experience, test programs, overview, highlights, lessons to be learned**

**Guenther Dietrich, Ivar Kalinowski**

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## **Literature**

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- R. Baeumer**      THTR 300 – Erfahrungen mit einer fortschrittlichen Technologie,  
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I. Kalinowski**      THTR Commissioning and Operating Experience,  
Dimitrovgrad, June 1989

# Resume

- **THTR 300 a prototype reactor**
- **THTR 300 the first step to commercialization of HTR in Germany**
- **Availability and outage times typical for prototype**
- **no problems with core**
- **design data reached and verified**
- **unavailability mainly given by refueling system**
- **low coolant gas radioactivity**
- **negative temperature coefficient verified**
- **airborne and waterborne release of radioactivity well below licensed limits**
- **low individual dose rates in operation and outages**



**THTR 300**  
**Operation experience**

**July**  
**2001**