

Arbeitsplatz

- 3½-Diskette (A:)
- System (C:)
- (D:)
- G_4320 auf 'psi10' (G:)
- L_lvv auf 'psi10' (M:)
- Protokolle
- QMS-HANDBUCH
- QMS-Listen AW's - TMs
- QMS-VORLAGEN
- SAV - SAP - AW's
- Technische Mitteilungen
- Teilprojekte - EDEN
- Teilprojekte - Fortgeschri
- ABB-KKL FPP-A8
- BN - Ariane - WB43
- BN - LEIGARD

erzeichnissberechtigungen

Verzeichnis: M:\Microchemie\Fortgeschrittene Brennstoffzellen\BN - Ariane

Benutzer: leopold

Berechtigungen für alle Benutzer dieses Systems

Berechtigungen für ausgewählte Benutzer dieses Systems

Name	Berechtigungen
ingold (Franz Ingold)	Vollzugriff (Alle) (Alle)
kopajtic (Zlatko Kopajtic)	Ändern (RWXD) (RWXD)
L_LWV	Lesen (RX) (RX)
ledergerber (Guido Ledergerber)	Vollzugriff (Alle) (Alle)
leopold (Ines Leopold)	Ändern (RWXD) (RWXD)
weiss (Eva Weiss)	Ändern (RWXD) (RWXD)
wernli_b (Beat Wernli)	Vollzugriff (Alle) (Alle)

ZERTIFIKAT ◆ CERTIFICATE ◆ 認 証 証 書 ◆ СВИДЕТЕЛЬСТВО ◆ CERTIFICATO ◆ CERTIFICAT

ZERTIFIKAT



Die Zertifizierungsstelle
der TÜV (Schweiz) AG
bescheinigt,
dass das Unternehmen

**Labor für Werkstoffverhalten
des Paul Scherrer Institut**
Forschungsbereich NES
CH-5232 Villigen, Schweiz

für den Geltungsbereich

Untersuchungen von stark radioaktiven
Materialien sowie Herstellung
innovativer Brennstoffkeramiken

ein Qualitätsmanagementsystem eingeführt hat
und anwendet.

Durch ein Audit, Bericht-Nr. AB-96QZ138
wurde der Nachweis erbracht, dass die Forderungen der
EN ISO 9001: 1994

erfüllt sind. Dieses Zertifikat ist gültig bis 05 / 2002

Zertifikat-Registrier-Nr. 99-138-024

Thun, 07.06.1999

P. J. [Signature]
Zertifizierungsstelle
der TÜV (Schweiz) AG

Ein Dienstleistungsunternehmen des TÜV Südschweiz und
der SWV Schweiz sowie Tochterunternehmen der Wälzlagerwerke AG Thun



SCES 013



Der Weg war das Ziel

- Better definition of functions, processes and organisations
- Thinking in functions and not in persons
- Definition of tasks and competence
- Improvement of the planning process
- Assessment of performance and keeping records

Outlook

- Milestone: Audit in year 2000
- Continuous improvement process needs to be established
- Effort must not slow down
- Proven, constant quality in experiments and accreditation of methods has to be achieved

EN ISO 9001 Certification of a Hotlab

F. Groeschel, G. Ledergerber, G. Bart
Paul - Scherrer - Institut/CH-5232 Villigen

European Working Group
"Hot Laboratories and Remote Handling"
13-15 October 1999

Das PSI...



Scientific excellence,
promotion of interdisciplinary
research,
"market" orientation,
development of leadership

PSI Guiding Principles

Is a certified quality management system a prerequisite for quality ?

⇒ Not necessarily, but it may help

For hotlabs, carrying out PIE, a certified QMS according to an accepted standard becomes essential

- requested by customers (vendors and utilities)
- favoured by authorities
- for some investigations accreditation according to EN 45001 is mandatory (e.g. surveillance tests)

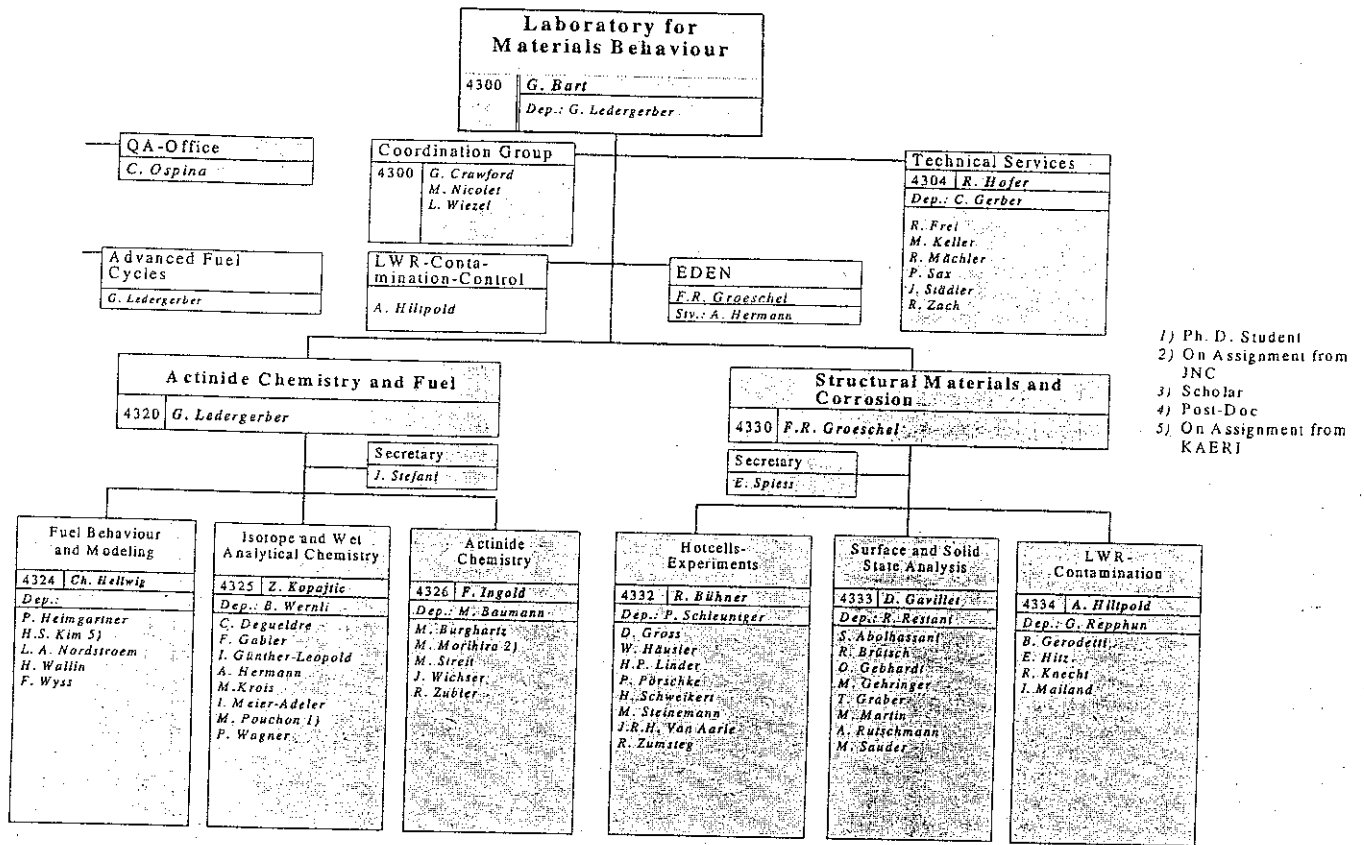
History

- National research institutes are relatively strongly controlled from the administrative perspective
- Operation of a hotlab is under tight supervision of authorities, requiring
 - ⇒ an operation manual to be approved each year
 - ⇒ regular operation reports
 - ⇒ safety assessments
- Specifications and procedures for analysis methods have been written (mostly during short periods followed by long periods of idleness)
- A QS-plan had been imposed by one customer and was introduced in 1995 for PIE projects with this partner

A good basis to start the project to establish a Quality Management System (QMS) certified according to accepted standards

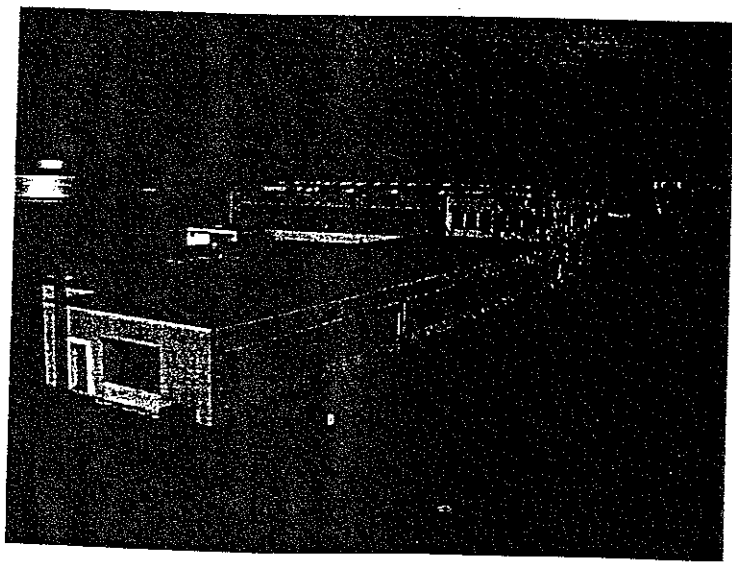
The Approach

- Certification according to what standard ISO 9001/9003 or EN 45001 or ISO 14001?
 - All functions and processes of the laboratory should be covered
- Certification or Accreditation?
 - QMS first, accreditation of methods later
- What organisations should be included?
 - Laboratory for Materials Behaviour and Hot Laboratory
- Who should be the certifying body?
 - Result of an assessment
- Should the QMS be process or function oriented (covering most of the 20 elements)?
 - Function oriented
- Which elements are relevant for a research lab?
 - 15 Elements



- 1) Ph. D. Student
- 2) On Assignment from JNC
- 3) Scholar
- 4) Post-Doc
- 5) On Assignment from KAERI

MAQMS-HANDBUCH - CG4301 - Verantwortung der Leitung/Organigramme LWV - SE43/ORG-Englisch-Folie.doc
August 4th, 1999 /E. Spiess, LWV



Construction : 1963

Extensions and Modifications in 1968, 1981 and 1995

Building Surface: 2547 m²

Building Volume: 29059 m³

Personnel (Staff and Users): about 80

Electricity 2520 MWh/year

Water 31`000 m³/year

Ventilation 90`000 m³/h

Sources of information:

- Get information from already certified companies
- Ask certification bodies
- Ask the partners



Project Start in
1996

Establishment of a
Quality Manual

Team:
Management of
Laboratory and a PSI
QS officer

Time Frame:

After first steps:

External consultant to moderate and assist in writing the quality manual

LWV - Quality Management System

Objective

- Define processes and make them transparent

Formalising processes helps to avoid mistakes and - if they happen - helps to remedy them

- The LWV QMS shall comply with
 - ⇒ the requirements of EN ISO 9001
 - ⇒ the national and international regulations for handling radioactive material

Field of Application

- The LWV QMS shall be applied for
 - ⇒ basic research, contract research and services
 - ⇒ handling of radioactive material
 - ⇒ safety at work; fire protection, etc.
- The LWV QMS applies to the
 - ⇒ Section "Nuclear Fuel and Actinides"
 - ⇒ Section "Structural Materials and Corrosion"
 - ⇒ Hotlab technical services and co-ordination group
 - ⇒ other permanent users of the hotlab with respect to safe operations within the hotlab

LWV - Quality Management System

	Structure	
Documentation		Contents
Level 1	Quality Manual	General Rules
Level 2	Laws Standards, Instructions, Standard Operating Procedures	Administrative and Quality Instructions Processes
Level 3	Orders, Protocols, Forms, Lists, Safety Relevant Data, Flow Sheets, Log Books, Quality Records, Reports	Tools, Records

GF43/WG_Hollab/13.10.99

LWV - QMS

Quality Records - Documents

administrative / safety relevant	project related
protocols of lab/group meetings	request for contract negotiation
safety relevant data (fissile material inventory, correspondence with authorities)	contracts, work statements
annual operational report	internal research projects
log books (equipment related documents, purchase orders)	project orders, work orders
QMS documentation	data (work protocols, data files, lab journals)
QMS assessment	project meeting protocols
	reports
	project assessments

GF43/WG_Hollab/13.10.99



Was QMH-Element	Alt		Neu		Begründung Art der Änderung
	Stand Version	Datum	Stand Version	Freigabe	
00 Einleitung	Rev. 0				NEU
01 Verantwortung der Leitung	Rev. 0				NEU
02 Qualitätsmanagementsystem	Rev. 0				NEU
03 Vertragsprüfung	Rev. 0				NEU
04 Prozess- und Designlenkung	Rev. 0				NEU
05 Lenkung von Dokumenten	Rev. 0				NEU
06 Beschaffung	Rev. 0				NEU
07 Lenkung der vom Kunden beigestellten Produkte			LEER, da in 06 integriert		
08 Kennzeichnung und Rück-	Rev. 0				NEU
09 Prozesslenkung			LEER, da in 04 integriert		
10 Prüfungen	Rev. 0				NEU
11 Betriebs-, Produktions- und Prüfmittelüberwachung	Rev. 0				NEU
12 Prüfstatus			ENTFÄLLT		
13 Lenkung fehlerhafter Produkte	Rev. 0				NEU
14 Korrektur- und Vorbeugungs- massnahmen	Rev. 0				NEU
15 Handhabung, Lagerung, Ver- packung, Konservierung und Versand	Rev. 0				NEU
16 Lenkung von Qualitäts- aufzeichnungen			LEER, da in 05 integriert		
17 Interne Qualitätsaudits	Rev. 0				NEU
18 Schulung	Rev. 0				NEU
19 Kundendienst			ENTFÄLLT		
20 Statistische Methoden	Rev. 0				NEU

Freigabe:

Datum:

Explorer - L_lvv auf 'Psi10' (M:)

Start | Suchen | Ansicht | Extras | Hilfe

L_lvv auf 'Psi10' (M:) [Buttons]

ALLES ERGEBNISSE

- Desktop
 - Arbeitsplatz
 - 3,5-Diskette (A:)
 - Pc1390_c (C:)
 - G_4320 auf 'Psi10' (G:)
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 - Protokolle
 - QMS-HANDBUCH
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 - ABB-KKL FPP-A8
 - BN - Ariane - WB43
 - BN - FIGARO
 - BN - M-109 - LG43
 - BN - NOK M-308 - LG43
 - IMF - Inertmatrix DC43
 - ENC '98 Paper Burghartz et al
 - Infra - Auflösezeile - WP43
 - Infra - FIXBOX - WP43
 - KAERI-PSI - HP43
 - SPF - PNC PSI - LG43
 - Teilprojekte - LWR-Kontamination
 - Teilprojekte - LWV
 - Scratch auf 'Scratch0' (S:)