

Claudia Reuter
Zu den Schafhofäckern 132
73230 Kirchheim unter Teck/ Germany
Tel: 07021/8077650
Email:reuterc@bawue.de

Education:

Physics diploma Universität Regensburg,
Thesis: "Moessbauer spectroscopy on ultra thin magnetic FeTb layers"

2012/13 – 2016: Technology and process consultant: BUDATEC GmbH, producers of vacuum solder equipment for SMT and hermetic seal.

- Support for process development: Microwave plasma technology and vacuum soldering.
- Helping with EU project application: Advantages of plasma pre-treatments for solder processes and surface conditioning of SMD components.

Implementation **ISO 9001:2008/15** incl. QM-Manual and process descriptions.

Parallel starting remote studies „BS. Psychology“ at „University Hagen“.

2011/12 small **projects** data management/Software-development (LAMP-based, Mac OS X server/clients) for landscape gardening business.

- Software for building a catalogue of services, resource management and pre/post calculation for acquisition and controlling.
- Helping with legal requirements for document storage, business software (Lexware), archive & backup for invoices, bills, correspondence etc.

Seminary talks: Statistics in quality management.

3/2009 -09/2010 Consultant at EADS/Cassidian/Airbus

Projects with Dpts. Microwave hybrid module production line (QS, Qualification for compliance acc. IEC 60748-23) and PCB technology (QS acc. IPC A 600 ff, IPC A 610 etc.).

- Quality process optimising for boards and components „in house“ and supply chain.
- SAP Q-Module: Customising defect catalogue, problem-reporting and rework cycles.
- Evaluation of post bond inspection tool by Delvotec, building automated data interface into Oracle DB.
- IT Consultancy: Database server (Linux) for Oracle DB, to store measurement results from in-line monitoring within microwave factory (networking production equipment datalogs and inspection tools output) for later evaluation.

2007/2008 Training & course work to obtain certificates for Q-Management (Auditor, Manager, Q-Tools for ISO9001, TS16949)

- Internship at FESTO and UMS to get audit practice.

2001 - 2007 Intermedia GmbH, a daughter of publishing house W.Kohlhammer GmbH,Vaihingen.

Project: HACMP Cluster: DB-applications (subcontractor Bull GmbH) und SAP/R3 implementation (Partner CENIT AG).

Project Volume:

ESCALA RL und EPC 610 (Bull), SAN Storage DAS 5300 (EMC) AIX, HACMP, ORACLE 7-9i, Lotus Notes, Riedemann & Partner (publisher customer database software), LASSY Logistics, SAMBA Fileservice, Legato Networker,

IBM H70, S-SCSI Storage, AIX, HACMP, SAP/R3,Tivoli Storage Manager, Nagios, NetVault Backup Server (ndmp)

Linux Blade Servers – Suse Linux Enterprise: Sauron, cups, samba, mail, apache, tomcat, mysql, dhcp, bind, ssh, clamav, spam assassin, Bacula etc.

Project: Install and configure Netapp NAS storage filer to replace s-scsi array.

Project: Interfacing of mass output management system „Accelio Jetform“ to SAP and development of QS-Software for control and tracking.

Project: Data interfaces to bring together smoothly 3 different ERP systems.

Project: Disaster-Recovery measures for all central services

Administrative Tasks:

- SAP Basis
- Data migration within SAN/NAS (Netapp Filer, EMC)
- SAP-Archive
- Administration and optimisation of central services
- Monitoring processes to assure uptime
- Support for all Publishing Stations (Mac OSX)
- Capacity planning

1999 -2000 Dialog Semiconductor GmbH, Kirchheim u. Teck

Project: Building IT-Infrastructure from scratch for a fabless semiconductor company:

LAN/WAN/Security, Unix (Sun Solaris), SAN, central services (samba, DHCP, bind, squid, lpd, mail, tkined (scotty), mrtg etc.). Disaster recovery measures (Legato Networker, backup & archive).

Planning, acquisition, installation, configuration, administration, optimising. Y2K intervention.

User support (CAD Tools Cadence & MentorGraphics)

Project volume:

- Ca. 300 users, six subsidiaries, 3 international (USA,UK,Sweden)
- 70% „power-users“ (design, layout and test engineers)
- 7/24 High Volume Chip Test environment (20 test systems „Credence“ w. SunOS 4.2)
- SUN E450 Cluster (Veritas VCS) with SAN Storage,
- optical fibre LAN, active components Nortel (Switches, Central Switch),
- 70 Design/Layout stations,
- WAN-connection over encrypted „leased line“ (Telekom).
- Checkpoint FW1 and virus scanner installation, configuration.
- Secure-ID, kerberos installation, configuration.
- Oracle DB

ICA III, University Stuttgart (10/1994-12/1998) Scientific work during thesis:

- Simulation of material flow effects in conducting patterns (electromigration)
- Geometrical preprocessor for hexaeder and Voronoi 3D meshes.
- Adaption of discretising algorithms to heavily anisotropic problems.
- Interface from diffusion (CFD) Problem to structural and thermal problem (FEM) with multigrid solvers – using UG package from ICA III as basis.

Research scientist: IMS (Institute for Microelectronics Stuttgart) (8/1990-9/94)**Projects: Process development and semiconductor technology assessment:**

- Ion implantation (As, Sb, P, B, N):
- Prozess optimisation and simulation (TMA tools), SPC, maintenance of EATON ion implanters.
- PVD of metal layers (AlSi, AlSiCu, AlSiTi); silicides (TiSi, PtSi), silicon oxide and nitrides, reactive sputtering of diffusion barriers.
- (Ti/TiN): Prozess development, machine specifications
- Aquisition and maintenance (MRC 603, Leybold Z590).
- Tutoring of Diploma thesis: „Ti/TiN diffusion barriers in CMOS-processes“ in cooperation with Max-Planck-Institute for metal physics Stuttgart.
- Characterisation of metal and barrier layers for in-house 1.2 µm und 0.8 µm CMOS-technology: Electrical tests, TEM, Auger spectroscopy, SEM, EDAX.

Project: JESSI Technology Assessment AC41 WP4

- Evaluation of reliability issues within different submicron CMOS technologies.(0.8-0.35 µm)
- Design of test structures und measurement methods for reliability testing and process characterisation: Metal and barrier, conductor and contact/via layers.
- Utilisation of results for process improvements:
- New PCM-structures for test and inline monitors.
- Highly accerated tests for monitoring layer quality in oxides (TDDB) or metals (electromigration).
- Software for automated testing (wafer prober), data evaluation and statistics.

Project: Exploration of mechanisms underlying electromigration.

- Evaluation of 1/f-noise-spektroskopie as tool for electromigration analysis: (Cooperation with „Institut for metal physics“, Max-Planck-Institut Stuttgart-Buesnau, published August 93 within

ICNF-conference in St.Louis).

- Sub-Project: FEM (ANSYS) Analysis to generate ideal test parameters for evaluation of acceleration factors.

Project: Long term defects in dielectrics. (TDDDB) – building test setup.

Project: Development of sensors and monitors for temperature, humidity, mechanical stress: Design, layout, test setup.

Project: SW-Development for microlithography (ebeam & laser direct writing):

- Evaluation and improvement of data conversion software for laser direct writing
- Development of a postprocessing tool for ebeam direct writing, which allows local dose correction for critical patterns and topography.
- Development of pattern verification software (like ChipCheck for masks) for direct write data.
- Development of monte carlo simulation software for electron beam: Modelling exposure and developer profiles.

1989/90 **Physics Diploma** (Ms.Sc.), University of Regensburg, Bavaria, Germany.

Thesis: PVD of ultrathin magnetic FeTb and FeZr Layers as alloy or multilayer-system.

Characterisation of magnetic and structural properties with Moessbauer Spectroscopy (low temperature CEMS), x-ray fluorescence, TEM.

Building of experimental setup, including datalink, from scratch.

Software development: Fit algorithms for hyperfinefield parameters and data visualisation. Completely GUI & menu-driven (oo program package GFA Basic, first of its kind) program: Moessbauer Spectra Fit for amorphous and nanocrystalline materials, which evaluates distribution functions of magnetic momentum from Zeeman-Split parameters, quadrupole split and isomer shift.

Additional skills:

Web:	CSS,HTML, java-script, VRML,
Web-Services:	apache, tomcat
Shell	tcsh, bash, ksh, perl, tcl/tk
Tools:	CVS, GNU-tools (make gcc ...), SVN
Languages::	Python, C, Fortran 77/90, diverse BASICs (real time), GFA-Workbench, SQL, ABAP, PHP
IT-services:	SAMBA, CUPS, BIND, NFS, NIS, MRTG, DHCP LDAP, Checkpoint FW-1, Lotus Notes, VMWare, Docker, nagi
OS:	UNIX(Solaris, Irix, AIX), Linux(es), MAC OS X, TOS/Gem
Disaster-Recovery :	TSM, NetVault, Legato Networker, Bacula
HA:	HACMP, Veritas Cluster + FS, heartbeat
SAP:	Q, MM, Output Management (developing), Jetform (accelio)
DB:	ORACLE 8,9,10, mysql, POSTGRESQL, INGRES
Simulation:	PSPICE, TMA-Tools, ANSYS, UG (ICA in-house sw)
Layout:	Calma, Valid, Cadence,Compass Tools
Publishing:	Quark Express, InDesign, Photoshop CS, gimp, Suitcase Fusion
CMS:	typo3, wordpress