

CURRICULUM VITAE (FOR INDIVIDUAL ASSIGNMENTS)

Proposed role in the project:

Category:

1. **Family name:** Guckelsberger
2. **First names:** Kurt, Rudolf, Adolf
3. **Date of birth:** 1941-08-14
4. **Nationality:** German
5. **Civil status:** married
6. **Education: University degree**

Institution [Date from - Date to]	Degree(s) or Diploma(s) obtained:
Univ. Munich [61-64]	Physik Vor-Diplom
TH Munich[64-67]	Physik-Hauptdiplom
Univ-Grenoble [1973]	Doctorat d'Etat es Sciences Physiques

7. **Language skills:** Indicate competence on a scale of 1 to 5 (1 - excellent; 5 - basic)

Language	Reading	Speaking	Writing
English	1	1	1
French	1	1	1
Spanish	3	5	5

8. **Membership of professional bodies:** None

9. **Other skills:** (e.g. Computer literacy, etc.)

10. **Present position:** Project Leader

11. **Years within the firm:** 26

12. **Key qualifications:** (Relevant to the assignment) Expert, metrology

13. **Specific experience in the region (experience abroad) (reverse chronological order):**

Country	Date from - Date to
Caribbean	2007
EU (Bruxelles)	2001-2003
Azerbaijan	1999
France	1977-1978
Switzerland (CERN)	1973 - 1977
France	1968-73

14. Professional experience (reverse chronological order)

Date from - Date to	Location	Company	Position	Description
2000-2006	Braunschweig	PTB	Project leader Project partner	- Internet Applications for Metrology: development of data bases and internet tools for collaborative work in distributed laboratories, quality assurance for key comparisons etc - EU GROWTH PROJECT MetroTrade = Metrological Support to International Trade - EU GROWTH PROJECT RegMet = Improving Dialogue between EU Regulatory Bodies and National Measurement Institutes - Advisor on Requirements for National Metrological Bodies in regional organisations
1997-1999		PTB	Deputy head Presidential sector	Assisting in developing and guiding the - Mutual Recognition Arrangement (MRA) of the BIPM/CIPM - Introduction of ISO 17025 at PTB, organizing EUROMET collaboration on Quality Systems in NMIs
1980-1996		PTB	Scientist at the Research Reactor Braunschweig	Neutron Scattering Techniques for studying Quantum effects in Solid State Physics, FERMI Quantum Liquids
1979	Stuttgart	Max Planck-Institut für Festkörperforschung	Ultra-Low Temperature Group	Thermal Conductivity and Specific heat Investigations at very low temperatures.
1978	Grenoble, France	Centre d'Études Nucléaires	Service Basses Températures	Low temperature thermal conductivity for studying defects in solids.
1973-1977	Geneva, Switzerland	CERN	Experimental Physics Division	Polarized Target development for High Energy Physics Experiments on Nuclear Spin Effects.

	nd			
1968-1973	Grenoble, France	Centre d'Études Nucléaires	Service Basses Températures	Thesis work on temperature thermal conductivity for studying defects in solids.

15. Other relevant information (e.g., Publications)

1. Reichweiten von Kr-85 Ionen in Eiseinkristallen
Diplomarbeit, Technische Hochschule Munchen, Phys. Dept. Teilinstitut Prof. Dr. N. Riehl, 1967 (unpublished)

2. Resonant Phonon Absorption in OH⁻ and OD⁻ doped LiF Single Crystals
K. Guckelsberger, K. Neumaier and H.-R. Zelsmann
Phys. Letters vol. 31A, 7, pp397-398 (1970)

3. Conductibilité thermique de l'oxide de germanium vitreux à basses temperatures
K. Guckelsberger et J. -C. Lasjaunias
Comp. R. Acad. Sci., t 270, pp 1427-1430, Series B (1970)

4. An Investigation of the Ground State of Cr²⁺ in MgO based on Thermal Conductivity Measurements
L.J. Challis, A.M. deGoer, K. Guckelsberger and G.A. Slack
Proc. Roy. Soc., London, vol A 330, pp 29 - 58 (1972)

5. Thermal Conductivity of MgO Single Crystals Containing Paramagnetic Impurities
K. Guckelsberger, L.J. Challis A.M. deGoer and G.A. Slack
Int. Conf. on Phonon Scattering in Ionic Crystals Paris (1972)

6. Analyse de la conductibilité thermique aux basses temperatures
K. Guckelsberger
Internal note S.B.T. 258 / 72 (1972) CEN-Grenoble BP 85 CEDEX F-38041

7. Precipitation de beryllium en faible concentration dans LiF
K. Guckelsberger
Internal note S.B.T. 312 / 72 CEN-Grenoble BP 85 CEDEX F-38041 Grenoble-Gare (1972)

8. Phonon Scattering by Small Precipitates in Beryllium doped LiF
K. Guckelsberger

Topical Conf. on "Lattice Defects in Ionic Crystals" Marseille Luminy (1973)

9. Etude de défauts paraelectriques dans LiF et paramagnetiques dans MgO par diffusion de phonons. These d'Etat, Docteur es Sciences, Universite Scientifique et Medicale de Grenoble (1973) no. d'ordre A.O. 8940 Centre de Documentation du CNRS(Paris)

10. Precipitation Dynamics in Mg-doped LiF at low Annealing Temperatures

K. Guckelsberger and R.M. Kimber

Solid State Comm. vol 15, p 437- 440 (1974)

11. Wärmeleitung von gamma-bestrahltem LiF

K. Guckelsberger und K. Neumaier

Frühjahrstagung der dt. phys. Gesellschaft, Freudenstadt TT 30 (1974)

12. Conductivité thermique de LiF irradié aux rayons gamma a 300 K

K. Guckelsberger et K. Neumaier

Reunion du GC3I, Neuchatel (1974)

13. Thermal Conductivity of gamma-irradiated LiF at Low Temperatures

K. Guckelsberger and K. Neumaier

J. Phys. Chem, Solids vol 36, pp 1353- 1363 (1975)

14. Phonon Resonance Scattering in InSb and InSb containing Ga

K. Guckelsberger and A. Briggs

J. Phys. C : Solid State Phys., vol 8, pp L195-L198 (1975)

15. Calibration of a Deuteron-Polarised Target

K. Guckelsberger and F. Udo

Nucl. Instr. and Methods, vol 137, pp 413- 421 (1976)

16. Dynamic Polarisation of Cr(V) doped 2,3 Butanediol and in other materials containing adjacent OH- Groups

K. Guckelsberger

Nucl. Instr. and Methods vol 144, pp 93-97 (1977)

17. Infrared absorption of OH -doped LiF.

K. Guckelsberger and H.R. Zelsmann:

Sol. State Comm., Vol. 32 (1979) p. 551-552.

18. Phonon scattering and interstitial clusters in gamma-irradiated LiF.

M. Abou-Ghantous, K. Guckelsberger and M. Locatelli:

J. Phys. Chem. Solids, Vol. 41 (1980) p. 473-480.

19. Specific heat of superconducting and normal Nb₂₀Zr₈₀.

E. Gmelin, K. Guckelsberger

J. Phys. C: Solid St. Phys. 13 (1980) p. L269-71.

20. Low Temperature thermal conductivity of Li₃N.

K. Guckelsberger, A.M. deGoer:

J. Phys. C: Solid St. Phys. 13 (1980) p. L767-71.

21. Low Temperature Thermal Conductivity of OH and OD doped LiF Single Crystals.

K. Guckelsberger

J. Phys. Chem. Solids, Vol. 41, (1980) p. 1209-1216.

22. Anomalous Thermal Conductivity of Polyacetylene.

K. Guckelsberger, P. Rödhammer, E. Gmelin, M. Peo, K. Menke, J. Hocker, S. Roth und K. Dransfeld:

Z. Phys. B43 (1981) S. 189-191.

23. Detection of tunnelling Systems in Li₃N by excess specific heat

E. Gmelin and K. Guckelsberger:

J. Phys. C: Solid State Phys. 14 (1981) p. L21-25.

24. Ultrasonic and Specific Heat Measurements in Quenched Superconducting NbZr.

N. Thomas, W. Arnold, E. Gmelin, K. Guckelsberger, G. Weiß, H. v. Löhneysen:

Suppl. Journal de Physique 41, C8, (1980) S. 751-753.

25. Spin alignment of protons in NH₄⁺ at Low temperatures.

Friedrich, H.; Guckelsberger, Kurt; Scherm, R. Hüller A.

J. Phys. C14(1981)SL147-150

26 Spinkonversion und Rotationstunneln.

Friedrich, H.; Guckelsberger, Kurt; Scherm, R.

Ber. über das Arbeitstreffen der Verbünde Neutronenstreuung zur Untersuchung kondensierter Materie. Hrsg. J. Kalus, Universität Bayreuth (1983) S. 111-115.

27. An Efficient Cryopump for Exchange Gas in Dilution Refrigerators.

Guckelsberger, Kurt; Scherm, R.; Hennecke, F.H.

Cryogenics 23 (1983) S. 675.

28. Operation and Control of a Dilution Refrigerator for Spin Conversion

Measurements with Neutrons.

Guckelsberger, Kurt; Friedrich, H.; Hennecke, F.H.; Matula, S.; Mihlan, F.H.; Mugai, D.; Scherm, R.

Workshop on Sample Environments in Neutron and X-Ray Experiments, Grenoble, France, Rev. Phys. Appl. 19 (1984) S. 779-781.

29. Pressure Dependence of Elementary Excitations in Normal Liquid Helium-3.

Scherm, R.; Guckelsberger, Kurt; Fåk, B.; Sköld, K.; Dianoux, A.J.; Godfrin, H.; Stirling, W.G.

Phys. Rev. Lett. (1987), S. 217-220.

30. Elementare Anregungen in Quantenflüssigkeiten.

Scherm, R.; Guckelsberger, Kurt; Körfer, M.; Fåk, B.; Sköld, K.; Dianoux, H.; Godfrin, H.; Stirling, W.

Prandl, W. (Hrsg.): Nukleare Festkörperforschung, Bericht über das Arbeitstreffen in Blaubeuren 1987, Tübingen 1988, S. 259-263.

31. Black is Beautiful: ^3He -an Experimental Challenge to Neutron spectroscopy. Guckelsberger, Kurt; Blanc, Y.; Dianoux, A.J.; Fåk, B.; Godfrin, H.; Körfer, M.; Scherm, R.; Sköld, K.

Physica, B 156 & 157 (1989), S. 681-683.

32. Elementary Excitations in the Fermi Liquid ^3He .

Scherm, R.; Dianoux, A.J.; Fåk, B.; Guckelsberger, Kurt; Körfer, M.; Stirling, W.G.

Physica, B 156 & 157 (1989), S. 311-313.

33. Elementary Excitations in Superfluid ^3He - ^4He Mixtures: Pressure and Temperature Dependence.

Fåk, B.; Guckelsberger, Kurt; Körfer, M. Scherm, R.; Dianoux, A.J.

Phys. Rev. B41 (1990), S. 8732-8748.

34. Elementary Excitations in Fermi Liquids: Neutron Scattering by ^3He and ^3He - ^4He Mixtures.

Scherm, R.; Guckelsberger, Kurt; Stunault, A.; Fåk, B.

In: Wyatt, A.G.F.; Lauter, H.J.(ED): Excitations in Two-Dimensional and Three-Dimensional Quantum Fluids. New York: Plenum Press, (1991), S. 231-238.

35. Nuclear Spin Conversion of Methane in pure and Rare-Gas Mixed Crystals.

Grieger, S.; Friedrich, H.; Asmussen, B.; Guckelsberger, Kurt; Nettling, D.; Press, W.; Scherm, R.

Z. Phys. B - Condensed Matter 87, (1992) S. 203-211.

36. TOF Spectroscopy: Energy Calibration and Consistency Check.

Stunault, A.; Andersen, L.K.H.; Blanc, Y.; Fåk, B.; Godfrin, H.; Guckelsberger, Kurt; Scherm, R.

Physica B, 180 & 181 (1992) S. 926 – 928

37. Spin Species Conversion of Rotational Tunneling Molecules Studies by Neutron Transmission.

Guckelsberger, Kurt; Friedrich, H.; Scherm, R.
Zeitschrift für Physik B 91,(1993) S. 209-219

38. The Dispersion of ^3He Quasiparticles in He II from Neutron Scattering
Scherm, R.; Guckelsberger, Kurt; Szprynger, A.; Fåk, B:
Journal of Low Temperature Physics 93,(1993) S. 51-77

39. Spin Fluctuations in normal liquid ^3He .
Fåk, B; Guckelsberger, Kurt; Scherm, R.; Stunault, A.;
Physica B 194-196, (1994) S 739 – 740

40. Spin fluctuations and zero-sound in normal liquid ^3He studied by neutron scattering.
Fåk, B.; Guckelsberger, Kurt; Scherm, R.; Stunault, A.
Journal of Low Temperature Physics, Vol. 97, Nos. 5/6 1994, S. 445-487

41. Spin fluctuations in normal liquid ^3He .
Fåk, B.; Guckelsberger, Kurt; Scherm, R.; Stunault, A
In: Physica B 194-196, 1994, S. 739-740

42. Neutron scattering from Liquid ^3He at Large Momentum Transfers
Azuah, R.T.; Stirling, W.G.; Guckelsberger, Kurt; Scherm, R.; Glyde, H.R.; Bennington, S.; Taylor, A.D.
Physica B 213&214 (1995) 454-458

43. Neutron Scattering from Liquid ^3He at Intermediate to Large Wavevectors.
Azuah, R.T.; Stirling, W.G.; Guckelsberger, Kurt; Scherm, R.; Yates, M.L. Bennington, S.; Tayior, A.D.
Journal of Low Temperature Physics 101 (1995), S. 951-969

44. Measurement of total cross section and spin conversion in solid methane
Friedrich, H.; Grieger, S.; Guckelsberger, Kurt; Scherm, R.; Press, W.
Physica B 226 (1996), S. 218-220

45. Neutron Scattering from liquid He at intermediate energies.
Guckelsberger, Kurt; Azuah, R.T., Stirling, W.G.; Bennington, S.M.; Yates, M.
Physica B, (1997) S 345-346

46. The total neutron scattering cross section of solid methane in phase II.
Grieger, S. ; Friedrich, Hans ; Guckelsberger, Kurt ; Scherm, Reinhard ; Press, W.
Journal of Chemical Physics 109 (1998), Nr. 8, S. 3161 - 3175

47. Messung des totalen Streuquerschnitts von ^3He .

Guckelsberger, Kurt ; Nistler, Wolfgang ; Scherm, Reinhard ; Weyrauch, Michael
Deutsche Neutronenstreutagung 1999, Potsdam, Deutschland, 25-27, Mai, 1999

48. Measurement of the Total Scattering Cross Section of ^3He (poster).

Guckelsberger, Kurt ; Nistler, Wolfgang ; Scherm, Reinhard ; Weyrauch, Michael:

2nd European Conference on Neutron Scattering : ECNS'99, Budapest, Hungary, September, 1-4, 1999 In: Cser, L (Hrsg.) ; Grosz, T (Hrsg.) ; Rosta, L (Hrsg.): 2nd European Conference on Neutron Scattering, Budapest. Amsterdam : Budapest : Technical University, 1999, S. 321

49. Feasibility of neutron diffraction on solid ^3He .

Siemensmeyer, K.; Schubert, E. A.; Adams, E. D.; Takano, Y.; Guckelsberger, Kurt
Physica B 284-288 (2000), S. 363 - 364

50. Novel ways to provide calibrations to metrological laboratories.

Guckelsberger, Kurt

Naval Warfare Assessment Station, Corona, California, USA, 26, January, 2000

51. Measurement System Modernisation at PTB.

Guckelsberger, Kurt:

Navy Primary Standards Laboratory (NPSL), San Diego, California, USA, 26, January, 2000

52. New links between PTB and Industry.

Guckelsberger, Kurt:

Measurement Science Conference 2000, Anaheim, California, USA, 20, January, 2000

53. Maßnahmen zur weltweiten Rückführung von Messungen auf SI Einheiten.

Guckelsberger, Kurt

20. Sitzung des MNPQ Koordinierungskreises in der PTB, Braunschweig, GERMANY, 29.02.2000

54. eCalibration and telepresence via Internet at PTB.

Guckelsberger, Kurt

WORLDnet Briefing, NIST, Gaithersburg, Maryland, USA, 27.04.2000

55. e-Kalibrierung mit Hilfe des Internet.

Guckelsberger, Kurt:

Sitzung des Fachausschusses Gleichstrom und Niederfrequenz, PTB, Braunschweig, GERMANY, 10.05.2000

56. The total neutron scattering cross section of ^3He .

Guckelsberger, Kurt ; Nistler, Wolfgang ; Scherm, Reinhard ; Weyrauch, Michael:

In: Physica B 276-278 (2000), S. 975 - 976

57. Effective mass, spin fluctuations, and zero sound in liquid ^3He .

Glyde, H. R. ; Fåk, B. ; van Dijk, N. H. ; Godfrin, H. ; Guckelsberger, Kurt ; Scherm, Reinhard
Physical Review B 61 (2000), Nr. 2, S. 1421 - 1432

58. Control of a complex instrument via internet.

Kaufmann, Frank ; Guckelsberger, Kurt:

Measurement Science Conference 2001. Tustin, Calif. : eDoc Publish, 2001, [CD-ROM] Dateiname: 3Aa.pdf, S. 4 S.

59. Internet-based applications for metrology at PTB. Workshop Internet Measurement & Self-Calibration

Kreis, Raimund (speaker) ; Schwenke, Heinrich ; Guckelsberger, Kurt

Workshop Internet Measurement & Self-Calibration. :, Delft, NMi Van Swinden Laboratorium, The Netherlands, 15, May, 2002 [s.l.] : AMCTM, 2002

60. Net based applications for metrology at PTB [poster].

Guckelsberger, Kurt:

Joint BIPM-NPL Workshop on IT in Metrology, Teddington, England, 16-18, September, 2002

61. Overview of e-measurement projects at PTB.

Guckelsberger, Kurt:

Workshop Internet Measurement & Self-Calibration. [s.l.] : AMCTM, 2002

62. Recent advances in netsupported metrology at PTB

Kurt Guckelsberger, Frank Kaufmann, Hans-Georg Kerkhoff, Heinrich Schwenke, Thomas Spiegel

Joint BIPM-NMIJ Workshop on IT in Metrology, Tsukuba, Japan, 16-18, April, 2005