

Curriculum Vitae

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Personal Information

Name:	Dipl.-Ing. Dr. techn. Christoph Reichl
Nationality:	Österreich
Date of birth:	07.07.1973
	married to Dipl.-Ing. Dr. techn. Irene Reichl, daughters: Ronja Rebecca (*06.06.2007), Joanna Lucia (*19.01.2010), Diana Serafina (*11.07.2012)
Contact (AIT):	AIT Austrian Institute of Technology Österreichisches Forschungs- und Prüfzentrum Arsenal Ges.m.b.H. Giefinggasse 2 1210 Vienna Austria ☎ mobile: +43 (0) 664 825 11 52 F +43(0) 50550-6679 ✉ christoph.reichl@ait.ac.at
Contact (private):	Franz Kamtner Weg 12/8 2380 Perchtoldsdorf ☎ private: +43 (0)1 244 26 10 ☎ private, mobile: +43 (0) 664 386 58 41 ✉ christoph.reichl@kabsi.at

Education and Training

Dates (from – to)	Name and type of the organisation	Principal subjects	Title awarded
1979-1983	elementary school (Volksschule Perchtoldsdorf)	general education	-
1983 - 1991	highschool (Bundesgymnasium & Bundesrealgymnasium Perchtoldsdorf)	general education school leaving examination Matura	-
1991 - 1997	Vienna Technical University	Technical Physics 1st diploma exam passed with distinction (24.01.1994) 2nd diploma exam passed with distinction (15.01.1997)	Dipl.-Ing.
1998 - 2001	Vienna Technical University	Technical Physics Solid State Physics Experimental Physics	Dr. techn.

Work Experience

Dates (from – to)	Name and type of the employer	Position held	Main activities and responsibilities
01.02.1997- 31.12.1997	Wiener Kinderfreunde civilian service	aide	childcare
during university education	Vienna Technical University Institute for experimental physics Institute for mechanics Institute for theoretical physics	tutor instructor	student advisor group leader
1998 May-July	Institute for High Energy Physics, OeAW	student researcher	student researcher at CERN, Switzerland
1998 - 2001	Vienna Technical University	PhD researcher	research activities in CNRS (Paris), PSI (Switzerland), ILL (Grenoble), ISIS (UK)
01.06.2001 -	AIT ÖFPZ Arsenal Ges.m.b.H. Austrian Institute of Technology GmbH	scientist	CFD (Multiphase flows, phase changing flows turbulence modelling, aero acoustics)
WS2010/11 WS2011/12 WS2012/13 WS2013/14 WS2014/15 WS2015/16 WS2016/17	Upper Austria University of Applied Sciences Engineering and Environmental Sciences Masterstudiengang Ökoenergietechnik	lector	Gebäudesimulation Numerische Strömungssimulation (Aussen- und Innenaerodynamik) <i>building simulation</i>
WS2010/11 WS2011/12 WS2012/13 WS2013/14 WS2014/15 WS2015/16 WS2016/17	Vienna Technical University Institute of Fluid Mechanics and Heat Transfer	lector	302.042 Numerische Methoden der Strömungsmechanik <i>numerical methods in fluid mechanics</i>
SS2011 SS2012 SS2013 SS2014 SS2015 SS2016	Vienna Technical University Institute of Fluid Mechanics and Heat Transfer	lector	302.017 Grundlagen der Numerischen Methoden der Strömungs- und Wärmetechnik (Fundamentals in numerical methods in fluid and engineering thermodynamics)

Languages

Language	Reading / writing / verbal	Level (basic, good, excellent)
German	Reading / writing / verbal	excellent
English	Reading / writing / verbal	excellent
French	Reading	basic

Technical skills ((software-)tools, machinery, equipment, etc.)

Technical skill	Level (basic, good, excellent)
CFD (FLUENT, Gambit, StarCCM+) Numerical Fluid Dynamics	excellent
Cluster Computing (Hard- and Software Architecture)	excellent
Acoustic Measurement Techniques and Analysis	excellent
Optical & Probe Flow Measurements	good

Selected Publications

Bookcontribution:

Christoph Reichl, Christian Krenn, Martin Mann, Hermann Lang
Application of Numerical and Experimental Techniques for the Aero-Acoustic Characterisation of Car Rear-View Mirror
 Computational Aeroacoustics edited by Ganesh Raman, ISBN 978-0-906522-55-4, 524pp,
 December 2008, Multiscience Publishing Co. Ltd.

Journal & Conference Contributions:

Ch. Reichl, R. Schneider, W. Hohenauer, F. Grabner, R. J. Grant
Numerical simulation of thermodynamic processes for cryogenic metal forming of aluminum sheets compared to measurements
 Applied Thermal Engineering (113) 2017, 1228-1241

Ch. Reichl, D. Lager, G. Englmaier, B. Zettl, M. Popovac
Fluid dynamics simulations for an open-sorption heat storage drum reactor based on thermophysical kinetics and experimental observations
 Applied Thermal Engineering (107) 2016, 994-1007

Ch. Reichl, K. Kramer, Ch. Thoma, P. Benovsky, T. Lemeé
Comparison of modelled heat transfer and fluid dynamics of a flat plate solar air heating collector towards experimental data
 Solar Energy 120 (2015); page 450-463

Ch. Reichl, A. Strehlow, T. Oltersdorf, S. Braungardt, M. Pröhl, P. Benovsky, M. Popovac, T. Fleckl, *GreenHP: Next Generation Heat Pump for Retrofitting Buildings – new evaporator component for large capacity air-to-water heat pumps*,
 Advanced HVAC & Natural Gas Technology Conference, May 6-9, 2015, Radisson BLU Hotel Latvija Conference Center,
 Riga, Latvia; DOI: 10.7250/rehvaconf.2015.015; page 100-109

R. Schneider, R. J. Grant, N. Sotirov, G. Falkinger, F. Grabner, C. Reichl, M. Scheerer, B. Heine, Z. Zouaoui, *Constitutive flow curve approximation of commercial aluminium alloys at low temperatures*
Materials & Design, Volume 88, 25 December 2015, Pages 659-666

N. Sotirov, G. Falkinger, F. Grabner, G. Schmid, R. Schneider, R.J. Grant, R. Kelsch, K. Radlmayr, M. Scheerer, C. Reichl, H. Sehrs Schön, M. Loipetsberger
Improved Formability of AA5182 Aluminium Alloy Sheet at Cryogenic Temperatures
Materials Today: Proceedings, Volume 2, Supplement 1, 2015, Pages S113-S118

M. Popovac, S. Seichter, P. Benovsky, T. Fleckl, Ch. Reichl
Numerical Analysis of the Frosting Performance of the air-side of a heat-pump
24th IIR international congress of refrigeration, August 16-22, 2015, ICR2015, Yokohama, Japan

Ch. Reichl, F. Hengstberger, Ch. Zauner, 2013. *Heat transfer mechanisms in a compound parabolic concentrator: Comparison of computational fluid dynamics simulations to particle image velocimetry and local temperature measurements.*
Solar Energy 97, 436-446.

C. Zauner, F. Hengstberger, W. Hohenauer, C. Reichl, A. Simetzberger, G. Gleiss
Methods for Medium Temperature Collector: Collector Development Applied to a CPC Collector
Energy Procedia, 30 (2012), S. 187-197

Ch. Reichl, Ch. Krenn, M. Mann, H. Lang
Application of Numerical and Experimental Techniques for the Aero-Acoustic Characterisation of Car Rear-View Mirror
Int. Journal of Aeroacoustics (IJA), number 1+2, 2005, pages 185-212

Awards & Scholarships

ARC Award 2003 - "Computational Aeroacoustics" - 3rd in category "Science" (together with Dr. Hermann Lang)

Memberships and Functions

ÖPG - Österreichische Physikalische Gesellschaft – Vorsitz Fachausschuß Akustik (ab 01/2017)
EUROMECH - European Mechanics Society
ERC OFTAC - European Research Community on Flow, Turbulence and Combustion, corresponding person for AIT
member of the editorial board – Europe of the International Journal of Aeroacoustics
IIR – International Institute of Refrigeration – Commission Member B1 (Thermodynamics & transfer processes) & B2 (Refrigerating equipment)
EHPA – Heat Pump Panel – Member and representative for AIT
DKV – Deutscher Kälte- und Klimatechnischer Verein e. V.

Fields of Application

Thematic Fields: Heat Pump Technologies and Solar Thermal Applications
Applied research and development in the area of heat- and mass transfer and fluid physics
Acoustics
Two-phase-flows, Phase change processes, Absorption
Computational fluid dynamics, Turbulence modelling (LES, DES), transient CFD
Fluid-mechanical optimization of HVAC components
Research in aeroacoustics (turbulence induced sound fields)
3D-1D simulation and optimization in the HVAC area including acoustics

PUBLICATIONS (1st Author)

1. Ch. Reichl
Magnetische Ordnung und Gitterdynamik in intermetallischen Verbindungen
Diplomarbeit am Institut für Experimentalphysik, TU Wien, 1996
2. Ch. Reichl, G. Wiesinger, G. Zaussinger, E. Bauer, M. Galli, F. Marabelli
On electronic structure and pressure response of $FeSi_{1-x}Ge_x$
Physica B, **259-261** (1999) 866-867
3. Ch. Reichl
Magnetic order studied by nuclear methods
Dissertation am Institut für Experimentalphysik, TU Wien, 2001
4. Ch. Reichl, H.A. Grogger, Ch. Krenn, A. Kaltenhauser, M. Höll, M. Mann, H. Lang
Aeroacoustic Characterisation of an Exterior Mirror Applying Numerical and Experimental Techniques
Colloquium Euromech 449, Dezember 9-12, 2003, Chamonix, France
5. Ch. Reichl, M. Mann, G. Haider
Pedestrian Comfort Analysis in Large Scale Urban Building Projects
International Conference on Urban Wind Engineering and Building Aerodynamics, May 5-7, 2004, von Karman Institute for Fluid Dynamics, Rhode-Saint-Genèse, Belgium
6. Ch. Reichl
Strömungssimulation, Gebäudeaerodynamik
in "M. Mann, Ch. Reichl, Ch. Krenn, Kreativität ohne Reue – Komfort und Sicherheit aus dem Computer"
Architektur und Bau Forum, Forum Planen 05, MAR.05
7. Ch. Reichl, H. Lang, Ch. Krenn, M. Mann
Aero-Acoustic Comfort Characterization of Ventilation Nozzles using Transient and Steady CFD Simulations
NAFEMS World Congress, 17.-20. Mai 2005, Malta
8. Ch. Reichl, M. Mann, G. Haider, H. Lang
Comparison of High Resolution Spectra to Mean Velocity Approaches for Urban Wind Comfort Simulations – A CFD study
EACWE4, 11.-15.07.2005, Prag
9. Ch. Reichl, Ch. Krenn, M. Mann, H. Lang
Application of Numerical and Experimental Techniques for the Aero-Acoustic Characterisation of Car Rear-View Mirror
Int. Journal of Aeroacoustics (IJA), number 1+2, 2005, pages 185-212
10. Ch. Reichl, H. Lang, Ch. Krenn, M. Mann
Aeroacoustic Characterization of flow phenomena by analysing dipolar and quadrupolar sound sources
TCN-CAE, 05.-08. October 2005, Lecce, Italia
11. Ch. Reichl, Ch. Buchner, G. Hirschmann, R. Sommer, A. Cabaj
Development of a Simulation Method to Predict UV Disinfection Reactor Performance and Comparison to Biosimetric Measurements
13th Conference on Modelling Fluid Flow (CMFF'06), September 06-09. 2006, Budapest, Hungary
12. Ch. Reichl, M. Haigis, H. Lang
Eindimensionale Modellierung der Schallausbreitung basierend auf dreidimensionaler Schallfeldsimulation
DAGA 2007, 19.-22. March, 2007, Stuttgart, Deutschland

13. Ch. Reichl, W. Tilser, M. Böck, H. Lang, K. Haindl, F. Reining, M. Opitz
Experimental and numerical analysis of the generation of a turbulent flow field in a free stream jet and its correlation to acoustic radiation and wall pressure fluctuations
DAGA 2008, 10.-13. March, 2008, Dresden, Deutschland
14. Ch. Reichl, M. Böck, W. Tilser, H. Lang, K. Haindl, F. Reining, M. Opitz
On the correlation of the acoustic signal of microphones mounted on a flat plate to the turbulence of an impinging jet
Acoustics'08 Paris, 29.06.-04.07.2008, Paris
15. Ch. Reichl, M. Böck, W. Tilser, K. Haindl, M. Opitz
Spectral comparison of numerical simulations and experimental data of turbulent impinging jets
14th Conference on Modelling Fluid Flow (CMFF'09), September 09-11. 2009, Budapest, Hungary
16. Ch. Reichl, M. Böck, W. Tilser, H. Kühnelt, K. Haindl, M. Opitz
Numerical Prediction and experimental characterization of turbulent flow fields and acoustic perturbations of HVAC components
Ventilation 2009, Zürich, Switzerland, October 18-21, 2009
17. Ch. Reichl, G. Pauschenwein, B. Windholz, C. Zauner, B. Hebenstreit, M. Monsberger
Condensation and subsequent icing on structured Plate and Glass Surfaces in Low Speed Flows - an experimental study
EUROSUN 2010, Int. Conference on Solar Heating, Cooling and Buildings, September 28th - October 1st, 2010, Graz, Austria
18. Ch. Reichl, G. Pauschenwein, B. Windholz, B. Hebenstreit, M. Monsberger
Experimental Studies on the Icing-Onset on Plates in Low Speed Flows
Sustainable Refrigeration and Heat Pump Technology Conference, June 13th - 16th, 2010, Stockholm, Sweden
19. Ch. Reichl, F. Hengstberger, Ch. Zauner, 2013. *Heat transfer mechanisms in a compound parabolic concentrator: Comparison of computational fluid dynamics simulations to particle image velocimetry and local temperature measurements.*
Solar Energy 97, 436-446.
20. Ch. Reichl, F. Hengstberger, Ch. Zauner, B. Kubicek, *Numerical and Experimental Approaches for the Characterization of Heat Transfer Mechanisms in Compound Parabolic Concentrators*, EUROSUN 2014, Int. Conference on Solar Heating, Cooling and Buildings, September 16th – September 19th, 2014, Aix-les-Bains, France
21. Ch. Reichl, F. Hengstberger, Ch. Zauner, B. Kubicek, *Compound Parabolic Collector Heat Transfer Investigated by numerical and experimental techniques*, Gleisdorf Solar 2014, June, 25th-27th, forumKLOSTER, Gleisdorf, Austria
22. Ch. Reichl, A. Strehlow, T. Oltersdorf, S. Braungardt, M. Pröhl, P. Benovsky, M. Popovac, T. Fleckl, *GreenHP: Next Generation Heat Pump for Retrofitting Buildings – new evaporator component for large capacity air-to-water heat pumps*, Advanced HVAC & Natural Gas Technology Conference, May 6-9, 2015, Radisson BLU Hotel Latvija Conference Center, Riga, Latvia; DOI: 10.7250/rehvaconf.2015.015; page 100-109
23. Ch. Reichl, K. Kramer, Ch. Thoma, P. Benovsky, T. Lemeé
Comparison of modelled heat transfer and fluid dynamics of a flat plate solar air heating collector towards experimental data
Solar Energy 120 (2015); page 450-463
24. Ch. Reichl, D. Lager, G. Englmaier, B. Zettl, M. Popovac
Fluid dynamics simulations for an open-sorption heat storage drum reactor based on thermophysical kinetics and experimental observations
Applied Thermal Engineering (107) 2016, 994-1007
25. Ch. Reichl, R. Schneider, W. Hohenauer, F. Grabner, R. J. Grant
Numerical simulation of thermodynamic processes for cryogenic metal forming of aluminum sheets compared to measurements
Applied Thermal Engineering (113) 2017, 1228-1241

PUBLICATIONS (co-author)

1. V. Paul-Boncour, L. Guénee, M. Latroche, M. Escorne, A. Percheron-Guégan, Ch. Reichl, G. Wiesinger
Local structure and magnetic properties of YFe_2D_x compounds ($0 < x \leq 3.5$)
Jour. Alloys and Compounds **262-263** (1997) 45-48
2. V. Paul-Boncour, L. Guénee, M. Latroche, M. Escorne, A. Percheron-Guégan, Ch. Reichl, G. Wiesinger
Structural and magnetic study of new YFe_2D_x compounds ($0 < x \leq 3.5$)
Jour. Alloys and Compounds **253-254** (1997) 272-274
3. E. Bauer, A. Galatanu, R. Hauser, Ch. Reichl, G. Wiesinger, G. Zaussinger, M. Galli, F. Marabelli
Evolution of a metallic and magnetic state in $(Fe,Mn)Si$ and $Fe(Si,Ge)$
Jour. Magn. Magn. Mat. **177-181** (1998) 1401-1402
4. B. Ya. Kotur, E. Gratz, E. Bauer, G. Hilscher, A. Kottar, H. Michor, Ch. Reichl, G. Wiesinger, A. S. Markosyan
Magnetic and electrical properties of $Sc(M_{1-x}Si_x)_{2-y}$ (M=Fe, Co, Ni)
Jour. Alloys and Compounds **278** (1998) 49-59
5. R. Sato Turtelli, E. de Morais, G. Wiesinger, Ch. Reichl, Vo Hong Duong, R. Grössinger
Struktural details and time dependence of the initial susceptibility in iron-rich Fe-Si ribbons
Jour. Magn. Magn. Mat. **205** (1999) 290-300
6. G. Wiesinger, R. Hatzl, Ch. Reichl, R. Groessinger, H. Sassik, K. Knight
On the magnetic structure of $HoFe_{10}Mo_2$
Jour. Magn. Magn. Mat. **196-197** (1999) 773-775
7. G. Wiesinger, Ch. Reichl, E. Gratz, P. Mietniowski, H. Figiel
Muon diffusion and relaxation in YCo_2
Physica B, **289-290** (2000) 307-310
8. V. Paul-Boncour, G. Wiesinger, Ch. Reichl, M. Latroche, A. Percheron-Guégan, R. Cortes
Local order study of YFe_2D_x ($0 \leq x \leq 3.5$) compounds by X-ray absorption and Mössbauer spectroscopy
Physica B, **307** (2001) 277-290
9. J. Schweifer, P. Weinberger, K. Mereiter, M. Boca, Ch. Reichl, G. Wiesinger, G. Hilscher, P. J. van Konigsbruggen, H. Kooijman, M. Grunert, W. Linert
catena- $[\mu$ -Tris(1,2-bis(tetrazol-1-yl)ethane- N_4,N_4')iron(II)]bis(tetrafluoroborate): synthesis, structure, spectroscopic and magnetic characterization of a chain-type coordination polymer spin-crossover compound
Inorganica Chimica Acta **339** (2002) 297-306
10. G. Wiesinger, V. Paul-Boncour, SM. Filipek, Ch. Reichl, I. Marchuk, A. Percheron-Guegan
Structural and magnetic properties of RFe_2D_x deuterides ($R = Zr, Y$ and $x = 3.5$) studied by means of neutron diffraction and $57Fe$ Mössbauer spectroscopy
J. Phys.: Condes. Matter **17** (2005) 893-908
11. G. Haider, Ch. Reichl
CFD Analysis on Pressure Waves in an Underground Rail Station Building
7th World Congress on Railway Research, June 04-08, 2006, Montreal, Canada
12. F. N. Gyax, A. Schenck, Y. Onuki, Ch. Reichl, G. Wiesinger
Magnetic Properties of $CeRh_3B_2$ investigated by muon spin rotation spectroscopy
Phys. Rev. B. **73**, 144423 (2006)
13. Ch. Krenn, M. Mann, Ch. Reichl
Sunny Research – Komfortuntersuchung und Optimierungsansätze für ein Bürogebäude anhand einer CFD-Studie
9. Internationale Passivhaustagung 2005, 29.-30. April 2005, Ludwigshafen, Deutschland
14. W. Hofbauer, Ch. Reichl, M. Treberspurg
Luftströmungen an zweigeschossigen Verglasungen (Computational Fluid Dynamics - Simulation)
8. Europäische Passivhaustagung und Messe 2004, 16. und 17.04.2004, Krems, Österreich

15. H. Kühnelt, Ch. Reichl
Vergleich von LBM und DES zur Simulation der Tonerzeugung bei Flöten
DAGA 2006, 20.-23. March, 2006, Braunschweig, Deutschland
16. H. Kühnelt, A. Haumer, T. Bäuml, U. Reisenbichler, C. Reichl, G. Karlowatz
Modeling Sound Level and Pressure Loss in HVAC Duct Networks using a Framework in Modelica/Dymola
NAG/DAGA2009, International Conference on Acoustics, Rotterdam, 23-26 March 2009
17. H. Kühnelt, A. Haumer, T. Bäuml, U. Reisenbichler, C. Reichl
Flow-Acoustic Concept Modeling of HVAC Duct Networks using a Dymola/Modelica Frame Work
The Sixteenth International Congress on Sound and Vibration, Krakow, 5-9 July 2009
18. B. Hebenstreit, Ch. Reichl, G. Pauschenwein, W. Laserer, M. Monsberger
Heat and Mass Transfer Properties of Water-LIBR Solution in a plate type Falling Film Absorber
EUROSUN 2010, Int. Conference on Solar Heating, Cooling and Buildings, September 28th - October 1st, 2010, Graz, Austria
19. G. Pauschenwein, Ch. Reichl, B. Windholz, I. Moretti, M. Monsberger
CFD Simulations for Solar Collectors Including Condensation and Ice Accretion
EUROSUN 2010, Int. Conference on Solar Heating, Cooling and Buildings, September 28th - October 1st, 2010, Graz, Austria
20. B. Hebenstreit, Ch. Reichl, I. Malenkovic, P. Benovsky, G. Taufraztzofer, M. Monsberger
Studies on the Heat and Mass Transfer Properties on Structured Plate Heat Exchangers
Sustainable Refrigeration and Heat Pump Technology Conference, June 13th - 16th, 2010, Stockholm, Sweden
21. B. Hebenstreit, I. Malenkovic, G. Taufraztzofer, P. Benovsky, Ch. Reichl, M. Monsberger
Untersuchung von innovativen Plattenwärme- und stoffübertragern für Absorptionskältemaschinen
20. Symposium THERMISCHE SOLARENERGIE, 05.05.2010 - 07.05.2010, Bad Staffenstein, Kloster Banz, Deutschland
22. G. J. Pauschenwein, Ch. Reichl, Ch. Zauner, M. Monsberger
Pressure Drop, Flow Distribution and Turbulence in Collector Hydraulics
ISES Solar World Congress 2011, August 28th – September 2nd, Kassel, Deutschland
23. G. J. Pauschenwein, Ch. Zauner, G. Schmid, Ch. Reichl, M. Monsberger
Kollektorhydraulik – Ultraschall und CFD
21. Symposium THERMISCHE SOLARENERGIE, 11.05.2011 - 13.05.2011, Bad Staffenstein, Kloster Banz, Deutschland
24. G. J. Pauschenwein, Ch. Reichl., B. Windholz, I. Moretti, M. Monsberger
Condensation and Icing on Cooled Surfaces
10th IEA Heat Pump Conference 2011, Tokio, Japan (accepted) – changed to web conference due to recent events
25. C. Zauner, F. Hengstberger, W. Hohenauer, C. Reichl, A. Simetzberger, G. Gleiss
Methods for Medium Temperature Collector: Collector Development Applied to a CPC Collector
Energy Procedia, 30 (2012), S. 187-197
26. P. Benovsky, H. Rusche, M. Ridzon, M. Popovac, C. Reichl, T. Fleckl,
Dropwise Condensation Modeling
Vortrag: Engineering Mechanics 2014, 20th International Conference, Svratka, Czech Republic (invited); 12.05.2014 - 15.05.2014; in: "im 2014", Brno University of Technology, 1st Edition (2014), ISBN: 978-80-214-4872-8; Paper-Nr. 80 to 83, 4 S.
27. B. Zettl, G. Englmaier, G. Steinmaurer, Ch. Reichl
Entwicklung eines offenen Adsorptionsprozesses in einem Trommelreaktor
Gleisdorf Solar 2014, June, 25th-27th, forumKLOSTER, Gleisdorf, Austria
28. A. Strehlow, C. Martín-Callizo, T. Oltersdorf, M. Popovac, Ch. Reichl
GreenHP: Heat Exchangers for Next Generation Heat Pump
4th International Congress and Exhibition on Aluminium Heat Exchanger Technologies for HVAC&R, 10-11 June, 2015, Hotel Radisson Blu Scandinavia, Düsseldorf, Germany

29. M. Popovac, S. Seichter, C. Reichl, P. Benovsky
Implementation and application of the frost growth and densification model for numerical analysis of heat pump frosting performance
Ammonia and CO2 Refrigeration Technologies, April 16-18, 2015, Ohrid, Republic of Macedonia
30. M. Popovac, S. Seichter, P. Benovsky, T. Fleckl, Ch. Reichl
Numerical Analysis of the Frosting Performance of the air-side of a heat-pump
24th IIR international congress of refrigeration, August 16-22, 2015, ICR2015, Yokohama, Japan
31. N. Sotirov, G. Falkinger, F. Grabner, G. Schmid, R. Schneider, R.J. Grant, R. Kelsch, K. Radlmayr, M. Scheerer, C. Reichl, H. Sehrschrön, M. Loipetsberger
Improved Formability of AA5182 Aluminium Alloy Sheet at Cryogenic Temperatures
Materials Today: Proceedings, Volume 2, Supplement 1, 2015, Pages S113-S118
32. R. Schneider, R. J. Grant, N. Sotirov, G. Falkinger, F. Grabner, C. Reichl, M. Scheerer, B. Heine, Z. Zouaoui, *Constitutive flow curve approximation of commercial aluminium alloys at low temperatures*; Materials & Design, Volume 88, 25 December 2015, Pages 659-666
33. Ch. Reichl, J. Emhofer, F. Lörcher, A. Strehlow, M. Popovac, P. Wimberger, C. Köfinger, A. Zottl, T. Fleckl
GreenHP: Strömungs-Analyse der Verdampfer-Luftseite
Jahrestagung des Deutschen Kälte- und Klimatechnischen Vereins, Kassel, Deutschland, 16.-18. November 2016
34. Ch. Reichl, J. Emhofer, T. Fleckl
Analyse der Luftströmung und Schallemissionen der Verdampfer-Luftseite der GreenHP mit speziellem Fokus auf Vereisung und Enteisung
e-nova 2016, Nachhaltige Technologien, Gebäude – Energie – Umwelt, University of Applied Sciences Pinkafeld, Österreich, 24.-25. November 2016
35. Ch. Reichl, J. Emhofer, F. Lörcher, A. Strehlow, M. Popovac, P. Wimberger, C. Köfinger, A. Zottl, T. Fleckl
Transient Acoustic Signatures of the GreenHP with special focus on icing and defrosting
12th IEA HP Conference, May 15th-18th Rotterdam, The Netherlands, 2017, submitted
36. M. Popovac, H. Jasak, H. Rusche, Ch. Reichl
Numerical stability of continuous adjoint optimization method for wall-bounded turbulent flows
submitted to Journal of Computational Physics, October 2016

INVITED TALKS & LECTURES

1. Ch. Reichl, M. Böck, W. Tilser, H. Lang
Analysis of the correlation between flow turbulence and wall pressure fluctuations in a turbulent impinging jet by means of experimental and numerical methods
Ansys Austria User Meeting, 24. April 2008, Wien, Österreich
2. Ch. Reichl
Computational Fluid Dynamics in Biomechanics & Sports
Lecture at Inst. Sport Sciences, University of Vienna, 2006
3. „Mechanik und Relativitätstheorie“ (AG Physik-Rechenübungen 1, 1. Semester)
4. „Elektrizität und Magnetismus“, „Schwingungen und Wellen“ und „Optik“ (AG Physik-Rechenübungen 2, 2. Semester)
5. „Thermodynamik und statistische Mechanik – Verbundlehrveranstaltung“ (AG Rechenübungen Thermodynamik (Verbundlehrveranstaltung), 3. Semester)
6. „Einführung in die Quantenphysik“ - AG Rechenübungen Quantenphysik, 3. Semester
7. UE Mechanik f. TPH, Übungen, 4. Semester
8. LU Arbeitsgemeinschaft Laborübungen für Technische Physiker, 4. Semester

9. *UE Elektrodynamik und Relativitätstheorie, 6. Semester*
10. Ch. Reichl, Laurenz Widhalm
„Wegweiser im Formalismus der Quantenmechanik“ und „Ergänzungen der Ableitungen“
Skriptum, Herbst 1994
11. „Elementarteilchenphysik I (135.443)“ und „Elementarteilchenphysik II (135.454)“
Ch. Reichl & Laurenz Widhalm Skriptum zur Vorlesung von Prof. Kummer, 2. Auflage, Juni 1995
12. Chapter on Multiphase Flows in Lecture of Prof. Kuhlmann "Numerische Methoden in der Strömungsmechanik" at Vienna University of Technology, 2010, January 14th, 21th and 28th
13. Lecture "Gebäudesimulation GSM3V and GSM3U" in WS2010/11 at Upper Austria University of Applied Sciences
14. Lecture 302.042, "Numerische Methoden der Strömungsmechanik" in WS2010/11 at Vienna University of Technology
15. Lecture 302.017, "Grundlagen der numerischen Methoden der Strömungs- und Wärmetechnik"
16. *Acoustic characterisation of Air-to-Water heat pumps – measurement equipment and analysis techniques*
OTTI Seminar „Air Source Heat Pumps in Retrofitting Applications“, May 7th 2015, Vienna, Austria

CONTRIBUTIONS (1st author)

1. Ch. Reichl, G. Wiesinger G. Zaussinger, E. Bauer, M. Galli, and F. Marabelli
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