

KIT Research Alumni Conference

"Renewable Energies – a German-Chilean Cooperation"

Date: November 23-24, 2018

Venue: Heidelberg Center for Latin America, Santiago de Chile



INTERNATIONAL AFFAIRS – INTERNATIONAL SCHOLARS AND WELCOME OFFICE









Welcome Address

Dr Enno Aufderheide, Secretary General of the Alexander von Humboldt Foundation Research Alumni Meeting of the Karlsruhe Institute of Technology Santiago de Chile, 23 – 24 November 2018

On behalf of the Alexander von Humboldt Foundation, I would like to welcome you to the Research Alumni Conference of the Karlsruhe Institute of Technology in Santiago de Chile.

The ties between the Humboldt
Foundation and Chile are close and intensive
as I will illustrate later in my address. It is
thus with great pleasure that we are



Photo: Humboldt Foundation/ Michael Jordan

supporting the Karlsruhe Institute of Technology's Research Alumni Conference here at the Heidelberg Center for Latin America in Santiago de Chile.

As you are undoubtedly aware, the Humboldt Foundation promotes academic cooperation between excellent scientists and scholars from Germany and abroad. Our Research Fellowships and Research Awards enable highly qualified researchers and academics from all disciplines and all countries to spend extended periods working on research in Germany. But we do not stop there: when the initial sponsorship period has come to an end and our Humboldtians – as we refer to the worldwide network of researchers we have sponsored – have returned to their own countries, we provide flexible support that helps them maintain and extend their relations with colleagues in Germany through a wide range of alumni sponsorship opportunities. Today, our worldwide Humboldt Network of Excellence embraces more than 29,000 scholars and scientists in over 140 countries.

There are currently approximately 140 Humboldtians in Chile. All of them were selected for one single reason: academic excellence. This has always been and remains the Humboldt Foundation's only selection criterion. We sponsor people, not projects, and we do not have any quotas for countries or disciplines.

Between 1953 and 2017, 206 Research Fellowships and five Humboldt Research Awards were granted to scholars and scientists from Chile. The most recent Research Award winner from Chile was Prof. Dr Rodrigo Gutiérrez from the Pontificia Universidad Católica de Chile who has just been honored this month with a Friedrich Wilhelm Bessel Research Award. This award is granted to eminent scientists and scholars from abroad who not only

have an international reputation in their field but who are expected to continue producing cutting-edge achievements which will have a seminal influence on their discipline beyond their immediate field of work in the future.

As mentioned earlier, fostering a worldwide network of Humboldt alumni is one of the Alexander von Humboldt Foundation's paramount goals. Its wide range of alumni sponsorship opportunities includes the so-called "Humboldt Kollegs". These are initiatives suggested by Humboldt Alumni Associations and individual Humboldtians to organize regional and interdisciplinary conferences. They serve to strengthen regional and professional networking amongst Humboldt alumni and spark the interest of junior researchers in Alexander von Humboldt Foundation programs and in Germany as a research location. In Chile, four Humboldt Kollegs have taken place since 2014. The most recent, "Translational Medicine: Emerging Health Problems in Latin America", was held by Prof. Dr Raúl Sánchez from the Universidad de la Frontera in Pucón in March 2018.

Every year, the Alexander von Humboldt Foundation grants up to four Humboldt Alumni Awards to promote Humboldtians' innovative networking initiatives. The award is designed to support initiatives not covered by the Foundation's existing sponsorship and alumni programs. It promotes academic and cultural relations between Germany and the Humboldt alumni's own countries and strengthens their collaboration in the respective regions. Since 2009, two Humboldt Alumni Awards have been granted to initiatives suggested by alumni from Chile. Most recently, Prof. Dr Claudio Llanos from the Pontificia Universidad Católica in Valparaíso received a 2018 Humboldt Alumni Award for his proposal. With his "Network for the study of contemporary social and political issues in Europe and Latin America: discussing and comparing our problems and responses," Claudio Llanos is building a specialist network of historians, sociologists and economists focusing on the current social and political challenges facing Europe and Latin America.

The global network of Humboldt alumni engages in cultural, scientific and scholarly dialogue at the highest levels. It is an excellent catalyst for internationalizing science and research and, last but not least, makes an important contribution to German foreign cultural and educational policy beyond the sphere of academic cooperation.

For several years, the Alexander von Humboldt Foundation has also been promoting research alumni activities at universities and research institutions in Germany in the context of the collaborative project "International Research Marketing". Since 2011, it has sponsored various competitions, inviting universities and research institutes to submit proposals for expanding collaboration with their research alumni. The Karlsruhe Institute of Technology

has received two awards for its convincing concepts for research alumni activities. In the 2017 contest, it was successful with its proposal to organize today's "Research Alumni Meeting", and the Humboldt Foundation is proud to support this important conference in Santiago de Chile.

Our thanks go to the German Ministry of Education and Research for funding the International Research Marketing initiative and for supporting this meeting. Our thanks are also due to our kind hosts, the Karlsruhe Institute of Technology and the Heidelberg Center for Latin America.

I hope the ties between the Humboldt research alumni from Chile and both the Karlsruhe Institute of Technology and the Humboldt Foundation will continue to complement each other. The Foundation would like to encourage Humboldtians here in Chile to make generous use of its alumni programs and to return to Germany to pursue further research collaborations. We should be delighted to welcome many Chilean research alumni to Germany in the near future.









KIT Research Alumni Conference "Renewable Energies – a German-Chilean Cooperation"

Date: November 23-24, 2018

Venue: Heidelberg Center for Latin America, Santiago de Chile

Organized by Karlsruhe Institute of Technology
within the framework of the sponsorship program "Research Alumni Meetings Abroad"
administered by the Alexander von Humboldt Foundation
and funded by the German Federal Ministry of Education and Research

PUBLICATION OPTIONS:

Accepted contributions of participants will be published in a peer-reviewed and edited volume of Springer Lecture Notes in Electrical Engineering. https://www.springer.com/series/7818

	Day I		
Reception	08:30 am	Welcome Coffee	
Welcome Addresses	09:00 am	Welcome Address by <u>Professor Dr. Thomas Hirth</u> , Vice President for Innovation and International Affairs, Karlsruhe Institute of Technology (KIT)	
	09:30 am	Welcome Address by <u>Professor Dr. Cristian Bornhardt</u> , KIT Alumni Club President in Chile, and <u>Dr. Erwin Plett</u> , KIT Deputy Alumni Club President in Chile	
Break	09:40 am	Consultation and Networking Break (Coffee Break) and Photo Session with Vice President Professor Dr. Thomas Hirth	

Context

The meeting is a constituent of the collaborative project "International Research Marketing" which is a joint initiative by the Alexander von Humboldt Foundation, the German Academic Exchange Service, the Deutsche Forschungsgemeinschaft, and the Fraunhofer-Gesellschaft. All activities within the project are part of the "Promote Innovation and Research in Germany" initiative under its brand "Research in Germany." The initiative is funded by the German Federal Ministry of Education and Research.

	I	
Presentation	10:15 am 11:00 am	Dr. Petra Roth, International Affairs (INTL), KIT: "The Research Alumni Initiative at KIT" Professor Dr. Andreas Braun, Institute for Regional Science (IFR), KIT: "A KIT-Chilean Partnership for the Future in the Fields of Renewable Energies, Raw Materials, Climate and Industrial Symbiosis: The Institute for Eco-Industrial Development (IEDE)"
Workshop	11:45 am	Scientific Poster Session by Participants of the Conference Open Space - Research Alumni Meet KIT Alumni Club Presidents
Lunch	12:30 pm	Lunch
Panel Discussion	02:00 pm	Panel Discussion: "Renewable Energies – a German-Chilean Cooperation and Challenge for the Future". Presented by Professor Dr. Thomas Kohl, Division of Geothermal Energy, Institute of Applied Geosciences (AWG), KIT Rainer Schröer, Promotion of Renewable Energies in Chile, German Corporation for International Cooperation GmbH (GIZ) Professor Dr. Rodrigo Palma, Solar Energy Research Center SERC-Chile, Universidad de Chile (UdC) Professor Dr. Christof Weinhardt, Institute of Information Systems and Marketing (IISM), KIT Professor Dr. Frank Dinter, Director of the Center for Solar Energy Technologies (CSET), Fraunhofer Institute Chile Annika Schüttler, Smart Energy Concepts, Cámara Chileno – Alemana de Comercio e Industria - CAMCHAL
	03:30 pm	Consultation and Networking Break (Coffee Break)
Visit	04:00 pm - 06:00 pm	Visit of the <u>Fraunhofer Center for Solar Energy Technologies</u> , Santiago de Chile
Dinner Reception	07:30 pm - 09:30 pm	Reception at the German Embassy in Santiago Welcome Address by German Ambassador Rolf Schulze

Day II			
ons	09:00 am	Dr. Petra Roth (INTL), KIT: "Research and Research Funding Opportunities in Germany in the Context of Research Alumni Activities"	
Presentations	09:30 am	Dr. Martina Schulze, Director of the German Science and Innovation House, São Paulo, Brazil: "Germany as a Partner for Funding Innovation and Technology Transfer"	
	10:00 am	Susanne Reischmann, Director of the DAAD Office in Chile: "Funding Opportunities by the German Academic Exchange Service (DAAD)"	
	10:30 am	Consultation and Networking (Coffee Break)	
		Scientific Poster Session by Participants of the Conference	
		Workshop A: Professor Dr. Andreas Braun, (IFR), KIT: "Industrial Development as an Innovation and Development Strategy"	
		Parallel:	
Workshops	11:00 am	Workshop B: Professor Dr. Christof Weinhardt, (IISM), KIT: "Integration of Renewable Generation through Local Energy Markets: Opportunities in Chile and Germany"	
		Parallel:	
		Workshop C: <u>Professor Dr. Thomas Kohl</u> , (AGW), KIT: "Perspectives of Geothermal Energy in Latin America – Chances, Risks and Potential for Renewable Energy Development."	
	12:30 pm	Lunch	
	02:00 pm	Presentation of Workshop Results (all workshops)	
	03:00 pm	Consultation and Networking (Coffee Break)	
Workshop	03:30 pm	KIT Alumni Clubs and Research Alumni: A "Win-win" Relation Scientific Poster Sessions by Participants of the Conference	
M		Reimbursement of Travel Costs	
	04:15 pm	Evaluation of the Conference & Closing Remarks	
	04:30 pm	End of Conference	



KIT Research Alumni Conference in Santiago "Renewable Energies – a German-Chilean Cooperation"



Short Profiles of the Participants



José Aliaga	Universidad de Concepción (Chile)
location	Concepción, Chile
short profile	Hydraulic engineer just graduated, planning PhD studies with the aim of developing an academic career. Currently working as research assistant at the Hydraulics Engineering Laboratory of the Universidad de Concepción. Currently working with DrIng Oscar Link in sediment transport related topics
expectations of the conference	Networking with Chilean and German researchers in re- newable energies with a focus in Hydropower and looking for research opportunities in Germany in Water related topics



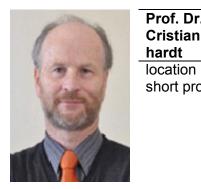
Carla Allende

location	Córdoba and Buenos Aires, Argentina
short profile	She studied Chemical Engineering and MSc. in Environ-
	mental Engineering from UTN. She is full professor for the
	subjects Design and optimization of chemical processes
	and for project management. Her focus on research is
	water quality and basins management, environmental im-
	pact assessment and LCA.
	Also she is in charge since 2005 of the International Office
	at Faculty Córdoba (UTN) and Director of International
	Cooperation for the UTN Rectorade since 2013. Since the
	creation in 2009 is the president of the KIT Alumniclub
	Argentina.
expectations of	To consolidate the existing collaborations between the
the conference	UTN and Argentina with the Chilean partners and explore
	new collaboration opportunities with other institutions and
	with the KIT Alumniclub Chile and others.

Universidad Tecnológica Nacional (Argentina)



Universidad Nacional de La Pampa (Argentina)
Santa Rosa, La Pampa, Argentina
Auxiliary Professor of Introduction to Industrial Automation at Universidad Nacional de La Pampa (UNLPam), Argentina. Main activities: besides teaching, research and development of remote sensors and wireless power transfer technologies. Former Sub-secretary of Information Technologies at UNLPam from 2014 to 2018 and representative in the Connectivity and Information Systems Commission of the Na-
tional Interuniversity Board (CIN). Education: Electronics Engineering degree at the National
Technological University, Regional Faculty of Córdoba.
Networking with fellow Alumni and exploring cooperation opportunities with KIT and other Latin-American Universities.



Prof. Dr.-Ing. Cristian Born-hardt

short profile

expectations of the conference

Universidad	de La Frontera (Chile)
Tamassa Ohili	
ty of Concepneering Scients same Universities in the finance (1983) and the Engineering at (1996). His act and grade in the fields on eering, main of urban and in and process and energy effocus has been logical treatment different univers, including lences (2010-the project "With versities in the tolan association, Bío-Bío ar million finance Since 2011 here	nis Chemical Engineering degree at Universi- ción, Chile (1979), and his Master in Engi- nices, major in Chemical Engineering at the nity (1981). Afterwards, he studied Food Pro- ering at Technical University of Karlsruhe nen obtained his DrIng. in Environmental nat Technical University of Berlin, Germany cademic activities are related to undergradu- nate teaching, research and technical advice of Food Engineering and Environmental Engi- nly physical-chemical and biological treatment ndustrial wastewaters, effluent management, rengineering with focus on pollution prevention officiency. Related to biological treatment, the nen on nitrogen removal using advanced bio- nents. During his academic career, he served nersity positions at Universidad de La Fronte- nean of the Faculty of Engineering and Sci- nelson of the Faculty of Engineering and Sci- nelson of the Faculty of Engineering and Sci- nelson of Chile, which corresponds tive initiative of the Universities of La Fronte- nelson of Talca, with funding of more than US\$ 10 nelson of Chile, which corresponds tive initiative of the Chilean KIT-AlumniClub. The Collaborative networks of Chilean and Ger-
maniesearch	CI 3.



Prof. Dr.	Karlsruhe Institute of Technology (Germany)
Andreas Braun	
location	Karlsruhe, Germany
short profile	Junior Professor for Risk-oriented Regional Development.
	Education: Geoecology (Diploma), sociology (M.A.). Head
	of the project IEDE - Institute of Eco-Industrial Develop-
	ment: establishment of a virtual research institute together
	with Universidad de Chile, Universidad de Concepcion,
	Universidad Austral de Chile. Main research areas: re-
	gional development - vulnerability research - land use
	impact research. Research experience in Chile: land use
	studies relating to deforestation – ecological consequenc-
	es of deforestation - social hazards as a result of forest
	fires – social conflicts with indigenous ethnic groups.
expectations of	Networking with Chilean researchers in renewable ener-
the conference	gies, presentation of own activities, scientific exchange
	with Chilean authorities in the context of own projects.
-	



Dr. Alisson V. Brito	Universidade Federal da Paraíba (Brazil)
location short profile	João Pessoa, Paraíba, Brazil Alisson Brito holds doctorate in Electrical Engineering from the Federal University of Campina Grande (UFCG), Brazil in field of Microelectronics in 2008, with cooperation with the Karlsruhe Institute of Technology (KIT), Germany, has master (2003) and BA degrees in Computer Science (2001) also by UFCG. He is currently reviewer of national and international journals and conferences. Has experience in Computer Science, with emphasis on design and development of embedded systems, mainly in the following themes: Design and Simulation of Embedded Systems and Applications using Unmanned Aerial Vehicles. He is currently professor at Universidade Federal da Paraiba (UFPB), is Coordinator of the Laboratory of Embedded Systems and Robotics (LaSER) and works on the Graduate Program in Computer Science (PPGI) of UFPB, where he teaches courses mainly in the areas of Computer Architecture and Embedded Systems for students from Computer Science and Computer Engineering.
expectations of the conference	Networking and possible future collaboration with researchers in the application of Unmanned Aerial Vehicles



Bernardo Cienfuegos	Pontificia Universidad Católica de Valparaíso (Chile)
location short profile	Valparaíso, Chile Researcher at the Centro Interdisciplinario de Ingeniería, Pontificia Universidad Católica de Valparaíso (PUCV). He studied Industrial Engineering at the PUCV. He worked as scientific staff at the Institut für Technikfolgenabschätzung und Systemanalyse (ITAS) at the Karlsruher Institut für Technologie. He is finishing his Dissertation at the Technische Universität Darmstadt. He has experience in developing decision support systems for Inventory Management, Production and Scheduling and Supply Chain Systems. His research areas are renewable energies, combining biomass logistics and Life Cycle Assessment for a sustainable approach. Currently working on interdisciplinary teamwork and University- Industry applied projects.
expectations of the conference	Networking with researchers interested in renewable energies, interdisciplinary teamwork and applied projects. Meet old KIT Alumni friends and new ones too.



Prof. Dr. Frank	Fraunhofer Center for Solar Energy Technologies
Dinter	(Chile)
location	Santiago, Chile
short profile	Prof. Frank Dinter wrote his diploma work at Plataforma Solar de Almeria, Spain in 1986/87. He completed his PhD (DrIng.) on Thermal Energy Storage Systems for CSP plants in 1992. Afterwards he worked for a German utility, and filled various positions there, including Head of Research & Development for optimization of fossil fired power stations. In 2008 he re-joined Solar Energy as, Head of Solar, at RWE Innogy, Germany. Frank was responsible for the operation of 25 PV plants in Germany/Spain and became technical director of "Andasol 3" (50 MW CSP plant in southern Spain) during construction and operation phase. From 2013 until 2017 Frank was the Eskom Chair in CSP and headed the Solar Thermal Energy Research Group (STERG) at Stellenbosch University, South Africa. Since July 2017 Frank works for Fraunhofer Chile Research in the Center of Solar Energy Technologies (FCR-CSET). Since February 2018 he is the executive
	Director of FCR-CSET.
expectations of	
the conference	



Prof. Dr. Márcio Dorn	Federal University of Rio Grande do Sul (Brazil)
location short profile	Porto Alegre, RS, Brazil Márcio Dorn is an Associate Professor with the Institute of Informatics (INF) at Federal University of Rio Grande do Sul (UFRGS), Porto Alegre, Brazil. He is lead of the Structural Bioinformatics and Computational Biology Laboratory. Education: he holds a Ph.D. in Computer Science from the Federal University of Rio Grande do Sul in Computer Science (2012), and MSc (2008) in Computer Science from the Pontifícia Universidade Católica do Rio Grande do Sul (PUCRS), Porto Alegre, Brazil. In 2008, 2009 and 2017 he was a research associate at the Karlsruhe Institute of Technology, Germany. His research interests include Bioinformatics, Structural Bioinformatics, Machine Learning, Metaheuristics, Artificial Intelligence and High-Performance Computing. Prof. Dorn is a CNPq (Brazilian National Research Council) Advanced Fellow, and an Alexander von Humboldt Research Fellow (AvH Germany).
expectations of the conference	Networking with German and Chilean researchers, presentation of own research activities, discuss possible cooperation in the fields of applied computing, Bioinformatics, and artificial intelligence.



Freiberger Jr.	Federal University of Santa Maria (Brazil)
location	Santa Maria-RS, Brazil
short profile	Associate Professor in the Department of Rural
	Engineering focused on the subjects Topographical
	Survey and Satellite Geodesy for undergraduate students
	of Forestry and Civil Engineering. He is engaged on
	research, education and extension projects also in the
	environmental sector.
expectations of	To build a network for scientific and technological
the conference	partnerships to encourage cooperation between research
	alumni and KIT.



Prof. Dr.	University of Concepción (Chile)
Ximena Garcia	
location	Concepción, Chile
expectations of the conference	Full professor at the Chemical Engineering Department of the University of Concepcion. Doctor degree in Chemical Engineering Sciences, of the University of Concepcion and the University of Karlsruhe in 1991. Research lines: Thermal conversion of coal, biomass and related materials, co-combustion of coal/biomass blends, developing of low cost catalysts for soot combustion, biomass gasification and CO/CO ₂ methanation, studies on kinetics and mechanisms of heterogeneous reactions. More than 40 publications in indexed (web of Science) journals, and responsible for a variety of research projects. Head of the graduate School of the University during the period 2006-2018. To explore possibilities of scientific collaboration with research groups of similar interests and to promote academ-
	ic mobility among both institutions.



Dr. Carla Gutiérrez	Universidad de O'Higgins (Chile)
location	Rancagua, Chile
short profile	Director of the Foreign Affairs Office at Universidad de O'Higgins.
	Education: Studied Philosophy at Universidad de Chile. After that, she moved to Germany. In 2010 she earned her Master's degree in Regional Science and Territorial planning at IfR at KIT. During the Master study, Carla worked as HiWi at Fraunhofer Institute for Systems and Innovation Research in research innovation projects between Germany and Chile. In 2016 she completed her doctorate degree in Social and Economic Geography at University of Heidelberg.
expectations of the conference	Presenting our new public University in Chile Universidad de O'Higgins (UOH) to the german academic and scientific network, promoting and fostering cooperation between UOH and KIT researchers. Meeting Chilean research alumni of KIT



Prof. Dr.	Karlsruhe Institute of Technology (Germany)
Thomas Hirth	
location short profile	Karlsruhe, Germany Vice President for Innovation and International Affairs. Education: Studied chemistry at Universität Karlsruhe in Germany, one of the predecessor institutions of the KIT, and then graduated in Karlsruhe at the Institute of Physical Chemistry and Electrochemistry. From 1992 to 2007, Thomas Hirth worked at Fraunhofer Institute for Chemical Technology ICT in Pfinztal, Germany, holding different positions from postdoctoral research fellow to head of environmental engineering. In December 2007, he moved to Stuttgart to become the Director of Fraunhofer Institute for Interfacial Engineering and Biotechnology. In 2008, he additionally was appointed professor at the University of Stuttgart and head of the Institute of Interfacial Process Engineering and Plasma Technology.
expectations of the conference	In 2012, Thomas Hirth became vice-dean of the Faculty of Energy, Process, and Bio-Engineering of the University of Stuttgart. In January 2012, he became member of the Presidential Committee of Fraunhofer Institute Stuttgart. Moreover, he was scientific coordinator of the Bio-Economy Leading-edge Cluster and took over the presidency of the steering committee of the research program "Bioökonomie Baden-Württemberg" in 2014. In early 2013, Since January 01, 2016, he has been Vice President for Innovation and International Affairs of KIT. Fostering cooperation projects between Chilean research institutions and KIT, networking with Chilean researchers in the renewable raw materials and energies sector, meeting research alumni of KIT



Oliver Kaas	Karlsruhe Institute of Technology (Germany)
location	Karlsruhe, Germany
short profile	Advisor for internationally mobile researchers at the Inter-
	national Scholars and Welcome Office, a sub-division of
	the International Affairs Business Unit of KIT. Main activi-
	ties: Funding opportunities for internationally mobile re-
	searchers (Humboldt-Foundation, Helmholtz Association,
	DAAD, DFG, scholarships, information roadshows, inte-
	grative activities, project officer in charge of the Research
	Alumni Initiative at KIT.
	Education: Master's degree in International Affairs / Con-
	flict and Peace Studies at Goethe University of Frankfurt
	and Technical University of Darmstadt.
expectations of	Promoting and expanding the research alumni network in
the conference	Chile and Latin America, networking with research alumni,
	fostering cooperation between research alumni and KIT



Prof. Dr. Thomas Kohl	Karlsruhe Institute of Technology (Germany)
location short profile	Karlsruhe, Germany Full professor for geothermal energy and head of the Helmholtz geothermal program at Karlsruhe Institute of Technology at KIT. After his degree in Geophysics at the Technical University of Karlsruhe he became research associate at CNRS in Paris in the field of seismology. In 1992 he got his PhD at ETH Zurich on his investigations of coupled processes in deep geothermal systems. After completing his habilitation thesis, he became senior lecturer at ETH Zürich in 1999 as recognized expert on subsurface and especially in geothermal systems. As cofounder of GEOWATT AG in Zürich he was the CEO of this ETH spin-off, medium size company between 2003 and 2011. In 2010, he was appointed professor at KIT. A major research focus is on the investigation of geomechanical aspects in fractured systems. As such, the origin and impact of induced seismicity and the impact on the reservoir is of strong interest. With his arrival, KIT became an internationally renowned institution in geothermal research.
expectations of the conference	Networking and initiation of interdisciplinary research projects, contact to researchers in Latin America; contact to authorities fostering binational research



Dr. Andrea Lazo	Universidad Técnica Federico Santa María (Chile)
location short profile	Valparaiso, Chile She has an academic position at Chemical and Environmental Engineering Department of Universidad Técnica Federico Santa María. Between 2002 and 2003 she obtained a specialization in electrochemistry and photochemistry at University of Karlsruhe and after that, during her doctoral studies, she carried out and internship at KIT. She has worked at industry and university in electrochemical researches applied to chemical, environmental and material Sciences.
expectations of	Networking with Chilean and German researches, explor-
the conference	ing the possibility of future collaborations with other professionals or research institutions.



Irma Mantilla	Karlsruhe Institute of Technology (Germany)
location	Karlsruhe, Germany
short profile	Staff member at KIT International Affairs office and Institute of Regional Science.
	Administrative Coordinator of the KIT-Chile Cluster, a group of 17 KIT institutes seeking to extend cooperation in research, teaching and innovation in the fields of renewable energies and sustainable use of resources. Member of the IEDE team. Regional officer for Latin-America, exploring new cooperation possibilities between KIT and Latin-American universities and institutions.
expectations of the conference	Professional experience in grant management of Europe- an research projects (Horizon 2020), gained both in a con- sultancy office and in the renewable energy industry. Promoting and expanding cooperation between KIT and Latin-American universities/institutions, networking with researchers and authorities



Prof. Dr. Francisco Marshall	Federal University of Rio Grande do Sul (Brazil)
location	Porto Alegre, RS, Brazil
short profile	Francisco Marshall is Full Professor within the Department
	of History, IFCH-UFRGS, and the current President of the
	Humboldt Club of Brazil. PhD by the USP, with post-doc in
	Princeton (Fulbright grant, 1998) and Heidelberg (Hum-
	boldt grant, 2009), Francisco Marshall is specialized in
	classical culture (History, Philosophy, Literature, Arts) and
	classical archaeology, Francisco Marshall works also with
	History and epistemology of the Sciences, Cultural History
	and Museology.
expectations of	Networking with German and Chilean researchers and
the conference	managers, presentation of a panel on epistemological questions related to sustainability, enhancing the theoretical sensibility on the general subject of the meeting.



Prof. Dr. Rodrigo Mikosz Gonçalves	Federal University of Pernambuco (Brazil)
location	Recife-PE, Brazil
short profile	He is an associate professor of Environmental Geoinformatics at Federal University of Pernambuco (UFPE), Brazil, and a permanent member of the Geodetic Science and Technology of Geoinformation Post Graduate Program (UFPE). He has research experience in the field of environmental geodesy, with specific focus on: coastal mapping, shoreline monitoring and modelling.
expectations of the conference	In my opinion this new opportunity to attend this seminary in Chile will keep improving my networking skills and en-
	lighten myself with KIT progress in Innovation and new research opportunities as well keeping actively as a research alumnus of KIT.



Dr. Sonia Montecinos Geisse	Universidad de La Serena (Chile)
location	La Serena, Chile
short profile	Academic of the Departamento de Física y Astronomía, Uninversidad de La Serena, Chile. Education: Master in Sciences in Physics (Univ. de Chile); Dr. rer. nat. in the Technische Universitaet, Clausthal. Head of the project CONICYT-BMBF "Prediction of an optimized system with renewable energies in Chile". Experience leading projects in atmospheric physic, fog characterization and renewable energy founded by Chilean an International cooperation founds (BMBF-CONICYT). Research experience: wind maps, wind energy forecast. Networking with Chilean and
	German researchers in renewable energies.
expectations of the conference	To know about research activities in Chile and KIT in renewable energy, and to get new contacts in this area for
	future cooperations.



Prof. Dr. Rodrigo Palma- Behnke	Universidad de Chile FCFM (Chile)
location short profile	Santiago, Chile Rodrigo Palma-Behnke (M'94, SM'04) He received his B.Sc. and M.Sc. on Electrical Engineering from the Pontificia Universidad Católica de Chile and a DrIng. from the University of Dortmund, Germany. He is associate professor at the Electrical Engineering Department at the University of Chile. His research field is the planning and operation of electrical systems in competitive power markets, renewable energy, solar energy solutions, smartgrids, power system education, and the development of microgrids solutions. He is with the Energy Center, FCFM, University of Chile (www.centroenergia.cl), and Director of the Solar Energy Research Center SERC-Chile (www.sercchile.cl). He was Chairman of the IEEE Chile Section, 2011-2012, 2007-2008, 2003-2004. Secretary in the IEEE Task Force on Microgrid Stability Analysis and Modeling (Chairs: Claudio Cañizares, University of Waterloo, and Jim Reilly, Reilly Associates). Co-founder of the initiative: Comunidad Solar R9 (solar community) of the IEEE (www.comunidadsolar.cl). Director of the Ayllu Solar
expectations of	Project (www.ayllusolar.cl).



expectations of the conference

Maximiliano Pavez	Karlsruhe Institute of Technology (Germany)
location	Karlsruhe, Germany
short profile	Doctoral student of Division of Geothermal Energy, Institute of Applied Geosciences (AWG), KIT. Working in joint inversion of magnetotelluric and gravity data of geothermal reservoirs in southern Chile. Doctoral scholarship holder through bi-lateral agreement of DAAD and CONICYT. Education: Master in Geophysics at University of Chile; Bachelor of Physics in Pontifical Catholic University of Chile.
expectations of the conference	Promote geothermal research of the institute of applied sciences and promote participation in DAAD scholarships.



Dr.-Ing. Erwin Plett

location short profile

Santiago, Chile

Alfa Lux Ingeniería SpA (Chile)

He is a chemical engineer graduated from Universidad de Chile, with a PhD (Dr.-Ing.) in Food Process Engineering from Universität Karlsruhe (TH), and post-doc in Thermal Engineering at the University of Madison-Wisconsin. He holds a CEM, Certified Energy Manager from the aee, The Association of Energy Engineers. Dr. Plett managed well renowned international engineering, and plant & equipment sales activities in the fields of food-, chemicals- & minerals-production with mechanical and thermal processing plants (Alfa Laval Food Engineering GmbH, GEA Wiegand GmbH, Babcock BSH AG). He had production management responsibilities in the plastics- (Plásticos W. Plett), pharmaceuticals- (Laboratorio Chile S.A.), dry natural products production (Soc. Agrícola. y Forestal Casino Ltda. & Soc. Comercial Botánica Ltda.), natural vegetable oil industry (Bionovo Chile Agroindustria Ltda.) and environmental engineering activities (Sello Verde Ingeniería Ambiental S.A.). Nowadays he focuses on ventures regarding sustainability as intelligent recycling systems (ViveEko SpA), energy efficiency projects, renewable energies (photovoltaic, solar thermal and geothermal) and modern lighting systems projects based on human centric lighting principles (Alfa Lux Ingeniería SpA), being also founder of Low Carbon Chile SpA working in the field of nanotechnology eco-catalyzers for emissions He has lectured at technical and college levels at Universidad de Chile, Universität Karlsruhe (T.H.), and University of Wisconsin-Madison. He has published over 60 technical papers in journals, authored and edited several books and handbook chapter publications in various process-engineering fields, where he has conducted research, developed practical applications, and helped in marketing efforts to promote brand new technologies. Being co-founder of KIT Alumniclub in Chile (formally AlumniKaTH-Club Chile) looking forward to strengthen collaborative networks of South American and German researchers

expectations of the conference



Prof. Dr. Benjamin Quesada	Universidad del Rosario (Colombia)
location short profile	Bogotá, Colombia Professor in Climatology, Leader of the Research Group ICE "Interactions Climate-Ecosystems". Education: Mechanical engineer, M.Sc. in Environmental and Climate Sciences, PhD in Climatology (France), Post-doc in vegetation-atmosphere feedbacks (KIT, Germany); Main research areas: land-atmosphere interactions – deforestation impact on climate and carbon – extreme weather events – photovoltaic modelling.
expectations of the conference	Learning about innovative research on renewable and potential links with climate change, Promote knowledge transfer to build similar successful Colombian-German scientific cooperation in Colombia, Networking with research alumni and cooperating with KIT.



Susanne Reischmann	German Academic Exchange Service, DAAD (Chile)
location	Santiago de Chile, Chile
short profile	Since august 2018 director of the DAAD Information Center in Santiago. From 09/2017 to 05/2018 lecture at the Ruhr Universität Bochum, from 08/2012 to 06/2017 DAAD lecture at USAC, Guatemala
expectations of the conference	To promote internationalization and the programs of DAAD.



DrIng. Fredy Rios	Karlsruhe Institute of Technology (Germany)
location	Karlsruhe, Germany
short profile	He obtained his Civil Engineering in Information Systems degree at Universidad Austral de Chile, with a major in Software Engineering. After working in the industry and in applied science in the forest sector, he pursued doctoral studies at the KIT at the Institute of Applied Informatics and Formal Description Methods. At the AIFB his research focused on nature-inspired algorithms and their utilization for optimizing the consumption of renewable energy sources in a demand side management context. Currently, as Scientific Coordinator of the KIT-Chile Cluster and the IEDE project his responsibilities include, among other,
	strategic communication with Chilean and German institutions, project management and grant applications.
expectations of	Consolidating existing collaborations between the KIT and
the conference	its' Chilean partners and explore new collaboration opportunities with other strategic institutions.



Jorge Rodríguez- Hernández	Pontincia Oniversidad Catolica dei Peru (Peru)
location short profile	Lima, Perú Mechanical Engineer from the Pontificia Universidad
SHOIT PROME	Católica del Perú (1978), Diplom Ingenieur in Mechanical Engineering at the University Fridericiana of Karlsruhe, Germany (1992). Doctorate in Mechanical Engineering and Industrial Organization at the University Carlos III of Madrid (2017).
	He has been working since 1980 as a teacher of Mechanical Engineering at the Pontificia Universidad Católica del Perú (PUCP). He has also been Visiting Professor at the School of Mechanical Engineering of the Universidad de
	las Américas in Puebla, Mexico and Professor of the Master Program of Mechanical Engineering of the Graduate School of the Universidad Nacional de Ingeniería, Lima, Peru. He is currently Professor of the Department of Engineering of the PUCP and teaches Applied Mechanics courses in the specialties of Mechanical Engineering and Mechatronics. He is also Director of the Master's Degree in Mechanical Engineering. He is a member of the Permanent Commission for Education of the International Feder-
	ation for the Promotion of Machines and Mechanisms (IFToMM) and is chairman of the IFToMM-Peru Committee.
expectations of the conference	Promote internationalization and technological cooperation programs between KIT and Latin American universities.

Pontificia Universidad Católica del Perú (Perú)



Dr. Petra Roth	Karlsruhe Institute of Technology (Germany)
location	Karlsruhe, Germany
short profile	Head of the International Scholars and Welcome Office, sub-division of the International Affairs Business Unit of KIT. Main activities: Strategic development of professional and individualized support for internationally mobile researchers and promotion of their participation in the KIT community; concept for the liaison of KIT with research alumni for mutual benefits. Member of the steering group of the Scholars at risk Germany Section in support of persecuted scientists.
evacetations of	Education: Forest Engineering (USP, Brazil); Doctorate in Biology/Plant Physiology (Universität Karlsruhe)
expectations of	Promoting the idea of the KIT research alumni network in
the conference	Chile by providing an environment for personal encounters to foster the bonds with KIT, a lasting exchange and future cooperation.



expectations of the conference

arbeit (GIZ) GmbH, Santiago de Chile (Chile)
Santiago de Chile, Chile
Rainer Schröer is physical engineer graduated in Aachen,
Germany and is since 2014, responsible for the coordina-
tion of GIZ implemented 4E-program in Chile, which con-
sists of several projects related to the promotion of renew-
able energies and energy efficiency in Chile and Argen-
tine. Rainer Schröer has accumulated more than 35 years
of experience working in the private and the government
sector in activities related to energy, energy efficiency,
renewable energies and water supply/treatment. After his first working experience at the KFA-Jülich (Nuclear Re-
search Center), he worked 7 years as adviser for the Phil-
ippine National Oil-Company, 4 years in Argentine as con-
sultant on water and energy issues and 4 years as con-
sultant in Brasil for energy company CEMIG. For more
than 15 years he was representative of German compa-
nies Steag (energy) and BWI (water) and with his own
service-company BWdoBrasil working in energy and water
related projects, mainly for the Brazilian mining industry.
He was hired by GIZ in 2008 for the acquisition of CDM-
projects (clean development mechanism) in Brasil and
from 2010-2014 for creating and implementing a regional
GIZ-energy program for the central American countries.
Expanding networking with participants from Chile and
other countries and discussing possibilities for cooperation
in aspects regarding the promotion of renewable energies
and energy efficiency.

Deutsche Gesellschaft für Internationale Zusammen-

Association of the second

Dr. Martina Schulze	German Academic Exchange Service, DAAD (Brazil)
location	Rio de Janeiro and São Paulo
short profile	Director of the German Academic Exchange Service (DAAD) Regional Office in Rio de Janeiro since October 2014. Since 2017, she holds also the position of director of the German Centre of Research and Innovation (DWIH) in São Paulo. From 1993 onwards, she has been working for the DAAD and has held several managerial positions within the organization throughout her career, most of them related to Latin America. She holds a PhD in Linguistics. In total, she dedicated more than 15 years to studying, researching, teaching and working in higher education co-
expectations of the conference	operation in South America. Share the experience of the German Centre for Research and Innovation, São Paulo, with the participants. Learn about innovation in the area of renewable energy and the co-operation between Research Universities and Industry in Chile.



Annika	CAMCHAL - Chilean-German Chamber of Commerce
Schüttler	and Industry (Chile)
location	Santiago, Chile
short profile	Annika Schüttler leads the Energy Division of the Chilean-German Chamber of Commerce and Industry (CAM-CHAL). She studied European Studies at Maastricht University in The Netherlands, specializing in environmental politics and the principle of sustainability. She followed a specialization course on Ecological Economics at the University of Buenos Aires, Argentina, and on the Methodology of Life Cycle Analysis at Northwestern University, USA. In Chile, she has worked at Eurochile and with the company Pipartner developing projects in the fields of Renewable Energies and Energy Efficiency. Furthermore, she introduced the Dutch technology Groasis Waterboxx and the German technology Yara-ZIM Plant Technology into the Chilean market, both aimed at reducing water use in agri-
	culture and the forestry industry.
expectations of the conference	· ·



Deceal Cial	Variancha Institute of Tachnalanu (Commanu)
Pascal Sick	Karlsruhe Institute of Technology (Germany)
location	Karlsruhe, Germany
short profile	Apprentice as Office Management Assistant at the International Affairs business unit. Main activities: Assistant to the head of the business unit as well as event managing for the International Affairs sub-division Regional Strategy &
	Information.
expectations of the conference	Insights about an international conference and research alumni work



Prof. Dr. Ullrich Stahl	Central University of Ecuador (Ecuador)
Stahl location short profile	Quito, Ecuador He studied Chemistry from 1987 to 1995 at the University of Karlsruhe, Germany. In 1999 he received his Ph.D. in Chemistry at the University of Karlsruhe, studying the "Development of a method for stabilization of polymer films on SAW-sensors for analysis of organic gases". His postdoctoral research at the Forschungszentrum Karlsruhe, Germany, which is now part of the Karlsruhe Institute of Technology, included development and operation of gas sensor systems based on surface acoustic wave devices. Since 2014, he is an associate professor at the Faculty of Chemical Engineering of the Central University of Ecuador in Qui-
expectations of the conference	to, Ecuador and his research interests are focused on dif- ferent aspects of renewable energies, like microwave pyrol- ysis of waste biomass and generation of biofuels. Expanding networking with research alumni also from Latin America, fostering cooperation between research alumni and KIT.



DrIng. Guido Staub	University of Concepción (Chile)
location short profile	Concepción, Chile I started my university career at KIT (former University of Karlsruhe (TH)) in 1997 as a student of Surveying (Vermessungswesen). I graduated in 2003 and did my PhD at the Institute for Photogrammetry and Remote Sensing at KIT. In 2006 I obtained my doctoral degree on Engineering Sciences. Since 2007 I am an academic at the University of Concepción, Chile. At this moment I am an Associate Professor at the University of Concepción and Head of the Department for Geodetic Sciences and Geomatics, which forms professionals in the area of Topography, Surveying and Geomatics since 1963. My current research is focused on climate change and environmental studies. Most of them are based on remote sensing techniques and visualization of data from a huge variety of sources, what is also known as sensor fusion.



Alvaro Viveros Bittner	Universidad de Concepción (Chile)
location	Concepción, Chile
short profile	I studied Mechanical Engineering at the University of Concepción and Alumni of the Karlsruher Institute for Technology (KIT) thanks to a university Exchange with the DAAD. I am constantly looking for venturing into various activities where I can get learnings. In 2017 I developed an entrepreneurial venture learning leadership skills and wood manufacturing.
	I'm developing a project on a dairy using Renewable Energy. Today the plant works with oil and want to reduce the pollution. The project considerers to build a new plant to produce cheese, both plants working with "Green Energy".
expectations of the conference	It is a big opportunity to work with researchers and to be part with the Alumniclub Chile and others countries. Also want to get actualization about renewable energy in Chile, and use this knowledge for some future projects.



Dr. Karin Walter	Hidrolatina de Chile (Chile)
location	Santiago, Chile
short profile	Research and development manager Hidrolatina de Chile. Education: Chemical Engineering, University of Concepción (2011), Doctor degree in Chemistry (Catalysis), Karlsruhe Institute of Technology (2016). Current research lines: water treatment, purification and recovery; osmosis, filtration and ultrafiltration technologies; sedimentation processes; membrane optimization; corrosion control; advanced oxidation; coagulation-flocculation; effluent management.
expectations of	agement.
expectations of the conference	Explore new national and international collaboration opportunities and networking.



Prof. Dr. Christof Weinhardt	Karlsruhe Institute of Technology (Germany)
location	Karlsruhe, Germany
short profile	He graduated in Industrial Engineering and received his Ph.D. in Economics from the University of Karlsruhe (TH) in 1989. Then he focused his research work more on Information System at the Universities of Giessen and Bielefeld. Currently – as full professor - he is director of the Institute for Information Systems and Marketing (IISM) at the Karlsruhe Institute of Technology (KIT) heading the group "Information and Market Engineering" (IM). With his academic background in Industrial Engineering, Business Administration, Economics, and Information Systems his research focuses on interdisciplinary topics related to Market Design and Engineering with applications in IT services, energy, finance, and telecommunications markets. In these areas he is chair, co-editor, and reviewer for numerous international journals and conferences, published more than 200 peer reviewed papers and books and received a number of awards for his research and
	teaching work.
expectations of the conference	Consolidating existing collaborations between our group and our Chilean partners and explore new collaboration opportunities with other institutions in Chile and South America.



Liege Wosiacki	Federal University of Paraná (Brazil)
location	Curitiba, Paraná, Brazil
short profile	Ph.D. Student at Federal University of Paraná (Brazil) and at Karlsruhe Institute of Technology s (double-degree). Working with environmental monitoring, hydrodynamic and environmental systems modeling. Currently is working at MUDAK project (Multidisciplinary Data Acquisition as the Key for a globally applicable water resource management) context, an international and interdisciplinary research group that aim to develop a model for the prediction of medium to long term changes in water quality in reservoirs.
expectations of the conference	Education: Environmental Engineer degree (2009) at Federal University of Paraná and Master in Computational Fluid Dynamics at the same university. Beside the scientific interests and networking with colleagues from different countries, universities, and fieldwork, as a member of Curitiba's KIT Alumni Club, I would like to keep in touch with other KIT Alumni Club Presidents to share experiences.

Verónica Yáñez University of Santiago de Chile (Chile)



R. location

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location	Santiago, Chile
short profile	Verónica Yáñez is an associate Professor within the De-
	partment of Geographical Engineering of the Faculty of Engineering of University of Santiago de Chile. She is cur-
	rently the Director of the Center Program in Territorial
	Planning, and the Master's program in Environment.
	She obtained the degree of Magister in Regional Science at the Fridericiana University of Karlsruhe from 1999 to
	2001 in Germany, in 1996 she graduated as Civil Engineer
	in Geography from the University of Santiago de Chile.
	She is a pre and postgraduate academic in the subjects of
	Planning and Territorial Planning, Instruments of Urban Planning, Urban Theory and Models, Theory and Regional
	Models.
	Research focus: Regional and Local Territorial Studies, Risk and Vulnerability
	She is a Member of the Chilean Society of Geography; of
	the International Network of the University of Karlsruhe
expectations of	(UNIKAT), Germany. Working in a network with Chilean and German research-
the conference	ers, exploring the possibility of future collaborations with
	other professionals or research institutions in order to enhance the exchange and transfer of knowledge.
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