

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





Research in Germany Land of Ideas







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.



Federal Ministry of Education and Research Research in Germany Land of Ideas



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

Date: November 23-24, 2018 Venue: <u>Heidelberg Center for Latin America</u>, 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. <u>https://www.springer.com/series/7818</u>

	Day I				
Reception	08:30 am	Welcome Coffee			
Welcome Addresses	09:00 am 09:30 am	 Welcome Address by <u>Professor Dr. Thomas Hirth</u>, Vice President for Innovation and International Affairs, Karlsruhe Institute of Technology (KIT) 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 <u>Professor Dr. Thomas Hirth</u>			

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.

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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 <u>Professor Dr. Thomas Kohl</u> , Division of Geothermal Energy, Institute of Applied Geosciences (AWG), KIT <u>Rainer Schröer</u> , Promotion of Renewable Energies in Chile, German Corporation for International Cooperation GmbH (GIZ) <u>Professor Dr. Rodrigo Palma</u> , Solar Energy Research Center SERC-Chile, Universidad de Chile (UdC) <u>Professor Dr. Christof Weinhardt</u> , Institute of Information Systems and Marketing (IISM), KIT <u>Professor Dr. Frank Dinter</u> , Director of the Center for Solar Energy Technologies (CSET), Fraunhofer Institute Chile <u>Annika Schüttler</u> , 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 09:00 am Dr. Petra Roth (INTL), KIT: "Research and Research Funding Opportunities in Germany in the Context of Research Alumni Activities"	
Opportunities in Germany in the Context of Research Alumni	
09:30 am Activities" 09:30 am Dr. Martina Schulze, Director of the German Science and Innovat House, São Paulo, Brazil: "Germany as a Partner for Funding Innovation and Technology Transfer"	<u>on</u>
Susanne Reischmann, Director of the DAAD Office in Chile: "Fun10:00 amOpportunities by the German Academic Exchange Service (DAAD)	-
10:30 amConsultation and Networking (Coffee Break)Scientific Poster Session by Participants of the Conference	
Workshop A: <u>Professor Dr. Andreas Braun</u> , (IFR), KIT: "Industrial Development as an Innovation and Development Strategy"	
Parallel:	
StoryWorkshop B: Professor Dr. Christof Weinhardt, (IISM), KIT: "Integ11:00 amof Renewable Generation through Local Energy Markets: Opport in Chile and Germany"Parallel:	
Parallel:	
Workshop C: <u>Professor Dr. Thomas Kohl</u> , (AGW), KIT: "Perspect Geothermal Energy in Latin America – Chances, Risks and Poten for Renewable Energy Development."	ves of tial
12:30 pm Lunch	
02:00 pm Presentation of Workshop Results (all workshops)	
03:00 pm Consultation and Networking (Coffee Break)	
Ogs VolumeKIT Alumni Clubs and Research Alumni: A "Win-win" Relation03:30 pmScientific Poster Sessions by Participants of the Conference	
Reimbursement of Travel Costs	
04:15 pm Evaluation of the Conference & Closing Remarks	
04:30 pm End of Conference	





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 Engineer- ing Laboratory of the Universidad de Concepción. Current- ly 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	Universidad Tecnológica Nacional (Argentina)
1007	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.

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



	Prof. DrIng. Cristian Born- hardt	Universidad de La Frontera (Chile)
	hardt location short profile	Temuco, Chile He obtained his Chemical Engineering degree at Universi- ty of Concepción, Chile (1979), and his Master in Engi- neering Sciences, major in Chemical Engineering at the same University (1981). Afterwards, he studied Food Pro- cess Engineering at Technical University of Karlsruhe (1983) and then obtained his DrIng. in Environmental Engineering at Technical University of Berlin, Germany (1996). His academic activities are related to undergradu- ate and graduate teaching, research and technical advice in the fields of Food Engineering and Environmental Engi- neering, mainly physical-chemical and biological treatment of urban and industrial wastewaters, effluent management, and process engineering with focus on pollution prevention and energy efficiency. Related to biological treatment, the focus has been on nitrogen removal using advanced bio- logical treatments. During his academic career, he served different university positions at Universidad de La Fronte- ra, including Dean of the Faculty of Engineering and Sci- ences (2010-16). At this moment, he is General Director of the project "World-class Engineering at regional state Uni- versities in the central-south of Chile", which corresponds to an associative initiative of the Universities of La Fronte- ra, Bío-Bío and Talca, with funding of more than US\$ 10 million financed by CORFO. Since 2011 he is President of the Chilean KIT-AlumniClub. To strengthen collaborative networks of Chilean and Ger-
	the conference	man researchers.

Prof. Dr. Andreas Braun	Karlsruhe Institute of Technology (Germany)
location short profile	Karlsruhe, Germany 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 the conference	Networking with Chilean researchers in renewable ener- 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 experi- ence in Computer Science, with emphasis on design and development of embedded systems, mainly in the follow- ing 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 Gradu- ate Program in Computer Science (PPGI) of UFPB, where he teaches courses mainly in the areas of Computer Archi- tecture and Embedded Systems for students from Com- puter Science and Computer Engineering.
expectations of the conference	Networking and possible future collaboration with re- searchers in the application of Unmanned Aerial Vehicles
	Brito location short profile

Some h	Bernardo Cienfuegos	Pontificia Universidad Católica de Valparaíso (Chile)
	expectations of the conference	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. Networking with researchers interested in renewable energies, interdisciplinary teamwork and applied projects.
		Meet old KIT Alumni friends and new ones too.



	Prof. Dr. Frank Dinter	Fraunhofer Center for Solar Energy Technologies (Chile)
5	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	

12	Prof. Dr. Márcio Dorn	Federal University of Rio Grande do Sul (Brazil)
1 Mar 1 Mar 1	location	Porto Alegre, RS, Brazil
	short profile	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
	expectations of the conference	Germany). Networking with German and Chilean researchers, presentation of own research activities, discuss possible cooperation in the fields of applied computing, Bioinformatics, and artificial intelligence.



Prof. Dr. Jaime 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 the conference	To build a network for scientific and technological partnerships to encourage cooperation between research alumni and KIT.

Prof. Dr. Ximena Garcia	University of Concepción (Chile)
location short profile expectations of the conference	Concepción, Chile 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: Ther- mal 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 re- search groups of similar interests and to promote academ- ic mobility among both institutions.

	Dr. Carla Gutiérrez	Universidad de O'Higgins (Chile)
	location short profile	Rancagua, Chile 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 plan- ning 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 Ger- many and Chile. In 2016 she completed her doctorate de- gree 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. Thomas Hirth	Karlsruhe Institute of Technology (Germany)
	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 en- vironmental 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. 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 presi-
		"Bioökonomie Baden-Württemberg" in 2014. In early 2013, Since January 01, 2016, he has been Vice President for Innovation and International Affairs of KIT.
	expectations of the conference	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

- Marking	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 lec- turer at ETH Zürich in 1999 as recognized expert on sub- surface and especially in geothermal systems. As co- founder 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 geome- chanical 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 re- search.
expectations of the conference	Networking and initiation of interdisciplinary research pro- jects, 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 Environ- mental Engineering Department of Universidad Técnica Federico Santa María. Between 2002 and 2003 she ob- tained a specialization in electrochemistry and photochem- istry 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 mate- rial Sciences.
	expectations of the conference	Networking with Chilean and German researches, explor- ing the possibility of future collaborations with other pro- fessionals or research institutions.

	Irma Mantilla	Karlsruhe Institute of Technology (Germany)
	location	Karlsruhe, Germany
	short profile	Staff member at KIT International Affairs office and Insti- tute 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 coopera- tion possibilities between KIT and Latin-American universi- ties and institutions.
		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.
	expectations of	Promoting and expanding cooperation between KIT and
	the conference	Latin-American universities/institutions, networking with researchers and authorities

	Prof. Dr. Francisco Marshall	Federal University of Rio Grande do Sul (Brazil)
	location short profile	Porto Alegre, RS, Brazil 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 the conference	Networking with German and Chilean researchers and managers, presentation of a panel on epistemological questions related to sustainability, enhancing the theoreti- cal sensibility on the general subject of the meeting.

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Prof. Dr. Rodrigo Mikosz Gonçalves	Federal University of Pernambuco (Brazil)
location	Recife-PE, Brazil
short profile	He is an associate professor of Environmental Geoinfor- matics at Federal University of Pernambuco (UFPE), Bra- zil, and a permanent member of the Geodetic Science and Technology of Geoinformation Post Graduate Program (UFPE). He has research experience in the field of envi- ronmental geodesy, with specific focus on: coastal map- ping, 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 re- search alumnus of KIT.

	Dr. Sonia Montecinos Geisse	Universidad de La Serena (Chile)
25 1	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	To know about research activities in Chile and KIT in re-
	the conference	newable 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 Pontifi- cia Universidad Católica de Chile and a DrIng. from the University of Dortmund, Germany. He is associate profes- sor at the Electrical Engineering Department at the Uni- versity of Chile. His research field is the planning and op- eration of electrical systems in competitive power markets, renewable energy, solar energy solutions, smartgrids, power system education, and the development of mi- crogrids 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 Water- loo, and Jim Reilly, Reilly Associates). Co-founder of the initiative: Comunidad Solar R9 (solar community) of the IEEE (www.ayllusolar.cl). Director of the Ayllu Solar Project (www.ayllusolar.cl).
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	DrIng. Erwin	Alfa Lux Ingeniería SpA (Chile)
	Plett	· ····································
	location	Santiago, Chile
		Santiago, Chile He is a chemical engineer graduated from Universidad de Chile, with a PhD (DrIng.) 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 engineer- ing, and plant & equipment sales activities in the fields of food-, chemicals- & minerals-production with mechanical and thermal processing plants (Alfa Laval Food Engineer- ing GmbH, GEA Wiegand GmbH, Babcock BSH AG). He had production management responsibilities in the plas- tics- (Plásticos W. Plett), pharmaceuticals- (Laboratorio Chile S.A.), dry natural products production (Soc. Agríco- la. y Forestal Casino Ltda. & Soc. Comercial Botánica Ltda.), natural vegetable oil industry (Bionovo Chile Agroindustria Ltda.) and environmental engineering activi- ties (Sello Verde Ingeniería Ambiental S.A.). Nowadays he focuses on ventures regarding sustainability as intelli- gent 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 Inge- niería SpA), being also founder of Low Carbon Chile SpA working in the field of nanotechnology eco-catalyzers for low emissions fuels. He has lectured at technical and college levels at Univer- sidad de Chile, Universität Karlsruhe (T.H.), and Universi- ty of Wisconsin-Madison. He has published over 60 tech- nical papers in journals, authored and edited several books and handbook chapter publications in various pro- cess-engineering fields, where he has conducted re-
	expectations of the conference	search, 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

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". <i>Education:</i> Me- chanical engineer, M.Sc. in Environmental and Climate Sciences, PhD in Climatology (France), Post-doc in vege- tation-atmosphere feedbacks (KIT, Germany); <i>Main re- search areas</i> : land-atmosphere interactions – deforesta- tion 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 re- search 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 Cen- ter 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
location 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 institu-
expectations of	tions, project management and grant applications. Consolidating existing collaborations between the KIT and
the conference	its' Chilean partners and explore new collaboration oppor-
	tunities with other strategic institutions.



Prof. Dr. Ing. Jorge Rodríguez- Hernández	Pontificia Universidad Católica del Perú (Perú)
location short profile	Lima, Perú Mechanical Engineer from the Pontificia Universidad 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 Mechani- cal 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 Mas- ter Program of Mechanical Engineering of the Graduate School of the Universidad Nacional de Ingeniería, Lima, Peru. He is currently Professor of the Department of Engi- neering 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 Perma- nent Commission for Education of the International Feder- ation for the Promotion of Machines and Mechanisms (IFToMM) and is chairman of the IFToMM-Peru Commit- tee.
expectations of the conference	Promote internationalization and technological cooperation programs between KIT and Latin American universities.

	Dr. Petra Roth	Karlsruhe Institute of Technology (Germany)
	location	Karlsruhe, Germany
000	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 re- searchers 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 per- secuted scientists.
		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.

Rainer Schröer	Deutsche Gesellschaft für Internationale Zusammen- arbeit (GIZ) GmbH, Santiago de Chile (Chile)
location short profile	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
the conference	other countries and discussing possibilities for cooperation in aspects regarding the promotion of renewable energies and energy efficiency.

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 with- in 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, re- searching, teaching and working in higher education co-
ovpostations of	operation in South America.
expectations of the conference	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.

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	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
2		specialization course on Ecological Economics at the Uni-
6		versity of Buenos Aires, Argentina, and on the Methodolo-
		gy of Life Cycle Analysis at Northwestern University, USA.
		In Chile, she has worked at Eurochile and with the compa-
		ny Pipartner developing projects in the fields of Renewable Energies and Energy Efficiency. Furthermore, she intro-
		duced 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	

Pascal Sick	Karlsruhe Institute of Technology (Germany)
location	Karlsruhe, Germany
short profile	Apprentice as Office Management Assistant at the Interna- tional 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

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Prof. Dr. Ullrich Stahl	Central University of Ecuador (Ecuador)
location	Quito, Ecuador
short profile	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 "De- velopment of a method for stabilization of polymer films on SAW-sensors for analysis of organic gases". His postdoc- toral research at the Forschungszentrum Karlsruhe, Ger- many, which is now part of the Karlsruhe Institute of Tech- nology, 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 Chemi- cal Engineering of the Central University of Ecuador in Qui- to, Ecuador and his research interests are focused on dif- ferent aspects of renewable energies, like microwave pyrol-
expectations of the conference	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 (Ver- messungswesen). 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 Univer- sity of Concepción and Head of the Department for Geodet- ic 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 re- mote sensing techniques and visualization of data from a huge variety of sources, what is also known as sensor fu- sion.

	Álvaro Viveros Bittner	Universidad de Concepción (Chile)
	location short profile	Concepción, Chile I studied Mechanical Engineering at the University of Con- cepción and Alumni of the Karlsruher Institute for Technol- ogy (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 entre- preneurial venture learning leadership skills and wood manufacturing. I'm developing a project on a dairy using Renewable Ener- gy. 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.

(Allen)	Dr. Karin Walter	Hidrolatina de Chile (Chile)
	location	Santiago, Chile
	short profile	Research and development manager Hidrolatina de Chile. Education: Chemical Engineering, University of Concep- ción (2011), Doctor degree in Chemistry (Catalysis), Karls- ruhe Institute of Technology (2016). Current research lines: water treatment, purification and recovery; osmosis, filtration and ultrafiltration technologies; sedimentation
1 ×		processes; membrane optimization; corrosion control; ad- vanced oxidation; coagulation-flocculation; effluent man- agement.
	expectations of the conference	Explore new national and international collaboration op- portunities and networking.

	Prof. Dr. Christof Weinhardt	Karlsruhe Institute of Technology (Germany)
	location short profile	Karlsruhe, Germany 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 In- formation System at the Universities of Giessen and Biele- feld. Currently – as full professor - he is director of the In- stitute 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 Sys- tems his research focuses on interdisciplinary topics relat- ed 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, pub- lished 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 reser- voirs.
		Education: Environmental Engineer degree (2009) at Fed- eral University of Paraná and Master in Computational Fluid Dynamics at the same university.
	expectations of the conference	Beside the scientific interests and networking with col- leagues from different countries, universities, and field- work, 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.



University of Santiago de Chile (Chile)
Santiago, Chile
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 (UNIKAT), Germany.
Working in a network with Chilean and German research-
ers, exploring the possibility of future collaborations with other professionals or research institutions in order to en- hance the exchange and transfer of knowledge.

Contact

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