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   President of the Friedrich-Alexander-Universität Erlangen-Nürnberg

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Friends for life
FAU Research Alumni Yearbook 2014/2015
Dear research alumni and friends of FAU,

As a guest researcher, you are an important member of the FAU family right from the first day of your stay at Friedrich-Alexander-Universität Erlangen-Nürnberg, as you enrich our University with your personality, your research and your international expertise. You represent FAU on the international stage and help define how it is viewed in society as our University becomes a part of your CV.

In light of this, in addition to ensuring you feel at home during your research stay, FAU would like to stay in contact with you in the future. We would like to invite you to become an active member of the FAU network, which includes researchers from all over the world and from all disciplines at various stages of their career.

We would like to support you in establishing and maintaining your personal contacts at FAU with our research alumni programme, which was funded and has been highly commended by the Alexander von Humboldt Foundation. On the following pages we will introduce you to our wide range of alumni services and activities.

I am especially pleased that some of our international guests are represented by profiles in this yearbook. They are just a small number of the approximately 700 international researchers — professors, postdoctoral researchers and doctoral candidates — who come to us every year and help make FAU a dynamic university with an excellent international network.

Please do stay in touch!
Kind regards,

Joachim Hornegger
University President
International doctoral candidates, postdoctoral researchers and advanced researchers who have spent time conducting research at FAU, as well as current guest researchers at the University, are all part of FAU's research alumni community.

With its research alumni programme FAU aims to establish and maintain a close relationship with its international guests, and to help researchers create and maintain their own network of contacts at the University. A wide range of information, events and services—including this yearbook—are offered as part of the programme, which was set up in 2014 with the help of funding from the Alexander von Humboldt Foundation under the German government’s ‘Research in Germany’ initiative and has been developed continuously ever since.

Welcome to FAU

Every year FAU invites its international guests to the Welcome Event where they have the opportunity to meet other researchers and find out about important services at the University at a range of information stands.

Brown Bag Break—Networking for hungry researchers

The Brown Bag Break events are a chance for young researchers to broaden their horizons by finding out about other areas of research and meet colleagues from other disciplines and countries over a snack. The activities on offer at these relaxed events include speed networking and talks on planning an academic career.
International Dinner

Once a year the University's executive board invites outstanding international researchers at FAU to an interactive dinner in private atmosphere. The aim is to get to know these researchers better and offer them an opportunity to share their intercultural expertise and specialist knowledge.

Interviews with research alumni

Guest researchers explain their research and share their experiences from their time at the University and in the Erlangen-Nuremberg region in FAU's online interview series.

FAU representatives

By acting as representatives, research alumni can help strengthen the University's international reputation and recommend FAU to young researchers as an excellent research institution. FAU appointed its first official ambassador, Prof. Dr. DhC Enrique Zuazua, at the Dies academicus in 2015. You can find out more in the interview with Prof. Zuazua on the following pages.

Alumni network

International researchers are invited to join the FAU alumni network to be part of the worldwide FAU community, connect with fellow researchers and enjoy a range of benefits. Registration is free: fau.eu/alumni

More information on FAU's research alumni programme: fau.eu/alumni/research-alumni

FAU Ambassador Prof. Dr. DhC Enrique Zuazua at the Dies academicus 2015.
FAU Ambassadors represent the University in their home country and communicate about their experiences at FAU in their scientific community. They can advise students and researchers who are interested in a stay in Erlangen-Nürnberg and foster relations between universities at home and FAU.

Prof. Dr. DhC Enrique Zuazua is one of the leading minds in the field of applied mathematics, currently Professor of Applied Mathematics at Universidad Autónoma de Madrid. He has garnered numerous important national and international awards and has a broad network of scientific contacts and collaborators around the world. Last year, he also joined Academia Europaea. From 2014 to 2015 he worked at FAU as a Humboldt Research Awardee. On November 4, 2015, he was officially appointed as FAU Ambassador—the first in a series of international research alumni who will take on this honorary position in the coming years.

Prof. Dr. Zuazua, why did you decide to take on the role of FAU Ambassador and what do you see as your main objectives in this role? I have been collaborating scientifically with Professor Günter Leugering for many years. When he joined Friedrich-Alexander-University (FAU) this led naturally to collaboration with his team, Department and FAU. I had the honour to be a Humboldt Research Awardee at FAU in the academic year 2014—2015. This was a fruitful academic period and a very rewarding one for my family and me. It is now an honour to become an Ambassador for FAU, an institution with which I share values, vision and projects, and their projection into the international scientific community.

In your opinion, what are particular strengths of FAU in an international context? From the mathematical perspective, the development and involvement in challenging multidisciplinary projects such as new materials, gas networks, etc. as FAU does, is a very significant plus. From our mathematical perspective, this helps excellence and innovative research in applied mathematics to emerge.

What were your first and later impressions of the Erlangen-Nuremberg region? The region is well structured and organised, friendly, with good infrastructure, efficient. In particular, FAU is the perfect place to develop an academic career. I particularly appreciate the will of the University to reinforce its role of a leading international player, focusing special attention and care on individuals.

Can you tell us some of your favourite places at FAU and in the region? I enjoyed the variety of restaurants in the evenings in the old quarter of Erlangen, the warm, calm, and rewarding atmosphere, and the quality of the food.

What should a visiting researcher definitely remember to bring for the stay? If possible, bring a bike. Otherwise, get one when you arrive.

Is there anything else you’d like to add? Eskerrik asko, thank you. It will be an honour to contribute to the growth of FAU in my role of Ambassador.

For more information: uam.es/matematicas/ezuazua and enzuazua.net
Major research areas at FAU

FAU’s new structure groups related subjects in departments which facilitates interdisciplinary collaboration for researchers. The motivation for this is obvious: today, new developments no longer emerge from the traditional core of academic disciplines, but in collaboration that transcends conventional subject boundaries.

‘Pushing boundaries’ is therefore a fitting motto to define and direct our work at FAU. FAU’s unparalleled expertise in science and engineering, this research area focuses on the research and development of hierarchical materials with structures organised from the molecular to the macroscopic levels. Bridging the gap between molecular modelling and the production and implementation of macroscopic components requires the development of novel approaches capable of covering different time and length scales in process and production technologies in order to simulate and model the complex processes and to analyse structures, qualities, and processes. FAU researchers are leaders in the fields of particle technology, carbon allotropes, ionic liquids, cellular ceramics, and self-organisation of nanostructures through anodisation. New materials are expected to lead to revolutionary breakthroughs in energy and communication technologies, catalysis, lightweight materials, and life sciences.

Optics and Optical Technologies

FAU has a long tradition in optics and optical technologies that spans all areas from basic research to applications in fields such as engineering, science, and medicine. The University’s international reputation in this field is partly thanks to the Max Planck Institute for the Science of Light (MPL) and the seminal contributions to the Cluster of Excellence EAM and the Graduate School SAOT. The close collaboration between FAU, the Fraunhofer Institutes and the MPL in current and future projects is a key asset for the further development of this major research area. Among the subjects currently being researched by top scientists at FAU are optical metrology of combustion processes and nanomaterials, photonic crystal fibres, computational optics, and optics in medicine.

Molecular Life Science and Medicine

This major research area focuses on the genetic, biochemical and cytological foundations of normal and pathological processes of development and differentiation in a multitude of living organisms and their specific interactions with the environment. Further core research areas are the development of sustainable technologies, new food and energy sources, the optimisation of plant biomass both in terms of quality and quantity, and the synthesis of medically relevant biomolecules. The exploration of molecular disease mechanisms provides a foundation for improved clinical diagnostics as well as for the treatment, prevention and protection against diseases. Here, immunology and infection research, renal and vascular research, neuroscience (including pain and glaucoma research) and tumour research are the focus areas.

Health Technology

The area of Health Technology deals with the development of technical devices and methods for the prevention, diagnosis and treatment of diseases. Its aims are to increase life expectancy, improve the quality of life and to optimise cost structures in healthcare. FAU scientists have made seminal contributions to the fields of medical imaging, telemedicine, biomaterials, and therapeutic systems. FAU’s health technology research is highly interdisciplinary: close collaboration with Siemens Healthcare, the Fraunhofer ‘Personal Health’ division and many
Language—Culture—Region
As an integral pattern of human knowledge, thought and behaviour, culture has its foundation in the capacity for symbolic thought, memory and social learning. At the Faculty of Humanities, Social Sciences, and Theology, cultural and linguistic processes are generally examined on a regional, national and transnational level as anchored in variously defined communities, societies and geographic regions. The main research focus on language, culture and region is explored with reference to historical, contemporary and anticipated future constellations.

Energy, Environment and Climate
FAU scientists from the Faculty of Sciences and the Faculty of Engineering as well as the two Fraunhofer Institutes work on ground-breaking approaches to sustainable energy and their direct impact on environment and climate. Research in this field focuses on interdisciplinary strategies for the development, processing and in-situ testing of materials for a new generation of solar cells and panels. What makes this research unique is the combination of sustainable energy research with approaches for converting solar power into new, transportable forms using chemical liquids for efficient use in mobile and stationary applications. All individual research topics focus on efficiency optimisation in basic research, simulation and real-life applications.

Electronics, Information and Communication
Leading FAU institutes and highly renowned external institutions work in close collaboration on a level unprecedented in Germany. Research focuses on the improvement of electronic components, circuitry and systems to meet the challenges in an increasingly complex technical environment. Interdisciplinary research at FAU encompasses technology and materials science (Faculty of Engineering and Faculty of Sciences), content-related systems such as broadcasting, Internet and archiving (Faculty of Humanities, Social Sciences, and Theology, School of Business and Economics), liability and safety (School of Law) and medical technology (Faculty of Medicine).

Cohesion—Transformation—Innovation in Law and Economics
This major research area looks at the increasing dynamics in formal and informal systems, organisations and markets. The focus is on how transformation processes can create room for innovation and, at the same time, how the required cohesion can be defined and ensured. Key research fields at the FAU School of Law are ‘Architecture of Law’ and ‘Law in Times of Europeanisation and Internationalisation’, while research at the School of Business and Economics focuses on ‘Designing Organisational Structures and Systems’, ‘Transforming Markets and Organisations’ and ‘Innovation in Services, Processes and Systems’.

For more information: fau.eu/research
Bright minds and creative thinkers from the global research community had the opportunity to test their skills with their peers in a worldwide competition organised by FAU—the FAU Open Research Challenge. From April to July 2015, teams of up to five researchers could tackle one of three questions at the forefront of information technology, optics, or applied mathematics in energy research. Designed to be engaging as well as challenging, the contest reflected some of FAU’s major research areas and received entries from all over the world. The teams that found the most elegant solution to each challenge were invited to spend a week in Erlangen at the end of October 2015. The three winning teams from Estonia, Australia and Mexico presented their ideas for the Open Research Challenge at the Long Night of Sciences.

Task 1: forge holograms
Andreas Valdmann, Ants Remm and Roland Matt were the craftiest counterfeiters. ‘Our task was to find out how the security holograms on a bank note were constructed, copy the note and change it to make the hologram show a different monetary value,’ explains Andreas Valdmann, one of the team of optics experts from the University of Tartu in Estonia.

Task 2: trace hackers
The second task was to use a hacked file to trace where it was stolen from, how the hacker entered the system, what other data they stole and where they copied it to. The cleverest solution was found by Quang Do, Dr. Ben Martini and Dr. Kim-Kwang Raymond Choo from the University of South Australia. ‘Just like in a criminal case, we retraced all of the hacker’s steps,’ Ben Martini says.

Team Tartu from Estonia, who studied holograms, visited the Chair of Photonic Technologies in Erlangen.

Team UniSA from Australia—shown here with Andreas Dewald (left) from the Chair of Computer Science 1 (IT Infrastructures)—solved the digital forensics puzzle.
Task 3: create the perfect train timetable

Prof. Rodrigo Castro Campos, Sergio Pérez Pérez, Gualberto Vázquez Casas and Prof. Francisco Zaragoza Martínez from Mexico, who won the third challenge, had to accomplish their task under special circumstances. They had to design a timetable for a train network which kept electricity costs to a minimum—but there are hardly any rail services in Mexico. The computer scientists incorporated all the data and variables, such as the electricity fed back into the system when the trains brake, in a mathematical model which calculated the timetable. ‘Maybe our solution could be used in other systems such as the underground network of Mexico City,’ says Sergio Pérez Pérez.

Interviews with the winners and descriptions of the tasks are available on the competition website at: www.openresearchchallenge.org
FAU research alumni: 30 portraits
Dr. Gonzalo Abellán Sáez

“**I ADORE NATURE AND THE FEELING OF FREEDOM THAT YOU FEEL FAR FROM THE PAVED ROADS.**”

**Position**
Marie Curie Postdoctoral Research Fellow at the Department of Chemistry and Pharmacy and Institute of Advanced Materials and Processes (ZMP), Friedrich-Alexander-Universität Erlangen-Nürnberg (FAU)

**Nationality**
Spanish

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**Curriculum Vitae**
- **2014—current**
  Marie Curie Postdoctoral Research Fellow at FAU, Germany (supervisor: Prof. A. Hirsch)
- **2014**
  Doctoral degree in Nanoscience and Nanotechnology, Institute of Molecular Science (ICMol), University of Valencia, Spain (supervisors: Prof. E. Coronado and Dr. A. Ribera)
- **2011**
  Master’s degree in Molecular Nanoscience and Nanotechnology, Institute of Molecular Science (ICMol), University of Valencia, Spain (supervisors: Prof. E. Coronado and Dr. A. Ribera)
- **2009**
  Degree in Chemistry at the University of Valencia, Spain
- **2008**
  Undergraduate Research Fellow at the Molecular Nanotechnology Lab of the University of Alicante, Spain (supervisor: Dr. J. García-Martínez)

**Scientific Background and Objectives**
Dr. Abellán’s doctoral research at the University of Valencia focused on magnetic layered double hydroxides (LDH) and was organised into three main parts: the basic synthetic and physical aspects of magnetic LDHs, the preparation of multifunctional organic-inorganic hybrids that respond to external stimuli, and finally some of the most innovative applications in energy storage and spintronics. Currently, the aim of his postdoctoral research at FAU is to undertake an extensive scientific programme on the synthesis and characterisation of a broad range of multifunctional graphene systems. This work requires a multidisciplinary approach, involving organic and supramolecular chemistry, essential for the successful derivatisation of graphene, and physics, which will be employed in the study of the properties exhibited by these systems. On the other hand, he is also involved in the functionalisation of another amazing 2D material, black phosphorus.

**Research Highlights**
Dr. Abellán developed an extensive work on the synthesis and characterisation of novel stimuli responsive hybrid materials, showing the very first examples of the reversible switching of the magnetic properties in LDH-based materials. Along this front, he succeeded in synthesising a series of photo- and thermo-switchable hybrids. Moreover, he reported some applications of novel graphene-based hybrids on energy storage and conversion. Within his work at FAU, he recently succeeded in developing the solvent exfoliation of black phosphorus, improving its stability and shedding light on its degradation mechanism. Moreover, he is currently involved in the chemical functionalisation of graphene with stimuli-responsive molecules, among others.

**Future Perspectives**
In the near future, Dr. Abellán will seek a junior professor-ship/tenure track to develop new chemical routes for the functionalisation of 2D materials, and create novel hybrid materials with appealing properties of interest for several applications. He intends to apply to the DFG and ERC for funding in order to create his own group.

**Selected Publications**

**Selected Awards**
- 2015 Selected to attend the 65th Lindau Nobel Laureate Meeting
- 2015 Tenth City of Algemesí Scientific and Technical Award (accessit, i.e. second prize)
- 2014 Valencia Idea 2014 Award (first prize in Energy and Environmental)
- 2013 IEF Marie Curie Fellowship
- 2012 European Materials Research Society (E-MRS) Graduate Student Award 2012 (Strasbourg)
- 2011 IUPAC Fellow
Scientific Background and Objectives

At this time, the world is situated in the midst of a measurement revolution transforming almost all fields of natural and social sciences into data. Statistics help describe these measurements more precisely. As an experienced researcher in statistics, Professor Al-Naqash likes to work with numbers and to solve mathematical problems. She received a BSc in statistics with highest honours from the Department of Statistics at the College of Administration and Economy at Baghdad University. Furthermore, she attended the Master’s programme at the same university and graduated with a thesis entitled ‘Time Series Analysis for the Prediction of Electricity Power Consumption of Baghdad City’ under the supervision of Dr. Waleed A. Al-Nouri. She continued her academic career by obtaining a doctoral degree in statistics with a thesis entitled ‘Planning of Residential Areas’ Electrical Distribution Network’ under the supervision of Dr. Shalal H. Al-Jibouri.

Research Highlights

Applied statistics helps to find different solutions to the problems in any academic field. For more than 30 years, Professor Al-Naqash has worked on complex quantitative research to assist researchers in various fields such as medicine, engineering and social sciences to improve the diagnosis for the most important causal factors. She has a great deal of experience in analysing experiment results, testing their significance and adapting the methods to unforeseen problems. The main goal is to construct constrained mathematical models to find the optimal decisions for the allocation of specific resources and optimal utilisation of results.

Future Perspectives

In today’s Iraq, regional disparity of development levels is identified as one of the most important issues. In general, Iraqi provinces suffer from a low development level in all areas to varying degrees, so it is crucial to focus on efforts to construct a reliable regional development index for measuring the development level in various fields such as education and health. The goals and objectives of Professor Al-Naqash’s work are to determine the optimal weights of indicators included in the index and to formulate some recommendations that regional planning may benefit from.

Selected Publications

- Using the Fuzzy Matrix Game to Find Production Strategies to the Oil Derivatives, accepted for publication in Administration & Economics magazine 2013
- Application of some of multivariate techniques to control the production quality, Administration & Economics magazine 2013
- Test Sample Design for Drain and the Industry Waters Leftovers by Using Robust D—Optimal Design, Administration & Economics magazine 2012, 9
- State Space Representation for the Structural Time Series Models and Box- Jenkins Models with an application in the Iraq Stocks Exchange, Iraqi Journal for Administrative Sciences 2011, Kerbala University
- Building and Studying some Models of State Space of Brain Waves Frequency to Identify the Reasons of Epilepsy, Iraqi Journal of Statistical Sciences 2011, 11, 20
- Path Analysis of Logistic Regression Model, with an application work, Administration & Economics magazine 2008, 70

Position

Professor of Statistics/Modelling at Al-Mustansiriyah University Baghdad, Iraq

Nationality

Iraqi

Contact

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Curriculum Vitae

- 2015—Current Postdoctoral Fellow, Center for Iraq Studies (CIS), Friedrich-Alexander-Universität Erlangen-Nürnberg (FAU), Germany
- 2011—2014 Professor of Experimental Design and Analysis at Al-Mustansiriyah University, Iraq
- 2000—2011 Assistant Professor at the Statistics Department and the following administrative positions at the College of Administration and Economics, University of Al-Mustansiriyah, Iraq
  - Manager of Consulting Bureau since 2011
  - Vice Dean of Scientific Affairs and High Studies, 2006—2011
  - Supervisor of High Studies units, 2002—2005
- 1997—1999 Lecturer at the Information System and Operation Research Department, Al-Mansour University College, Iraq
- 1992—1996 Lecturer at the English Language Department, College of Art, Iraq
- 1982—1992 Member of Teaching Staff at the Statistics Department (Tutor and Assistant Tutor), College of Administration and Economics, University of Al-Mustansiriyah, Iraq

Manager of Consulting Bureau, College of Administration and Economics
- 2000—2011 Assistant Professor at the Statistics Department and the following administrative positions at the College of Administration and Economics, University of Al-Mustansiriyah, Iraq
- 1997—1999 Lecturer at the Information System and Operation Research Department, Al-Mansour University College, Iraq
- 1992—1996 Lecturer at the English Language Department, College of Art, Iraq
- 1982—1992 Member of Teaching Staff at the Statistics Department (Tutor and Assistant Tutor), College of Administration and Economics, University of Al-Mustansiriyah, Iraq
Scientific Background and Objectives
Dr. Ali works as a scientific researcher at the University of Kufa. He studied International Economics focusing on the euro zone economy and how to transfer the concept to the Iraq economy. His doctoral thesis is titled ‘The Crisis of Sovereign Debts and its Reasons and Tracks. The Euro Zone and Iraq as an Example.’ As a participant of the split-site doctoral degree programme between Iraqi universities and FAU he had the chance to conduct parts of his research for his doctoral thesis in Erlangen. During his stay in Erlangen, he was able to benefit a great deal from the University Library and the seminars, conferences and symposia he had the pleasure to attend.

Research Highlights
Being specialised in research on economic crises, Dr. Ali is especially interested in the impact of the sovereign debt crisis in Europe regarding its economic and commercial relations with Iraq. His focus lies on the price fluctuations in oil and its influence on trade with the commercial partners suffering from the debt crisis.

Future Perspectives
In his postdoctoral research Dr. Ali will conduct specified research on the topic of his doctoral thesis. In the period of 2013—2014, there was a severe change in Iraqi oil export caused by different external and internal factors.

Selected Publications
- The relation between the sovereign debts in the Euro-zone and the Iraqi economy: Effect channels and affected scenarios, University Journal of Wasit University, 2014

Dr. Akram Neamah Ali

Position
Scientific Researcher at Kufa University, Iraq

Nationality
Iraqi

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Curriculum Vitae
- 2015
  Guest Researcher at Friedrich-Alexander-Universität Erlangen-Nürnberg (FAU), Germany
- 2014
  Split-site doctoral candidate at FAU, Germany
- 2010—2014
- 2006—2008
- 2001—2005
  BSc in Economics, Faculty of Management and Economics, University of Kufa, Iraq

“I LOVED THE SYSTEM OF LAW IN GERMANY AS WELL AS THE BRILLIANT EDUCATION AT ERLANGEN UNIVERSITY AND I HOPE IRAQ WILL ONE DAY FOLLOW ITS EXAMPLE.”

“I LOVED THE SYSTEM OF LAW IN GERMANY AS WELL AS THE BRILLIANT EDUCATION AT ERLANGEN UNIVERSITY AND I HOPE IRAQ WILL ONE DAY FOLLOW ITS EXAMPLE.”
Dr. Kamal K. Jawad Al-Shimari

Curriculum Vitae

- **2015—current**
  Postdoctoral Fellow at Friedrich-Alexander-Universität Erlangen-Nürnberg (FAU), Germany

- **2014**
  Doctoral thesis in the field of Economics at the College of Economics and Administration, Kerbala University, Iraq

- **2007—current**
  Lecturer at the College of Economics and Administration, Kerbala University, Iraq

- **2002—2011**
  Manager of Financial Affairs, Kerbala University, Iraq

- **2007**
  Master of Economics, College of Economics and Administration, Kerbala University, Iraq

- **1988**
  Bachelor of Economics, College of Economics and Administration, Mustansiriya University, Baghdad, Iraq

Position
Lecturer at the College of Economics and Administration, Kerbala University, Iraq

Nationality
Iraqi

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“WHAT I MOST LIKE IS THE KINDNESS OF THE PEOPLE.”

Scientific Background and Objectives

As an economist living in Iraq, Dr. Al-Shimari focuses on the relationship between economic growth and its impact on the environment. In times of global financial and economic crisis and the associated worsening of poverty, particularly in developing countries, it is necessary to guide the national economy to a shift towards a green economy based on sustainable development. By comparing different approaches his research aims to find a successful strategy for environmentally friendly economic development in Iraq.

Research Highlights

In the course of his research on his doctoral thesis, Dr. Al-Shimari had the chance to prove a positive impact of high environmental standards and competitiveness in exports. Comparing environmental awareness and economic success in developed and developing countries, such as China, Egypt, the USA and countries in the EU, showed a much better economic performance in countries focusing on sustainable strategies for the protection of nature.

Future Perspectives

After completing his doctoral thesis at the University of Kerbala, Dr. Al-Shimari is glad to have the opportunity to continue his studies as a postdoctoral fellow at FAU. His objective is to find a suitable strategy to ensure a sustainable path of development. Therefore, he has begun research on Green economy policies in the light of economic development inequality in selected developing countries. The international conference United Nations Decade on Sustainable Development (Rio +20), held in Brazil in 2012, laid the cornerstone in focusing on green economics in developing countries. Regarding the vast differences in these countries it is necessary to conduct a new concept of flexibility and realism to take into account the disparity in the level of economic development and the nature of prevailing economic and social conditions.

Selected Publications

- Impact of environmental criteria in determining the competitiveness of exports in Egypt, accepted for publication in the Journal of Business and Economics 31/12/2013, 90, Faculty of Administration and Economics, University of Kerbala
- The role of environmental standards in determining the competitiveness of exports in the United States of America, accepted for publication in the Journal of Business and Economics 12/08/2013, 80, Faculty of Administration and Economics, University of Kerbala
- Small Industries site under the structural adjustment programs, Journal of the University of Kerbala 2012, 10, 3
- Islamic banks and the challenges of globalization and financial liberalization with special Basel 2/Convention on the research, Journal of Qadisiyah Administrative and Economic Sciences 2009, 11, 4, issued by the Faculty of Administration and Economics, University of Qadisiyah
Elisaveta Bakalova

“I RECEIVED A SUPERB EDUCATION AT THE SCHOOL OF BUSINESS AND ECONOMICS AT FAU—A GREAT BASIS FOR FUTURE SUCCESS.”

Position
External doctoral candidate at the Chair of Business Administration: Taxation, School of Business and Economics, Friedrich-Alexander-Universität Erlangen-Nürnberg (FAU); Audit and Taxation Assistant at Rödl & Partner

Nationality
Bulgarian and German

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Curriculum Vitae

- 2011—2015
  Doctoral candidate at the Chair of Business Administration: Taxation, Professor Dr. Wolfram Scheffler, School of Business and Economics, Friedrich-Alexander-Universität Erlangen-Nürnberg, Germany, ‘Besteuerung von grenzüberschreitenden Erbfällen’ (Taxation of cross-border successions)

- 2010—current
  Audit and Taxation Assistant at Rödl & Partner

- 2004—2010
  Diplom in International Business Studies at the School of Business and Economics, Friedrich-Alexander-Universität Erlangen-Nürnberg, Germany, and Universidad Autónoma de Madrid, Spain

Scientific Background and Objectives

Doctoral thesis: ‘Besteuerung von grenzüberschreitenden Erbfällen’ (Taxation of cross-border successions). On account of the growing mobility of people and assets in the European Union, cases of cross-border successions are becoming more and more frequent. In the sphere of succession and gift tax law, there is no harmonisation throughout the European Union. The sovereignty of the member states in this aspect necessarily leads to different connection criteria for limited and unlimited tax liability, different objective and subjective tax exemptions, as well as different tax rates and tax scales and diverse systems of definition and evaluation of transferable assets. Elisaveta Bakalova’s doctoral thesis focuses on the succession tax law of the following member states: the United Kingdom, Greece, Bulgaria, Spain, Poland, Germany, Austria, Ireland and Croatia.

Research Highlights

In order to identify cases of double taxation or double non-taxation of inheritance, first a verbal and then a quantitative analysis has been conducted. The taxation consequences of fictitious cross-border successions between each pair combination of the chosen member-states have been depicted. The quantitative analysis was carried out on the basis of fictitious estates (operational and personal assets) as well as with regard to the chosen heirs of the estates (i.e. spouse, child). It takes into account several factors such as the evaluation of the succession assets, objective and subjective tax exemptions, and uni- and bilateral measures for avoidance of double taxation.

Future Perspectives

In numerous cases, the overlapping of subjective and objective connection criteria for tax liability leads to problematic double taxation of the succession or may result in double non-taxation. As a response to the flaws in current succession tax law, an ideo-typical guideline for the taxation of cross-border successions is created. Through simultaneous application in all member states of the European Union this should lead to avoidance of double taxation as well as gaps in taxation.

Selected Publications
- Bakalova, Elisaveta, Besteuerung von grenzüberschreitenden Erbfällen, Verlag Dr. Kovac, 2015

Selected Awards
- 2010 Scholarship from the Bavarian State for international students in the final stage of their degree
“SMART PEOPLE, BEAUTIFUL LANDSCAPES AND LEBKUCHEN IN A SINGLE PLACE.”

Rodrigo Alexander Castro Campos, MSc

Position
Invited to the Department of Mathematics as winner of the Discrete Optimisation Challenge, part of FAU’s Open Research Challenge 2015

Nationality
Mexican

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Private mail: rcc.dark@gmail.com
Website: www.sites.google.com/site/rccuam

Curriculum Vitae

- 2013—current
  Doctoral candidate in the Optimisation Programme of Universidad Autónoma Metropolitana Azcapotzalco, Mexico
- 2011—2013
  Professor at the Systems Department of Universidad Autónoma Metropolitana Azcapotzalco, Mexico
- 2009—2011
  MSc at Centro de Investigación en Computación, IPN, Mexico
- 2003—2007
  BEng at Universidad Autónoma Metropolitana Azcapotzalco, Mexico

Scientific Background and Objectives
Rodrigo Alexander Castro Campos is interested in several areas. One of them is the implementation of generic, high-performance algorithms; including algorithm design, programming languages and computer architecture. On the other hand, he is also deeply interested in solving real-world optimisation problems. He and his colleagues have been studying several optimisation and graph-related problems, such as the Euclidean 3-matching problem, the travelling repairman problem and the graceful labelling problem. As part of his doctoral work, he is also studying the computation of Boolean Gröbner bases; such computation implicitly finds the whole set of solutions of an integer programme given as input.

Research Highlights
Rodrigo Alexander Castro Campos was part of a team that proposed a quadratic-time, 2-approximation algorithm for the travelling repairman problem on a line with unit time windows (joint work with S. Pérez, C. Rodríguez, L. Urbán and F. Zaragoza). The team implemented algorithms for finding graceful labellings and found one in the Petersen graph (joint work with G. Vazquez and F. Zaragoza). They designed new integer formulations for the 3-matching problem that have asymptotically fewer variables than the state-of-art models (joint work with M. Heredia, G. Vazquez and F. Zaragoza).

Future Perspectives
Rodrigo Alexander Castro Campos and his colleagues are trying to improve the approximation guarantee for the travelling repairman problem on a line with unit time windows, as well as trying to establish its computational complexity. They are looking for faster Boolean Gröbner bases algorithms as well as better integer formulations for the 3-matching problem, along with heuristics for the maximisation version of this problem.

Selected Publications

Selected Awards
- 2015 Winner of the Discrete Optimisation Challenge, Friedrich-Alexander-Universität Erlangen-Nürnberg, Germany
- 2014—2016 Full doctoral scholarship from the National Council of Science and Technology (Conacyt), Mexico
- 2011 Graduated with honours from the Master’s degree programme in Computer Science at Centro de Investigación en Computación (CIC IPN), Mexico
- 2007 Graduated with the Medal of University Merit from the Computer Engineering programme at Universidad Autónoma Metropolitana Azcapotzalco, Mexico
Scientific Background and Objectives
Professor Chanvorachote’s research interests focus on cancer cell biology and therapeutics in the following aspects:
(1) metastasis behaviours of cancer cells and the role of biological substances in the tumour microenvironment including nitric oxide and reactive oxygen species in the regulation of metastasis; (2) molecular mechanisms involving chemotherapeutic susceptibility of cancer cells; (3) the role of tumour promoter caveolin-1 (Cav-1) in metastatic potentials of cancer cells including anoikis resistance, cell motility and endothelial adhesion; and (4) pharmacological effects of active compounds from natural products on tumour growth and metastatic behaviours in order to develop new anti-cancer and anti-metastasis drugs.

Research Highlights
Cancer stem cells are the major cause of cancer relapse, metastasis, and chemotherapeutic resistance, and are now becoming the new target of cancer therapy. Professor Chanvorachote’s attention has been drawn to this specific area of cancer research, and he is currently elucidating the biology of cancer stem cells and molecular mechanisms regulating cancer stemness. In addition, he is testing the pharmacological effects of bioactive compounds in the regulation of stemness as well as aggressive behaviours of cancer cells.

Future Perspectives
Targeting cancer stem cells is a promising approach to overcoming cancer. Research on the molecular mechanisms in controlling cancer stemness or cancer stem cells can pave the way for developing new strategies for cancer treatment with better outcomes.
Prof. Dr. Raymond Choo

Position
Invited to FAU as winner of the Digital Forensics Challenge, part of FAU’s Open Research Challenge 2015

Nationality
Australian

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Curriculum Vitae
- 2013—current Co-Chair, Cloud Security Alliance Asia Pacific Education Council
- 2010—current Member of International Consultancy Groups (Research), United Nations Office on Drugs and Crime—Korean Institute of Criminology Virtual Forum against Cybercrime programme
- 2011—current Associate Professor—University of South Australia
- 2006—current Member of International Consultancy Groups (Research), United Nations Office on Drugs and Crime—Korean Institute of Criminology Virtual Forum against Cybercrime programme

Scientific Background and Objectives

Research Highlights
Professor Choo has had the opportunity to apply his research knowledge, having been invited to provide expert opinion on policy developments, including the Australian Government Department of the Prime Minister and Cabinet’s Cyber White Paper as a member of the Australian Computer Society Cyber Task Force of experts (2011), and the Australian Bureau of Statistics Draft Conceptual Framework for Cybercrime (2012 and 2013). In March 2014, he appeared as an invited witness on ‘Bitcoin and alternative remittance systems’ to the Parliamentary Joint Committee on Corporations and Financial Services. He was Keynote/Plenary Speaker at conferences organised by Infocomm Development Authority of Singapore (2015), CSO Australia and Trend Micro (2015), Anti-Phishing Working Group (2014), National Taiwan University of Science and Technology (2014), Asia Pacific University of Technology & Innovation (Malaysia; 2014), Nanyang Technological University (Singapore; 2011), and National Chiai University (Taiwan; 2010). He was an Invited Expert at conferences organised by UNAFEI (2015), INTERPOL (2015), Taiwan Ministry of Justice Investigation Bureau (2015), and at the World Internet Conference (Wuzhen Summit) in 2014, jointly organised by the Cyberspace Administration of China and the People’s Government of Zhejiang Province.

Future Perspectives
Cyber security is a highly specialised and interdisciplinary field, which requires a deep understanding of the underlying technical, cultural, social, regulatory and other aspects, as well as intimate knowledge of temporal trends—historical, recent and emerging trends, etc. Theories and approaches from hitherto disparate disciplines and strategies, techniques and best practices from different countries can play complementary roles in understanding the cyber threat landscape and designing prevention and mitigation/neutralisation strategies, as the diversity of attack vectors and threat actors necessitates enhanced interdisciplinary and international knowledge base.

Selected Publications
- Q. Do, B. Martini, K.-K.R. Choo, A Forensically Sound Adversary Model for Mobile Devices, PLOS ONE 2015, 10(9), e0138449

Selected Awards
- 2015 Best Research Paper Award, European Symposium on Research in Computer Security (ESORICS 2015)
- Highly Commended Award in the 2014 ‘Best Chapter in a Book’ Category by Australia New Zealand Policing Advisory Agency
- 2014 Academic Impact and Uptake Award which recognises researchers who have made important contributions to knowledge and have demonstrated excellence over a period of 5 years in research achievement in an area of strategic importance to the University of South Australia
- 2010 Consensus IT Professional Award
- 2009 Fulbright Scholarship
Prof. Dr. Constance Cook

Position
Professor (Chinese Language and Literature; home institution: Lehigh University, USA);
Visiting Fellow at the International Consortium for Research in the Humanities, Friedrich-
Alexander-Universität Erlangen-Nürnberg (FAU)

Nationality
American

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Curriculum Vitae
- 2015
  Visiting Fellow, IKGF Erlangen, FAU, Germany
- 2007—present
  Full Professor in Chinese, Lehigh University, USA
- 1996—2007
  Associate Professor in Chinese, Lehigh University, USA
- 1990—1996
  Assistant Professor in Chinese, Lehigh University, USA
- 1990
  PhD in Chinese language and literature, University of California, Berkeley, USA

Scientific Background and Objectives
As a scholar of Chinese BC Era excavated text since the late 1970s (PhD, UC, Berkeley 1990), Professor Cook has focused on bronze inscriptions with primary interests in religious, social, and regional practices. In the early 1990s, she began to publish studies on bamboo texts, including those dedicated for divination, sacrifice, and mortuary ritual. Most recently, she has been working on bamboo texts stored at Tsinghua University. While at IKGF she finalised several book manuscripts, including A Sourcebook of Ancient Chinese Bronze Inscriptions edited and written with P. Goldin; Birth in Ancient China co-authored with Luo Xinhui and Ancestors, Kings, and the Dao. Each of these publications engages bronze and bamboo texts.

Research Highlights
IKGF Research Project: Tsinghua university bamboo texts from the fourth century BCE, the Shifa (Stalk Divination) and Zhou Gong zhi qinwu (The Lute Dance of Zhou Gong). The Shifa is a divination manual based on trigrams and charts of cosmic influences to diagnose present anxieties and determine the most likely future outcomes of particular conditions or actions. This research resulted in a book co-authored with IKGF fellow, Zhao Lu, tentatively called Divining the Way: a Newly Discovered Fourth Century BCE Divination Manual. The Zhou Gong zhi qinwu is an ode performed as part of ancestor worship in nine stanzas. Study of the ode draws on research in religious beliefs in the cosmic power of de, numerology, and music as well as on self-cultivation practices. The historical evolution of these practices is explored in the book Ancestors, Kings, and the Dao but further, more specific work is forthcoming.

Future Perspectives
Continued work with excavated texts from pre-imperial China.

Selected Publications
- C.A. Cook, Ancestors, Kings, and the Dao, Harvard University Asia Center, forthcoming in 2017
- C.A. Cook, Pre-Han Healing. T.J. Hinrichs & L.L. Barnes, eds., Chinese Medicine and Healing: An Illustrated History Cambridge, MA: Harvard University, 2013, 5—29

Selected Awards
- 2011/12 Fulbright Senior Research Award, Senior Research Scholar, Beijing Normal University, History Institute, Ancient Text Department
- 2000/01 Chiang Ching-Kuo Foundation Postdoctoral Fellowship
- 1994/95 National Endowment for the Humanities Fellowship
- 1993/94 National Academy of Sciences, Committee for Scholarly Communication with China, post-doctoral research grant, Chinese Academy of Social Sciences, History Research Institute, Beijing

“QUIET WALKS AND INTELLECTUAL COMMUNITY: BOTH ARE POSSIBLE IN ERLANGEN.”
Curriculum Vitae

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Egyptian

Nationality

Position

Guest Professor at the Pattern Recognition Lab, Department of Computer Science, Friedrich-Alexander-Universität Erlangen-Nürnberg (FAU)

Summer 2015 Guest Professor at the Pattern Recognition Lab, Department of Computer Science, FAU, Germany

2012—current Assistant Professor, Engineering, Physics and Mathematics Department, Faculty of Engineering, Ain Shams University, Egypt

2012 Doctoral degree (Dr.-Ing.) in Computer Science, Department of Computer Science, FAU, Germany

2006—2012 Doctoral candidate, Department of Computer Science, FAU, Germany

2000—2007 Teaching and Research Assistant, Engineering Physics and Mathematics Department, Faculty of Engineering, Ain Shams University, Egypt

2006 MSc in Engineering Mathematics, Faculty of Engineering, Ain Shams University, Egypt

2000 BSc (hons) in Electronics and Communications Engineering, Faculty of Engineering, Ain Shams University, Egypt

Selected Papers

Selected Awards

2015 Scholarship award from the German Academic Exchange Service (DAAD) Re-invitation Programme

Position

Guest Professor at the Pattern Recognition Lab, Department of Computer Science, Friedrich-Alexander-Universität Erlangen-Nürnberg (FAU)

Summer 2015 Guest Professor at the Pattern Recognition Lab, Department of Computer Science, FAU, Germany

2012—current Assistant Professor, Engineering, Physics and Mathematics Department, Faculty of Engineering, Ain Shams University, Egypt

2012 Doctoral degree (Dr.-Ing.) in Computer Science, Department of Computer Science, FAU, Germany

2006—2012 Doctoral candidate, Department of Computer Science, FAU, Germany

2000—2007 Teaching and Research Assistant, Engineering Physics and Mathematics Department, Faculty of Engineering, Ain Shams University, Egypt

2006 MSc in Engineering Mathematics, Faculty of Engineering, Ain Shams University, Egypt

2000 BSc (hons) in Electronics and Communications Engineering, Faculty of Engineering, Ain Shams University, Egypt

Scientific Background and Objectives

During the course of his academic studies, Professor El-Rafei encountered many disciplines. He obtained his Bachelor’s degree in the field of electronics and communications engineering. After extensive studies of mathematics, he was qualified as a teaching and research assistant of engineering mathematics at the Faculty of Engineering at Ain Shams University in Egypt. This provided the basis for his Master’s work where the image processing problem of optical character recognition was addressed using mathematical techniques such as the wavelet transform. Professor El-Rafei’s subsequent research was in the related topic of medical image processing at the Department of computer science at FAU. This work required an understanding of the acquisition and content of medical images in addition to image processing techniques. A set of algorithms were developed to investigate the new direction of detecting the cerebral changes in the visual system caused by glaucoma. After obtaining a doctoral degree (Dr.-Ing) in computer science from FAU, Professor El-Rafei was appointed as an assistant professor of engineering mathematics at Ain Shams University, Egypt. In addition to his undergraduate and postgraduate teaching responsibilities, he started a research group where the members utilise their diverse range of expertise to solve engineering problems in various fields.

Research Highlights

Ophthalmic diseases such as glaucoma can be delayed or stopped by providing the proper treatment if detected at an early stage. Limited access to ophthalmologists and the lack of symptoms are among the main reasons causing delayed awareness of diseases. Teleophthalmology could help in disease screening and thus reduce the progression rate of diseases. Quality assessment of the acquired retinal images is essential for the success of the screening process. Together with his colleagues, Professor El-Rafei has developed algorithms that operate in real-time to accurately identify the quality of retinal images, addressing the majority of quality degradation causes. This is important in order to avoid misdiagnosis or missed cases.

Future Perspectives

Professor El-Rafei’s research group sees itself at the intersection of many scientific disciplines where solutions to many engineering problems could be provided from one direction to the other. Quality evaluation of retinal images is the first step in developing a completely automated system to screen a large population for ophthalmic diseases. Other examples of the group’s recent work include a quantum mechanics based framework for image processing, medical signal compression, optimisation of economic load dispatch and antenna design.

Selected Publications


Selected Awards

- 2015 Scholarship award from the German Academic Exchange Service (DAAD) Re-invitation Programme
Dr. Adel Francis

“THE WIDE RANGE OF SOCIAL AND SCIENTIFIC EVENTS MAKE THE ERLANGEN-NUREMBERG REGION UNIQUE AND CHARMING.”

Position
Visiting scientist at the Institute of Biomaterials, Friedrich-Alexander-Universität Erlangen-Nürnberg (FAU), sponsored by the Alexander von Humboldt Foundation, June–October 2014

Nationality
Egyptian

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Curriculum Vitae
- Present Senior researcher of ceramic materials at Central Metallurgical R&D Institute (CMRDI), Cairo, Egypt
- June—October 2014 Visiting scientist at the Institute of Biomaterials, FAU, Germany
- 2007—2009 Georg Forster Research Award sponsored by the Alexander von Humboldt Foundation at Technische Universität Darmstadt, Germany
- 2004 Department of advanced materials (ceramics division) at CMRDI, Egypt
- 2000 Award from the Royal Society, stay as an academic visitor at Imperial College London, UK
- 1997 PhD in Chemistry from Ain Shams University's Faculty of Science (Cairo, Egypt), training period at Japan Fine Ceramics Center (JFCC) in Nagoya
- 1991 MSc in Chemistry from Ain Shams University's Faculty of Science, Cairo, Egypt
- 1984 BSc in Chemistry from Ain Shams University's Faculty of Science, Cairo, Egypt

Scientific Background and Objectives/Research Highlights
A better understanding of the correlation between the functional, magnetic and electrical properties and the microscopic structure of the related materials (polymer-derived ceramics, glass and composites) is a key to finding new materials for advanced applications. Dr. Francis’ research is mainly focused on the following topics: Polymer-derived ceramics/Metals (carbon nanotubes) composites: i) Manipulation of the properties of metal organic polymeric materials (e.g. polysilazane and polysiloxane) can be achieved by varying the composition through incorporating metallic materials (e.g. Al, Fe and Al-Si alloys) as the sensing element or carbon nanotubes (CNT) as conductive fillers that lead to commercial and technological applications as well as open new markets within information technology, soft and hard magnets, hard magnetic nanoparticles, magnetic recording media and magnetic shielding. ii) Coating and surface modification of magnesium substrates for biomedical applications: Surface treatment or deposition of a coating is considered as a viable approach to improve the corrosion resistance and to provide an appropriate surface for better bone bonding and cell growth on Mg and Mg alloys. iii) Conversion of industrial wastes into dense and porous ceramics: Another aspect of Dr. Francis’ work is designing experiments for statistically analysing and investigating the impact of operating conditions and their interactions on the physical properties of glass and ceramic products.

Future Perspectives
Because of the ability of bioabsorbable implants to be metabolised by the body, magnesium and Mg alloys show great promise as bioabsorbable implant materials for applications in dentistry and orthopaedics. The development of novel bioactive coatings for magnesium alloys should lead to the production of high performance biodegradable implant materials with technologically interesting properties which could enable many applications in the orthopaedic and dental fields and in bone tissue engineering.

Selected Publications
- W. Daoud, A. Francis, Y. Lin, R. German, An exploratory investigation on the in-situ synthesis of SiC/AlN/Al composites by spark plasma sintering. Journal of Alloys and Compounds 2015, 622, 458
- W. Daoud, A. Francis, Y. Lin, R. German, An exploratory investigation on the in-situ synthesis of SiC/AlN/Al composites by spark plasma sintering. Journal of Alloys and Compounds 2015, 622, 458
Dr. José Manuel González Álvarez

Curriculum Vitae

Position
Alexander von Humboldt Foundation Fellow (Experienced Researchers Programme) at Friedrich-Alexander-Universität Erlangen-Nürnberg (FAU)

Nationality
Spanish

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Scientific Background and Objectives

In recent years, the autobiographic genre and its implications have become the centre of attraction for literary theory and critics. One of the most common approaches has been concerned with drawing up the boundaries between autobiography and fiction. Autofiction is led by contemporary literature and art's general tendency. Once inability to access a stable benchmark has been assumed; authors still strive to embody their identities, albeit in an uncertain and fragmentary way. Dr. González’s main goal involves carrying out an insightful analysis on contemporary Argentinean autofiction (2000–2015). Within this timeframe, writers have been particularly prone to a fictional self-representation which, however, has not received the attention it deserves. His main objectives are to determine to which degree autofictions are rethorical, self-conscious and even metalinguistic artifacts; to define through what formal tools literary ego hides, deforms, multiplies or reinvents itself within the weaves of fiction; to elucidate how and to what extent resources such as mise en abyme, humour, irony, parody and distortion may impact the shaping or defacement of fictional ego.

Research Highlights

For this purpose, texts will be explored from a double perspective: a pragmatics-oriented approach, based on the sociology of literature and a theoretical outlook founded on the use of tools pertaining to literary theory methods and reception theory. Dr. González will thus target those pieces—novels and short stories—where ego's invention runs under fantastic, metafictional and playful (grotesque distortion) channels, not as watertight categories, but by exploring multiple dialogues existing among them.

Future Perspectives

Dr. González expects that his research stay will have a strong impact on him, as it will contribute in particular to broadening both the scope of his publications and his whole research profile. It will also help him to produce a third substantial monograph study on Argentinian literature. In addition, it is a relevant step towards achieving an associate post at a university.

Position

- Alexander von Humboldt Foundation Fellow (Experienced Researchers Programme) at Friedrich-Alexander-Universität Erlangen-Nürnberg (FAU)

Nationality

Spanish

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Website: www.humboldt-life.de/profile/u0872555018

Curriculum Vitae

- 2015—current
  - AvH Postdoctoral Fellowship at FAU, Germany
- 2014—current
  - Member of Research Project “La autoficción hispánica (1980—2013). Perspectivas interdisciplinarias y transmediales”, Univ. de Alcalá, Spain
- 2013—2014
  - Member of Research Project “De los archivos de escritores a las transformaciones del canon crítico”, Univ. Nacional de La Plata, Argentina
- 2000—2010
  - Postdoctoral Fellowship at Univ. de Buenos Aires, Argentina
- 2005—2012
  - Assistant Teacher at Instituto de Iberoamérica, Univ. de Salamanca, Spain
- 2005
  - Doctoral degree (Latin American Literature), Univ. de Salamanca, Spain
- 2004
  - Research stay at Univ. de Buenos Aires, Argentina
- 2002
  - Research stay at Univ. de la República, Uruguay
- 2001—2005
  - Predoctoral scholarship holder at Univ. de Salamanca, Spain

Selected Publications

- J.M. González (coord.), Pasavento 2015, 5
- J.M. González, A. Gallego, E. Martínez, Queridos todos, 2013, 163—175
- J.M. González, Pasavento 2013, 1, 125—133
- J.M. González, Taller de Letras 2013, 52, 39—53
- J.M. González, La voz contra la voz 2013, 653—658
- J.M. González, El cántaro centenario: cinco sesios a la literatura argentina (1910—2010), 2012
- J.M. González, Latin American Theater Review 2012, 45.2, 73—93
- J.M. González, A. Gallego (ed.), Entre la Argentina y España 2012, 159—175
- J.M. González, Revista de Crítica Literaria Latinoamericana 2011, 74, 49—70
- J.M. González, C.R. Barrionuevo, Voces y escrituras 2011, 169—177
- J.M. González, Hispamérica 2011, 118, 21—30
- J.M. González, En los “bordes fluidos”. Formas híbridas y autoficción en la escritura de Ricardo Piglia, 2009
- J.M. González, Nuestra América 2009, 6, 141—161

Selected Awards

- 2011 Successful assessment to apply for Teaching Senior Assistant and Associate posts, ANECA
- 2009 Successful assessment to apply for Teaching Assistant posts, ANECA (National Agency for Quality Assessment and Enablement), Gov. of Spain
Dr. Huilei Hou

Position
Postdoctoral Fellow with Humboldt scholarship in Prof. Dr. Andreas Hirsch’s research group at Friedrich-Alexander-Universität Erlangen-Nürnberg (FAU)

Nationality
Chinese

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Curriculum Vitae
- 2015—present
  Postdoctoral Fellow at FAU, Germany
- 2009—2014
  Master’s and PhD student at the State Key Laboratory of Electroanalytical Chemistry, Changchun Institute of Applied Chemistry, Chinese Academy of Sciences

Scientific Background and Objectives
Synthetic carbon allotropes [SCAs, e.g. fullerenes, carbon nanotubes (CNTs) and graphene] have attracted an enormous level of interest in the scientific community, due not only to the sheer multitude of aesthetically pleasing structures but also to their outstanding properties. During his time as a Master’s and PhD student, Dr. Hou focused on synthesis of functionalised fullerene derivatives and the reaction mechanism, exploring methods to provide different structures and properties of fullerene compounds. The title of his PhD thesis is Study on Synthesis and Mechanism of Fullerene Oxazoline and Imidazoline Derivatives.

Research Highlights
Dr. Hou is currently researching graphene-based hybrid materials, which take advantage of both the superior properties of graphene and functionalising molecules.

Future Perspectives
The relatively uniform size of graphene sheets would show better properties for their potential applications in sensors, energy storage, electronics, organic photovoltaic devices, etc.

Selected Publications

Selected Awards
- 2015 Humboldt Research Fellowship for Postdoctoral Researchers
- 2014 Excellent Student in the Graduate School of the Chinese Academy of Sciences (top 15%)
- 2011 Excellent Student in the Graduate School of the Chinese Academy of Sciences (top 15%)
- 2010 Excellent Student in the Graduate School of the Chinese Academy of Sciences (top 15%)
Position
Alexander von Humboldt Fellow, Pattern Recognition Lab (Informatik 5), Friedrich-Alexander-Universität Erlangen-Nürnberg (FAU)

Nationality
Chinese

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Curriculum Vitae
- 2015—present
  Alexander von Humboldt Fellow at FAU, Germany
- 2012—2015
  Postdoctoral fellow at KU Leuven, Belgium
- 2012
  PhD in control science and engineering at Tsinghua University, China
- 2006
  BSc in control science and engineering, BSc in applied mathematics at Xi’an Jiaotong University, China

Scientific Background and Objectives
Nowadays, machine learning is becoming a very important topic for both academic and daily life. With the growth of available data, machine learning is required to investigate the underlying relationships. Meanwhile, the growth of calculation capability makes it possible to develop efficient machine learning algorithms. In the field of machine learning, piecewise linear (PWL) technology has attracted researchers’ attention. On the one hand, a PWL model can be analysed and solved as a series of linear systems. On the other hand, a PWL function is nonlinear on the whole and one can design a suitable PWL function for desired properties. As the simplest extension to linear functions, we are expecting to develop efficient PWL machine learning and then apply it to medical image/signal processing, especially when there is big noise or outliers.

Research Highlights
Dr. Huang and his co-author have been working on PWL machine learning methods for several years. They developed a standard PWL model to represent any continuous piecewise linear function. They also utilised the pinball loss, which is a piecewise linear function, for classification and then established a new support vector machine. This new method is a pioneering method for using quantile concepts in classification tasks. Another interesting PWL function is the ramp loss and then a new PWL classifier is established. In both theoretical analysis and numerical experiments, this method has shown great advances for sparse classifiers and big noise.

Future Perspectives
After establishing the above methods, Dr. Huang is starting work on the application of piecewise linear models in medical engineering at FAU. This is also based on the fact that LME®FAU has solid foundations and rich experience in medical engineering. It can be expected that the group will develop efficient piecewise linear machine learning methods for medical image processing and other medical engineering topics.

Selected Awards
- 2015 Alexander von Humboldt Fellow
- 2012 Excellent Doctoral Thesis of Tsinghua University
- 2011 Prof. Zheng, Weimin Memorial Scholarship
- 2010 MITSUBISHI Scholarship
- 2009 TOSHIBA Scholarship
- 2006 LENNOVO Scholarship
- 2005 BenQ Scholarship

Selected Publications
- X. Huang, M. Matijas, J.A.K. Suykens, IEEE Trans. on Neural Networks and Learning Systems, 2013, 24, 1279—1291
- J. Xu, X. Huang, S. Wang, Automatica 2009, 45, 2325—2332

THE CLOSE RELATIONSHIP BETWEEN LME®FAU AND INDUSTRY PROVIDES RESEARCHERS WITH A GOOD PLATFORM FOR REALISING THEIR IDEAS, WHICH IS ATTRACTIVE FOR MY RESEARCH ON APPLYING MACHINE LEARNING IN MEDICAL IMAGE PROCESSING.”
Dr. Olcay Kizilaslan

“KEEPING YOURSELF FOCUSED AT WORK CAN BE HARD SOMETIMES. ERLANGEN IS A GREAT PLACE WITH COMFORT AND NATURE TO FOCUS ON YOUR WORK.”

Position
Visiting researcher at the Department of Physics, Friedrich-Alexander-Universität Erlangen-Nürnberg (FAU)

Nationality
Turkish

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Private mail: olcaykizilaslan@gmail.com

Curriculum Vitae
- 2015—current
  Assistant Professor at the Department of Biomedical Engineering, Inonu University, Turkey
- 2011—2015
  Research Assistant at the Department of Physics, Inonu University, Turkey

Scientific Background and Objectives
Dr. Kizilaslan’s research area is superconductivity. He has worked on superconductor materials from different points of view, ranging from superconducting single crystal growth to the potential application of superconductivity. He initially focused on Bi-based single crystal fabrication and its mechanical and electrical properties, later concentrating more on applications of superconductivity such as intrinsic Josephson effects (IJJs) in Bi-based whiskers and, especially, the Josephson effect in cross-whisker junctions prepared by thermal annealing of two joined whisker strands. For the IJJs fabricated in the form of cross-whisker he used the carrier injection effect to tune and discovered a new effect. As the interface layers of the two whiskers ‘glued’ together suffer significantly from oxygen loss and, therefore, from a drastic decrease of carrier concentration resulting in a degradation of the superconducting properties, ‘revitalising’ this interface is an essential task. He was able to restore the integrity of the interface through a rather elegant method. The doping procedure was the so-called carrier injection. Through this method, he was able to restore the ideal superconducting properties of the oxygen-depleted, even non-superconducting layers at the interface.

Research Highlights
Dr. Kizilaslan focused on superconductivity and its potential application. The fabrication of single crystal whiskers that have a desired carrier concentration was done successfully and many studies were carried out on electrical, magnetic and mechanical properties of the single crystal whisker. The fundamental superconducting properties of the intrinsic Josephson junctions such as critical current density, critical temperature and normal state resistance were tuned by carrier injection.

Future Perspectives
It is clear that there is a growing demand for THz sources in scientific, technological and industrial fields such as biological and medical science, non-destructive testing, homeland security, and quality control of food and agricultural products. Dr. Kizilaslan’s future plan is to focus on the technological applications of IJJs, especially in the field of health, and, in this context, some of the potential applications of IJJs is THz emission and superconducting quantum interference devices (nanoSQUIDs) for the investigation of magnetic nanoparticles.

Selected Publications
- O. Kizilaslan, Y. Simsek, M.A. Aksan, Y. Koval, M.E. Yakinci, and P. Müller, Adjustable tunneling barrier in Bi-based high-Tc cross-whisker junctions, Superconductor Science and Technology 2015, 28, 025010
- O. Kizilaslan, G. Kirat, M.A. Aksan, Magnetic relaxation behavior in the Bi2Sr2Ca2Cu3-xMoxO10+d system fabricated by glass-ceramic technique, Journal of Magnetism and Magnetic Materials 2015, 384, 186
- O. Kizilaslan, M.A. Aksan, Crystallization of glass-ceramic Bi3Sr2Ca2Cu3O10+d superconducting system, Journal of Crystal Growth 2013, 381, 77–82
- M.A. Aksan, O. Kizilaslan, E.N. Aksan, M.E. Yakinci, Thermoelectric power and thermal conductivity study of the YBa2Cu3Ox system, Physica B 2012, 407, 2820–2824

Selected Awards
- 2014 Research Fellowship, Scientific and Technological Research Council of Turkey (TUBITAK)
- 2013 Research Fellowship, Department of Physics, FAU, Germany
- 2013 Research Fellowship, Center of Excellence for Superconductivity Research, Ankara University, Turkey
Prof. Dr. Marilena Z. Leana-Taşcılar

Position
Visitor Scholar in Talent Development and Excellence at Friedrich-Alexander-Universität Erlangen-Nürnberg (FAU)

Nationality
Turkish

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“WORKING THERE WITH SUCH GOOD COLLEAGUES AND GREAT MENTOR PROF. DR. ALBERT ZIEGLER WAS THE BEST EXPERIENCE IN MY ACADEMIC LIFE.”

Curriculum Vitae

- 2015—current
  Assistant Professor of Gifted Teacher Training Programme at Istanbul University, Turkey
- 2014—2015
  Visitor Scholar in Talent Development and Excellence at FAU, Germany
- 2009—2014
  Assistant Professor of Gifted Teacher Training Programme at Istanbul University, Turkey
- 2007 August—2008 January
  Researcher at the Department of Communication Sciences and Disorders at MGH Institute of Health Professions, Boston, USA
- 2002—2009
  Researcher at Gifted Teacher Training Programme at Istanbul University, Turkey
- 2009
  Doctoral degree in Psychology on cognitive abilities of gifted students at Istanbul University, Turkey

Scientific Background and Objectives

Professor Leana-Taşcılar has been working at Istanbul University (Turkey), Hasan Ali Yücel Faculty of Education, Special Education Department, Gifted Teacher Training Programme since 2002. Her Master’s and doctoral theses were about the executive functions and planning abilities of gifted students. Identification of gifted children, twice-exceptional students, underachievement, bibliotherapy for gifted children and self-regulated learning are some of her interests. She has presented at several national and international conferences. She has been a member of the Turkish Delegates in the World Council for Gifted and Talented Children since 2002.

Research Highlights

During her stay in FAU she had the opportunity to work with Prof. Dr. Albert Ziegler and his colleagues on his Actiotope Model of Giftedness. She was part of a cross-cultural validation study of the Questionnaire of Educational and Learning Capital (QELC) in China, Germany and Turkey. She also had the opportunity to collaborate with Professor Ziegler, Mr. Reutlinger and Mr. Wasserloos in the Hochbegabte mit türkischem Migrationshintergrund (HotM) project.

Future Perspectives

She was very pleased with her stay at FAU and hopes to continue collaborating with the University. With the experience and productive year at FAU she feels more equipped. Although she has now left, she still has the opportunity to collaborate with Dr. Ziegler in new international projects.

Selected Publications

- M.Z. Leana-Taşcılar, 2015, Questionnaire of educational and learning capital (QELC): turkish language Validity and factor structure, College Students Journal, 49(4), 531–541
- M.Z. Leana-Taşcılar, 2014, Age differences in actiotope model of giftedness, Psychological Test and Assessment Modeling, 57(1), 111–125

Selected Awards

- 2014—2015 YÖK Scholarship for 1 year Abroad (Germany)—by Ministry of Education Turkey
- 2007 TINCEL Scholarship for 3 Months Abroad—by TINCEL (Foundation of Istanbul University)
- 2002 Distinguished Faculty—awarded by Istanbul University

52 Friends for life FAU Research Alumni Yearbook 2014/2015
Dr. Liliana Liverani

“ERLANGEN IS THE NICEST PLACE TO LIVE AND WORK.”

Position
Postdoctoral fellow within Marie Skłodowska-Curie Individual Fellowship at the Institute of Biomaterials, Department of Materials Science and Engineering, Friedrich-Alexander-Universität Erlangen-Nürnberg (FAU)

Nationality
Italian

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Curriculum Vitae
2015—current
Postdoctoral fellow, Friedrich-Alexander-Universität Erlangen-Nürnberg (FAU), Germany

2014
Researcher in the framework of SAFE & SMART Italian National Cluster project

2012—2014
Postdoctoral fellow, Università Campus Bio-Medico di Roma (UCBM), Italy

2009—2014
Educational activities in teaching and undergraduate student supervision at UCBM, Italy

2011
Doctoral degree in Biomedical Engineering, UCBM, Italy: “Chitosan-based scaffold for osteochondral tissue engineering”; Visiting doctoral candidate at Institute of Biomaterials, FAU, Germany

2008
Post-lauream Master’s degree in Innovation in Surgery at the Department of Bioengineering, Politecnico di Milano, Italy

2007
MSc in Biomedical Engineering at UCBM, Italy: “Electrospun biopolymer with cylindrical geometry for cardiovascular surgery”

Scientific Background and Objectives
Dr. Liverani’s research background is in the synthesis and functionalisation of biomaterials for tissue engineering applications. In particular, her research activities have focused on the fabrication of polymer-based scaffolds mainly by using the electrospinning techniques and on the combined use of different scaffold fabrication techniques for obtaining multilayered scaffolds for interface tissue engineering applications.

Research Highlights
At the moment, Dr. Liverani is working on a BIOeSPUN scaffolds project, a Marie Skłodowska-Curie Individual Fellowship, aiming at the fabrication and characterisation of novel types of multilayered scaffolds suitable for interface tissue engineering applications, in particular for osteochondral segment regeneration. The project will focus on the integration of several scaffold fabrication techniques for the development of novel electrospun multilayered scaffolds. In particular, considering the well-known effects of bioactive glass on osteogenesis, angiogenesis and its antibacterial activity, electrospun bioactive glass mats will be fabricated. Moreover, bioactive glass particles will be considered to fabricate bioactive glass-doped electrospun mats. Innovative solutions will be adopted to achieve stratified samples, integrating different scaffold fabrication technologies.

Future Perspectives
At the end of this Marie Skłodowska-Curie Individual Fellowship, Dr. Liverani expects that she will have reinforced her professional maturity and independence, increasing also the multi-disciplinary aspect of her professional profile, being an expert able to continue working in academia or in industry.

Selected Publications

Selected Awards
- 2011 Beneficiary of Erasmus Lifelong Learning Programme for her visiting period as a doctoral candidate in Germany
- 2009 Enrolment in National Professional Engineers Register, Rome—Italy (n. 30894 section: A)
Dr. Takahiro Maeki

Curriculum Vitae

Position
Postdoctoral fellow in the Institute for clinical and molecular virology at Friedrich-Alexander Universität Erlangen-Nürnberg (FAU)

Nationality
Japanese

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"ERLANGEN IS A VERY COMFORTABLE AND CONVENIENT CITY TO LIVE IN."

Scientific Background and Objectives

Human cytomegalovirus (HCMV) belongs to the ß-herpesvirus subfamily. Generally, HCMV causes asymptomatic infections in immunocompetent individuals. However, HCMV can cause severe diseases in newborns and immune compromised hosts. Dr. Maeki is part of a research group which has focused on pp71, one of the major tegument proteins of HCMV. Previously, the group has shown that pp71 plays important roles in the establishment of HCMV infection by dispersion of ND10 (a cellular structure which inhibits virus replication). In addition, the group has previously found that HCMV pp71 interacts with the cellular protein TRIM6 (TRIM: tripartite motif). Detailed analysis had not been done at the time because the function of TRIM6 was not entirely clear. However, in 2014, one group showed that TRIM6 plays critical roles in type I IFN (interferon) response. Therefore, Dr. Maeki’s objectives are to elucidate the function of the interaction between TRIM6 and pp71.

Research Highlights

The group speculates that pp71 inhibits the function of TRIM6 because HCMV has evolved many strategies to antagonise the antiviral responses. If this is the case, pp71 is a kind of multi-functional protein; pp71 plays important roles not only in the early stage of infection (by establishing the infection) but also in the later stage (by antagonising the immune response). Therefore, the detailed analysis of the interaction between TRIM6 and pp71 can contribute to elucidating the mechanism of the HCMV whole replication cycle.

Future Perspectives

In the future Dr. Maeki is planning to analyse the function of pp71 in immune evasion beyond the interaction with TRIM6. So far, there are no previous reports of pp71 antagonising the immune response in HCMV infected cells, although there are several previous reports of pp65, another major tegument protein of HCMV. Therefore, analysing the function of pp71 in immune evasion can contribute to elucidating the mechanism of HCMV immune evasion.

Selected Publications

- H. Tang, M. Hayashi, T. Maeki, K. Yamanishi, Y. Mori, Human herpesvirus 6 glycoprotein complex formation is required for folding and trafficking of the gH/gL/gQ1/gQ2 complex and its cellular receptor binding. Journal of Virology 2011, 85, 11121–30

Selected Awards

- 2014 Alexander von Humboldt Foundation Postdoctoral Fellowship (2 years)
Scientific Background and Objectives

Professor Marzooq is a postdoctoral fellow at the Center for Iraq Studies at FAU. His current research concerns inflation targeting: lessons from selected countries and prospects. He studied the effect of conflicts on economic relationships, especially regarding Israel and the changes inflicted after 2003. Therefore, his doctoral thesis was 'The Economic Conflict in the Middle East'. For his MA thesis, 'Analysis of the Inflationary Gap in the Iraqi Economy 1980—1995', he studied suitable tools in monetary policy to reduce the factors leading to inflationary gaps. During his time as a researcher, he held the administrative positions of Dean of the Economic and Administration College at Kufa University (2014), Associate Dean of the Economic and Administration College (2006—2013), and IT Manager at the same college (2003—2005).

Research Highlights

When he finished his doctoral degree, Professor Marzooq developed an interest in the global financial crisis, especially the mortgage crisis in the United States, how it spread all over the world and eventually was an important factor in the causality leading to the sovereign debt crisis in Europe, specifically in the euro zone. His research is an attempt to understand the mechanisms of this transition causing the crisis.

Future Perspectives

Professor Marzooq's postdoctoral studies focus on economic problems in Iraq, especially the discussion about inflation targeting reducing inflation persistence in case of an economic crisis. The possibility of implementing the results in the Iraqi economic system is of utmost importance. According to studies, all economic activities in Iraq are connected with oil revenues. This causes a lack of effectiveness as well as a negative impact on monetary policy. He discusses the current monetary policy in Iraq and is developing an effective method to analyse its impact on the Iraqi economy. Eventually, he hopes to find an applicable tool to ensure price stability.
Dr. Nooriya Abed Mohammed

Position
Head of Department of Economic Studies/Office for Planning and Studies at the Ministry of Electricity (MoE) in Iraq

Nationality
Iraqi

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Office mail: planningstudies@yahoo.com
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Curriculum Vitae
- 2014–current
- 2009—2013
- 2006—2009
  Employment at the Department of Economic Studies at the Office for Planning and Studies in the Ministry of Electricity (MoE), Iraq
- 2000—2006
  Employment at the information centre and operation research office at MoE
- 1997—2000
  MSc in Operational Research: ‘Building Integrated Simulation Models for Manufacturing Industry used as Laboratory Device for Teaching the Subject of Model Building’ at Baghdad University, Iraq

Scientific Background and Objectives
Dr. Mohammed is doing research for a second doctoral degree at FAU. She has worked as researcher at the MoE in Iraq and studied model building in operation research at Baghdad University under the supervision of Prof. Dhafer Hassine. She has presented her research at several national conferences in Iraq. In her doctoral thesis, she focuses on foreign investment and methods for the prediction of future domestic investment in Arabic countries. She was a participant in the research project ‘A comparison between the regression models and the artificial neural networks for forecasting’ for the United Arab Statistics Conference. She also was a member of a research team working with the company Parsons Brinckerhoff to develop a master plan for the MoE at a conference for Iraqi energy planning in Istanbul. Through her work she has completed many analytical studies and quantitative reports.

Research Highlights
Dr. Mohammed specialises in using statistics and operation research approaches to analyse and find optimal solutions for different activities in Iraq for the development of the electricity power system. Her work includes the preparation and organisation of reports for all databases related to electricity generation and energy transmission and distribution in the Middle East since 2005. She also worked on a pre-feasibility study of 15 off-grid PV wind hybrid system projects in 2012 and 2013, as well as on an economic study and analysis of new approaches in power generation and the preparation of a master plan for Iraqi electricity, including calculating the approximate load demand in the long term with contribution of economic parameters such as GDP and tariff. After that he conducted a comparison between regression models and the artificial neural networks for forecasting. Further projects are annual studies regarding the generation cost and the analysis of consumer’s behaviour in different tariff patterns.

Future Perspectives
Electricity power in Iraq suffered and continues to suffer from the vast shortage in energy supply, so it is crucial to predict the actual energy demand to put economic planning for investment in this field, furthermore it is necessary to forecast the demand electricity power in Iraq for short and long term. Therefore, using economic data with applying econometric models is the most promising approach.

Selected Publications
- A Comparison between the Regression Models and the Artificial Neural Networks for Forecasting, United Arab Statistics Conference, 2013
- Building Integrated Simulation Models for Manufacturing Industry used as Laboratory Device for Teaching the Subject of Model Building, Baghdad University, 2000

“In ERLANGEN, I FOUND JUSTICE IN ALL ASPECTS OF LIFE, AS WELL AS RESPECT FOR HUMAN BEINGS.”
Dr. Neus Edurne Nuin Pla

“I LIKE ERLANGEN, IT’S A VERY WELCOMING CITY AND YOU NEVER FEEL LIKE AN OUTSIDER.”

Position
FFL Postdoctoral Research Fellow at Friedrich-Alexander-Universität Erlangen-Nürnberg (FAU)

Nationality
Spanish

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Curriculum Vitae
- 2014—current Postdoctoral Researcher at the Institute of Organic Chemistry II, FAU, Germany (supervisor: Prof. A. Hirsch)
- 2013 Post-doctoral Researcher at the Institute of Chemical Technology (UPV-CSIC), Technical University of Valencia, Spain (supervisor: Prof. M.A. Miranda)
- 2010—2013 Doctoral degree in Chemistry at the Technical University of Valencia, Spain (supervisors: Prof. M.A. Miranda and Dr. I. Andreu)
- 2008—2013 Associate Researcher at the Institute of Chemical Technology (UPV-CSIC), Technical University of Valencia, Spain (supervisor: Prof. M.A. Miranda)
- 2008—2010 DEA (equiv. MSc) with specialisation in “Organic Chemistry in the Chemical Pharmaceutical Industry” at the Technical University of Valencia, Spain (supervisor: Prof. M.A. Miranda)
- 2006 Undergraduate Student Fellow at the Materials Science Institute, University of Valencia, Spain (supervisor: Prof. J. Latorre)

Scientific Background and Objectives
Dr. Nuin is an expert in organic synthesis of model compounds, paying particular attention to the study of the photochemical properties of drugs in microheterogeneous media such as proteins, mixed micelles, liposomes, etc. During her doctoral degree, she developed new non-invasive strategies for the study of real drugs issues. The derivatisation of complex carbon nanostructures is the goal of Dr. Nuin’s work. During the next year she will explore the synthesis of sophisticated magnetic metal-organic complexes with selective fullerene anchoring groups in order to study their magnetic properties at the single-molecule level. This research area is located at the interface between chemistry and physics and will deliver results of interest in the fields of molecular nanoscience and nanotechnology. Moreover, she is also pursuing the synthesis of complex fused perylene–phthalocya-nine structures, a very promising new family of chromophores.

Research Highlights
During her doctoral degree Dr. Nuin was involved in several multidisciplinary projects regarding the synthesis, photophysical and photochemical characterisation of compounds. Among other findings, she provided direct evidences of drug-drug interactions within protein cavities. In addition, it is noteworthy that during her doctoral degree Dr. Nuin worked in collaboration with medical groups within a multidisciplinary network, and acquired a broad knowledge of the subject of allergies and adverse drug diagnostic techniques. At FAU she recently succeeded in the synthesis of some magnetic molecular complexes with fullerene anchor groups of interest for single-molecule junctions.

Future Perspectives
The possibility of interacting with top scientists will allow Dr. Nuin to develop a strong network for facing future scientific challenges in the next stage of her career. i.e. trying to obtain a junior researcher position leading her own research projects. In this sense, she wants to apply for junior research/starting grants funded by the DFG, Liebig or SFB, among others, with the aim of becoming established in Germany with a permanent position.

Selected Publications

Selected Awards
- 2015 FFL Postdoctoral Fellowship
- 2013 Postdoctoral research contract from the Spanish National Health Foundation
- 2008—2013 Predoctoral research contract from the Spanish National Health Foundation
- 2006 Scholarship for outstanding final year students (granted by the Spanish Ministry of Education and Science)
Research Highlights

Professor Purdy’s research explores the literary production of Native American authors. His current project is a documentary film that examines the works of several Pacific Northwest authors and poets who convey compellingly their special attachments to specific landscapes. During his stay at FAU Professor Purdy taught a seminar, gave lectures and worked with faculty to assess the MA in American Studies. He provided the short seminar for students ‘Writing Place in American Literatures and Film’, examining a number of texts written from varying cultural points of view that describe the landscapes of North America over a long period of time. It explored the diverse visions of the world that have come to be called ‘American literature’ and, as with all attempts to recognise and understand alternative points of view, it engaged in cultural studies methodologies, focusing on two core novels—Ken Kesey’s Sometimes a Great Notion and Louise Erdrich’s Tracks—as well as other, shorter, readings and a number of works in film. Professor Purdy also gave a talk at FAU, ‘People, Place and Politics: The Radical Reclamation of D’Arcy McNickle’s Native America.’

McNickle (1904—1977) was an adopted member of the Montana Salish and worked as an activist for Native American causes. He was also a novelist whose works provided insights into social, political and environmental issues.

Curriculum Vitae

- **Position**
  Professor Emeritus, Western Washington University in Bellingham, Washington US.

- **Nationality**
  United States

- **Contact**
  **Address:** P.O. Box 572, Deming, WA 98244 U.S.
  **Mail:** John.Purdy@wwu.edu
  **Website:** www.johnpurdy.net

- **04/2015—06/2015**
  Guest Professor at FAU through the Fulbright Senior Specialist programme; Attendance of a Conference in Bonn, giving a paper entitled “A Radical Reclamation: Native American Re-inscriptions of ‘Life Science’ in the Twentieth Century.”

- **2014—present**
  Professor Emeritus of English, Western Washington University

- **1991—2014**
  Professor of English, Western Washington University
  Fulbright scholar: University of Mannheim, University of Canterbury, Christchurch, New Zealand

“MY TIME AT FAU WAS THE HIGHLIGHT OF THE YEAR. MY COLLEAGUES AT FAU ARE TREMENDOUSLY SUPPORTIVE, REMARKABLY ACCOMPLISHED, AND FULLY ENGAGED IN OUR PROFESSION; THEIR PROGRAMMES ARE NOTABLE FOR THEIR INTEGRATION OF DISCIPLINES IN INNOVATIVE CURRICULA.”

Selected Publications

- Writing Indian. Native Conversations. Lincoln: University of Nebraska Press, 2009

Selected Awards

- 2006—2010 Editor, American Review of Canadian Studies, Former Editor, Studies in American Indian Literatures
- 2003 Alumni Award of Excellence, Western Oregon University
- 2001 Winner of ‘Writer of the Year’ Award from the Wordcraft Circle of Native American Writers and Storytellers
- 1994—2001 Associate Member: Centre de recherches et d’études nord-américaines, Université Paul-Valéry Montpellier III; Editorships: Studies in American Indian Literatures
- Founder of the nonprofit Write Place (www.write-place.org)
Dr. Katarzyna Ślebarska

Curriculum Vitae

- **Position**
  Research Scientist and Lecturer, Institute of Psychology, University of Silesia

- **Nationality**
  Poland

- **Contact**
  Address: Institute of Psychology, University of Silesia, ul. Grażyńskiego 53, 40-126 Katowice, Poland
  Phone: +48 (32)3599824
  Mail: katarzyna.slebarska@us.edu.pl

- **Since 2009**
  Research Scientist and Lecturer, Institute of Psychology, University of Silesia, Poland

- **2014/2015**
  Visiting researcher, Chair of Organisational and Social Psychology, FAU, Germany (DAAD Scholarship)

- **2011/2012**
  Visiting researcher, Division of Health Psychology, Freie Universität Berlin, Germany (DAAD Scholarship)

- **2009**
  PhD, Institute of Psychology, University of Silesia, Poland

- **2007—2009**
  Lecturer, Institute of Psychology, University of Silesia, Poland

- **2005—2006**
  Visiting researcher, Division of Organisational and Social Psychology, FAU, Germany (DAAD Scholarship)

**Research Highlights**

2014—2016: Proactive coping with an adaptation to a new workplace after reemployment (Project No. 2013/10/M/HS6/00550, Polish National Science Center—NCN);

2014: Proactive coping in the situation of unemployment (Institute grant for young scientists; coordinator);

2013: Proactive coping in the new workplace (Institute grant for young scientists; coordinator);

2011—2013: Occupational reintegration—coping with psychosocial costs of reemployment (Project No. 106 349540, Polish National Science Centre—NCN; coordinator);

2011: Tunnel perception of own occupational future and job search behaviour (Institute grant for young scientists; coordinator);

2010: Psychological determinants of short-term and long-term employment (departmental research grant);

2007—2008: Social Support and Job Search Behaviours in the situation of unemployment (Project No. 106 056, Polish Ministry of Science and Education)

**Selected Publications**


- K. Ślebarska, A. Chudzicka-Czupala, Emotional costs, social influence, sense of coherence, and coping in the situation of reemployment. Psychology Research 2013, 3, 4, 220—231

- K. Ślebarska, A. Chudzicka-Czupala, Occupational reintegration and well-being. Do long-term unemployed suffer more from reemployment than short-term unemployed? International Journal of Multidisciplinary Thought 2013, 3(2), 67—75

- A. Chudzicka-Czupala, K. Ślebarska, Psychological antecedents of coping with stress by re-employed, Humanities and Social Sciences Review 2013, 3(5), 354—362


**Selected Awards**

- 2013 Individual award for scientific and research activity, University of Silesia

- 2011 Team award for scientific and research activity, University of Silesia

- 2011 Poster award, Interdisciplinary Conference: Around the social influence; Kraków, Poland

- 2009 1st Award from Polish Ministry of Work and Social Policy for the best dissertation

- 2009 Doctoral dissertation awarded by the Dean of the Faculty of Pedagogy and Psychology, University of Silesia

- 2008 Jacobs Foundation Award: Young Scientists Program (ICP2008) and 2-week stay at FU Berlin, Germany
Dr. Nicolai Savaskan

Position
Head of the Laboratory, Translational Neuro-oncology group, Department of Neurosurgery, Universitätsklinikum Erlangen, Friedrich-Alexander-Universität Erlangen-Nürnberg (FAU), and founder of BiMECON Ent., Berlin

Nationality
Turkish, German

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Curriculum Vitae
Since 2016
Founder of BiMECON Ent., Berlin-Brandenburg, Germany
2011—current
Head of the laboratory of neurosurgery at FAU, Germany
2009—2010
Group leader, Center for Anatomy and Neurobiology, Charité Berlin, Germany
2007—2009
Junior group leader, Brain Research Institute, University of Zurich, Switzerland
2003—2007
DFG and HFSP fellow, Division of Cellular Biochemistry, Netherlands Cancer Institute, Amsterdam, The Netherlands
1994—2003
MD student, graduate student and postdoctoral fellow, Institute of Cell Biology and Anatomy, Charité Berlin, Germany

“The NUREMBERG METROPOLITAN REGION IS A HOTSPOT FOR BIOMEDICAL TECHNOLOGIES AND A GREAT PLACE TO BE.”

Scientific Background and Objectives
Trained as a developmental neurobiologist, Dr. Savaskan worked on axon guidance molecules and plasticity related genes before entering the cancer research field. Trained at the Netherlands Cancer Institute (Amsterdam) and ETH Zurich, he is working on glutamate receptor signalling in brain tumours and angiogenesis in transgenic animals. Recently, Dr. Savaskan expanded his research focus on clinical brain tumour imaging including intraoperative fluorescence imaging and the DIVA (dual intra-operative visualisation approach) and vDIVA MRI modalities. These techniques led to findings on the heterogonic tumour zones in gliomas. These studies aim to efficiently translate findings from bench to clinical settings.

Research Highlights
One research highlight was when he and his colleagues identified a new gene family called Plasticity related genes (PRG or LPPR family) involved in neuronal regeneration. Secondly, the group identified the molecular mechanisms by which tumour cells poison their environment. In doing so they identified the glutamate transporter xCT/SLC7A11 as a key player in ferroptosis, a specific form of cell death and neurodegeneration.

Future Perspectives
In the upcoming years, the group will work on clinical interventions to block glutamate signalling in brain tumours and implementing DIVA and MultiDIVA techniques as a standard procedure for supracomplete tumour surgery.

Selected Publications
Dr. Jeremy Shonberg

Scientific Background and Objectives
Dr. Shonberg’s main research interests focus on the design and development of novel compounds targeting G Protein-Coupled Receptors (GPCRs). This superfamily of receptors are the largest and most diverse group of membrane receptors in humans, and are responsible for the regulation of a broad range of physiological processes. Dr. Schonberg’s PhD focused on the design, synthesis and pharmacological analysis of novel molecules at the dopamine D2 receptor, a GPCR that regulates a number of functions including memory, cognition, and smooth muscle movement and is inextricably linked to schizophrenia and Parkinson’s disease. His research focused on novel methods of targeting the receptor, including targeting topographically distinct receptor binding sites (allosteric, bitopic and bivalent ligands). Since moving to FAU, he has focused on the design, synthesis and pharmacological analysis of novel compounds targeting β2-adrenergic receptors for the treatment of pulmonary disorders, and also the design of novel orexin receptor agents for the treatment of narcolepsy and insomnia.

Research Highlights
A particular research highlight of Dr. Shonberg’s was the involvement on a project at Monash University which uncovered a novel mechanism of allostery in a GPCR dimer. In this project he designed and synthesised a range of compounds which elucidated novel mechanisms for targeting this important family of receptors, and has implications in the treatment of schizophrenia.

Future Perspectives
The field of medicinal chemistry at GPCRs remains a highly rewarding endeavour. As physiologically relevant targets are continually uncovered for treating various disorders, avenues constantly open for the possibility of generating novel drug molecules with beneficial impacts on human health. And, for known targets there remains a strong need for better, safer and more effective medicines for global wellbeing. Dr. Shonberg’s aim is to help advance medicinal chemistry efforts for the better understanding of how drugs act at their targets, and therefore how medicines can be improved for the future.

Selected Publications
- J. Shonberg, C. Draper-Joyce, S.N. Mistry, A. Christopoulos, P.J. Scammells, J.R. Lane, B. Capuano, J. Med. Chem. 2015, 58, 5287
- J. Shonberg, J.R. Lane, P.J. Scammells, B. Capuano, MedChemComm 2013, 4, 1290
- J. Shonberg, P.J. Scammells, B. Capuano, ChemMedChem 2011, 6, 963

Selected Awards
- 2014 Alexander von Humboldt Postdoctoral Research Fellowship (FAU), Germany
- 2012 Best Poster Prize—EFMC-ISMC 22nd International Symposium on Medicinal Chemistry, Berlin, Germany
- 2009 Australian Postgraduate Award (Monash University, Melbourne, Australia)

Position

Nationality
Australian, German

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Curriculum Vitae
- February 2015—present
  Alexander von Humboldt Postdoctoral Research Fellow at FAU, Germany
- November 2013—February 2015
  Postdoctoral Research Fellow in GRK1910: Medicinal Chemistry of Selective GPCR Ligands, FAU, Germany
- February 2013—November 2013
  Postdoctoral Research Fellow, Department of Medicinal Chemistry and Drug Discovery Biology, Monash University, Melbourne, Australia
- July 2009—February 2013
  PhD in Medicinal Chemistry, Monash University, Melbourne, Australia
- March 2005—November 2009
  Bachelor and Honours Degree in Medicinal Chemistry, Monash University, Melbourne, Australia

“A HISTORIC INSTITUTE IN A CLASSICAL FRANCONIAN SETTING. THE IDEAL PLACE TO BE.”


**Dr. Alec Sproten**

**Scientific Background and Objectives**

Dr. Sproten is a behavioural scientist and is used to applying methods from various fields (such as economics, psychology, endocrinology, or neuroscience) to the corresponding research questions. His research is based on three central areas: ageing, social norm compliance, and new media. Beyond the toolbox of experimental economics, he runs experiments using functional magnetic resonance imaging (fMRI), eye-tracking, and hormonal sampling through blood and saliva. Although his research career started with ethological studies during his licentiate in psychology, he moved on to run economic experiments in his doctorate. The topic of Dr. Sproten’s doctoral thesis ‘Developmental neuroeconomics: lifespan changes in economic decision making’ summarises well the research he performed with various co-authors during this time.

**Research Highlights**

Dr. Sproten worked on age differences in decision making under uncertainty, with instruments from both behavioural economics and neuroeconomics. He then started working on social preferences or, more precisely, on age differences in competitiveness. His research portfolio is extended by his works on social norm compliance, in which he performed research on efficiency concerns (where methods from experimental economics are supplemented by hormonal measurements) and on fiduciary money management (which lies in the field of experimental finance). More recently, Dr. Sproten started work on his third research area in new media, where he studies media piracy using experimental methods and drug trafficking on cryptomarkets with the tools of empirical economics.

**Future Perspectives**

By organising and participating in various workshops and conferences, Dr. Sproten has built up a large and international network of contacts with researchers with similar interests and with whom he is successfully co-authoring a number of projects. He intends to continue on this path in the future.

**Selected Publications**


**Selected Awards**

- 2013 SABE/IAREP/ICABEEP grant to organise a workshop
- 2009 Research grant, Government of the German-speaking Community of Belgium
- 2008 Small travel grant, University of Liège

**Position**

Assistant Professor at the Chair of Economic Theory at Friedrich-Alexander-Universität Erlangen-Nürnberg (FAU)

**Nationality**

Belgian

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"FAU ERLANGEN-NÜRNBERG OFFERS AN EXCELLENT RESEARCH INFRASTRUCTURE."

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**Curriculum Vitae**

- **2012—present**
  - Habilitation—in progress: ‘Social Norm Compliance’
  - Academic Advisory Board Member of a platform for psychological counselling
- **2009—2012**
  - PhD and laboratory manager at the Chair of Behavioural Economics, Alfred Weber Institute for Economics, Heidelberg University, Germany
  - Freelance collaborator at nimirum.info
- **2003—2008**
  - Licenciate in Psychology (main subjects: ethology and neuropsychopharmacology), University of Liège, Belgium
  - Research stay at Estación Biológica Quebrada Blanco, German Primate Centre, Peru

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**Selected Publications**


**Selected Awards**

- 2013 SABE/IAREP/ICABEEP grant to organise a workshop
- 2009 Research grant, Government of the German-speaking Community of Belgium
- 2008 Small travel grant, University of Liège
Dr. Huynh Van Luong

“ERLANGEN IS A GREAT PLACE TO GET INSPIRED WITH ITS UNIQUE NATURE AND CULTURE.”

Position
Postdoctoral researcher with the Humboldt Research Fellowship from the Alexander von Humboldt Foundation, at the Chair of Multimedia Communications and Signal Processing, Friedrich-Alexander-Universität Erlangen-Nürnberg (FAU)

Nationality
Vietnamese

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Curriculum Vitae
- 2015—present
  Humboldt Research Fellow – Alexander von Humboldt Foundation, Chair of Multimedia Communications and Signal Processing, FAU, Germany
- 2014
  Postdoctoral Researcher, Biomedical Research Imaging Center, University of North Carolina at Chapel Hill, North Carolina, USA
- 2010—2013
  PhD in Coding and Visual Communication, Technical University of Denmark, Copenhagen, Denmark
- 2007—2009
  MSc in Computer Engineering and Information Technology, University of Ulsan, Ulsan, South Korea

Scientific Background and Objectives
Dr. Van Luong’s background is centred on imaging algorithms involved in image and video analysis and communication. During his Master’s study, he proposed new parallel approaches to medical image processing using a massively parallel processor array with high performance and energy efficiency. During his PhD in Denmark, he worked on a distributed video coding and processing project to develop a new video coding paradigm that requires a low complexity encoder with high coding efficiency, which is important for new applications such as wireless video surveillance. More recently, as a postdoctoral researcher in the USA, he conducted research in the field of imaging in medicine, focusing on medical image registration applications. His research goal is to develop valuable algorithms and methods for interactive visual analysis and communication to produce real-world applications. His research covers theoretical foundations to emerging applications in multimedia signal analysis and visual communications.

Research Highlights
He is developing novel algorithms for distributed coding and processing of correlated video sources that can be used in applications in the field of augmented reality. His current interest focuses on robust object tracking and recognition for application in multiple wearable cameras, which are becoming smaller and smarter.

Future Perspectives
His research is expected to reveal emerging applications for distributed visual sensors and smart tiny camera systems in interactive wireless environments. His ongoing project is developing novel visual analysis and communication algorithms for multiple distributed wearable devices to interactively detect, recognise, track, and retrieve object information in error-prone environments.

Selected Publications
- H.V. Luong, S. Forchhammer, J. Slowack, J. De Cock, and R. Van de Walle, Adaptive Mode Decision with Residual Motion Compensation for Distributed Video Coding. APSIPA Transactions on Signal and Information Processing 2015, 4, e1, 1—11

Selected Awards
- 2014 Humboldt Research Fellowship (2015—2017) from the Alexander von Humboldt Foundation (Germany), Friedrich-Alexander-Universität Erlangen-Nürnberg, Germany
- 2012 Research Grant (Jun.—Sep. 2012) from the Oticon Foundation and the Otto Mønsteds Foundation (Denmark) for a research stay at Multimedia Lab, University of Ghent, Belgium
- 2011 Best 10% paper award in IEEE International Workshop on Multimedia Signal Processing 2011 (MMSP 2011), Hangzhou, China

Friends for life
Gualberto Vazquez Casas, BEng

Curriculum Vitae

- **Position**
  Invited to the Department of Mathematics as winner of the Discrete Optimisation Challenge, part of FAU’s Open Research Challenge 2015

- **Nationality**
  Mexican

- **Contact**
  
  - **Mail:** gvc@correo.azc.uam.mx
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**Scientific Background and Objectives**

Gualberto Vazquez Casas’s area of research is the computation of matchings and flows in graphs. In his Master’s thesis, he is studying how to calculate a minimum cost 3-matching of a set of points in the Euclidean plane (a problem which is unfortunately NP-Hard). He and his colleagues have designed several integer programming formulations. They are also studying the effect of certain inequalities on the relaxation value and performance in MIP solvers.

**Research Highlights**

Gualberto Vazquez Casas and his colleagues currently have three integer programming models that use asymptotically fewer variables than the state-of-art models. They have also shown that the polyhedra of those state-of-art models are equivalent, which is not the case for their own models. They have also found useful cuts that improve the relaxation and the performance of the MIP solver (joint work with R. Castro, F. Zaragoza, M. Heredia).

**Future Perspectives**

The problem of finding a maximum cost 3-matching appears to be much harder for the MIP solver, so Gualberto Vazquez Casas and his colleagues are studying the problem’s structure in order to find good algorithms and heuristics.

**Selected Publications**


**Selected Awards**

- 2015 Winner of the Discrete Optimisation Challenge, Friedrich-Alexander-Universität Erlangen-Nürnberg, Germany
- 2015 Winner of Técnicas y Algoritmos en Criptografía, Universidad Autónoma Metropolitana Azcapotzalco, Mexico
- 2014 Honourable Mention, XXIX Coloquio de Teoría de las Gráficas, Combinatoria y sus Aplicaciones, Mexico
- 2013 Honourable Mention, The XVIII ACM ICPC Mexico and Central America Region, ITESM University, Mexico
- 2012 Honourable Mention, The XVI ACM ICPC Mexico and Central America Region, ITESO University, Mexico

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- 2013 Honourable Mention, The XVIII ACM ICPC Mexico and Central America Region, ITESM University, Mexico
- 2012 Honourable Mention, The XVI ACM ICPC Mexico and Central America Region, ITESO University, Mexico

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Dr. Francisco Javier Zaragoza Martínez

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Mexican

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Curriculum Vitae
- 2004—current
  Full Professor at the Systems Department of Universidad Autónoma Metropolitana Azcapotzalco, Mexico
- 2009—2013
  Computer Engineering Undergraduate Coordinator at Universidad Autónoma Metropolitana Azcapotzalco, Mexico
- 2003
  PhD at the Combinatorics and Optimization Department of the University of Waterloo, Canada
- 1997
  MSc at the Computer Science Department of Cinvestav, Mexico
- 1993—2007

Scientific Background and Objectives
Dr. Zaragoza Martínez’s main line of research focuses on discrete optimisation problems involving objects moving through a graph. In one problem, an agent with a given maximum speed wants to capture objects that appear, move, and disappear. In a special case, called the travelling repairman problem, the objects do not move but they are available only for one unit of time. In a third problem, a street sweeper is trying to clean the streets of a city with cars parking on alternate sides of the street. In each case, the aim is to decide the computational complexity, to construct integer programming models, to study the properties of its linear programming relaxations, and to provide approximation algorithms.

Research Highlights
Dr. Zaragoza Martínez and his colleagues have found polynomial-time algorithms for capturing all objects either on minimum time or minimum movement when the capture order is given (joint work with R. López and L. Urbán). They proposed a quadratic-time, 2-approximation algorithm for the travelling repairman problem on a line with unit time windows (joint work with R. Castro, S. Pérez, C. Rodríguez, and L. Urbán). They gave approximation algorithms for the street sweeping problem. They found properties of a linear relaxation of this problem (joint work with L. Chávez and F. Hernández).

Future Perspectives
Dr. Zaragoza Martínez and his colleagues are searching for good algorithms for the problem of capturing all moving objects on a line when the capture order is not given. They are trying to improve the approximation guarantee for the travelling repairman problem on a line with unit time windows, as well as trying to establish its computational complexity. They are looking for a characterisation of integrality or half-integrality of the polyhedron related to the street sweeping problem.

Selected Publications
- F. Zaragoza, Proceedings of Numerical and Evolutionary Optimization, 2016, in press
- L. Barba, R. Fábila, D. Lara, J. Leaños, C. Rodríguez, G. Salazar, F. Zaragoza, Discrete Mathematics and Theoretical Computer Science 2013, 15.1, 93–100
- R. López, F. Zaragoza, Revista de Matemáticas: Teoría y Aplicaciones 2012, 19.2, 79–84
- R. Castro, G. Tellez, F. Zaragoza, Research in Computer Science 2011, 53, 3–12
- F. Zaragoza, Electronic Notes in Discrete Mathematics 2007, 29, 79–83

Selected Awards
- 2015 Winner of the Discrete Optimisation Challenge, Friedrich-Alexander-Universität Erlangen-Nürnberg, Germany
- 2005—current Scholarship from the National System of Researchers (SNI), National Council of Science and Technology (Conacyt), Mexico
- 2007—current Excellence awards in research and teaching, Ministry of Education, Mexico
- 1998—2001 Full doctoral scholarship from the National Council of Science and Technology (Conacyt), Mexico
Prof. Dr. Chengshi Zheng

Scientific Background and Objectives
With the new development of digital signal processing (DSP) hardware and software, it is possible to run many complex algorithms on DSP hardware to achieve different objectives. It is important to suppress noise and reverberation for many devices, such as audio-visual telecommunication systems, assistive listening systems and smartphones. Professor Zheng has done extensive work on speech enhancement and dereverberation since he started work as a PhD candidate in 2004. He has introduced many new spectral estimation methods to improve the performance of these existing speech enhancement algorithms. Moreover, he has studied many microphone array speech enhancement algorithms using statistical methods. Accordingly, he has proposed numerous effective schemes to improve these algorithms under a statistical signal model. All of his research aims to develop robust, reliable and effective algorithms for speech and audio applications.

Research Highlights
Professor Zheng has extended cross-coherence function (CCF) to the single-input case, named as auto-coherence function (ACF). The ACF has been successfully applied to howling detection and transient noise reduction for speech applications. He also proposed a generalised framework for the nonparametric cross-coherence function estimation in 2008.

Future Perspectives
Recent studies have shown that it is difficult to capture a sound source using a microphone when the distance between the sound source and the microphone is extremely long. It is therefore a key aim to capture a sound using other non-acoustic sensors, such as the laser Doppler velocimeter, the ultrasonic sensor and the visual microphone. Professor Zheng will focus on speech reconstruction for speech captured by different non-acoustic sensors and develop effective algorithms to improve speech quality/intelligibility.

Position
Associate Professor of Signal Processing at the Institute of Acoustics, Chinese Academy of Sciences (IACAS), China
Visiting Professor of Signal Processing at Friedrich-Alexander-Universität Erlangen-Nürnberg (FAU)

Nationality
China

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Curriculum Vitae
- November 2014—present
  Visiting Professor of Signal Processing at FAU, Germany
- January 2012—present
  Associate Professor of Signal Processing at IACAS, China
- July 2009—December 2011
  Assistant Professor of Signal Processing at IACAS, China
- June 2009
  PhD in Acoustics at IACAS, China


Selected Publications

Selected Awards
- 2014 Visiting Scholar Awards, Chinese Academy of Sciences
- 2013 Youth Innovation Promotion Association, Chinese Academy of Sciences
- 2009 Excellent Graduates of the Chinese Academy of Sciences
- 2008 Zhu, Yue-Hua Scholarship, Chinese Academy of Sciences
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