# International Alumni News University of Bayreuth

Issue III/2014









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## **2015:** *40* Years of Teaching and Learning on the Bayreuth Campus



The 40 th anniversary of the University of Bayreuth, celebrating 4 decades since teaching began in the 1975/76 winter semester, will be marked by a range of exciting events.

The university intends to take the opportunity to celebrate alongside its students, its alumni such as yourselves, representatives of university staff, various institutions and members of the wider public.

A range of colourful and varied events over the course of the weekend will offer you the ideal opportunity to rediscover the campus, come into contact with acquaintances old and new, professors, institutes and faculties.

The University Senate and the various alumni organizations very much look forward to welcoming you back to the campus in Bayreuth.

You will soon be able to find further information on the University of Bayreuth website, as well as on the websites of the various individual alumni organizations and institutions involved.

#### Programme

Friday evening, 17 July 2015 Party (most likely with DJs from the university's professorate) Everybody is welcome! Location: campus

Saturday, 18 July 2015 "Campus Erleben" An experience for the whole family! Location: campus

In the evening, the University of Bayreuth Anniversary Ball will represent the highlights of the festivities Location: Bayreuth City Centre (Marquee outside the New Palace) Admission: 7pm Admission ticket (incl. meal): € 85 Promenade ticket (starting at around 9 pm): € 20

Sunday morning, 19 July 2015 Early morning jazz with the University Big Band Alumni get-together/"homecoming" Location: campus

and much more ....

The University of Bayreuth and the various independent alumni organizations and institutions cordially invite all members and former members of the university, as well as to the general public, to attend all of the planned events.

## **Africa and the 1st World War:**

## An International Conference at the University of Bayreuth



Participants of the international conference

Even 100 years after the outbreak of the 1st World War, historical views of the events remain very eurocentric in nature. The grave consequences of the war in other parts of the world are rarely mentioned, and particularly not those of African countries, still viewed as "exotic" theatres of war on the rim of the central movements of power and of little interest except for their colonial history. A new conference held in Bayreuth in October 2014 aimed to address this imbalance, with scholars representing Africa, Europe and North America.

## Africa at breaking point: the First World War's historical scar

The 3-day conference was hosted by the Bayreuth Academy of Advanced African Studies (BA), which is the unique research institution of its kind in Europe. Since 2012, the academy has been funded by the German Ministry for Education and Research (BMBF), and encompasses a great number of interdisciplinary research projects and debates under the key theme of "The Future of Africa". "Research on the consequences of the First World War in Africa is of great relevance within this field", explained the 1st Spokesperson of the Bayreuth Academy, Prof. Achim von Oppen, who is also a Bayreuth Professor for the History of Africa. "In both Africa and in the African diasporas, the 1st World War, despite or perhaps because of its catastrophic consequences, sparked a host of political, cultural and social changes, and in some cases actually helped them to come about. By the end of the war in 1918, the world view of the people of Africa, and also for example the Caribbean, had changed dramatically. It heralded the end of many of the political structures wrought in the time of colonialism, such as the division of Africa amongst the expanding European powers. At the same time, new ideas and ways of thinking for the future began to surface, spurred on by the horrendous experiences of the war, as became clear in the course of the presentations and discussions during the conference."

#### **Experiences of catastrophe**

"Catastrophe or catalyst?" was the main question behind the international conference, which saw many academics of various levels of experience take part. The consensus: "for Africa, the 1st World War proved to be both". A true catastrophe, in which the death toll was equal amongst the European and American soldiers, with 10% of the troops losing their lives. The European colonial powers recruited around 2 million Africas and sent them to war as soldiers and as labourers. The majority of them fought in Africa, but at least 160,000 fought on the battlefields of Europe.

Others were sent to Europe as labourers, as for example was the case for the over 600 young Africans who lost their lives in the English Channel on board the "SS Mendi", which had sailed from Cape Town in South Africa. Such tragedies left left an enduring mark on South Africa.

#### New direction, drive and visions

"As reported by the participants at the conference, remembrance of the horrors is often avoided in the African countries today. The African people have a desire to move on from the burdens of the past and look to the future", explains Prof. Von Oppen.

Looking back, it is clear that the events had a catalytic effect upon the tendency towards revolutionary thinking. Such concepts and visions were largely muted prior to 1914 by the brutal elimination of anti-colonial groups. Soon after 1918 however, everything changed as the European powers failed to deliver on the hopes and promises formed by the loyal colonies during the war. To begin with, criticism by the local population of the system in place was limited to a desire for an improvement of their own economic and legal position within the colonial system, but soon these turned to a rejection of colonialism itself.

In East Africa, a vision of political equality regardless of ethnic background developed among the migrant group from South Asia, which was in clear conflict with the British colonial principle of "Divide and Rule". During and after the war, independent Christian communities in Africa also began to appear, breaking free from the previous dominance of the missionaries of Europe.

In many cases, these communities became completely detached from their original churches. In both religion and culture, a greater and greater tendency towards independence became apparent. The conference in Bayreuth also looked at some of the new revolutions taking place in the Caribbean at the same time. In Jamaica for example, new movements with the aim of improving political rights for women began to gain momentum as a direct consequence of wartime experiences.

#### Moving away from a eurocentric view

As Prof. David Killingray of the University of London discussed in his presentation, any analysis of the events of the 1st World War that views the war in Africa as an exotic "special case" or in isolation from the war in Europe is fundamentally flawed from the outset. "Our international meeting has clearly shown that the consequences of the 1st World War were certainly not the same all over the African continent. On the contrary, the movements and ways of thinking that were sparked or given new strength by the horrendous happenings were not only different on a regional level, but also on a national level between the various African countries", concluded the heads of the conference, Prof. von Oppen, Dr. Christine Whyte and Dr. Analisa Urbano. "This is a field ripe for study within departments of history and of cultural studies". The further such studies distance themselves from a view fixed centrally upon Europe, the more successful and productive they will be. The Bayreuth Academy will seek to continually contribute to work in this vital research area."

Original version (in German): Press release 192/2014 of the University of Bayreuth, http://www.unibayreuth.de/presse/Aktuelle-Infos/2014/192-Afrika-Erster-Weltkrieg.pdf

## In 'Scientific Reports': New Insights into the Earth's Geochemical Cycle of Materials

The materials in the upper mantle, which begins about 20 km below the earth's crust, are marked by an unusual chemical diversity. An international team of researchers, of which Dr. Anja Rosenthal from the University of Bayreuth is a member, have brought to light the processes in the interior of the earth that are responsible for this chemical diversity. The new research results, which may, in the long term, help us gain understanding of magmatism and volcanism, have been published in the respected research journal 'Scientific Report', which is part of the 'Nature' – publishing group.

## From the earth's crust to the interior: How eclogites arise from basalt

The lithosphere, which is the rigid upper mantle, consists of the earth's crust and the uppermost portion of the mantle. It is formed by both large and small continental plates, which move upon the softer mantle – much in the same way that ice moves on the sea. When two plates collide, one possibility is that the outermost edge of one plate pushes down upon the other, which is forced deep below the surface. This process is called subduction and can allow materials from the lithosphere to be transported down to the deep mantle.

The earth's crust consists largely of volcanic rock basalt. This rock formed of hot materials from the upper mantle at mid oceanic rifts, when adjoining continental plates drift apart. The basalt transforms into the high pressure form of eclogites when it is transported into the mantle by subduction and placed under more than 1.5 gigapascals of pressure.

#### When eclogites rise:

## Melting processes generating chemical diversity in the upper mantle

Eclogites spread, having started life as part of the crust, into the mantle, which stretches down around 2,900 km below the earth's surface, by means of external transport processes, so called "mantle convection". What happens if eclogites in the mantle soar and move towards the earth's surface? Together with geoscientists, Dr. Anja Rosenthal simulated the 'destiny' of eclogites in the upper mantle at the Australian National University in Canberra. The research team generated pressures of up to 50,000 atmospheres, which corresponds to a mantle depth of around 160 km – and temperatures of up to 1,500 degrees Celsius in a special stamp-cylinder-press. The result: the eclogites melt in the mantle partially or even completely under these conditions.



Dr. Anja Rosenthal

As eclogite melts have a high silicon dioxide content, they react with the surrounding periodite: a rock that is much less rich in silicon dioxide. That is how the new mantle rocks end up in the upper mantle, significantly adding to the chemical diversity in the upper mantle.

#### From Canberra to Bayreuth with a Marie-Curie research grant from the EU

Dr. Anja Rosenthal is now continuing this research at the Bayerische Geoinstitut (BGI) of the University of Bayreuth, as a Marie Curie Research Fellow of the European Union. With the help of high performance presses, pressures can be generated that would otherwise be found at depths of up to 1,000 km down the lower mantle. The investigations, conducted in Bayreuth, as well as the models based upon them, corroborate the results found in Canberra. "After finishing my dissertation in Australia, I would now like to explore some unanswered geochemical research questions", said the Bayreuth post doc. "The BGI offers an outstanding infrastructure."

## Melting processes dependant on depth – Generation of diverse mantle rocks

The cooperation between Dr. Anja Rosenthal and the Australian geoscientists led to a fundamental discovery: eclogitc melts that are formed at a depth of 160 km, contain more silicon dioxide, but less sodium oxide and also less aluminium oxide than eclogitc melts, generated lower in the mantle. These same depth-dependant variations also cause different reactions with adjacent mantle periodites. This means that they contribute to the generation of various new types of rock in the upper mantle and also have ramifications for magmatism and volcanism.

#### **Geochemical 'Recycling'**

"When magma and rocks are transported from the upper mantle to the earth's surface, due to volcanism, they allow us to gain a glimpse of the impressive chemical diversity that must have been present at the time of their formation in the interior of the earth", explains Dr. Anja Rosenthal. "The research work we published in 'Scientific Reports', shows a cycle of earth materials leading from the oceanic earth crust down into the depths of the mantle back up again to the earth's crust – in the case of volcanic eruptions even as far as the earth's surface. We can therefore talk of geochemical 'recycling'. Simulations and models of the processes involved in this cycle of materials, make a huge contribution to our understanding of worldwide phenomena such as magmatism and volcanism.

Original version (in German): Press release 185/2014 of the University of Bayreuth, http://www.unibayreuth.de/presse/Aktuelle-Infos/2014/185-Geochemisches-Recycling.pdf

Translation: BIAC

## Supporting the Next Generation of Interdisciplinary Research and Teaching

# The German Research Foundation (DFG) has extended its funding for the "Graduate School" at the University of Bayreuth

Which technologies will prove vital to meeting the everincreasing global demand for energy in the future? How can sunlight be used more efficiently to produce energy? Since 2010, the DFG Graduate School at the University of Bayreuth "Photo-physics of synthetic and biological multichromophor systems" has been grappling with research into the most important technologies needed to face such challenges. The DFG recently agreed to continue financing of this innovative work until 2019, with a total of around  $\in$  3 million.

More than 25 young researchers are currently working on their dissertations as part of this graduate school, which is integrated in the Bayreuth Graduate School for Mathematics and Natural Sciences (BayNAT). "We are delighted at the decision of the DFG to allow us to continue our support of upcoming young scientists over the coming years", explains Prof. Jürgen Köhler, 1st Spokesperson of the graduate school and a professor in the department of experimental physics at the University of Bayreuth. "The dissertation projects produced here have already led to around 70 high-quality publications, which have all appeared in renowned journals. The new insights gained at theoretical level will help to spur on and optimize the development of the latest innovative technologies, in particular those for the harnessing of solar energy, an area that still holds great potential.

Research at the DFG graduate school focuses on the absorption, transport and conversion of light energy, both in plants and bacteria as well as in chemical and synthetic systems. The molecular structuring of organic solar cells so that the largest possible proportion of the sunlight is harnessed as electrical energy is of particular interest. The development of new materials for high-efficiency organic solar cells requires doctoral students of chemistry, theoretical physics and of experimental physics to work together. Bayreuth offers these students an interdisciplinary doctoral programme, equipping them not only with scientific qualifications and knowledge, but also with broader key skills for their future careers. The programme specializes in the support of young scientists, both in terms of targeted financial support and a wide range of lectures that expose students to many potential role models and envisage their own future career pathways.

Original version (in German): Press release 219/2014 of the University of Bayreuth, http://www.unibayreuth.de/presse/Aktuelle-Infos/2014/219-DFG-Graduiertenkolleg.pdf

#### Award Winner

2014 sees the University of Bayreuth and the International Club present the University of Bayreuth International Club Prize for the second time since it was established. The prize is awarded to two internationally acclaimed young scholars: Dr. Karen Tavares Silva and Dr. Martti Pärs



Dr. Beatrice Trost and Dr. Karen Tavares Silva

In 2014 the University of Bayreuth and the International Club presented the University of Bayreuth International Club Prize for the second time since it was established, this time to Dr. Karen Tavares Silva. Dr. Silva is a renowned international scholar who has made a significant contribution to research into the fundamentals of microbiology, as well as to the development of a method for genome-wide tranposon mutagenesis in magnetic bacteria, which were previously not accessible for investigation. This has led to considerable insight into the genetic engineering behind the formation of magnetic life forms. For the first time, thanks to Dr. Silva's research, the mutagenisis of all 500 magnetic bacterial genes, and thus the research of their specific functions, is now possible. The results of her research has attracted considerable attention within the scientific community.

Alongside her groundbreaking research, Dr. Silva has also earned great respect for her international experience and commitment to teaching, including successful supervision of both bachelor and master level students. She devoted a great deal of time and energy to help with the establishment of Professor Schüler's research laboratory, particularly with the training new laboratory staff and handling the usual experimental hang-ups. Dr. Silva never hesitated to take on responsibilities far beyond her own field of research.

Dr. Silva was born in 1982 in Rio de Janeiro, Brazil, where she also grew up. She conducted research for many years and completed her bachelor's and master's theses at the Federal University of Rio de Janeiro (UFRJ). The UFRJ awarded her a doctorate in 2012, and she subsequently took up a position at the Ludwig-Maximilian University in Munich (LMU), financed by a scholarship from the Brazilian government. Since April 2014, Dr. Silva has held a position as a PostDoc at the University of Bayreuth, supported by the "Ciência sem Fronteiras" programme.

Text: Stabsabteilung Presse, Marketing und Kommunikation

## Light Controlling Light: An Optical Transistor



Dr. Beatrice Trost and Dr. Martti Pärs

Dr. Martti Pärs has been working at the Experimental Physics department IV (J. Köhler's team) as a young scholar since 1 September 2009. He is part of the research on "Polymers and Colloids", of Graduate School 1640 (photo-physics of synthetic and biological multi-chromophoric systems), as well as of the Bavarian Elite Programme of Study "Macromolecular Science". Dr. Pärs` interdisciplinary research encompasses work on "photochromic" molecules, which are a type of molecule that change their shape in reaction to light. This effect is important for example in the production of self-tinting lenses for glasses.

Dr. Pärs harnessed this effect to control the intensity of luminescence of molecular colour elements, and thus create an optical transistor. This optical transistor does not use electrons, but rather photons (particles of light) to send signals. Light controlling light! A transistor of this type is extremely advantageous: it allows light signals to be modulated by other light signals at the molecular level. Optical transistors are smaller and faster than electronic transistors, and the fact that light signals, unlike electronic signals, do not interfere with each other allows several "minitransistors" to be used together to produce one even more powerful transistor. But characteristic of optical transistors can simply not be matched: all signals are produced and transmitted at the speed of light, it is therefore impossible to produce anything faster. Dr. Pärs spent several successful years as a laboratory assistant and researcher at the University of Tartu in Estonia, where he was awarded his bachelor's, master's and doctorate (2008). He has spent periods of his research at several different institutions, including the well-known research centre CERN in Switzerland.

The results of Dr. Pärs' research can be found in many respected international journals, and have attracted considerable attention even outside related scientific circles.

> Text: Stabsabteilung Presse, Marketing und Kommunikation



## DAAD-Award 2014 for Jimam Timchang Lar

"Vigilantism, State, and Society in Plateau State, Nigeria: A History of Plural Policing (1950 to the present)"

Jimam Timchang Lar

The 2014 University of Bayreuth DAAD Award goes to Jimam Timchang Lar, in recognition of his promise as a young scholar, his achievements as part of his doctoral work, as well as his determination to apply his own knowledge in support of humanitarian politics and conflict reduction.

Jimam T. Lar has been a Junior Fellow of the Bayreuth International Graduate School for African Studies (BIGSAS) at the University of Bayreuth since April 2011. His dissertation, "Vigilantism, State, and Society in Plateau State, Nigeria: A History of Conflict, Cooperation and Compromise (1950 to the present)", was based primarily on the field of African history, but also draws from African politics, sociology and social anthropology. Jimam T. Lar has seen first hand the realities of community conflict and violence. These experiences fuelled his motivation to work on strategies for the mittigating such acute and contemporary social problems. His research on the role of peoples and non-state militias was particularly innovative, as he looked at connections between state violence, civil violence and security strategies that are commonly viewed as separate from one another. Jimam T. Lar's academic commitment and his gift for analysis and synthesis have gained him, alongside a host of international guest lectures and publication invitations, a considerable number of research invitations and cooperation opportunities, such as with the renowned Kofi Annan International Peacekeeping Training Centre in Accra (Ghana), the Conflict, Security and Development Group (CSDG) and the African Leadership Centre of King's College London and the University of Nairobi, as well as with a research group at the University of Bordeaux. In

this way, Jimam T. Lar makes an extraordinary contribution to the internationalisation of the University of Bayreuth and to African research.

Jimam T. Lar always seeks to build bridges across borders and support understanding and justice in his immediate surroundings. In Bayreuth, he is a popular participant and commentator of interdisciplinary BIGSAS working groups and research seminars. He regularly takes part in public events, such as the "Africa Learning Day" organized by the Bayreuth Academy and at the Munich Adult Education Centre in February 2014, where he always looks to draw attention to the work of foreign - particularly African - doctoral candidates in Germany. His willingness to discuss and to apply himself to the needs of others earned him great respect from his fellow doctoral students, allowing him to become BIGSAS Junior Fellow Representative for 2013-14.

Jimam Timchang Lar was born in 1977 in Jos-Plateau (Nigeria). He became a Junior Fellow (doctoral student) at the Bayreuth International Graduate School of African Studies (BIGSAS) in April 2011. His doctoral project, although based primarily in the research in African history, is of an interdisciplinary nature. Both through his research and personal dedication, he is committed to raising awareness and conflict results and the de-escalation of conflict in Africa and in general.

> Text: Stabsabteilung Presse, Marketing und Kommunikation

## Franconia – My Second Home

From the recent national league table of the Alexander von Humboldt-Foundation, it is once again clear that the University of Bayreuth and its surroundings continue to attract innovative research projects and topclass scholars from abroad. Some of those scholars are frequent visitors or permanent university guests, whilst others stay for research work. For some of its guests, the University of Bayreuth was and is a second home, an academic home where they are able to progress in their chosen field of research. Dr. Bradley David Ridpath is an example.

In an interview with the International Office, he explains his motives for returning to the University and the town of Bayreuth.

His connection with Franconia began in 1983, when he was stationed as a U.S. soldier in Würzburg. But much has changed since then. David Ridpath's wife is Franconian and her family lives in the region. Since marrying her, he regularly spends extended periods living in Franconia. He studied and graduated in the USA, going on to fulfill his dream of working in the sport industry, before beginning work in sport management research. He decided upon the University of Bayreuth, due to his own ties to Franconia as well as the specialist fields and reputation of the institution. He feels both welcome and well-received. He is also full of praise for the University Administration, the Faculty for Law, Business and Economics and the Sport Institute: "They go out of their way to help and it is nice to have the support system here", said Ridpath.

In terms of his research, he justifies the choice of Bayreuth as the location for his *sabbatical* in a common feature of both institutions: the Ohio University and the University of Bayreuth are both at the forefront of curriculum development in sports studies. This connection means that David Ridpath had already been working closely with certain members of the Sport Institute for several years, including Prof. Dr. Herbert Woratschek. A partnership was formed between the institutions in 2009, which has since been strengthened and expanded by several visits. Moreover, the University of Bayreuth offers him the ideal base for his research project on European club sports, by virtue of its central location at the heart of Europe.



Dr. Bradley David Ridpath

A focus of this collaboration is the Business Consulting Project, whereby students and academic staff work with the manufacturer of sports equipment Adidas to find solutions for practical issues. The cooperation between the Universities of Ohio and Bayreuth is constantly moving forward and both are hopeful that they will be able to establish an exciting and unique Dual Degree Programme in the near future, in the field of Sports Management. This programme will also offer students of the University of Bayreuth the possibility of spending part of their studies at the University of Ohio. David Ridpath also sees the fact that courses at the Bayreuth institute are, in part, offered in English as a great advantage. He feels at home on campus, which he describes as "friendly, open, inviting and international", as many of the university's students come from abroad. In this way, both the campus and the region have become his new second home: "This is the Franconia I remember. My second home."

> Text: International Office Translation: BIAC

## **Discover Our New Web Portal for Bayreuth Alumni**

Interaction with fellow alumni, an individual profile, forums on career and scholarship opportunities and news about the Bayreuth International Alumni Network: these are only a few of the opportunities offered by the University of Bayreuth's new web portal for international alumni and friends.

The new portal offers you ample opportunities to stay in touch with the University of Bayreuth and fellow alumni, both on a social and professional level. We look forward to your registration:

| Welcome <u>BIAC</u> . 🍓 <u>Logout</u> 🥖 <u>Edit Profile</u> 🖂 | Private Messages 🧧 German 🖀 Moderation 🎲 Administration                                    |                      |
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http://www.international-alumni-forum.uni-bayreuth.de/

### **UBT Events**

#### 7 January 2015

Stadtgespräche 'Varieties of religious interconnections: Jews, Christians and Muslims' Prof. Sarah Stroumsa und Prof. Guy G. Stroumsa, Hebrew University Jerusalem

#### 4 February 2015

Stadtgespräche 'Die Entwicklung des Universums vom Urknall bis heute' Prof. Dr. Gisela Anton, Lehrstuhl für Astroteilchenphysik, Universität Erlangen-Nürnberg

When? 6 pm to 7.30 pm

Where? Iwalewahaus – Wölfelstraße 2, Bayreuth

#### 20 to 22 March 2015

Bayreuth International Alumni Event "Career chances and development with focus on the German/Chinese economic area"

Where? Shanghai International Studies University (SISU), Shanghai, China

Please visit our homepage for further information: www.uni-bayreuth.de

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