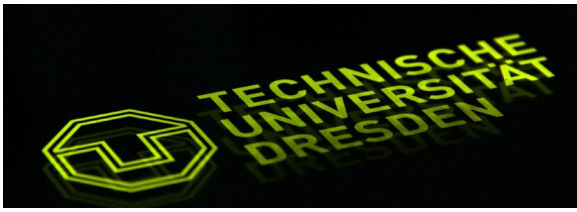
EVENT

Long Night Against Procrastination on 7 March 2019

The Writing Center of TU Dresden (SZD) cordially invites you to the Long Night Against Procrastination (LNDS) to get started drafting, connecting your ideas, or even finish writing projects. Productive writing sessions with community, motivation, inspiration and tips against procrastination on 7th March from 5 – 12 pm in the SLUB! More information: https://tu-dresden.de/deinstudiener-folg/szd
Registration: http://t1p.de/lnds2019

RESEARCH

Invisible tags: Physicists at TU Dresden write, read and erase using light



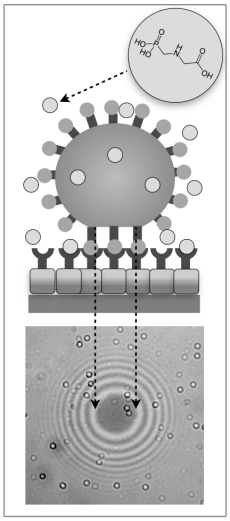
© Max Gmelch and Heidi Thomas / TUD

The LEXOS group at the Institute of Applied Physics headed by Prof. Sebastian Reineke developed a new method of storing information in fully transparent plastic foils. Their innovative idea was now published in the renowned online journal "Science Advances". Prof. Reineke is already thinking further ahead: 'Those invisible and re-writable tags can be used in a multitude of ways. We can manufacture such tags thinner than conventional barcode stickers. These tags can become a versatile alternative to many frequently technology-laden solutions for information exchange in our daily life. These luminescent tags make electronics obsolete at the location, where the information is stored. The development and optimisation of such systems open a broad research field bringing together material development, process engineering, and fundamental research in an interdisciplinary fashion." Read more on invisiblie tags at:
https://tu-dresden.de/mn/der-bereich/news/etiketten-der-zukunft-dresdner-physiker-schreiben-lesen-und-radieren-mit-licht

Collaboration on new technology for detecting glyphosate

Conception of a portable, optical measuring device, which is able to provide instantaneous quantitative results for glyphosate concentration. © anvajo.com

Herbicides containing glyphosate often hit the headlines, because this chemical compound is widely regarded as potentially carcinogenic. The ability to quickly and easily detect glyphosate is therefore an important topic, one which is currently being investigated by researchers from Leipzig University and TU Dresden in cooperation with three companies from Saxony: over the next three years, they intend to make a novel technology for the quick and simple detection of glyphosate ready for the market. They will build on joint research results which have already yielded a novel detection principle for glyphosate, for which a patent application has been filed. So far, it has only been possible to detect the controversial substance by means of a complex and expensive laboratory diagnostic procedure. "The project brings together the existing expertise of the Saxon companies and the two Saxon universities, and will culminate in a platform technology for a new type of easy-to-use on-site analysis system, which should be accessible to a wide range of users for a variety of applications and also commercially marketable," explains Dr. Ostermann from the Institute of Genetics at the Faculty of Biology.
Read more at:https://tu-dresden.de/mn/der-bereich/news/kooperationsprojekt-fuer-neue-technologie-zum-nachweis-von-glyphosat


The novel detection principle for glyphosate, for which a patent application has been filed. © T. Pompe

Testosterone therapy could help men suffering from depression

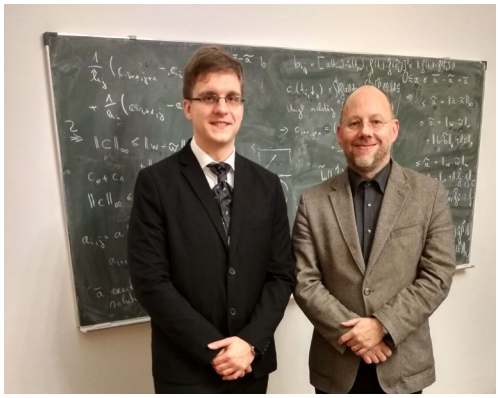
Headed by psychologist Dr. Andreas Walther from the Chair of Biopsychology, an international research team has found sufficient evidence that treatment with testosterone could help reduce depressive symptoms in men. The full results of the study have been published in the journal *JAMA Psychiatry*. Read more at: https://tu-dresden.de/mn/der-bereich/news/testosteron-kann-maennern-mit-depression-helfen

„No risk, no fun“: Risk is contagious in adolescence

An international research team headed by Dr. Andrea Reiter from the Collaborative Reserach Centre 940 „Volition and Cognitive Control: Mechanisms, Modulators and Dysfunctions" found evidence that risk-seeking behaviour among adolecsents is contagious. Using choice data and computational modeling, the study demonstrates stronger risk contagion in male adolescents when observing peers compared to nonpeers. The results of the study have recently been published in the renonwed American *Journal of Experimental Psychology: General*. Read more at: https://tu-dresden.de/mn/der-bereich/news/no-risk-no-fun-risikobereitschaft-bei-jugendlichen-ist-ansteckend

AWARDS

Georg Helm Prize for mathematician Dr. Reinhard Stahn



From left to right: Dr. Reinhard Stahn with his supervisor Prof. Ralph Chill. ©R. Stahn

Dr. Reinhard Stahn from the Faculty of Mathematics was awarded the Georg-Helm-Preis for excellent dissertations at TU Dresden on 2 February 2019. The board of trustees chose four awardees out of 31 proposals by fourteen faculties. In addition to Dr. Reinhard Stahn, Dr. Maximilian Matthé, Hans Friedrich Findeisen and Johannes Marvin Eckhardt were awarded the Prize of the association *Verein zur Förderung von Studierenden der Technischen Universität Dresden e.V.*

Dr. Stahn’s dissertation on "Quantified Tauberian Theorems and Applications to Decay of Waves" was supervised by Prof. Dr. Ralph Chill from the Institute of Analysis and marked with "summa cum laude." In particular, the quality and quantity of the mathematical results, the elegance in the argumentation and the innovative strategies in the analysis of the decay of waves prove the excellence of his work.

Both awardees of the first two positions, Dr. Reinhard Stahn and Dr. Maximilian Matthé receive a prize money of 2,500 Euros. The third position is shared to equal terms of each 1.250 Euro between Johannes Eckhardt and Hans Friedrich Findeisen. All awardees receive a medal made of Meissen porcelain.

achatech membership for Prof. Karl Leo

The German National Academy of Science and Engineering - acatech – expanded the circle of their around 500 members by 27 outstanding scientists in December 2018. Among the newly elected members is Prof. Dr. Karl Leo, head of the Institute of Applied Physics and Professor for Optoelectronics. The election is both, a distinction of his scientific achievements and a honorary mandate, since the academy funded by the Federal Government and the Länder provides advice on strategic engineering and technology policy issues to policymakers and the public.

WELCOME AT THE SCHOOL

Dr. Anna Isaeva appointed Junior Professor for Synthesis and Crystal Growth in Quantum Materials

Jun.-Prof. Dr. Anna Isaeva. © foto-diebel

Jun.-Prof. Dr. Anna Isaeva started her work as junior professor for Synthesis and Crystal Growth in Quantum Materials at the Institute of Solid State and Materials Physics at 1 January 2019. Following her doctorate in chemistry at the Faculty of Materials Science of the Lomonosov Moscow State University in 2008, Dr. Anna Isaeva gained multifaceted interdisciplinary research experience in transmission electron microscopy at the EMAT center of the University of Antwerp (2009-2010), Belgium, and in solid-state chemistry at TU Dresden (Institute of Inorganic Chemistry II) and solid-state physics with partner institutes within DRESDEN-Concept (since 2010). Her current work has a strong interdisciplinary spirit as it revolves around design, crystal growth and chemical modification of new quantum materials, in particular, topological insulators, frustrated magnets and materials with strong spin-orbit coupling. The activities of Isaeva’s working group are strongly embedded into the collaborative research center (SFB) 1143 “From Frustration to Topology” and Research Training Group 1621 “Itinerant magnetism and superconductivity in intermetallic compounds”.

STUDIES

FLiK module: Human-machine interaction in industrial production systems

Starting in the summer semester of 2019, the Centre for Interdisciplinary Learning and Teaching is offering a new two semester FLiK module. Its central question is how humans and machines can jointly cope with the complexity of underspecified technical systems. The module is optimized for students of Psychology: Master HPSTS, Processing- and Textile Engineering, Vocational Education and Automation Technology. Moreover, the module is open for all interested students from different backgrounds, as long as they can integrate it into their schedules. We are looking forward to learning more about the approaches and perspectives of other scientific disciplines

Read more at: https://tu-dresden.de/mn/psychologie/iaosp/applied-cognition/studium/master/flik-modul-mensch-maschine-interaktion-in-produktionsanlagen

A LOOK BACK

Offsite Meeting of mathematics' administrative staff

The eight participants attended two seminars at the conference room of the Dorint Parkhotel Meissen. ©Nicole Gierig

From 6 to 7 February 2019, secretaries and other administrative staff of the Faculty of Mathematics met at the Dorint Park Hotel Meissen for a first joint offsite meeting. The eight participants attended a seminar on business processes and regulations of TU Dresden headed by Anke Tänzer, Controller for the School of Science and a workshop on communication strategies with Public Relations Advisor Nicole Gierig. Anke Kluge, secretary of the Dean's Office was the organiser of the event and is glad about its success: "The event brought us closer together as a team and we learnt a lot of new things. It would be fantastic if we could repeat this one day."

Winter School of the German Society for Addiction Research and Addiction Therapy (DG-Sucht)

From 10 to 12 January 2019, the second winter school of the DG Sucht junior researcher group took place in Mannheim. The 20 selected participants from the fields of sociology, psychology, medicine and social work had the opportunity to present their projects and theses and to discuss them with experts from addiction research and –therapy.

Dipl.-Psych. Sören Kuitunen-Paul from the Work group Addictive Behaviors, Risk Analysis and Risk Management at the Faculty of Psychology was among the organisation team. Moreover, the master student Malin Hildebrandt had been selected for participation. The event was funded by the Federal Ministry for Health in co-operation with the German Society for Addiction Research and Addiction Therapy. Read more at: http://www.dg-sucht.de/nachwuchsgruppe/aktuell/

SERVICE

„Network for Suicide Prevention in Dresden" NeSuD

The project „Network for Suicide Prevention in Dresden" - NeSuD - headed by Prof. Dr. Jürgen Hoyer, Apl. Prof. Dr. Susanne Knappe (both Institute of Clinical Psychology and Psychotherapy (ICPP)) and PD Dr. med. habil. Ute Lewitzka (Werner-Felber-Institut für Suizidprävention und interdisziplinäre Forschung im Gesundheitswesen e.V., Dresden wants to contribute to an increase of knowledge about psychological stress and suicidality in adolescents and young adults, to inform about professional (regional) help offers and to help overcome barriers in the care of suicide-prone persons. The network aims at creating a regional cross-sectoral network of low to high-threshold aid structures for different target groups and a universal prevention measure for psychoeducation in secondary schools for pupils aged 12 and above. Learn more at:
https://tu-dresden.de/mn/der-bereich/news/das-thema-geht-uns-alle-an-warum-tud-forscher-ein-netzwerk-fuer-suizidpraevention-gegruendet-haben

Information portal on mental health for all TUD members

Take time for your health! The online portal PSYCHNET could help you therewith. It is free for all staff members and students of TU Dresden offering information documents, self-assessments and much more. The project „Psychnet TUD – A web-based information portal for mental health for TU Dresden" is headed by Apl Prof. Dr. Susanne Knappe (Institute of Clinical Psychology and Psychotherapy (ICPP)) and works in close co-operation with the university's healthcare management (UGM). The second part of the information portal is now online at: https://ssl.psych.tu-dresden.de/psychnet/

Publisher: *Prof. Clemens Kirschbaum, Chairman for the School of Science. Office hours by prior arrangement: Wednesdays, 9.30 to 10.30 a.m., Tel.: 0351 463 37512.*
Editing: *Nicole Gierig, Public Relations*
Contact: *Nicole.Gierig@tu-dresden.de, Tel. 0351 463 39504*