Henrik Mouritsen Awarded Prize for Excellent Research

The Universitätsgesellschaft Oldenburg (UGO) has awarded Prof. Dr. Henrik Mouritsen its Prize for Excellent Research, which includes 5,000 euros in prize money. Mouritsen was selected for "his outstanding research in the field of Neurosensorics/Animal Navigation," according to the jury statement.

The Prize for Excellent Research was awarded for the first time in 2012. The UGO awards it in alternation with its Prize for an Outstanding PhD Thesis. "With this prize our aim is to honour not only the person but also Oldenburg as an outstanding research location, and to bring it into the public eye," UGO Chairman Michael Wefers explained.

Henrik Mouritsen (43) has been conducting research and teaching at Oldenburg University since 2002, and earned his habilitation there in 2005. He has turned down offers of professorships in Manchester, Kiel and Bayreuth in favour of remaining at Oldenburg. He has held the Lichtenburg Chair, endowed with 1.5 million euros, since 2007. In 2011 he was awarded the "Eric Kandel Young Neuroscientists Prize". As head of the international research group "Neurosensorik/Animal Navigation", Mouritsen was able to demonstrate that birds use the Earth's magnetic field to orient in two different ways. Photosensitive molecules in their eyes enable them to sense the compass direction of the magnetic field. Furthermore, the birds have a magnetic sensor in their upper beak which is connected to their brain stem via the ophthalmic branch of the trigeminal nerve. For both orientation systems, the group led by Mouritsen was able to locate the area of the birds' brain involved. Mouritsen's research extends into the newly emerging field of quantum biology. Together with physicists and chemists from Oxford University, Mouritsen is investigating to what extent, the birds' magnetic sensor fundamentally relies on quantum mechanical principles.

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presse@uni-oldenburg.de

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Dr. Corinna Dahm-Brey (cdb)
Matthias Echterhagen (me)

Editors:
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Jörn Brüggemann
Didactics

Prof. Dr. Jörn Brüggemann, secondary school teacher and research associate at the Chair of Didactics at the University of Erlangen-Nuremberg, has been made Chair of Teaching of German Literature Including Media Teaching. Brüggemann studied German and philosophy at the University of Cologne and in Berlin. His PhD thesis examined the history of German lessons and how the history of literature is dealt with in German lessons. While doing his PhD he also completed his probationary teacher training. He then became a secondary school teacher and research associate at the University of Erlangen-Nuremberg. Brüggemann participated in the German Research Foundation project „Literary-Aesthetic Comprehension and Judgement Competence", supervised the research project „Aesthetic Communication in Literature Classes" and developed modules for the Virtual University of Bavaria. His work and research focuses on the history and theory of literature lessons, the empirical research of reading and literary-aesthetic comprehension skills, and the development of practice-oriented instruction research for literature lessons."

Thorsten Dittmar
Marine Geochemistry

Prof. Dr. Thorsten Dittmar has been made Chair of Marine Geochemistry in the Institute for Chemistry and Biology of the Marine Environment (ICBM). He has led the Max Planck Marine Geochemistry research group there since 2008. As a „bridge professor" Dittmar will continue to extend the Institute's cooperation with the Max Planck Institute for Marine Microbiology (MPI Bremen). Dittmar studied geoecology at Bayreuth University. He earned his PhD at the University of Bremen in 1999. He was a research fellow at the Alfred-Wegener-Institut (AWI) in Bremerhaven and then spent several years conducting research at the University of Washington (USA). Before coming to Oldenburg Dittmar was Assistant Professor at Florida State University in Tallahassee (USA). His research concentrates on dissolved organic matter in seawater, whose role in the carbon cycle is still not well understood. He analyses the formation, chemical structure and potential components of this matter, which consists of algae remnants, terrestrial plants and petroleum components that have leaked from deposits under the ocean bed into the seawater.

Anna Henkel
Social Theory

Prof. Dr. Anna Henkel, postdoctoral fellow at the Graduate School in History and Sociology at Bielefeld University, has been appointed Junior Professor for Social Theory at the Faculty of Education and Social Sciences. Henkel studied economics and social sciences at Witten/Herdecke University and at the Institut d'Études Politiques in Paris. After several research stays in Copenhagen she received her PhD in 2011. Her research focuses are social and societal theory in connection with empirical research, the inclusion of materiality and material in sociological studies as well as questions relating to economic sociology and knowledge research. Her main focus is to apply social theory to social problems. The interdisciplinary and inter-university doctorate programme „Dimensions of Worry", funded by the Evangelische Studienwerk Villigst e.V., was launched in July. It supports PhD projects at the universities of Oldenburg, Bochum and Greifswald in the disciplines of theology, philosophy and sociology. Henkel was the lead applicant for the programme.

Jörg Lücke
Machine Learning

Prof. Dr. Jörg Lücke has been summoned to the „Machine Learning“ chair in the „Hearing4all“ Cluster of Excellence at the Faculty of Medicine and Health Sciences. Lücke studied physics at the Technical University of Dortmund, the University of Exeter (UK) and the Centre de Physique Théorique in Marseille (France). He earned his PhD with a thesis on „Information Processing and Learning in Networks of Cortical Columns“ at the Ruhr University Bochum. After two-and-a-half years as a postdoctoral fellow at University College London, Lücke led a research group on „Computational Neuroscience and Machine Learning“ based first at the Goethe University Frankfurt‘s Institute for Advanced Studies and later at the Institute for Software Technology and Theoretical Informatics at the Technical University of Berlin. His main research focuses are algorithms, the processing of sensory data and mathematical models of neuronal information processing. This research is applied mainly to language and image recognition, as well as pattern recognition.

Jan Steffen Müller
Mathematics

Dr. Jan Steffen Müller has been appointed Junior Professor of Mathematics with the main emphasis „Explicit Methods in Number Theory and Algebra“. Müller studied „Mathematics with Computer Science“ at the Technische Universität Darmstadt. After a year at the Middle East Technical University in Ankara (Turkey) he gained his master‘s degree at Bayreuth University with his dissertation entitled „Calculating canonic heights on Jacobians“ under the supervision of Prof. Dr. Michael Stoll. Before transferring to Oldenburg Müller (31) was a research fellow at the University of Hamburg. Müller‘s research focuses on algorithmic number theory and arithmetic geometry with an emphasis on solving Diophantine equations using geometric and algorithmic methods. He cooperates on these subjects with researchers at the universities of Oxford (England), Be’er Sheva (Israel) and Leiden (the Netherlands), where he also spent several research stays.

Verena Pietzner
Chemistry Teaching

Prof. Dr. Verena Pietzner, previously Professor for Chemistry and Chemistry Teaching at the University of Hildesheim, has been appointed Chair of Chemistry Teaching. In this position she also takes over leadership of the teacher training lab „Chemol – Chemistry in Oldenburg“. Pietzner studied to become a secondary school teacher of mathematics and chemistry at Bielefeld University. After obtaining her teaching degree she completed her PhD at the Braunschweig University of Technology, where she then took a postdoctoral post and earned her habilitation. Pietzner was visiting researcher in the „Natural Science Lessons“ research group at the University of Duisburg-Essen. Before transferring to Hildesheim in 2009, she was Chair of Physical Chemistry and Chemistry Teaching at the University of Koblenz-Landau. Research cooperation projects – on for example „creativity in chemistry lessons“ and „integrating modern media into university teaching“ – took her to universities in Japan and Israel. Pietzner‘s research focuses include the use of computers in chemistry lessons and interdisciplinary chemistry lessons.

Lars Steinsträßer
Plastic Surgery

Prof. Dr. Lars Steinsträßer, Heisenberg Professor at Ruhr University Bochum and Chief Surgeon of the Plastic Surgery Hospital at the Berufsgenossenschaftlichen Universitätsklinik Bergmannsheil, has been appointed Chair of Plastic Surgery with the Focus on Molecular Oncology and Wound Healing. He has also acted as a senior consultant at the University Hospital for Plastic Surgery at the Evangelisches Krankenhaus Oldenburg since August 2013. Steinsträßer studied medicine at the University of Hamburg, where he also earned his MD. After his medical training in Cologne he spent two years conducting research at the University of Michigan in Ann Arbor (USA). In 2001 he resumed his specialised medical training at the Berufsgenossenschaftlichen Universitätsklinik Bergmannsheil and was appointed as a junior professor at Ruhr Bochum University in 2004. In 2005 he qualified as a specialist for plastic and aesthetic surgery and later as a hand surgery specialist (2008) and intensive care specialist (2012). Steinsträßer has received numerous prizes for his research, including the Research Prize of the German Society of Surgery (DGCH) and the 2010 German Innovation Award.

Sarah Verhulst
Medical Physics

Prof. Dr. Sarah Verhulst has been appointed Junior Professor for Analysis and Modelling the Auditory System. Before she came to Oldenburg she was a postdoctoral researcher at Boston University‘s Center for Computational Neuroscience (USA) and a research fellow at Harvard Medical School. Verhulst, who comes from Belgium, studied electrical engineering at the Group T college in Leuven (Belgium) and acoustical engineering at the Technical University of Denmark, where she completed her PhD in 2010. Her research in Oldenburg focuses on improving hearing impairment diagnostics. To achieve this she is looking for ways to combine psychoacoustic methods with physiological methods such as electroencephalograms (EEG) and otoacoustic emissions. She also uses computer models of the auditory pathway to study the impact of hearing impairment on the processing of noise along the auditory pathways. Verhulst has research collaborations with Aalto University Finland, the Technical University of Denmark (DTU), and the Universities of Boston and Harvard (USA).

Michael Wark
Technical Chemistry

Prof. Dr. Michael Wark, lecturer in technical chemistry at the Ruhr University Bochum, has been appointed Professor of Technical Chemistry at Oldenburg University. He heads the University‘s working group „Photocatalysis and Sustainable Use of Resources“. Wark studied chemistry in Bremen, where he attained his PhD with his thesis „Stabilisation of High Disperser Semiconductor Particles in Zeolith Matrices“. Postdoctoral posts at the Ecole Nationale Superieur de Chimie de Mulhouse (France) and the universities of Dortmund and Bochum followed. Wark earned his habilitation in 2004 with the treatise „Dye Molecules and Semiconductor Nanoparticles in the Pores of Molecular Sieves“ at the University of Hanover, where he then became adjunct professor. He turned down an offer of a professorship at Saarland University. His research focuses on the development of innovative photocatalysts as well as researching materials such as membranes for fuel cells or dye-sensitised solar cells for modern energy technologies.