

CAS Scholarships

SCHOLARSHIPS FOR VISITING PROFESSORS – EMINENT SCIENTISTS FROM ALL OVER THE WORLD VISIT WARSAW UNIVERSITY OF TECHNOLOGY

From the beginning of launching the Project to the end of 2011, 28 world-class specialists visited Warsaw University of Technology and gave lectures, conducted discussions and held meetings with WUT undergraduate students, PhD students and academics. The total number of the visitors' lecture hours was approximately 400.

FROM SEPTEMBER 2011 TO MARCH 2012, THE CENTER FOR ADVANCED STUDIES HAD THE PLEASURE OF HOSTING:

- Professor Mina Teicher, Bar-Illan University, Israel
- Professor Robert F. Singer, University of Erlangen, Germany
- Professor Thomas Josef Graule, Empa Swiss Federal Laboratories for Materials Testing and Research, Switzerland
- Professor Jonathan Blackledge, Dublin University of Technology, Ireland
- Professor Dominique Lambert, the University of Namur, Belgium
- Professor Adrian Bondy, University Paris 6, France
- Professor Jean-Paul Brasselet, CNRS, Institut de Mathematiques de Luminy, France
- Professor Maria S. Millán, Technical University of Catalonia, Spain
- Professor Ralf Lucklum, Otto-von-Guericke University of Magdeburg, Germany



↑ Professor Maria S. Millán, lecture on *Applications to Ophthalmology: Eye Fundus Image Analysis and Intraocular Lenses*

WITHIN THE NEXT FEW MONTHS OF 2012, THE FOLLOWING PROFESSORS WILL BE HOSTED:

- Professor Gerald Urban, University of Freiburg, Germany
- Professor Jean-Paul Brasselet, CNRS, Institut de Mathematiques de Luminy, France
- Professor Vladimir G. Chigrinov, the Hong-Kong University of Science and Technology, China
- Professor Thomas Graule, Swiss Federal Laboratories for Materials Testing and Research, Switzerland



Visiting Professors' countries of origin (for visits between 2008-2011).

See more information on the scholarships for visiting professors:

<http://www.csz.pw.edu.pl/index.php/en/stypendia-dla-profesorow-wyzytujcych>

CAS SCHOLARSHIPS FOR WUT PHD STUDENTS AND WUT ACADEMICS – AWARDING THE MOST GIFTED, EXCELLING AND ACTIVE SCIENTISTS

In the 2011/2012 Autumn Semester, the Center announced the 4th home research scholarship competition for WUT PhD students and WUT postdoctoral scientists as well as the 5th foreign research scholarship competition intended for WUT PhD students and WUT academics. 166 applications were submitted for the former, 110 by PhD students and 56 by postdoctoral scientists. The Judging Panel granted 34 and 16 scholarships respectively. For the foreign research scholarship competition 36 applications were submitted, including 15 from PhD students and 21 from WUT academics. The Judging Panel awarded 10 to the former and 16 to the latter. Because of the available funds, an additional foreign research competition for PhD students was held in February 2012. 9 applications were submitted and the Judging Panel granted 3 scholarships.

Thanks to the funds, the CAS scholarship holders can accomplish their scientific goals, both at Warsaw University of Technology and in many renowned foreign research centers.

All the scholarships granted by the Center in the project *Warsaw University of Technology Development Programme* are co-financed by the European Union within the European Social Fund.



HUMAN CAPITAL
NATIONAL COHESION STRATEGY



WARSAW UNIVERSITY OF TECHNOLOGY
DEVELOPMENT PROGRAMME

EUROPEAN UNION
SOCIAL FUND

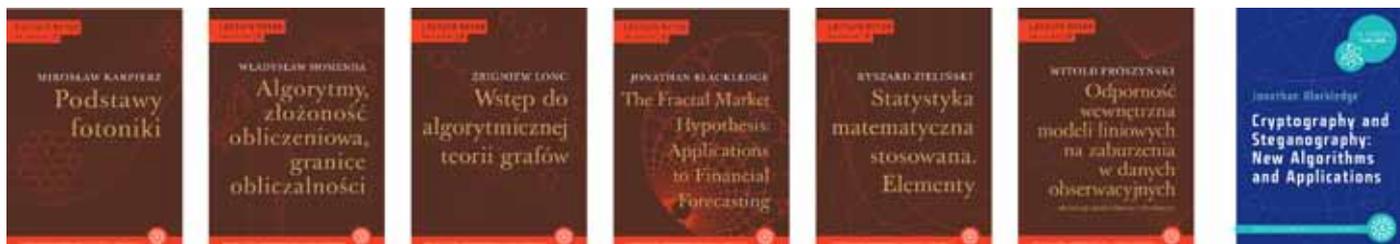


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CAS Publications

The Center for Advanced Studies publishes two series – CAS Lecture Notes and CAS Textbooks. So far, the Center has published 6 books within the Lecture Notes series, these are: *Fundamentals of Photonics* by Professor Mirosław Karpierz, *Algorithms, Computational Complexity, Boundaries of Computation* by Professor Władysław Homenda, *Introduction to Algorithmic Graph Theory* by Professor Zbigniew Łonc, *The Fractal Market Hypothesis: Applications to Financial Forecasting* by Professor Jonathan Blackledge, *Elements of Applied Mathematical Statistics* by Professor Ryszard Zieliński, *Measures of robustness of linear models to observation disturbances - uncorrelated and correlated observations* by Professor Witold Prószyński and one CAS Textbook *Cryptography and Steganography: New Algorithms and Applications* by Professor Jonathan Blackledge.

Another item within the CAS Textbook series – *Geometric Methods* by Professor Michał Szurek – is in the pipeline.



The CAS Advanced Studies Offer 2011/2012

BASIC LECTURES/AUTUMN SEMESTER:

- Professor Piotr Przybyłowicz (Warsaw University of Technology) – *Elements of General Mechanics*
- Professor Marian Grynberg (University of Warsaw) – *Semiconductors and Their Role in the Informative Era**
- Professor Ryszard Zieliński (Institute of Mathematics of the Polish Academy of Sciences) – *Mathematical Statistics**
- Professor Mirosław Karpierz (Warsaw University of Technology) – *Modern Optics and Photonics*
- Professor Jerzy Garbarczyk (Warsaw University of Technology) – *Introduction to Solid State Physics*

SPECIAL LECTURES/AUTUMN SEMESTER:

- Dorota Kobylińska, PhD (University of Warsaw) – *Psychology of Personality and Personality Development Stimulation**
- Professor Elżbieta Jarzębowska (Warsaw University of Technology) – *Nonlinear Control Strategies and Algorithms – Design and Application in Technical Tasks*

* Lectures co-financed by the European Union within the European Social Fund



CAS Newsletter

Warsaw University of Technology, Politechnika Square 1, 00-661 Warsaw, Poland
e-mail: csz@csz.pw.edu.pl, telephone no. (00 48 22) 234 60 02

Editor-in-chief/translation: Ewa Stefaniak
Editorial team: Joanna Jaszurka, Patrycja Nieściur, Ilona Sadowska, Anna Żubrowska
Supervision: Professor Stanisław Janeczko
Graphic design/DTP: Diana Gawronkiewicz, Podpunkt

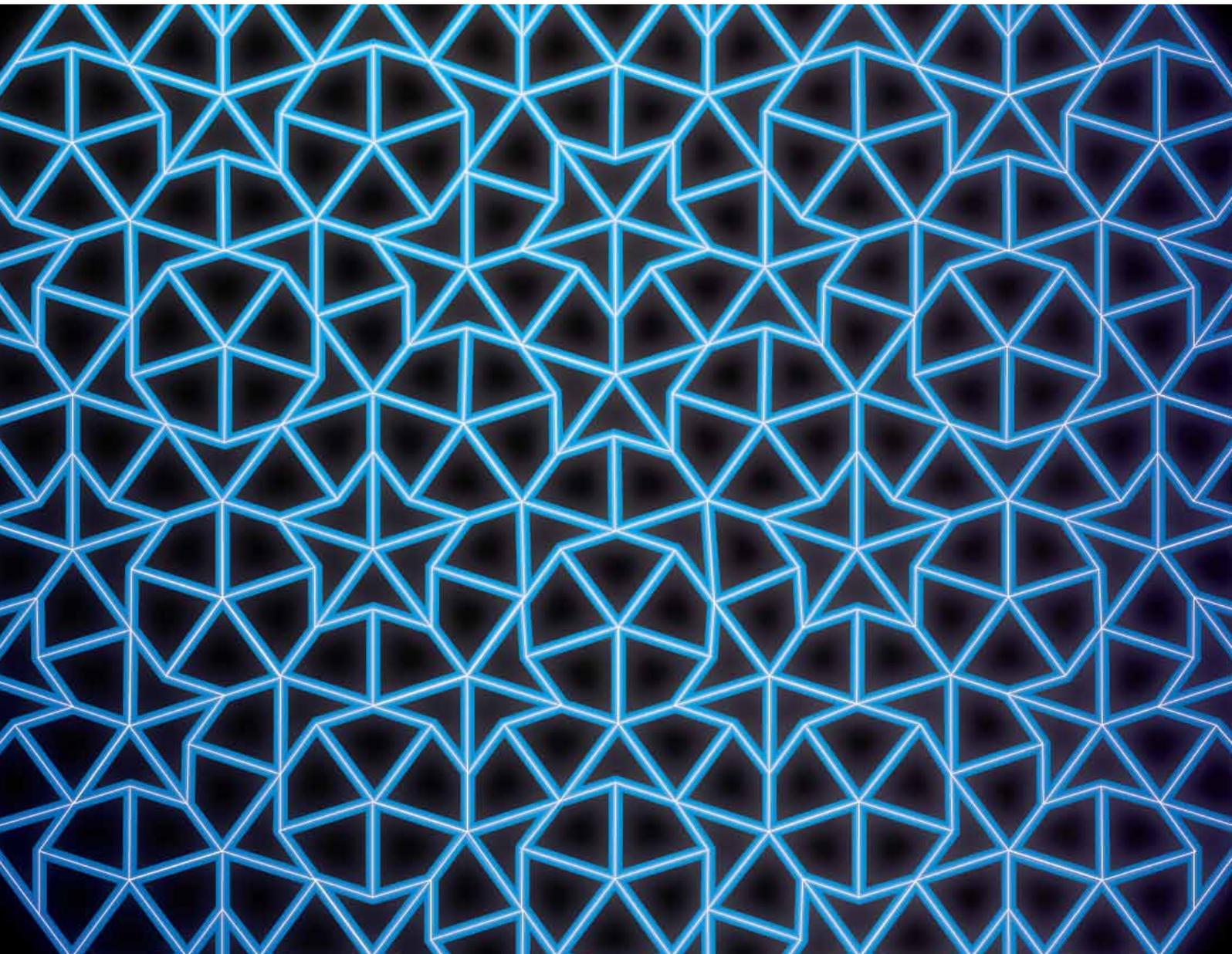
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NEWSLETTER

APRIL 2012



Center for Advanced Studies OF WARSAW UNIVERSITY OF TECHNOLOGY



INSIDE THIS ISSUE:

Strengths and Weaknesses of the Contemporary Humanities - from the Ivory Tower to the Education Supermarket - Humanities Face the Challenges of Our Time - Professor Jerzy Axer

*CAS Advanced Studies Offer - Autumn Semester 2011/2012
CAS Scholarships - WUT Scientists and Visiting Professors
Calendar of Events (April 2011/March 2012)*

Strengths and Weaknesses of the Contemporary Humanities –

from the Ivory Tower to the Education Supermarket – Humanities Face the Challenges of Our Times.

Professor Jerzy Axer

The modern-day university is trying to adjust to new circumstances which Frank Furedi in his book *Where Have All the Intellectuals Gone?* calls “the colonization of higher education by an education bureaucracy”. The whole web of bureaucratic tentacles reaches far into university autonomy and tradition. On the one hand, universities are striving to maintain their autonomy, as only by maintaining their independence can they preserve their identity. On the other hand, European universities have become dependent on prompting and decisions which they do not control. We have been witnessing a battle between those who have yielded to the external institutions’ regime and the other group – the opponents of “the colonization process” who want to defend the university from any extrinsic and intrusive pressure. In Professor Axer’s opinion, the academic community should close ranks, unite and act in favour of the common cause by binding within the autonomous structures, in order to guard freedom and remain independent intellectual centers.

In contemporary bureaucratic machine, the humanities are perceived by many ministerial officials as ineffective and non-profitable, consequently they are marginalized. The institute *Artes Liberales*, established by Professor Axer, is a “catalyst for change”, an example that “we can do differently”. *Artes Liberales* aims to free from: conformism, fear of taking up risk

and diminishing the curiosity towards everything that brings no tangible profit. Finally, it liberates from the idea that we should acquire knowledge for a purpose other than the acquisition of knowledge for its own sake. Although the concept seems to promote elitism, it is not meant for the opulent, but it is addressed to the chosen who dare pose questions and whose quest for discovering the unknown is never-ending. The niches of such exclusive education are simply a must in society, and should be considered an integral part of the university’s public mission.

Humanistic disciplines offer the curricula which develop multiple interests and prepare the students for coping both with the heritage of the past and the present. Good humanities socialise and anchor individuals within the communities, they help them to find themselves in time and space. Yet, the humanities do much worse in diagnosing short-term market demands. Consequently, if the students are not eager to get a broad humanistic education, they will always end up with the least lucrative job offers. The best graduates, on the contrary, are flexible enough to be offered managerial posts. In other words, they make the job market instead of adjusting to it. As Professor Axer points out, nowadays, the knowledge of biology, mathematics and other sciences acquired by humanists is extremely limited, and young scholars feel neither ashamed nor

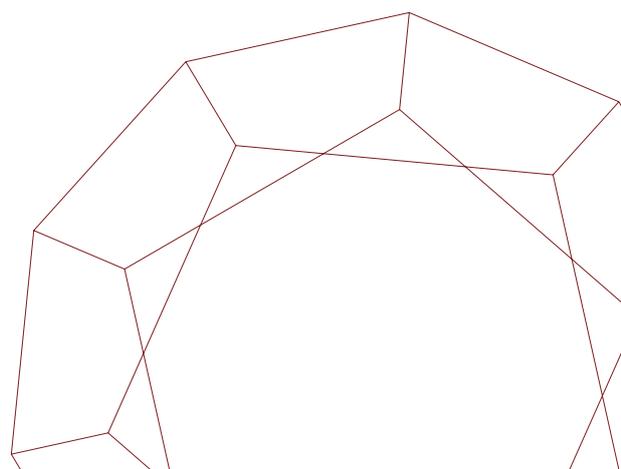
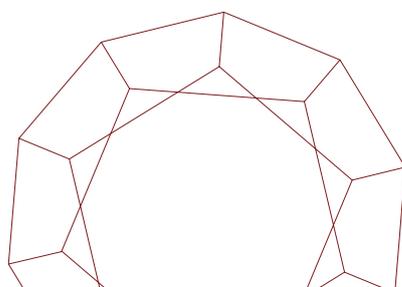
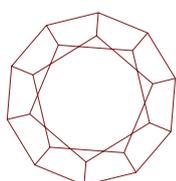


↑ Professor Jerzy Axer | Photo by Sławomir Ostrowski (Fotocasty)

anxious about this fact. And vice-versa, engineers have little time to systematically keep up with the dynamically developing field of the humanities. The best thing would be to retain a mutual interest, but the possibility that the world will not be perceived as a whole, but only in narrow scientific disciplines, is, unfortunately, very likely.

No less important, according to Professor Axer, is the tutor-pupil relation. When it functions properly, the student takes only as much as he or she needs and wants to take. At the same time, the tutor benefits to a greater extent from this relation, that is to say, the relation serves as an antidote for the disease affecting many lecturers – the Peter Pan syndrome. In the course of teaching generations of students, the tutors become unaware of getting old and, in spite of not receiving any feedback, they are strongly convinced of being good partners for their pupils. As Professor Axer explains, only in a one-to-one relation, and not before a large audience, can tutors see the real impact, the real worth of their words. While studying it is not the curricula that matter most, it is the people we meet, the people who inspire us and whom we never forget.

Professor Jerzy Axer is a specialist in classical studies at the University of Warsaw. He is the initiator and Director of the Centre for Studies on the Classical Tradition in Poland and East-Central Europe which in 2008 was transformed into the Institute for Interdisciplinary Studies *Artes Liberales*. Professor Axer is also the founder of the College of Inter-Faculty Individual Studies in the Humanities (University of Warsaw) and a member of the Polish Academy of Sciences. He is an author of over 300 publications, mainly on Latinist and neo-Latinist studies and the reception of Antiquity in European culture.



Calendar of Events

- APRIL 2011
- > Popular lectures in mathematics: Professor Michał Wojciechowski, Barbara Roszkowska-Lech, PhD, Michał Budzyński, MSc
 - > WUT Colloquium Lecture: *Strengths and Weaknesses of the Contemporary Humanities. Travels in Time and Space, Following the Tracks of the Somalian Giraffe* by Professor Jerzy Axer
 - > The publication of 4th issue of the bulletin *Profundere Scientiam*
- MAY 2011
- > Scientia Suprema: *All About Graphene* by Professor Jacek Baranowski, Professor Włodzimierz Strupiński, Professor Jerzy Krupka, Mariusz Zdrojek, PhD
 - > Expert seminar: *Creation of the Brain Atlas. Computer Imaging in Medicine – Research and Commercialization* by Professor Wiesław L. Nowiński
 - > WUT Colloquium Lecture: *K-dron – the Overlooked Shape. Between Science and Art* by Janusz Kapusta, PhD
- JUNE 2011
- > Expert seminar: *Minkowski sums, Area Distance, Improper Affine Spheres and Related Constructions* by Professor Peter Giblin
 - > WUT Colloquium Lecture: *Describing the World with Chemistry* by Professor Jacek Kijeński
 - > CAS Spring Scientific Workshop, Będlewo
 - > Mathematical Exhibition *Imaginary*
 - > Training course for PhD students: *Effective Methods in Information Management*
- SEPTEMBER 2011
- > Expert seminar: *How Does the Brain Work?* by Professor Mina Teicher
 - > Research scholarships for PhD students – competition, 34 scholarship winners
 - > The publication of 5th issue of the bulletin *Profundere Scientiam*
 - > CAS Lecture Notes by Professor Ryszard Zieliński
- OCTOBER 2011
- > WUT Colloquium Lecture: *Bright and Dark Corners of the Universe* by Professor Marek Demiański
 - > *Bridging Generations* – meeting with Professor Maciej Grabski
 - > CAS Autumn Scientific Workshop, Mądralin
 - > Research scholarships for postdoctoral scientists – competition, 16 scholarship winners
- NOVEMBER 2011
- > WUT Colloquium Lecture (**Nobel Laureates at the Center**): *Drug Development in the 21st Century and the Personalised Medicine Revolution: Are We Going to Cure All Diseases?* by Professor Aaron Ciechanover
 - > Foreign research scholarships for PhD students and academics – competition, 10 and 16 scholarship winners
 - > Training course for PhD students: *How to Present Oneself Professionally?*
- DECEMBER 2011
- > *Ars Mathematica* – lectures for students, high school students and teachers
 - > Christmas meeting at the CAS office
- JANUARY 2012
- > CAS and the Polish Children's Fund joint workshop
 - > The ceremony of awarding the CAS scholarship holders with the letters of congratulations, lecture *Photonics as a Key Enabling Technology* by Professor Tomasz Woliński
- FEBRUARY 2012
- > WUT Colloquium Lecture: *Far Infra-red (THz) in Semiconductors, the Physics and Applications* by Professor Marian Grynberg
 - > Launching of a series of advanced classes in physics and mathematics for the most excelling WUT first-year students
 - > Initiation of a series of lectures *Humanities Face the Challenges of Our Times* given by the academics at the Institute of Interdisciplinary Studies *Artes Liberales* (University of Warsaw)
- MARCH 2012
- > *In the Center of Attention* – the aim of the meeting is to present the Center's current activities and to integrate academic communities around common ideas and projects
 - > Foreign research scholarship for PhD students – additional competition, 3 scholarship winners
 - > Expert seminar – *Cryptography and Steganography: New Algorithms and Applications* by Professor Jonathan Blackledge
 - > CAS Textbook by Professor Jonathan Blackledge
 - > *Ars Mathematica* – lectures for students, high school students and teachers.