



Prof. Dr. Marek R. Ogiela

**Head of Laboratory of Cryptography and Cognitive Informatics**

<http://www.cci.up.krakow.pl>



**AGH University of Science and  
Technology**

30 Mickiewicza Ave  
30-059 Krakow, Poland

<http://www.agh.edu.pl/en>

E-mail: [mogiela@agh.edu.pl](mailto:mogiela@agh.edu.pl)

Web: <http://home.agh.edu.pl/~mogiela/>



**Pedagogical University of Cracow**

ul. Podchorazych 2

30-084 Krakow, Poland

<http://www.up.krakow.pl/main/eng>

**Short bio: Prof. Marek R. Ogiela**

Professor of Computer Science, cognitive scientist and cryptographer, head of Cryptography and Cognitive Informatics Laboratory.

Professor Marek R. Ogiela works at the AGH University of Science and Technology and Pedagogical University in Krakow. In 1992 graduated from the Mathematics and Physics Department at the Jagiellonian University. In 1996 for his honours doctoral thesis on syntactic methods of analysis and image recognition he was awarded the title of Doctor of Control Engineering and Robotics at the Faculty of Electrical, Automatic Control, Computer Science and Electronic Engineering of the AGH University of Science and Technology. In 2001 he was awarded the title of Doctor Habilitated in Computer Science for his research on medical image automatic analysis and understanding. In 2005 he received a professor title in technical sciences.

Member of numerous world scientific associations (IEEE-Senior Member, SPIE-Senior Member, SIIM etc.) as well as of the Forecast Committee 'Poland 2000 Plus' of the Polish Academy of Science and member of Interdisciplinary Scientific Committee of the Polish Academy of Arts and Sciences (Bio cybernetics and Biomedical Engineering Section in years 2003-2011). Author of more than 270 scientific international publications on pattern recognition and image understanding, artificial intelligence, IT systems and biocybernetics. Author of recognised monographs in the field of cryptography and IT techniques; author of an innovative approach to cognitive medical image analysis, and linguistic threshold schemes. For his achievements in these fields he was awarded many prestigious scientific honors, including Prof. Takliński's award (twice) and the first winner of Prof. Engel's award. He is Associate Editor in *Soft Computing* Journal and *Security and Communication Network* Journal

## Professional activities

1. SPIE - Society of Photo-Optical Instrumentation Engineering, (since 1998, Member No. 00557494), **Senior Member SPIE** (since 2011)
2. IEEE Signal Processing Society (since 2001), **Senior Member IEEE** (since 2010)
3. IEEE Computer Society, (since 2001)
4. International Biomedical Optics Society, Technical Working Group on International Biomedical Optics (SPIE). (since 1999)
5. IS&T - The Society for Imaging Science and Technology, (since 2000)
6. SCAR (SIIM) - Society for Computer Applications in Radiology (since 1999)
7. IASTED since 2002
8. Member of the Interdisciplinary Scientific Committee of the Polish Academy of Arts and Sciences (Bio-cybernetics and Biomedical Engineering Section)

## Research areas:

1. Computer science (cognitive informatics, pattern classification),
2. Biomedical engineering (medical image understanding and analysis),
3. Cryptography (secret splitting and sharing), AmI Security

## Awards

1. Medal of National Education Commission, Minister of Education of Republic of Poland 2010
2. Prof. Takliński's award (twice in years 2000, 2003)
3. Prof. Engel's award (2002)
4. Awards of Rector of the AGH University of Science and Technology (19 times)

## Best Papers

1. **Best Paper Award** by Organizing Committee of *AIT 2010* (ACN/AST/ISA/UCMA 2010) Conferences, Miyazaki, Japan, 23-25 June 2010 paper: Marek R. Ogiela, Urszula Ogiela, Grammar Encoding in DNA-Like Secret Sharing Infrastructure, in Tai-hoon Kim, Hojjat Adeli (eds.) *Advances in Computer Science and Information Technology, LNCS 6059*, pp. 175-182, 2010, Springer-Verlag, Berlin, Heidelberg, 2010
2. **Best Paper Award by AINA 2012 Organizers**, for *WAINA 2012*-26th IEEE International Conference on Advanced Information Networking and Applications Workshops (WAINA-2012), Fukuoka Institute of Technology, Fukuoka, Japan, March 26-29, 2012, paper: Marek R. Ogiela, Lidia Ogiela, Medical Visualizations in Secure Bio Computing, pp. 997-980, DOI 10.1109/WAINA.2012.106, ISBN 978-0-7695-4652-0
3. **Best Paper Award by STA 2013 Organizing Committee** for *STA 2013* - The 10th FTRA International Conference on Secure and Trust Computing, data management, and Applications, July 8-10, 2013, FIT, Fukuoka, Japan, paper: Marek R. Ogiela, Lidia Ogiela, Security of Cognitive Information Systems, J. J. (Jong Hyuk) Park et al. (eds.), *Information Technology Convergence, Lecture Notes in Electrical Engineering*, Vol. 253, pp. 427-433, DOI: 10.1007/978-94-007-6996-0\_44, Springer Science+Business Media Dordrecht 2013

## Chief of the Projects (only 2010-2013):

1. Grant N N516 478940 (National Science Centre, Republic of Poland), *The system for cognitive analysis and semantic interpretation of spatial coronary arteries reconstructions*, 2011-2013
2. Grant N N516 511939 (Ministry of Science and Higher Education, Republic of Poland), *Cognitive techniques of semantic analysis and interpretation of brain perfusion maps*, 2010-2013
3. Grant N516 196537 (Ministry of Science and Higher Education, Republic of Poland), *Cognitive categorization systems of UBIAS and E-UBIAS types*, 2009-2011.
4. Grant N519 00732/0978 (Ministry of Science and Higher Education, Republic of Poland), *Contextual and semantic analysis, recognition and interpretation of image and their sequences with applications in medicine*, 2007-2010

## Member of Editorial Boards:

1. Soft Computing (Springer), **ASSOCIATE EDITOR**;  
Editors-in-Chief: Antonio Di Nola and Vincenzo Loia;  
(<http://www.springer.com/engineering/computational+intelligence+and+complexity/journal/500>)
2. Security and Communication Networks (SCN, Wiley), **ASSOCIATE EDITOR**;  
Editors-in-Chief: Hsiao-Hwa Chen and Hamid R. Sharif;  
(<http://onlinelibrary.wiley.com/journal/10.1002/%28ISSN%291939-0122>)
3. **BIO-ALGORITHMS AND MED-SYSTEMS**, Jagiellonian University, Poland  
(<http://www.bams.cm-uj.krakow.pl>)
4. **International Journal of Intelligent Defence Support Systems (IJIDSS)**, InterScience Publishers, (<http://www.inderscience.com/browse/index.php?journalID=269#board>)
5. **International Journal of Understanding**, Queen Jadwiga Foundation Press  
([http://www.qjfp.org/JournalUnderstanding/Eng/Eng\\_IJU\\_PO\\_0.htm](http://www.qjfp.org/JournalUnderstanding/Eng/Eng_IJU_PO_0.htm))
6. **Journal of Wireless Mobile Networks, Ubiquitous Computing and Dependable Applications (JoWUA)**, (<http://www.jowua.org/index.php/jowua/index>)
7. **International Journal of Space-Based and Situated Computing (IJSSC)**, (<http://www.inderscience.com/browse/index.php?journalCODE=ijssc>)
8. **Computer Science**, AGH University of Science and Technology, Poland
9. **Intelligent Decision Technologies (IDT)** - An International Journal, IOS Press, (<http://www.iospress.nl/loadtop/load.php?isbn=18724981>)
10. **International Journal of Urban Design and Computing (IJUDC) - SERSC** - Science & Engineering Research Support Society, Associate Editor, EiC: Hoon Ko, (<http://www.sersc.org/journals/IJUDC>)
11. **IT Convergence Practice – Editor**, EiC: PanKoo Kim, Ilsun You (published by Korean Institute of Smart Media (<http://inpra.yolasite.com/editorial-board.php>))

## Most important books:

1. Ryszard Tadeusiewicz, Marek R. Ogiela, *Medical Image Understanding Technology*, Springer Verlag, Berlin-Heidelberg, 2004
2. Marek R. Ogiela, Ryszard Tadeusiewicz, *Modern Computational Intelligence Methods for the Interpretation of Medical Images*, Springer-Verlag, Berlin Heidelberg 2008
3. Lidia Ogiela, Marek R. Ogiela, *Cognitive Techniques in Visual Data Interpretation*, Springer-Verlag, Berlin Heidelberg 2009
4. Marek R. Ogiela, Lakhmi Jain (eds.), *Computational Intelligence paradigms in advanced pattern classification*, Springer -Verlag, Berlin Heidelberg 2012
5. Marek R. Ogiela, Lidia Ogiela, *Advances in cognitive information systems*, COSMOS- Cognitive Systems Monographs, Springer Verlag, Berlin Heidelberg 2012
6. Marek R. Ogiela, Urszula Ogiela, *Secure Information Management Using Linguistic Threshold Approach*, *Advanced Information and Knowledge Processing*, 2014

Supervisor of 8 finished PH.D thesis, and additional 3 in progress. Author of above 270 journal and conference papers, as well as author of 24 books and books chapters. Member of Organizing or Scientific Committees of above 90 international conferences. Participation in 160 Scientific Conferences.