

CURRICULUM VITAE

Dr. Malgorzata Celuch

Affiliation and official address:

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Date and place of birth:

May 10th, 1964

Nationality:

Polish

Degrees:

- 1996 Ph.D. (honours)
from: Warsaw University of Technology
thesis title: "A generalized approach to the FDTD and TLM algorithms for microwave circuit modelling"
advisor: Prof. Wojciech Gwarek
- 1988 M.Sc. (honours)
from: Warsaw University of Technology
thesis title: "Numerical analysis of planar circuits incorporating nonlinear components"
advisor: Prof. Wojciech Gwarek
- 1983 International Baccalaureate (distinctions)
from: United World College of the Atlantic, UK, and IB Office, Switzerland

Career/Employment:

current:

- 1996→ Assistant Professor, Warsaw University of Technology
1994→ free-lance electromagnetic software developer
1999→ vice-president of QWED company www.qwed.eu

former:

- 1988-1989 researcher (rektorski etat naukowo-badawczy), Warsaw University of Technology
1989-1991 maternity leave
1992-1996 Ph.D. studies, Warsaw University of Technology

Specialisation:

- main fields: computational electromagnetics, multiphysics modelling
other fields: microwave circuits
current research: conformal FDTD methods,
new applications of FDTD for microwave power problems,
frequency-domain parameter extraction from FDTD simulations

Awards for excellence in research and /or innovation:

- 2001, 2006 Leader in Software Export
(Polish Software Market Association)
2000 Proton Award
(from State Committee for Scientific Research and Proton TV programme)

2000	Master of Technology Award (from NOT - Polish Federation of Engineering Associations)
1999	Prime Minister of Poland Award
1998	European Information Technology Prize (from European Commission and Euro-Case)
1997	Rector of the Warsaw University of Technology Award (<i>individual</i>)
1996	Scholarship of the Foundation for Polish Science (<i>individual</i>)
1995	Minister of Education Award

Note: the awards not marked as '*individual*' were granted to the core QuickWave team of 4 researchers or QWED company run by them.

Reviewer for:

IEEE Transactions on Microwave Theory & Techniques (since 1996)
IEEE Transactions on Antennas and Propagation (since 1997)
IEEE Microwave and Wireless Components Letters (since 2001)
Journal of Microwave Power and Electromagnetic Energy (since 2006)
Applied Computational Electromagnetics Society Journal (since 2007)
IEEE Antennas and Propagation Society Magazine (since 2008)
International Journal of Infrared and Millimeter Waves (since 2008)
Physica Status Solidi B (since 2008)
Computer Physics Communications (2009)
Wydawnictwa Komunikacji i Łączności (2009)

Helsinki University of Technology – pre-examiner of Ph.D. Thesis in 2001

TPC member of *IEEE MTT-S International Microwave Symposium* since 2002
TPC member of *Microwave Materials and Applications Conference MMA-2010*
TPC member of *ANTEM 2010*

FP7 expert for the European Commission (since 2008)

Teaching experience – Warsaw University of Technology:

Fields, Waves and Antennas (lecturer in charge)
Computational Electromagnetics for Telecommunications (lecturer in charge)
Komputerowa Analiza Problemów Elektrodynamiki (with prof. W.Gwarek)
Oddziaływanie fal elektromagnetycznych na organizmy żywe (6 hrs lectures)
author of laboratory exercises for POFA, EFWA
contributions to other courses in computational electromagnetics and microwave theory
two graduated students (M.Sc., B.Sc.), two currently supervised B.Sc.

Teaching experience – international and foreign universities:

Franco-Polish High School of New Information and Telecommunication Technologies, Poznan
tutorials and laboratory exercises in electronic circuit theory, 1992-1993
Chalmers University of Technology, Gothenburg, Sweden
contractual consultancy on FDTD modelling for mobile communications, 1995-1996
Chalmers University of Technology, Gothenburg, Sweden
Microwave Modelling with the FDTD method
graduate level lectures 20 hrs, Nov.1995
University of Guadalajara, Guadalajara, Mexico

Computational Electromagnetics

Ph.D. course 30 hrs (co-taught with prof. W.Gwarek), Feb.2005

California Institute of Technology, Pasadena, CA

Electromagnetic Software Applications to Antenna Problems

M.Sc. / Ph.D. lecture and tutorials 8 hrs, Jan.2007

Worcester Polytechnic Institute, Worcester, MA

The finite-difference time-domain algorithms: numerical properties & practical applications

lectures 4 hrs within graduate course, Apr. 2008

Co-organiser and tutor of professional training courses:

Chalmers University of Technology, Gothenburg, Sweden

QuickWave Modelling

3 days (co-taught with prof. W.Gwarek), Nov.1999

Northampton Community College, Bethlehem, PA

Electromagnetic Modelling for Microwave Heating

2 days (co-taught with dr. V.Yakovlev), Jan.2002

Swedish Institute for Food and Biotechnology, Gothenburg, Sweden

QuickWave Electromagnetic Software Application

2 days (co-taught with prof. W.Gwarek), May 2002

The Ferrite Company, Inc., Hudson, NH

Advanced & Specialised Training in QuickWave-3D

1 day (co-taught with dr. V.Yakovlev), Jan.2003

Politechnika Wroclawska, Wrocław

Modelowanie Elektromagnetyczne Układów Mikrofalowych i Antenowych Symulatorem FDTD

2 days (co-taught with prof. W.Gwarek), Apr.2006

Invited speaker at seminars in academic and industrial institutions:

Ferdinand-Braun-Institut für Höchstfrequenztechnik, Berlin, Germany, Oct.1993

Chalmers University of Technology, Gothenburg, Sweden, Nov.1998, Feb.2003

University of Victoria, Victoria, Canada, June 2001

Worcester Polytechnic Institute, Worcester, MA, Jan.2002, Jan.2009

Technische Universität Darmstadt, Darmstadt, Germany, July 2002

Whirlpool, Norrköping, Sweden, Aug.2003

Dalhousie University, Halifax, Canada, June 2005

Stellenbosch University, Stellenbosch, RPA, Sep.2005

California Institute of Technology, Pasadena, CA, Jan.2007

Jet Propulsion Laboratory, Pasadena, CA, Jan.2007

Nestle PTC, Singen, Germany, Aug.2007

Invited speaker at scientific conferences:

MIKON, May 1998

East-West Workshop "Advanced Techniques in Electromagnetics", May 2004

Computer Modelling & Microwave Power Industry

June 2000, Jan.2003, Jan.2004, Feb.2008, Jan.2009

Invited speaker at business and policy-making events:

Polish Software Market Association:

Leader in Software Export Event, Mar.2001

European Network for Financing Food Innovation:

Roundtable Meeting, Warsaw, Sep.2006
IEEE MTT-S Winter Technical Panel Session:
Government Support for MTT Research, Long Beach, CA, Jan.2007
European Commission and OSEO Conference:
Consolidating Research and Innovation for European SMEs, Paris, Sep.2008

Session / workshop organiser:

Applied Computational Electromagnetics Society Symp. – sessions in 2007, 2008
IEEE MTT-S International Microwave Symp. – workshop in 2009

Session chair at scientific conferences:

about 15 sessions at *MIKON, IEEE IMS, ACES, AMPERE, IEEE APMC*

Managerial experience:

coordinating QWED company activities (6 employees, 10 consultants)
leading European projects (Eureka, two STREP FP6, Marie Curie)
leading industrial projects at WUT and QWED

Professional organisations:

member of IEEE since 1996
co-chair of IEEE AES/AP/MTT Joint Chapter, Section Poland, 2007-2008

Other voluntary organisations:

founding member of Polish UWC Association (Towarzystwo Szkół Zjednoczonego Świata)
member of National Committee selecting students for United World Colleges since 2001

Other public / medial appearances:

in TV programmes "Luz", "Styl życia" – several appearances in 1990s
in radio programmes – several broadcasts around 2000

Publications:

total of 122 ,	25 / 97 before / after submission of Ph.D. thesis
chapters in monographs	- / 4
international journal articles	5 / 13 (4 / 4 in IEEE series, -/1 IEE, -/4 IMPI , 1/4 other ICI)
national journal articles	1 / 5