CURRICULUM VITAE

Enikö György
Tel: 0040-734312260
E-mail: eniko.gyorgy@inflpr.ro; egyorgy@icmab.es; engyorgy@hotmail.com

EDUCATION

B.Sc in Physics	Faculty of Physics, University of Bucharest, Romania *overall mark: 9.62*	1989-1994
Master in Physics	Faculty of Physics, University of Bucharest, Romania *overall mark: 10*	1994-1995

Ph.D in Physics 10 Febr. 1999	Institute of Atomic Physics, Bucharest, Romania	1995-1999
Post-doctoral Fellowship Spanish Ministry of Education and Culture	University of Barcelona, Spain	2000-2003

PROFESSIONAL ACTIVITY

Research Assistant	National Institute for Lasers, Plasma and Radiations Physics, Bucharest, Romania	1994-1995
Scientific Researcher	National Institute for Lasers, Plasma and Radiations Physics, Bucharest, Romania	1996 – 2006
Scientific Researcher 1st degree	National Institute for Lasers, Plasma and Radiations Physics, Bucharest, Romania	2006–present
Senior Scientific Researcher	Institute of Materials Science of Barcelona, Consejo Superior de Investigaciones Cientificas, Spain	2008-present

SCIENTIFIC COLLABORATIONS AND RESEARCH STAGES

1.	University of Salento, Italy
2.	“Johannes Kepler” University Linz, Austria
3.	Institute of Electronic Structures and Lasers, Foundation for Research and Technology of Hellas, FORTH-IESL, Heraklion, Greece
4.	University of Milano, Italy
5.	Institute of Theoretical Physics and Chemistry, Foundation for Research and Technology of Hellas, Athens, Greece
6.	Institute of Electronics, Sofia, Bulgaria
7.	Institute of Solid State Physics, Sofia, Bulgaria
8.	Institute of Physics, Prague, Check Republic
9.	”József Attila University of Szeged, Hungary
10.	University of Barcelona, Spain
11.	Instituto de Tecnologia Quimica e Biologica /Universidade Nova de Lisboa (ITQB/UNL) Portugal
12.	Swiss Federal Laboratories for Materials Science and Technology, St. Gallen, Switzerland
13.	Instituto de Optica “Daza de Valdés” (IO-CSIC) Madrid, Spain
14.	Rutgers University Camden, New Jersey, United States
15.	ALBA Synchrotron, Barcelona, Spain

PARTICIPATION IN RESEARCH PROJECTS

National research contracts:

1. MEC 329/2002 *"Diffusion and recrystallisation of semiconductor materials through direct laser treatment: an innovative process consisting of an unique technological step",* 2001-2002, Romanian Ministry for Education and Science
2. MEC 328/2002: *"Thin films for magneto-optical sensors, non-linear waveguides by reactive laser deposition: fundamental physical processes and technological developments"*, 2000-2002, Romanian Ministry for Education and Science
3. Romanian Academy 47/2000: *"Study of the physical processes taking place in the ablation plasma during pulsed laser deposition. Establishment of the correlation between the physical parameters of the plasma and the characteristics of the nanometer sized structures obtained by pulsed laser deposition"*, 1998-1999
5. MCT *"Pulsed laser deposition en reactive chemical atmosphere: application to the synthesis of carbon-nitride thin films (C_3N_4)",* 1997-1998, Romanian Ministry for Education and Science
6. CERES 138: "*Synthesis, characterization and applications of thin films and multistructures of AlN, BN, and SiC obtained by pulsed laser deposition and reactive pulsed laser deposition",* 2001-2004, Romanian Ministry for Education and Science

International research contracts:

1. Inter-Governmental *"Laser Generated Plasma Investigations and Applications in Thin Films Synthesis",* 1996-1998, University of Milano, Italy
2. Inter-Governmental *"Laser Deposition of Thin Oxide Films for Applications in Optoelectronics",* 2001- 2002, University of Lecce, Italy
3. Inter-Governmental *"Deposition and Characterisation of hard thin films"*, 1996-1998, University of Lecce, Italy
4. Inter-Governmental "*Laser deposition of thin films of nitrides and carbides*", 1998-2000, Institute of Electronic Structure and Lasers, Foundation for Research and Technology – Hellas, FORTH-IESL, Heraklion, Greece
5. Inter-Governmental "*Laser deposition of thin films of nitrides and carbides*", 2000-2002, Institute of Electronic Structure and Lasers, Foundation for Research and Technology – Hellas, FORTH-IESL, Heraklion, Greece
6. Bulgarian Academy of Science "*Optical and electrical investigations of the structures obtained by pulsed laser deposition or laser surface processing",* 1998-2000, Institute of Solid State Physics, Sofia
7. Bulgarian Academy of Science "*Pulsed laser deposition of oxide thin films"*, 2000-2003, Institute of Electronics, Sofia
8. Bulgarian Academy of Science "*Electrical and Optical Properties of CNx-Si, WCx-Si, AlNx-Si and BNx-Si",* 2001-2004, Institute of Solid State Physics, Sofia
9. Academy of Science of the Czech Republic "*Pulsed laser deposition of thin films*", 2001-2003, Institute of Physics, Prague
10. Hungarian Academy of Science *"Pulsed laser deposition of oxide, nitride and carbide thin films",* 2000-2002, University "Jozsef Attila" of Szeged
11. FP5 "*Innovative preparation methods and new materials*", SIMI, G5RD-CT-2000-00423, 2001-2004
12. FP5 "*Fotonic Sensors",* NANOPHOS, IST-2001-39112, 2003-2006
13. INCO-COPERNICUS IC15-CT98-0807, "*Inter-European Network of Pulsed Laser Deposition of Innovative Materials*", INPULSNET, 1998-2002
14. NATO-CLG PST.CLG.977325 "*Multiwavelength laser plasma investigations for applications in thin films deposition and processing*", 2001-2002
15. NATO-CLG PST.CLG 980464 *"Deposition of doped thin films with the aid of two synchronised laser systems for nano-electronic applications"*, 2003-2004

RESPONSIBLE OF RESEARCH PROJECTS

National research contracts:

1. CNCSIS 863/2006 *"Multifunctional oxide thin films for optical gas sensor applications",* 2006-2008, Romanian National University Council, 25.000 EURO/year
2. CEEX 150/2006 *"Laser techniques for biosensors design and fabrication",* BIOSENSOR, 2006-2008, Romanian Ministry for Education and Science, 350.000 EURO (project coordinator)
3. IDEAS 1290/2009 *"Innovative processing of biomaterials with the aid of laser radiation for controlled drug delivery and detection devices*", 2009-2012, Romanian Ministry for Education and Science, 100.000 EURO
4. Partnerships 162/2012 „*Complex high surface area photoactive nano-materials for environmentally-friendly energy production and organic pollutants degradation*", 2012-2016, Romanian Ministry for Education and Science, 700.000 EURO, 4 partners implied, 230.000 EURO for the National Institute for Lasers, Plasma and Radiations Physics, (project coordinator)
5. IDEAS 85/2013 "*Processing and immobilization by non-conventional laser techniques of nanocomposite materials for next-generation stretchable transparent electrodes",* 2013-2016, Romanian Ministry for Education and Science, 250.000 EURO
6. Experimental Demonstration Project (PED) 47/2017 „*Photoactive carbon based nanocomposite materials for efficient wastewater treatment by organic pollutant removal*" 2017-2018, Romanian Ministry for Education and Science, 150.000 EURO
7. Exploratory Reasearch Project (PCE) 175/2017 „*Nanocomposite materials obtained by laser techniques for flexible electronic devices*", 2017-2019, Romanian Ministry for Education and Science. 200.000 EURO
8. Exploratory Reasearch Project (PCE) 90/2021 „*Nanocomposite layers for the treatment of microorganisms by advanced oxidation processes*", 2021-2023, Romanian Ministry for Education and Science. 200.000 EURO

International research contracts:

1. Inter-Governmental "*Multiwavelength laser plasma investigations for applications in deposition of nitride thin films",* 2000-2002, Institute of Theoretical Physics and Chemistry, Athens, Greece
2. Inter-Governmental "*Thin oxide films grown by laser techniques for optical sensor applications",* 2006-2007, University of Lecce, Italy
3. Inter-Governmental "*Biosensors design using laser radiation*", 2006-2007, University "Jozsef Attila" of Szeged, Hungary
4. NATO EAP.RIG 981200 *"Biosensors obtained by matrix assisted pulsed laser deposition"*, 2004-2007
5. MAT2006-26534-E *"Development of completely new laser techniques for the growth of biomolecular thin films", Spanish Ministry for Education and Science,* 86.000 EURO
6. 2007PT0007 "*Development of biogenic amines optical biosensors by innovative laser nanostructuring of solid supports",* Consejo Superior de Investigaciones Cientificas, España, Fundacion para la Ciencia y Tecnología, Portugal
7. ENE2014-56109-C3-3-R, *"Carbon and metal oxide hybrid nanocomposites for supercapacitor application",* 2014-2016, Spanish Ministry of Economy and Competitiveness
8. ENE2017-89210-C2-1-R, *"Advanced fabrication of hybrid electrodes based on nanocarbon materials for supercapacitor applications",* 2017-2020, Spanish Ministry of Economy and Competitiveness

9. 2017092465-2018, "*Synchrotron-based Fourier Transform Infrared Microspectroscopy investigations of graphene oxide / transition metal oxide nanocomposite thin films obtained by advanced laser techniques*", ALBA Synchrotron, MIRAS beamline, Spain
10. PID2020-116612RB-C31, "*Advanced functionalization of carbon nanomaterials by high intensity laser radiation*" 2021-2024, Spanish Ministry of Science and Innovation
11. PDC2021-121868-C21, "*Laser fabrication of electrodes for supercapacitors*", Spanish Ministry of Science and Innovation, Proof of Concept NextGenerationEU project, 90.000 EURO
12. TED2021-130477B-I00, "*Laser-assisted synthesis of multicomponent photocatalysts for solar hydrogen production*", 2023-2024, Spanish Ministry of Science and Innovation, Strategic Projects Oriented to the Ecological Transition and the Digital Transition, 139.000 EURO

Evaluator-rapporteur of project proposals:

European Commission

Spanish Ministry of Education and Competitiveness

Catalan Government, Agency for Management of University and Research Grants (AGAUR)

Romanian Ministry of Education and Research

Hungarian Ministry of Education and Culture

National Science Centre, Poland

Agencia Nacional de Promoción Científica y Tecnológica, Argentina

German Academic Exchange Service

Bulgarian National Science Fund

Paris Region Fellowships, France

Cyprus Research and Innovation Foundation

Participation in Panel Meetings – member of evaluation Panels:

European Commission

Romanian Ministry of Education and Research

Monitoring of ongoing research projects:

European Commission

Romanian Ministry of Education and Research

Participation in the organization and the management of the scientific research:

- Participation in the organization and setting of strategic research objectives in the field of physics in Romania in the short (2012-2014) and medium (2015-2020) term - member in the cluster nr. 10 Applied Physics, Romanian Ministry of Education and Research, year 2011

- Participation in candidates' selection process for lecturer position, member of selection commission of Department of Applied Physics, University of Barcelona, Spain, year 2020

Co-director of PhD Thesis:

Guillaume Sauthier, "*Synthesis and characterization of undoped and nitrogen doped titanium oxide thin films for photocatalytic applications*", Universitat Autonoma de Barcelona, Spain, 2008-2012

Pablo Garcia Lebière, "*Fabrication of nanocarbon-based supercapacitor electrodes through advanced laser processing*", Universitat Autonoma de Barcelona, Spain, 2018-2022

Co-director of Master Thesis:

Ana-Maria Anicai, "*Development of urease biosensors by matrix assisted pulsed laser evaporation method*" Polytechnique University of Bucharest, Romania, June 2008

Guillaume Sauthier, "*Laser synthesis of nitrogen doped titanium oxide thin films for photocatalytic applications*", Universitat Autonoma de Barcelona, Spain, 2008

Iulian Mitache, "*Laser induced reduction and nitrogen doping of graphene oxide in titanium oxide / graphene oxide composites*", University of Bucharest, Faculty of Physics, July 2015

Seyed Mahyad Komarizadeh Asl, *"Laser synthesis of photoactive nanocomposites for environmental applications*" Universitat Autonoma de Barcelona, Spain, September 2019

Maroua Omezzine Gnioua, "*Laser synthesis of carbon nanomaterial – transition metal oxide layers for environmental applications*" Universitat Autonoma de Barcelona, Spain, September 2019-November 2020

Co-director BSc Thesis:

Roger Morales Pérez, "*Fabrication using laser techniques of advanced electrodes for energy storage applications*", Universitat Autonoma de Barcelona, Spain, September 2020-June 2021

PhD Thesis committee member:

Camelia Popescu Cojanu, "*Contributions in the field of nanostructured thin films obtained by pulsed laser techniques for biosensors and controlled drug delivery"* University of Bucharest, Romania, November 2011

Maria Marilena Motoc, "*Immobilization by laser techniques of biomaterials for therapeutic applications*", University of Bucharest, Romania, September 2014

Arevik Mushegyyan Avetisyan, "*Synthesis and characterization of multilayer graphene nanostructures*" University of Barcelona, Spain, July 2019

Luis Fernando Pantoja Suárez, "*Carbon Nanotubes Grown on Stainless Steel for Supercapacitor Applications*", University of Barcelona, Spain, September 2019

Memberships:

-External Member of the Hungarian Academy of Science, since 1999

-Scientific Secretary of the Bucharest Regional Committee, Hungarian Academy of Science since 2020

-Member of the Committee on Physics, Regional Committee in Cluj, Romania of the Hungarian Academy of Science, since 2020

-Member of Physics Commission of the National Council for Attestation of University Degrees, Diplomas and Certificates of Ministry of Science, Romania, since 2020

-Member of Editorial Board of Coatings journal, IF: 3.236 (2021); 5-Year IF: 3.312 (2021) since 2020

-Member of Official Nominators Team for the VinFuture Prize since 2024

Official referee of ISI quoted, high impact factor international journals:

Solid State Communications, Materials Letters, Journal of Optoelectronics and Advanced Materials, Journal of Physics D: Applied Physics, Surface and Coatings Technology, Sensors and Actuators B, The Journal of Physical Chemistry, Applied Surface Science, Journal of Materials Science, Materials Science and Engineering B, Journal of Physics: Condensed Matter, Applied Physics A: Materials & Processes, Europhysics Letters, Materials Chemistry and Physics, Journal of Hazardous Materials, Journal of Colloids and Interface Science, Advanced Biomaterials, Journal of the American Ceramic Society, Optics and Laser Technology, Physica B, Physica Status Solidi, Journal of Electronic Materials, Electrochemistry Communications, Journal of American Ceramic Society, Materials Science and Engineering C, Diamond & Related Materials, Thin Solid Films, Journal of Photochemistry and Photobiology, Catalysis Communications, Physical Chemistry Chemical Physics, RSC Advances, Materials & Design, New Journal of Chemistry, Advanced Optical Materials, Journal of Non-Crystalline Solids, ACS Applied Materials & Interfaces, Colloids and Surfaces A: Physicochemical and Engineering Aspects, Langmuir, Nanoscale, CrystEngComm, Carbon, Nanotechnology, Science of the Total Environment, Solid State Science, Chemical Engineering Journal, Materials Chemistry and Physics, Journal of Materials Chemistry A

Evaluator of book proposal:

Elsevier - Dr Kostas Marinakis, Senior Acquisition Editor, Chemical and Biochemical Engineering, "*Graphitic carbon nitride: an uprising carbonaceous material; synthesis, characterisation and applications*", Eds. S. Thomas, S. Anas

Participation in working groups and scientific advisory committees:

-Participation in a project of the Institutional Review Boards of the University of Albany and the National Bureau of Economic Research, USA, to identify scientific work that is of particularly high-impact and/or transformative in specific research fields; invited by Prof. Gerald Marschke, University of Albany, January, 2020.

-Impact assessment, related to the impact generated in the industrial field by large research infrastructures, within the framework of RIPATHS project, Horizon2020. Objectives: observe and describe the impact of innovation arising in the industry from the results of experiments carried out by online users of synchrotron radiation and identification of pathways that allow impact generation, November 2019.

Awards:

-*International Association of Advanced Materials (IAAM) Scientist Medal* **Award**, European Advanced Materials Congress, 23-25 August 2016, Stockholm, Sweden

-IOP Institute of Physics - Outstanding Reviewer Award, the journal Nanotechnology, 2018

Conference organization:

-Member of International Advisory Committee
10th International Conference on Photoexcited Processes and Applications, August 29 – September 2, 2016, Brasov, Romania

-Co-chair of the sessions: *"World Technology Forum"*
"Clean and Sustainable Energy Technologies"
European Advanced Materials Congress, 23-25 August 2016, Stockholm, Sweden

-Chair of the session: *"MAPLE and Materials Processing"*
International High Power Laser Ablation and Directed Energy Conference, HPLA2018, 26-29 March 2018, Santa Fe, New Mexico, USA

- Member of Scientific Committee
"Materials for applications in photocatalysis and photoconversion" Symposium H, E-MRS Spring Meeting, May 27-31, 2019, Nice, France

-Chair of the session: *"Laser Ablation for PLD and MAPLE"*
International High Power Laser Ablation and Directed Energy Conference, HPLA2021, 13-15 April 2021, Santa Fe, New Mexico, USA

-Chair of the session: *"Laser Ablation for PLD and MAPLE"*
International High Power Laser Ablation and Directed Energy Conference, HPLA2024, 24 February – 1 March 2024, Santa Fe, New Mexico, USA

-Panelist, "*Comparing Ablative and Pure Photon Propulsion*" Panel, 7th International Conference on Optics, Photonics, and Lasers, OPAL' 2024 Conference, 15-17 May, Palma de Mallorca, Spain

Training courses:

Communication of research outcomes

-Workshop on oral communication of research outcomes, 3 hours, 03 of March, 2022, Barcelona School of Management

Research management

-Creation of R&D&I Companies in Research and Innovation Centers, 4 hours, 01 of February, 2022, PONS Business School, Madrid
-Protection of Industrial and Intellectual Property, 4 hours, 15 of February, 2022, PONS Business School, Madrid
-Strategic Planning of R&D&I, 4 hours, 29 of March, 2022, PONS Business School, Madrid

Hirsch-index: H 28

Number of citations: 2.563; without self citations: 2.211

SCIENTIFIC PUBLICATIONS: more than 100

CONTRIBUTIONS TO INTERNATIONAL CONFERENCES: more than 80

PAPERS PUBLISHED IN PROCEEDINGS OF INTERNATIONAL CONFERENCES: more than 10

BOOK CHAPTERS

[1] *"Pulsed Laser Deposition: An Overview"*
I. N. Mihailescu, **E. György**
Chapter 1 in Part IV Optical materials and Processing, 4-th International Commission for Optics (ICO) Book "International Trends in Optics and Photonics", T. Asakura (Ed. ICO President), Springer Series in Optical Science, Berlin, Heidelberg, pp. 201-214 (1999), ISSN 0342-4111, ISBN 978-3-662-14212-7, ISBN 978-3-540-48886-6 (e-book)
https://www.springer.com/gb/book/9783662142127

[2] "*Functional nanostructured metal oxide thin films for applications in optical gas detection"*
G. Socol, I. N. Mihailescu, E. Axente, C. Ristoscu, **E. György**, D. Stanoi, S. Grigorescu, L. Escoubas, T. Mazingue
Chapter 13 in Part: Nanoscale thin Films of the book "Functional Properties of Nanostructured Materials"**,** NATO SCIENCE SERIES, SERIES II: MATHEMATICS, PHYSICS AND CHEMISTRY, Springer Verlag, Kassing R; Petkov P; Kulisch W; Popov C (Eds.) Volume: 223 pp. 363-366 (2006), ISBN 978-1-4020-4594-3

https://www.springer.com/gp/book/9781402045936

[3] "*XRD Study of Pulsed Laser Deposited AlN Films with Nanosized Crystallites*",
S. Bakalova, A. Szekeres, A. Cziraki, **E. György**, S. Grigorescu, G. Socol, I.N. Mihailescu in
Chapter 31 in "Functionalized Nanoscale Materials, Devices and Systems", NATO Science Peace and Security Series B: Physics and Biophysics, Springer Verlag, Vaseashta, Mihailescu, I.N. (Eds.) (2008) pp. 357-364, ISBN 978-1-4020-8902-2 (PB), ISBN 978-1-4020-8901-5 (HB), ISBN 978-1-4020-8903 -9 (e-book)
https://www.springer.com/gp/book/9781402089015

[4] *"Biomaterial thin films by soft pulsed laser technologies for biomedical applications"*
I. N. Mihailescu, A. Bigi, **E. György**, C. Ristoscu, F. Sima, E. T. Oner
Chapter 11 in "Lasers in Materials Science" (SLIMS 2012), Spinger Series in Materials Science, vol 191, Eds. P.M. Ossi, M. Castillejo, L. Zhigilei, (2014) pp. 271-294, ISBN 978-3-319-02897-2 (Hardcover), ISBN 978-3-319-02898-9 (e-book)
https://www.springer.com/gp/book/9783319028972

[5] "*Wetting and photoactive properties of laser irradiated zinc oxide – graphene oxide nanocomposite layers*"
A. Datcu, A. Perez del Pino, C. Logofatu, A. Duta, **E. György**
Chapter 13 in "Nanoscience Advances in CBRN Agents Detection, Information and Energy Security" NATO Science for Peace and Security Series A: Chemistry and Biology, Springer Verlag, Volume 39, P. Petkov, D. Tsiulyanu, W. Kulisch, C. Popov (Eds) 2015, pp. 119-125, ISBN 978-94-017-9697-2
https://www.springer.com/gp/book/9789401796965

[6] "*Enzyme-Based Biosensors for Trace Detection*"
E. György and I. N. Mihailescu
Chapter 9 in "Life Cycle Analysis of Nanoparticles: Risk, Assessment, and Sustainability", A. Vaseashta, (Ed.), DEStech Publications Inc., Lancaster, Pennsylvania, USA, 2015, pp. 231-248, ISBN 978-1-60595-023-5
https://www.destechpub.com/product/life-cycle-analysis-of-nanoparticles/

[7] "*MAPLE deposition of nanomaterials*"
E. György and A.P. Caricato
Chapter 6 in "Pulsed Laser Ablation: Advances and Applications in Nanoparticles and Nanostructuring Thin Films", Ion N. Mihailescu, Anna Paola Caricato (Eds.) Pan Stanford Publishing Pte. Ltd**,** 2018, pp. 207-245, ISBN 978-1-315-18523-1 (eBook), ISBN 978-981-4774-23-9 (Hardcover)
https://www.crcpress.com/Pulsed-Laser-Ablation-Advances-and-Applications-in-Nanoparticles-and-Nanostructuring/Mihailescu-Caricato/p/book/9789814774239

[8] "*Laser processing of graphene oxide / transition metal oxide nanocomposite coatings*"
E. György, A. Perez del Pino, C. Logofatu, A. Duta
Chapter 2 in "Graphene Oxide: Advances in Research and Application" Nova Science Publishers, Inc., A. K. Mishra (Ed.), 2018, pp. 11-36, ISBN: 978-1-53614-168-9
https://novapublishers.com/shop/graphene-oxide-advances-in-research-and-applications/