



Curriculum vitae Europass



Informații personale

Nume / Prenume **Duma Virgil-Florin**
Adrese Universitatea "Aurel Vlaicu" din Arad
Facultea de Inginerie
Bv. Revolutiei 77, Arad 310130, Romania
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E-mail duma.virgil@osamember.org
Naționalitate română
Data nașterii 4 Iulie 1967
Sex masculin

Site: <http://3om-group-optomechatronics.ro/>

Locul de muncă / Domeniul ocupațional

Profesor universitar Dr.-habil. inginer
Învățământ superior și cercetare științifică (plus management în învățământul superior și în cercetare)

Experiența profesională

Perioada	2014 - Prezent
Funcția sau postul ocupat	Profesor asociat
Activități și responsabilități principale	Predare ore Master (în limba engleză); coordonare dizertații de Master;
Numele si adresa angajatorului	Univ. de Vest Timisoara, România
Tipul activitatii sau Sector de activitate	Facultatea de Fizică
Perioada	2014 - Prezent
Funcția sau postul ocupat	Profesor asociat
Activități și responsabilități principale	Conducere doctorat (http://www.upt.ro/img/files/2014-2015/admitere/doctorat/oferte/Oferta_doctorala_2015-DUMA.pdf)
Numele si adresa angajatorului	Univ. "Politehnica" Timisoara, România
Tipul activitatii sau Sector de activitate	Școala Doctorală
Perioada	2014 – Prezent
Funcția sau postul ocupat	SPIE Visiting Lecturer
Numele si adresa angajatorului	Intl Society for Optics and Photonics, Bellingham, WA, USA (SPIE), http://spie.org/x109325.xml
Perioada	2013 - Prezent
Funcția sau postul ocupat	Visiting Scientist , The Institute of Optics, Univ. of Rochester, NY, SUA (#1 in Optics in SUA) http://www.odalab-spectrum.org/Rochester/People.html
Perioada	2012
Funcția sau postul ocupat	Consilier ministerial
Perioada	2009-2010
Funcția sau postul ocupat	Senior Fulbright Research Fellow

Activități și responsabilități principale	Cercetare științifică (Predare – în secundar)
Numele și adresa angajatorului	US Dept. of State – Grant, The Institute of Optics, <i>Univ. of Rochester</i> , NY, SUA (#1 in Optics in SUA)
Tipul activității sau Sector de activitate	Cercetare științifică în Optomecatronică și Optică Biomedicală-OCT (Optical Coherence Tomography)
Perioada	2009 - Prezent
Funcția sau postul ocupat	Visiting Senior Research Fellow și membru al Elliot College
Activități și responsabilități principale	Cercetare științifică
Numele și adresa angajatorului	School of Physical Sciences (Applied Optics Group), <i>University of Kent, Canterbury</i> (UK) http://www.kent.ac.uk/physical-sciences/research/aog/
Tipul activității sau Sector de activitate	Cercetare științifică - Applied Optics și OCT (Optical Coherence Tomography)
Perioada	2006 - Prezent
Funcția sau postul ocupat	Profesor universitar
Activități și responsabilități principale	Cursuri, seminarii, lucrări de laborator, coordonare lucrări de diplomă; Cercetare științifică, conducere Proiecte de cercetare naționale și internaționale
Numele și adresa angajatorului	Dept. Design de Produs (DP) & AAMR, Facultatea de Inginerie, Univ. "Aurel Vlaicu" din Arad, Romania
Tipul activității sau Sector de activitate	Cursuri, seminarii și lucrări de laborator la Mecanisme, Instrumentație [optoelectronică], Ingineria calității, Inginerie biomedicală, Periferice de calculator, Management în inginerie industrială; Sisteme de calitate - Master Cercetare științifică (inclusiv management granturi științifice), coordonare proiecte de diplomă; Invățământ superior
Perioada	2002 - 2006
Funcția sau postul ocupat	Conferențiar universitar
Activități și responsabilități principale	Cursuri, seminarii, lucrări de laborator, coordonare lucrări de diplomă; Cercetare științifică
Numele și adresa angajatorului	Catedra DP & AAMR, Facultatea de Inginerie, Univ. "Aurel Vlaicu" din Arad, Romania
Tipul activității sau Sector de activitate	Cursuri, seminarii și lucrări de laborator la Mecanisme și Sisteme mecanice [de măsurare], Cercetare științifică (inclusiv management granturi științifice), conducere proiecte de diplomă; coordonare practică productivă, decan de an; Invățământ superior
Perioada	1999 - 2002
Funcția sau postul ocupat	Șef de lucrări
Activități și responsabilități principale	Cursuri, seminarii, lucrări de laborator, coordonare lucrări de diplomă; Cercetare științifică
Numele și adresa angajatorului	Catedra DP & AAMR, Facultatea de Inginerie, Univ. "Aurel Vlaicu" din Arad, Romania
Tipul activității sau Sector de activitate	Cursuri, seminarii și lucrări de laborator la Mecanisme; Cercetare științifică; coordonare practică productivă; Invățământ superior
Perioada	1997 - 2001
Funcția sau postul ocupat	Șef de lucrări
Activități și responsabilități principale	Cursuri, seminarii, lucrări de laborator, proiecte; Cercetare științifică
Numele și adresa angajatorului	Catedra de Organe de Mașini și Mecanisme, Facultatea de Mecanică, Univ. "Politehnica" din Timișoara
Tipul activității sau Sector de activitate	Cursuri, seminarii și lucrări de laborator la Mecanisme, Aparate de măsură și control; Cercetare științifică, conducere proiecte de diplomă, coordonare practică productivă; Invățământ superior
Perioada	1994 - 1997
Funcția sau postul ocupat	Asistent universitar
Activități și responsabilități principale	Seminarii, lucrări de laborator, proiecte; Cercetare științifică
Numele și adresa angajatorului	Catedra de Organe de Mașini și Mecanisme, Facultatea de Mecanică, Univ. "Politehnica" Timișoara
Tipul activității sau Sector de activitate	Seminarii, lucrări de laborator și proiecte la Aparate și sisteme de măsurare, Calculul și construcția aparaturilor optice; Cercetare științifică, conducere proiecte de diplomă, coordonare practică Invățământ superior
Perioada	1991 - 1994
Funcția sau postul ocupat	Preparator universitar



Activități și responsabilități principale Seminarii, lucrări de laborator, proiecte; Cercetare științifică
 Numele și adresa angajatorului Catedra de Organe de Mașini și Mecanisme, Facultatea de Mecanică, Univ. "Politehnica" Timișoara
 Tipul activității sau Sector de activitate Cursuri, seminarii și lucrări de laborator la Aparate și sisteme de măsurare, Calculul și construcția aparatelor optice, Optică tehnică, Aparate spectro-fotometrice; Cercetare științifică, coordonare practică productivă; Invățământ superior

Educație și formare

Perioada **2013**
 Calificarea / diploma obținută **Abilitare / Conducere doctorat – domeniul Inginerie mecanică, mecatronică și robotică**
 Disciplinele principale studiate / Titlul tezei de abilitare:
 competențe profesionale dobândite "Optomechatronic Modulators: Choppers, Attenuators and Scanners. Analysis and Design"
 Președinte Comisie de abilitare: Acad. Dr. Fiz. Valentin Vlad (Președinte Academia Română);
 Membrii: Prof. N. Puscas (UPB), Prof. J.P. Huignard (Institute Lavoisier, France), Dr. G. Perrone (Univ. Torino, Italy).
 Numele și tipul instituției de învățământ Univ. "Politehnica" din București, România
 Perioada **1994 - 2001**
 Calificarea / diploma obținută **Doctor în Științe Inginerești**
 Disciplinele principale studiate / Titlul tezei de doctorat: "Contribuții la analiza și sinteza sistemelor de scanare",
 competențe profesionale dobândite coordonator științific Prof. Dr. ing. Dan Perju
 Numele și tipul instituției de învățământ Univ. "Politehnica" din Timișoara, Facultatea de Mecanică, România
 Nivelul în clasificarea națională sau Nivel superior, **calificativul cum laude**
 internațională
 Perioada **1986-1991**
 Calificarea / diploma obținută **Inginer diplomat** (1985-1986 efectuat stagiul militar, Termen redus)
 Disciplinele principale studiate / Mecanică fină și optică
 competențe profesionale dobândite Media generală 9,84, cu nota 10 la lucrarea de diplomă: "Colorimetru tricromatic cu sinteză mixtă",
 coordonator științific Prof. Dr. Fiz. Ioan Mihalca
 Numele și tipul instituției de învățământ Univ. "Politehnica" din Timișoara, România, Facultatea de Mecanică
 Nivelul în clasificarea națională sau Nivel superior, **șef de promoție** (din aprox. 140 studenți)
 internațională
 Premii **Olimpiadele studențești Traian Lalescu:**
1989 (anul 3) **National: premiul special - Mecanica fluidelor; local: premiul 1 - Mecanica fluidelor,**
 premiul 1 - Electrotehnică;
1988 (anul 2) **National: premiul 1 – Fizică (electromagnetism, optică, mecanică cuantică);**
 premiul **special - Matematică; local: premiul 1 - Matematică, premiul 1 - Fizică;**
1987 (anul 1) **National: premiul 3 – Fizică (mecanică & termodinamică);**
 local (Centrul Universitar Timișoara): premiul 1 - Fizică, mențiune - Engleză; Premiul special comunicări
 științifice studențești - Matematică;
 Perioada **1981 - 1985**
 Calificarea / diploma obținută Diploma de Bacalaureat, **medie bacalaureat 9,66 (prima medie pe liceu)**
 Numele și tipul instituției de învățământ Liceul de Matematică-Fizică "Ioan Slavici" Arad, România
 (în prezent Colegiul Național „Moise Nicoară” Arad)
 Premii Premiul 2 Olimpiada de Fizică, jud. Arad, 1982.

Aptitudini și competențe personale

Limba maternă **Română**
 Limbi străine cunoscute **1994 TOEFL Exam – Lb. Engleză: Score 627 din 640**

Autoevaluare	Înțelegere		Vorbire		Scriere
	Ascultare	Citire	Conversație	Discurs oral	Exprimare scrisă
Nivel european (*)					
Engleză	C2	C2	C2	C2	C2
Franceză	C2	C2	C1	C1	C1

(*) [Nivelul Cadrelor Europene Comune de Referință Pentru Limbi Străine](#)



Competențe și abilități sociale **Management echipe de cercetare de peste 30 de persoane** (36 de cercetători angajați în Proiectul Parteneriate 2012-2016, <http://3om-group-optomechatronics.ro/>);
Coordonarea activității științifice instituțional - **Secretar Științific catedră** (2004-2006) și **Facultate de Inginerie** (2008-2011); **Director Centru de cercetare în Inginerie Mecanică** (UAV Arad) – din 2013;
Coordonarea activității studenților la cercurile științifice și la proiectele de diplomă. Mentorat.

Prelegeri invitate la Universități internaționale și Simpozioane științifice:

Duma V.-F., Scanning systems: from industrial to high-end biomedical applications (SPIE Invited Lecture – at *Optics & Photonics Applications (OPA) Conference*), *Univ. of Guanajuato*, Salamanca (Mexico), Sept. 2, **2015**; http://spie.org/StudentChapterReports/Guanajuato_Report_201509.pdf

Duma V.-F., Biomedical imaging using Optical Coherence Tomography. Devices, systems, and applications (Invited Lecture), *BioRemed International Conference*, Oradea (Romania), Sept. 19, **2015**; <http://bioremed2015.srb.ro/7/programme>

Duma V.-F., Handheld scanning probes for OCT: Developments, applications and perspectives, *World Federation of Lasers in Dentistry – European Division (WFLD-ED) 5th Congress & SRLS-SPIE 6th Intl Conference Lasers in Medicine [ISI]*, Timisoara (Romania), May 8, **2015**, published in *Proc. SPIE*, Todea C., Podoleanu A., Duma V.-F., Eds.;

Duma V.-F., Handheld Probes and Galvoscaning in OCT. On-going Industrial and Biomedical Applications (Invited Seminar), School of Physical Sciences (Applied Optics Group), *Univ. of Kent, Canterbury* (UK), Feb. 20, **2015**;

Duma V.-F., Biomedical Imaging and Optical Coherence Tomography: Scanning Systems and Applications (Invited Presentation), *Academic Days of the Victor Babes Univ. of Medicine and Pharmacy of Timisoara* (Romania), Dec. 12, **2014**;

Duma V.-F., Scanning in Optical Coherence Tomography (Invited Lecture), *National Univ. of Ireland (NUI) at Galway* (Ireland), Nov. 24, **2014**; http://tomi.nuigalway.ie/SPIE_NUIG_UL/spie_events.html

Duma V.-F., Renewable Energies – Two Projects and a Global Perspective (Invited Presentation), BHB–Sustainable development business center HURO/1101/175/2.1.1, *Romania-Hungary 2007-2013 Program of Trans-frontiers Cooperation* (www.huro-cbc.eu), Arad (Romania), Apr. 11, **2014**

Duma V.-F., 1-D and 2-D Scanning Systems in Biomedical Imaging (Invited Seminar), at the School of Physical Sciences (Applied Optics Group), *Univ. of Kent, Canterbury* (UK), Nov. 7, **2013**;

Duma V.-F., Scanning in biomedical imaging: from classical devices to handheld heads and micro-systems, *SRLS-SPIE 5th Intl Conference Lasers in Medicine [ISI]*, Timisoara (Romania), Sept. 19-21, **2013**, published in *Proc. SPIE*, Todea C., Podoleanu A., Duma V.-F., Eds.; <http://dx.doi.org/10.1117/12.2042733>

Duma V.-F., Galvanometer-based Scanners in Optical Coherence Tomography (OCT) (Invited Seminar), *City Univ. of New York* (USA), Febr. 14, **2013**;

Duma V.-F., Optical Engineering: Scanners, Choppers, Lenses, and Much More. A Mathematical Approach (3 Invited Lectures, Fulbright OLP), *Ana G. Mendez University System (AGMUS): Univ. Metropolitana, Univ. del Este*, and *Univ. Turabo*, San Juan (Puerto Rico, USA), March 19-22, **2010**;

Duma V.-F., Optical Scanners in Medical Imaging. An Optomechanical Perspective (Invited Seminar, Fulbright OLP - Occasional Lecturer Program), *City University of New York* (USA), April 15, **2010**;

Duma V.-F., Optical scanners (Invited Lecture - for PhD Students), *The Institute of Optics, University of Rochester* (NY, USA), Mar. 03, **2010**;

Duma V.-F., Invited Presentations (Tutorials), *Hopkins Center for Optical Metrology, Institute of Optics, University of Rochester*, Rochester (NY, USA): 1) Applications and types of scanners (Nov. 03, **2009**); 2) Scanners – fundamentals (Nov. 17, **2009**); 3) Constructive characteristics of scanners (Dec. 01, **2009**); 4) Perspectives of optical scanning in OCT (Jan. 20, **2010**);

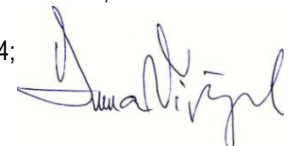
Duma V.-F., Mathematical functions of a 2-D scanner with oscillating elements, *9th Conference on Dynamic Systems Theory and Applications*, Łódź (Poland), Dec. 17-20, **2007** (Invited Paper); published as chapter in Springer; doi.org/10.1007/978-1-4020-8778-3_22;

Duma V.-F., Kaposta I., Tusz F., Achievement of the South-West Axis in Industrial Robots, Arad zone, of the EUROP-RO Technology Platform, *2nd EUROP-RO Symposium*, Bucharest (Romania), April 26, **2007**, CD-ROM (Plenary Presentation), <http://www.europ-ro.ro/v1/ro/documente/58>;

Duma V.-F., Contributions on the Design of the Optical Systems (Laser Scanning Devices) (Invited Presentation), Dept. of Physics, *Jacobs University of Bremen*, Bremen (Germany), Oct. **2004**;



Competențe și aptitudini organizatorice	Sef și fondator 3OM Research Group (in Opto-Mechatronics, Optical Metrology, and Optical Materials), http://3om-group-optomechanics.ro/ - si al Laboratorului de Opto-Mecatronica și de Fotonică Biomedicală la <i>Aurel Vlaicu Univ. of Arad</i> – din 2008, Secretar științific Facultatea de Inginerie (2008-2011), Secretar științific catedră (2004-2006). Organizator al Secțiunii de Inginerie a Simpozionului „Research and Education in the Innovation Era,” Arad; 2008, 2010 - editor al cărții de Proceedings. Organizator al Sesiunilor anuale de comunicări științifice studențești Inginerie UAVA (2008, 2009, 2011). Sef al Laboratorului de Mecanisme la <i>Aurel Vlaicu Univ. of Arad</i> – din 1999.
Competențe și aptitudini tehnice	Managementul proiectelor de cercetare științifică; Membru și Director în peste 16 granturi de cercetare câștigate prin competiție. Director Proiecte IDEI, PARTENERIATE, FULBRIGHT, elaborare brevete.
Competențe și aptitudini de utilizare a calculatorului	Utilizator calculator și internet; Competențe de modelare și simulare în programe specializate
Rezultate obținute în cercetarea științifică	http://www.researcherid.com/rid/B-3031-2010 Scopus Author ID 9839230700
Publicații	188 lucrări științifice publicate (62 ca unic autor, 47 ca prim, 79 ca și co-autor): 16 în reviste ISI cu factor de impact; 51 in alte reviste cu peer-review; 59 în proceedings indexate ISI sau BDI; 62 în proceedings-urile altor conferințe. 1 brevet național – OSIM (avizat, în curs de publicare) 2 cereri de brevet național – OSIM.
Cărți	3 capitole in cărți internationale (Springer); 2 cursuri universitare (co-autor); 2 monografii științifice (unic autor); 3 îndrumare de laborator (co-autor); 6 cărți ca editor (2 îndrumare de laborator, 4 Proceedings);
Citări in reviste ISI	<i>Scientific Reports – Nature Group</i> (IF>5), <i>Optics Express</i> (IF>3.4), <i>Biomedical Optics Express</i> (IF>3.4), <i>Physics in Medicine and Biology</i> (IF>3), <i>Applied Optics</i> (IF>1.5), <i>J of Optics</i> (IF>2), <i>Optics & Laser Technology</i> (IF>1.5), <i>Revista de Chimie</i> (IF>0.5), <i>Materiale Plastice</i> , <i>J. Opt. Soc. Am. A</i> (IF>1.5), <i>J Multimedia Tools and Applications</i> (IF>1), <i>Control Engineering Practice</i> (IF≈1.8), <i>Lasers in Surgery and Medicine</i> (IF>2.5), <i>Applied Science</i> (IF>1.3), <i>J. Micro/Nanolith. MEMS MOEMS</i> (IF>1)
Citări in alte reviste, conferinte, etc	<i>Chinese J. of Optics and Applied Optics</i> , <i>Brazilian Journal of Instrumentation and Control</i> , <i>Proceedings of SPIE</i> , <i>Proceedings of IEEE</i> , <i>dizertatii de Master si teze de doctorat</i> , etc. - v. <i>Google Academic</i>
Indicatori bibliometrici personali	Indicele Hirsch 11 , suma citărilor în ISI Web of Science (fără autocitări): 53; în Google Academic (fără autocitări): 89 http://scholar.google.ro/citations?hl=ro&user=gBRLlfcAAAAJ&view_op=list_works http://orcid.org/0000-0001-5558-4777 Conform criteriile MECTS 2011, domeniul inginerie mecanică, mecatronică și robotică, respectiv inginerie electrică, sunt îndeplinite condițiile pentru Profesor universitar abilitat / conducător de doctorat – cf. LEN 1/2011: I > 5, P > 6, C > 5
Membru în colectivul de redacție al unei reviste științifice	Editor-in-Chief (si fondator) , <i>Scientific and Technical Bulletin of the Aurel Vlaicu Univ. of Arad, Series: Mechanical Engineering</i> , www.uavsb.xhost.ro , nationally recognized by the Romanian CNCS / NURC (National University Research Council) since 2006;
Conducere societăți științifice internaționale/naționale	Vice-președinte si reprezentant al UAV Arad in EUROP-RO , filială a European Robotics Platform EUROP – din 2006; Presedinte filiala Arad a SRR (Romanian Robotics Society)
Membru în societăți științifice internaționale/naționale	Senior Member SPIE (International Society for Optical Engineering, USA) – din 2011, membru din 2005 Life Member , Fulbright Association, USA – din 2012, OSA (Optical Society of America, USA) – din 2007 – Life Member din 2014; European Technology Platform Photonics21 – din 2006.



Referent științific la reviste ISI / internaționale / naționale *Optics Express* (IF>3.4), *Biomedical Optics Express* (IF>3.4), *Optics Letters* (IF>3.4), *J. Opt. Soc. Am. A* (IF>2), and *Applied Optics* (IF>1.7) - Journals of OSA (Optical Society of America) 5-7 reviews/year; www.osa.org, din 2007;
Acta Mechanica Sinica (IF≈0.7) <http://www.springer.com/materials/mechanics/journal/10409>, din 2010;
Advances in Optical Technologies, <http://www.hindawi.com/journals/aot/>, since 2011;
Differential Eqs and Dynamic Systems; <http://www.springer.com/mathematics/journal/12591>, din 2012;
Latin American Journal of Solids and Structures (IF>1); <http://www.lajss.org/>, din 2012;
Theoretical & Applied Mechanics Letters; <http://taml.aip.org/>, din 2012;
J of Zhejiang University SCIENCE A (IF≈0.5), <http://link.springer.com/journal/11582>, din 2012;
J of Engineering in Medicine (IF>1), <http://jih.sagepub.com/>, din 2014;
IEEE Transactions on Industrial Electronics (IF>5), <http://vps.ieee-ies.org/pubs/ieee-transactions-on-industrial-electronics>, din 2015;
J of Adhesion Science and Technology, SAGE (IF≈1), www.tandfonline.com/, din 2015;
J of Medical Devices, ASME (IF>0.5), <http://medicaldevices.asmedigitalcollection.asme.org/>, din 2015;
J of Optics, IOP (UK) (IF>2), <http://iopscience.iop.org/2040-8986>, din 2015;
Optics Communications (IF≈1.5), <http://www.journals.elsevier.com/optics-communications/>, din 2015;
Lasers in Surgery & Medicine (IF>2.5), <http://onlinelibrary.wiley.com/journal/10.1002/%28ISSN%291096-9101>, din 2015;
IEEE/ASME Transactions on Mechatronics (IF≈3.5), <http://ieee-asme-mechatronics.org/>, din 2015;
Mechatronics (IF≈1.7), <http://www.journals.elsevier.com/mechatronics>, din 2015;
Control Engineering Practice (IF≈1.8), <http://www.journals.elsevier.com/control-engineering-practice/>, din 2015;
Phase Transitions (Taylor & Francis) (IF≈1), din 2016

Evaluator Proiecte de cercetare științifice (<http://www.tandfonline.com/action/journalInformation?journalCode=gphl20#.VuZ2ltAtHrY>);
Since 2013: **Reviewer** of Grants of the Foundation for Polish Science; 1 Proposal evaluated, Dec. 2013;
Since 2010: **Reviewer** of Fulbright Grants of the US Department of State; 10 Proposals evaluated: Dec. 2010, Apr., Nov. 2011, Nov. 2012, Nov. 2013, Dec. 2014, Dec. 2015;
Since 2008: **Reviewer** of Grants with European Union Funding (POS); Proposals evaluated: 16 (May and Sept. 2009); 6 (Nov. 2010); 9 (Jan. 2011), 8 (Aug. 2012), 5 (Apr. 2013); 5 (Nov. 2015);
Since 2007: **Reviewer** of Grants of the Romanian R&D Plan; Proposals evaluated: 30 (July 2007), 13 (March 2008), 4 (May 2010), 8 (Nov. 2011), 3 (Feb. 2014), 1 (Dec. 2014), 15 (May 2015);

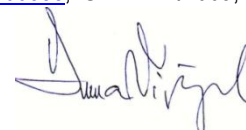
Organizare conferințe științifice

Chair, Editor - SPIE Proceedings [ISI], **Member - Scientific Committee**, Organizing Committee, reviewer, and **Chairman** of Session - SPIE 5th Congress of the World Federation of Lasers in Dentistry-European Division (WFLD-ED) & 6th SRLS Intl. Conference Lasers in Medicine (ICLM) (<http://wflid-bucharest2015.wix.com/romania>), Bucharest (Romania) 2015;
Chair, Editor - SPIE Proceedings [ISI], **Member - Scientific Committee**, Organizing Committee, **Chairman** of Session-SRLS 5th Intl Conference Lasers in Medicine (ICLM), Timisoara (Romania) 2013;
Chairman of Session "Applications in high-tech products," 11th IFToMM Intl Symposium on the Theory of Machines and Mechanisms – SYROM (<http://arotmm.ro/syrom2013/>), Brasov (Romania) 2013 [ISI];
Chairman of Session XXIX (BIO): RIAO-OPTILAS (VIII Iberoamerican Conf. Opt. & XI Latinamerican Meeting on Opt., Lasers and Applications) – SPIE [ISI], <http://riao.samura.pt/>, Porto (Portugal) 2013;
Member of the Scientific Committee, **Chairman** of Session, and reviewer, 13th Intl. Conf. on Dynamic Systems Theory and Applications (DSTA), Lodz (Poland), 2015 (<http://www.dys-ta.com/>); 12th DSTA, 2013; 11th DSTA, 2011; 10th DSTA, 2007;
Chairman of Session: Optics in Precision Mechanics and Mechatronics, 8th Intl. Conference on Mechatronics and Fine Mechanics (COMEFIM), Cluj-Napoca (Romania), June 8-10, 2006;
Member, Organizing Committees & reviewer of the Proc. of ISREIE (Aurel Vlaicu Univ.), Arad (Romania), 2000, 2002, 2004, 2006, 2008, 2010; **Editor** of the Engineering Proceedings, 2008, 2010;



- Cărți și capitole din cărți publicate - semnificative
- B15. Todea C., Podoleanu A. Gh., and **Duma V.-F.** (Eds.), *Proceedings of SPIE [ISI]*, Vol. 9670 - PROGRESS IN BIOMEDICAL OPTICS AND IMAGING, 5th Congress of the World Federation of Lasers in Dentistry-European Division (WFLD-ED) & 6th Intl Conference on Lasers in Medicine, Bucharest (Romania), May 7-9, **2015** (SPIE Press, Bellingham, WA, USA), ISSN 0277-786X, 37 papers - in print;
- B.14. Todea C., Podoleanu A. Gh., and **Duma V.-F.** (Eds.), *Proceedings of SPIE [ISI]*, Vol. 8925 - PROGRESS IN BIOMEDICAL OPTICS AND IMAGING 15(44), 5th Intl Conference on Lasers in Medicine: Biotechnologies Integrated in Daily Medicine, Timisoara (Romania), Sept. 19-21, 2013 (SPIE Press, Bellingham, WA, USA, **2014**), ISSN 0277-786X, ISBN 978-0-8194-9817-5, 264 pages; 33 papers; <http://spie.org/Publications/Proceedings/Volume/8925> (ISI Accession Number: WOS:000333186500001);
- B.13. **Duma V.-F.***, Nicolov M. F., Kiss M., Ilca T., Mnerie C., Demian D. and Szantho L., Choppers: Optomechatronic Devices for the Controlled Modulation of Light, in *Mechanisms, Transmissions and Applications*, Mechanisms and Machine Science, Vol. 3, Lovasz E.C., Corves B., Eds., **2011**, Springer, ISSN 2211-0984, ISBN 978-94-007-2726-7, pp. 129-134, <http://dx.doi.org/10.1007/978-94-007-2727-4>;
- B.12. **Duma V.-F.***, Rolland J.P., Mechanical Constraints and Design Considerations for Polygon Scanners, in *New Trends in Mechanism Science: Analysis and Design*, Mechanisms and Machine Science, Vol. 5, Part 8, Pislă D., Ceccarelli M., Husty M., Corves B., Eds., **2010**, Springer, Berlin, Heidelberg, ISBN 978-90-481-9688-3, pp. 475-483, http://dx.doi.org/10.1007/978-90-481-9689-0_55;
- B.11. **Duma V.-F.**, Teaching Mechanisms: from Classical to Hands-on-Experiments and Research-Oriented, in *New Trends in Mechanism Science: Analysis and Design*, Mechanisms and Machine Science, Vol. 5, Part 8, Pislă D., Ceccarelli M., Husty M., Corves B., Eds., **2010**, Springer, Berlin, Heidelberg, ISBN 978-90-481-9688-3, pp. 493-501, http://dx.doi.org/10.1007/978-90-481-9689-0_57;
- B.10. **Duma V.-F.** (Ed.), *Proceedings of the 3rd International Symposium: Research and Education in an Innovation Era, Engineering Sciences*, Arad, Nov. 10-12, **2010**, ISSN 20652569;
- B.9. **Duma V.-F.** (Ed.), *Proceedings of the 2nd International Symposium: Research and Education in an Innovation Era, Engineering Sciences*, Arad, Nov. 20-22, **2008**, ISSN 20652569, 502 pages;
- B.8. **Duma V.-F.** (Ed.), *Tools, Devices, and Control Apparatuses. Experimental Topics* (in Romanian), Aurel Vlaicu Univ. Publishing House, Arad, **2008**, ISBN 978-973-752-283-2, 194 pages;
- B.7. Perju D., Ianosi E., Mateas M., **Duma V.-F.**, *Measuring Apparatuses and Systems. Experimental Works* (in Romanian), Politehnica, Timisoara, **2005**, ISBN 973-625-194-2, 267 pages.
- B.6. **Duma V.-F.**, *Scanning* (in Romanian), Politehnica, Timisoara, **2004**, ISBN 973-625-191-8, 190 pag.
- B.5. **Duma V.-F.**, *Vignetting* (in Romanian), Politehnica, Timisoara, **2004**, ISBN 973-625-154-3, 124 pag.
- B.4. Perju D., Davidescu A., Mateas M., **Duma V.-F.**, *Measurement and Control Apparatuses. Metrology* (in Romanian), University Horizons, Timisoara, **2001**, ISBN 973-8109-60-4, 106 pages;
- B.3. Nicoara I., Gruescu C., Atitoaie V., **Duma V.-F.**, *Optical Apparatuses, Vol. I* (in Romanian), University Horizons, Timisoara, **2000**, ISBN 973-944-96-5, 248 pages;
- B.2. Nicoara I., **Duma V.-F.** (Eds.), *Optical Apparatuses. Experimental Topics* (in Romanian), Mirton, Timisoara, **1996**, ISBN 973-578-134-4, 224 pages;
- B.1. Pommersheim A., Varga St., Gruescu C., Zsivanov D., **Duma V.-F.**, *Technical Optics. Laboratory Works* (in Romanian), Politehnica Univ. Publishing House, Timisoara, **1995**, 101 pages;

16. Craciunescu E., Sinescu C.*, Negrutiu M. L., Pop D. M., Lauer H.-C., Rominu M., Hutiu Gh., Bunoiu M., **Duma V.-F.***, Antoniac I., Shear Bond Strength Tests of Zirconia Veneering Ceramics after Chipping Repair, *J of Adhesion Science and Technology* **30**(6), 666-676 (2016); ISSN 0169-4243; **ISI IF 0.961/2014**; <http://dx.doi.org/10.1080/01694243.2015.1117304>
15. **Duma V.-F.***, Dobre G., Demian D., Cernat R., Sinescu C., Topala F. I., Negrutiu M. L., Hutiu Gh., Bradu A., and Podoleanu A. Gh., Handheld scanning probes for optical coherence tomography, *Romanian Reports in Physics* **67**(4), 1346-1358 (2015); ISSN 1221-1451; **ISI IF 1.517/2014**; http://www.rpp.infim.ro/2015_67_4/A14.pdf; **OPEN ACCESS**
14. **Duma V.-F.***, Tankam P., Huang J., Won J. J., and Rolland J. P., Optimization of galvanometer scanning for Optical Coherence Tomography, *Applied Optics* **54**(17), 5495-5507 (2015), ISSN 1559-128X; **ISI IF 1.784/2014 (RIS 1.231/2013)** <http://dx.doi.org/10.1364/AO.54.005495> - also selected & published in *Virtual Journal for Biomedical Optics* **10**(6), ISSN 1931-1532 (2015); **OPEN ACCESS**
13. Canjau S., Todea C., Negrutiu M.L., Sinescu C., Topala F.I., Marcauteanu C., Manescu A., **Duma V.-F.**, Bradu A., and Podoleanu A. Gh., Optical Coherence Tomography for Non-Invasive ex vivo Investigations in Dental Medicine - a Joint Group Experience (Review). *Sovremennye tehnologii v medicine/Modern Technologies in Medicine* **7**(1), 97-115 (2015) <http://dx.doi.org/10.17691/stm2015.7.1.13>; **OPEN ACCESS**
12. Sinescu C., Negrutiu M. L., Bradu A., **Duma V.-F.***, and Podoleanu A. Gh., Noninvasive quantitative evaluation of the dentin layer during dental procedures using Optical Coherence Tomography, *Computational and Mathematical Methods in Medicine*, Paper ID 709076 (2015) ISSN 1748-670X; **ISI IF 0.766/2014**; <http://dx.doi.org/10.1155/2015/709076>; **OPEN ACCESS**
11. Oancea R., Bradu A., Sinescu C.*, Negru R. M., Negrutiu M. L., Antoniac I., **Duma V.-F.**, and Podoleanu A. Gh., Assessment of the sealant/tooth interface using optical coherence tomography, *J of Adhesion Science and Technology* **29**(1), 49-58 (2015); ISSN 0169-4243; **ISI IF 1.153/2013**; <http://dx.doi.org/10.1080/01694243.2014.974879> - all the authors had equal contributions.
10. Hutiu Gh., **Duma V.-F.***, Demian D., Bradu A., and Podoleanu A. Gh., Surface imaging of metallic material fractures using optical coherence tomography, *Applied Optics* **53**(26), 5912-5916 (2014), ISSN 0003-6935 (print), ISSN 1539-4522 (online); **ISI IF 1.649/2013**; <http://dx.doi.org/10.1364/AO.53.005912>; - also selected & published in *Virtual Journal for Biomedical Optics* **9**(11), ISSN 1931-1532 (2014); **OPEN ACCESS**
9. Velea O.-A., Sinescu C.*, Zeicu C., Freiman P. C., Velea P. I., Onisei D., **Duma V.-F.**, Evaluation of periodontal pockets using different biomaterials: a preliminary study, *Revista Chimie / Chemistry Magazine* **65**(9), 1063-1066 (2014), ISSN 0034-7752; **ISI IF 0.677/2013** - all the authors had equal contributions. **OPEN ACCESS**
8. Demian D., **Duma V.-F.***, Sinescu C., Negrutiu M. L., Cernat R., Topala F. I., Hutiu Gh., Bradu A., and Podoleanu A. Gh., Design and testing of prototype handheld scanning probes for optical coherence tomography, *Journal of Engineering in Medicine* **228**(8), 743-753 (2014); ISSN 0954-4119; **ISI IF 1.144/2013**; <http://dx.doi.org/10.1177/0954411914543963>; **OPEN ACCESS**
7. **Duma V.-F.**, Prototypes and modulation functions of classical and novel configurations of optical chopper wheels, *Latin American Journal of Solids and Structures* **10**(1), (2013), ISSN 1679-7817 (print), ISSN 1679-7825 (online); **ISI IF 1.21/2012**; <http://www.lajss.org/index.php/LAJSS/article/view/510/463>
6. **Duma V.-F.***, Lee K.-S., Meemon P., Rolland J. P., Experimental investigations of the scanning functions of galvanometer-based scanners with applications in OCT, *Applied Optics* **50**(29), 5735-5749 (2011), ISSN 0003-6935 (print), ISSN 1539-4522 (online); <http://dx.doi.org/10.1364/AO.50.005735>, **ISI IF 1.748/2011** - also selected & published in *Virtual Journal for Biomedical Optics* **6**(11), ISSN 1931-1532 (2011);
5. **Duma V.-F.**, Optical choppers with circular-shaped windows: Modulation functions, *Communications in Nonlinear Science and Numerical Simulation* **16**(5), 2218-2224 (2011); ISSN 1007-5704; <http://dx.doi.org/10.1016/j.cnsns.2010.04.043>; **ISI IF 2.806/2010**;
4. **Duma V.-F.**, Optimal scanning function of a galvanometer scanner for an increased duty cycle, *Optical Engineering* **49**(10), 103001 (2010); <http://dx.doi.org/10.1117/1.3497570>, ISSN 0091-3286; **ISI IF 0.815/2010**;
3. **Duma V.-F.**, Radiometric versus geometric, linear and non-linear vignetting coefficient, *Applied Optics* **48**(32), 6355-6364 (2009); ISSN 0003-6935, <http://dx.doi.org/10.1364/AO.48.006355>; **ISI IF 1.41/2009**;



2. **Duma V.-F.*** and Nicolov M., Neutral density filters with Risley prisms: analysis and design, *Applied Optics* **48**(14), 2678-2685 (2009); ISSN 0003-6935, <http://dx.doi.org/doi:10.1364/AO.48.002678>, ISI IF **1.41/2009**;

1. **Duma V.-F.**, Theoretical approach on optical choppers for top-hat light beam distributions, *Journal of Optics A: Pure and Applied Optics*, **10**(6), 064008 (2008); <http://iopscience.iop.org/1464-4258/10/6/064008>; ISSN 1464-4258; ISI IF **1.742/2008**.

Brevete de inventie **Duma V.-F.**, Demian D., Optical modulator, has solid rotating shaft with some through slots of well-defined profiles, Romanian Patent number RO129610-A0, Derwent Primary Accession Number: 2014-P50842 (in evaluare);

Duma V.-F., Demian D., Optical modulator with a rotational disk, Romanian Patent Request, OSIM, A01083/28.10.2011 (in evaluare);

Duma V.-F., Nicolov M. F, Mnerie C., Szantho L., Optical modulator with an element in rotation movement, Romanian Patent Request, OSIM, A01263/30.11.2010 (aprobat - in curs de publicare);

Stagii de cercetare
de scurtă durată **1 lună:**

Univ. of Kent, Canterbury (UK): July 17-Aug. 13, **2015**; Aug. 04-Sept. 01, **2013**; July 26-Aug. 28, **2011**;
Univ. of Rochester, N.Y. (USA): May 30-June 26, **2010**;

1-2 săptămâni (Visiting Professor):

Univ. of Kent, Canterbury (UK): Feb. 13-22, **2015**; Feb. 07-21, Aug. 2-20 **2014**; Oct. 27-Nov. 09, **2013**;

Univ. of Rochester, N.Y. (USA): Oct. 8-28, **2015**; July 17-30, **2014**; Feb. 15-28, **2013**;

Univ. of Guanajuato, Salamanca (Mexico), Aug. 31-Sept. 05, **2015**

National Univ. of Ireland (NUI) at Galway (Ireland), Nov. 24-27, **2014**;

City Univ. of New York, N.Y. (USA): Feb. 08-15, **2013**; April 14-20, **2010**;

Ana G. Mendez Univ. System, San Juan (Puerto Rico, USA): Mar. 18-22, **2010**;

RWTH Aachen (Germany): June 25-30, **2007**;

Jacobs Univ. of Bremen (Germany): Oct. 25-30, **2004**;

Burse (Scholarships & Fellowships) **Visiting Senior Research Fellowship**, at the *Univ. of Kent at Canterbury*, Faculty of Science, Technology and Medical Sciences (UK); Host: Prof. Adrian Gh. Podoleanu (Head of the *Applied Optics Group*, <http://www.kent.ac.uk/physical-sciences/research/aog/index.html>), July **2009**-Present;

Fulbright Senior Research Fellowship, awarded by the US Dept. of State, at *The Institute of Optics* (#1 rated in Optics and #4 in Applied Physics in the US), *Univ. of Rochester, N.Y. (USA)*; Host: Prof. Jannick P. Rolland (Brian J. Thomson Chair in Optical Engineering), ODALAB (<http://www.odalab-spectrum.org/Rochester/People.html>), Sept. **2009**-June **2010**;

BEST (Board of European Students of Technology) **Scholarship**, Summer School, *Eindhoven Univ. of Technology*, The Netherlands: Energy in Its Various Aspects; concluded with the team project: Nuclear Plant – Design and Ecological Aspects, July **1991**;

Republican Merit Scholarship for outstanding results, highest student award in Romania, from the Romanian state (**1990-1991**).



Granturi și proiecte naționale și
internaționale

1. **Director (PI), PARTNERSHIP Grant** code PN-II-PT-PCCA-2011-3.2-1682 (contract 22/2012), Romanian National Authority for Scientific Research, CNDI-UEFISCDI: *Optical Coherence Tomography (OCT) systems with handheld and endoscope probes for real-time investigations in material studies and for in vivo medical imaging (~950k€)*, **2012-2016**; <http://3om-group-optomechatronics.ro/> **14 journal papers in ISI Web of Science, ΣIF=26.016**
2. **Consultant** (Expert-Coordinator of the Mechatronics and Mechanical Engineering Domain of the Univ.), **POSDRU /5/1.5/S/2** (EU funding)-UEFISCDI Project: *Doctorate in Schools of Excellence – Evaluation of the Quality in Universities and the Increase of Visibility by Scientific Publishing*, **2009-2011**;
3. **Director (PI), Fulbright Senior Research Grant** 474/July 1, 2009, in Optical Engineering (from the US Department of State): *Scanning in Swept Source Optical Coherence Tomography (OCT)*, at The Institute of Optics, Univ. of Rochester, N.Y. (USA); Host: Prof. J.P. Rolland, Sept. **2009**-June **2010** (\$26,450); **1 journal paper in ISI Web of Science, IF=1.748**
4. **Researcher, NYSTAR** (New York Science and Technology Association for Research) Award 054048-002, PI Prof. Jannick P. Rolland, University of Rochester, N.Y. (USA), **2010** (support of \$6,300);
5. **Consultant** (Expert in Education), **POSDRU 2/1.2/S/3** (EU Funding)-UEFISCDI Project, code 2684: *Quality and Leadership for Romanian High Education System (QLHE)* (www.edu2025.ro), **2009-2011**;
6. **Director (PI), IDEAS Grant, NURC/CNCS** (National University Research Council) code 1896/2008 (contract 631/2009), Romanian Education and Research Ministry: *Analysis and design of some polygonal and galvanometer-based, 1D and 2D scanners*, **2009-2011** (100,000€); **5 journal papers in ISI Web of Science, ΣIF=9.931**
7. **Consultant** (Expert in Mechatronics and Robotics), **POSDRU 2/1.2/S/2** (EU Funding)-UEFISCDI: *Development of an operational system of professional qualifications in Romania (DOCIS)*, **2009-2011**;
8. **Co-PI, Erasmus Program**, RWTH Aachen (IGM) - Aurel Vlaicu University of Arad, **2007-2013**;
9. **Researcher, PN II PARTNERSHIPS Grant** 41-084/2007, Romanian Education and Research Ministry: *Use of genetic markers for establishing optimal therapies for laryngeal and oropharyngeal human cancer*, University of Bucharest, **2007-2010** (600,000€);
10. **Consultant** (Expert in Robotics), **CARE** (Coordinated Action for Robotics in Europe), **FP 6** Program of the European Commission, EU (participation at CARE Consensus Meetings: Stuttgart, May 2008; Pisa, Oct. **2008**, for the elaboration of SRA 2008-2020 – Strategic Research Agenda for Robotics in Europe);
11. **Researcher, Balkan Environmental Association (B.E.N.A.)-COSMOTE Grant** 1428/2007, *Remote, computer assisted command and optimize of the use of a solar installation for greenhouses and small consumers*, **2007** (750€);
12. **Researcher, CEEX Grant** 126/01.08.06, Romanian Education and Research Ministry: *EUROP_RO Technology Platform (European Robotics Platform, Romanian branch)*, PI Prof. Adrian Nicolescu, Politehnica Univ. of Bucharest, **2006-2008** (60,000€);
13. **Director (PI), 3 Research Contracts** (Romanian companies), through Aurel Vlaicu Univ., **2004-2005** (2,000€);
14. **Director (PI), AT (Young Researchers) Grant**, NURC (National University Research Council) code 385: *Development of Some New Scanning Equipments*, **2003-2004** (3,500€); **2 books (monographs) published in 2014**
15. **Researcher, Leonardo da Vinci Program** of the European Union, Timkars Project, for conceiving the courses in Precision Mechanics & Optics (simultaneously published in Germany and in Romania); co-author of the book: *Measuring and Control Apparatuses. Metrology*, **2000 – 2001** (225,000€);
16. **Researcher, Program Ro-4096** with the Word Bank, and **D Grant**, CNCS/NURC (National University Research Council), code 57: *Methods and means for improvement performances of the equipments for precision mechanics and quality control*, PI Prof. Dan Perju, Politehnica University of Timisoara, **1998 – 2002** (\$30,000). **PhD Thesis defended Sept. 2001**



GRANTURI PENTRU PARTICIPARE LA CONFERINȚE

17. **Director / Principal Investigator (PI)**, Support from the Hungarian Academy of Sciences, to participate at the Word Science Forum (<http://www.sciforum.hu/>), as representative of Romania in the Fulbright Alumni delegation, Budapest (Hungary), Nov. **2015** (~300€);
18. **PI, SPIE Lecturer Program Grant**, from SPIE (The Intl Society for Optics and Photonics, USA) and support from the Univ. of Guanajuato for lecturing at this university (Mexico), Sept. **2015** (~\$1,4k);
19. **PI, SPIE Lecturer Program Grant**, from SPIE (The Intl Society for Optical Engineering, USA) for lecturing at the National Univ. of Ireland (NUI) at Galway (Ireland), Nov. **2014** (600€);
20. **PI**, Support from the Brazilian Academy of Sciences and from the Fulbright Association, to participate at the Word Science Forum (<http://www.sciforum.hu/index.html>), as representative of Romania in the Fulbright Alumni delegation, Rio de Janeiro (Brazil), Nov. **2013** (~4,000€);
21. **PI**, Suport din partea FAST (Fulbright Academy of Science and Technology, SUA) și a Academiei Ungare de Științe, pentru a participa la Word Science Forum (<http://www.sciforum.hu/>), ca reprezentant al României în delegația Fulbright Alumni 30+, Budapesta, Noi. **2011** (~1500€);
22. **PI, Fulbright Occasional Lecturer Program (OLP) Grant** – din partea Departamentului de Stat al SUA, pentru a conferența în New York (N.Y., SUA), Apr. **2010** (\$250);
23. **PI, Fulbright Conference Grant** – din partea Departamentului de Stat al SUA, pentru a participa la Conferința "Linking Campus to Community" în Washington D.C. (WA, USA), Apr. **2010** (\$1000);
24. **PI, Fulbright Occasional Lecturer Program (OLP) Grant** – din partea Departamentului de Stat al SUA, pentru a conferența în San Juan (Puerto Rico, USA), Mar. **2010** (\$750);
25. **PI**, Suport din partea **University of Rochester (NY, USA)**, pentru a participa la SPIE Photonics West Congress, Ian. **2010**, San Francisco (USA) [ISI] (\$1300);
26. **PI**, Ratiu Family Charitable Foundation (UK) Grant, pentru a participa la SPIE 1st Canterbury Workshop on Adaptive Optics and OCT, Sept. **2008**, Kent (UK) [ISI] (335£);
27. **PI, MC CNCSIS Grant cod 237/2007**, pentru a participa la DSTA Symposium, Lodz (Poland) (800€);
28. **PI, MC CNCSIS Grant cod 140/2007**, pentru participare DAAAM Symposium, Zadar [ISI] (800€);
29. **PI**, suport **IEEE** (Conference fee waiver) & **FEDROM** (FEDeration of ROManians in Spain) pentru a participa la IEEE / LEOS' ODIMAP V (2 papers), Oct. **2006**, Madrid (Spain) (total: 900€).

PREMII

- ANCS Award** PN-II-RU-PRECISI-2015-9-8637 for *Applied Optics* **54**(17), 5495-5507 (**2015**) (500€);
ANCS (Romanian National Authority for Scientific Research) **Habilitation Award** 3863/2014 (1,200€);
1st Award - Implant Poster Competition, for M.L. Negrutiu, C. Sinescu, V.-F. Duma, A. Manescu, MicroCT Investigation of Bone Graft Biomaterials, *New York Great Dental Meeting*, USA, **2014**;
ANCS Award PN-II-RU-PRECISI-2014-8-6510, for *Applied Optics* **53**(26), 5912-5916 (**2014**)
http://uefiscdi.gov.ro/userfiles/file/PREMIERE_ARTICOLE/ARTICOLE%202014/LISTA%203%20REZULTATE.pdf (150€);
SPIE Senior Membership (Intl Society for Optics and Photonics, Bellingham, WA, USA) – since 2011 (<http://spie.org/profile/Virgil-Florin.Duma-64413>);
Merit Gradation, granted for 3, respectively for 5 years, on a competitive basis, highest professional recognition and salary bonus (+25%) in a Romanian University, **2008-2010**, and **2012-2016**;
ANCS Award PN-II-RU-PRECISI-2011-3-1257/2011 for *Applied Optics* **50**(29), 5735-5749, **2011**,
http://www.uefiscdi.gov.ro/userfiles/file/PREMIERE_ARTICOLE/articole%202011/evaluare/lista%207%20noiembrie%20rezultate%20buna.pdf (500€);
ANCS Award 1390/2010, for *Applied Optics* **48**(32), 6355-6364, **2009**,
http://www.cncsis.ro/userfiles/file/PREMIERE_ARTICOLE/REST_REZULTATE_CUMULATE_ETAPA_II.pdf (500€);
ANCS Award 1391/2010, for *Applied Optics* **48**(14), 2678-2685, **2009**,
http://www.cncsis.ro/userfiles/file/PREMIERE_ARTICOLE/ARTICOLE%202009/REZULTATE_CUMULATE_ETAPA_II%281%29.pdf (250€);
ANCS Award 87/2008, for *Journal of Optics A: Pure and Applied Optics* **10**(6), 064008, **2008**,
http://www.cncsis.ro/PNCIDI%20II/Resursa%20umana/Premiere/Mai08/REZULTATE_PREMIERE_MAI%202008.pdf (1000€);

Dotări semnificative Am dezvoltat și dotat Laboratorul de Optomecatronică și Fonică Biomedicală (UAV, Sala M29), de cercetare, cu aparatură de peste 150.000 Euro – exclusiv în cadrul proiectelor de cercetare la care am fost/sunt director.
Am continuat dotarea Laboratorului de Mecanisme (didactic) – exclusiv prin lucru cu studenții.

Domenii de interes științific Aparate și sisteme de măsurare; Optomecatronică și sisteme optice; Fonică biomedicală; Mecanisme și teoria mașinilor; Ingineria calității.



Anexa – Conference Papers - indexed in ISI Web of Science – Selectie din ultimii 10 ani

Duma V.-F.*, Demian D., Dobre G. M., Sinescu C., Cernat R. C., Negrutiu M. L., Hutiu Gh., Bradu A., Rolland J. P., Podoleanu A. Gh., Constructive solutions of handheld probes with galvanometer scanners for biomedical and industrial imaging. Applications in OCT, *Proc. SPIE*, Vol. 9633, 96330Q, Mazuray L., Wartmann R., Wood A. P., Eds., *SPIE OptiFab (Optical Design and Engineering VI)*, ISSN 0277-786X, Rochester, NY (USA), Oct. 12-15, **2015**; doi: 10.1117/12.2195839

Duma V.-F.*, Dobre G. M., Demian D., Cernat R. C., Sinescu C., Topala F. I., Negrutiu M. L., Hutiu Gh., Bradu A., Rolland J. P., and Podoleanu A. Gh., Handheld probes and galvanometer scanning for optical coherence tomography, *Proc. SPIE*, Vol. 9626, 9626-50, Mazuray L., Wartmann R., Wood A. P., Eds., *SPIE Optical Design (Optical Design and Engineering VI)*, ISSN 0277-786X, Jena (Germany), Sept. 7-10, **2015**; doi: [10.1117/12.2191130](http://dx.doi.org/10.1117/12.2191130)

Sinescu C., Negrutiu M. L., Manole M., de Sabata A., Rusu L.-C., Stratul S., Ducea D., Borzea D., **Duma V.-F.***, Retractions of the Gingival Margins Evaluated by Holographic Methods, *Proc. SPIE*, Vol. 9508, 95080V, Hrabovský M., Sheridan J. T., Fimia A., Eds., *Holography: Advances and Modern Trends IV (Optics + Optoelectronics)*, ISSN 0277-786X, Prague (Czech Republic), Apr. 13-16, **2015** <http://dx.doi.org/10.1117/12.2179010>

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