**PORTAN DIANA-HORTENSIA**

|  |  |
| --- | --- |
| **PERSONAL INFORMATION** |  |
| Ypapantis 133, Patras 265 04, Achaia, Hellene Republic  +30 2610 969 490  +30 698 943 0046 +40 761 283 564  [portan@upatras.gr](mailto:portan@upatras.gr); [diana.portan@gmail.com](mailto:diana.portan@gmail.com)  **Birthday**: 18.09.1985 | **Nationality**: Romanian | |

**Personal Website**: <https://dianaportan.com/>

**ORCID**: 0000-0002-5856-3434

**Scholar**: <https://scholar.google.com/citations?hl=en&user=EAa26coAAAAJ&view_op=list_works&sortby=pubdate>

**Linkedin**: <https://www.linkedin.com/in/diana-portan-521bb6204/>

**ResearchGate**: <https://www.researchgate.net/profile/Dv-Portan>

**PRESENT AND PREVIOUS ACADEMIC EXPERIENCE AND career**

|  |  |
| --- | --- |
| **06.2025 – Now** | ***Collaborative Teaching Staff (Lecturer) / Intermediate in Chinese system,*** Chemical Engineering Department, University of Patras, Greece; ***Responsibilities***: teaching |
| **09.2020 – Now** | ***Collaborating Researcher***, University of Medicine, Pharmacy, Sciences and Technology of Tg. Mures- Center for Advanced Medical and Pharmaceutical Research, Tg. Mures, Romania; ***Responsibilities***: research, scientific proposals writing, intermediating Romanian - Hellene Academic collaboration |
| **04.2023 – Now** | ***Collaborating Researcher***, ROBETECH EMC S.R.L. ( <https://robetech.emcsb.ro/>), R&D company for natural sciences and engineering, Romania; ***Responsibilities***: scientific proposals writing, intermediating Romanian - Hellene research institutions |
| **10.2023 – 07.2025** | ***Researcher,*** Dept. of Chemistry, University of Patras 265 00, Patras, Greece; ***Responsibilities***: research, students’ co-supervision |
| **09.2023 – 09.2024** | ***Postdoctoral Fellow***, Section of Medicinal Chemistry - Pharmacognosy, Department of Pharmacy, University of Patras 265 00, Patras, Greece; ***Responsibilities***: research |
| **03.2012 – 08.2023** | ***Academic Fellow*,** Division of Applied Mechanics, Materials Technology and Biomechanics, Department of Mechanical Engineering and Aeronautics, University of Patras 265 00, Patras, Greece. ***Responsibilities*:** teaching, research, students' supervision; Activities: teaching, research, co-supervision of final year theses, proposal writing for national and international research grants |
| **03.2020 –**  **06.2020** | Teaching position 407, Dept. of Food Science and Technology, University of Peloponnese, 28 Erythrou Stavrou and Karyotai, Kalamata, Greece. ***Responsibilities***: teaching and laboratory |

|  |  |
| --- | --- |
| **STUDIES AND EDUCATION** | |
| **01.02.2024-Now** | **TRAINNING**: Involved in a mentoring module for becoming an evaluator on European projects,  under European Commission expert Dr. Florin Popescu (EX2020D386217, EX2020D386217,  EX2020D386217, EX2020D386217) |
| **3/2017** | **PhD diploma** fromtheDepartment of Mechanical Engineering and Aeronautics, University of Patras, ***PhD thesis title:*** ‘Fabrication and characterization of titanium dioxide nanotubes as well as modeling of the interface between substrate and nanotubes in biological, physical, and mechanical systems’, State Scholarship Foundation (IKY) from 2013 to 2016, Greece |
| **12/2011** | **PhD diploma** from theFaculty of Applied Chemistry and Materials Science, ‘Politehnica’ University of Bucharest, Romania, ***PhD thesis title:*** ‘Theoretical and Experimental Studies on the Manufacturing, Biocompatibility and Modelling of TiO2 Nanotubes’, POSDRU Scholarship from 2008 to 2011, Romanian Education Ministry |
| **9/2007** | **Master Program,** Faculty of Applied Chemistry and Materials Science, ‘Politehnica’ University of Bucharest, Romania ***Master program:***  Biocompatible Substances, Materials and Systems, ***Thesis title*:** ‘Effect of Electromagnetic Radiation on the Physical and Mechanical Ageing of Pure and ZnO - Reinforced Silicones Applied to Prosthetic Face Surgery’ |
| **6/2007** | **Bachelor,** Department of Ecology and Environmental Sciences, University of Bucharest, Romania, ***Thesis title***: ‘Microbiology of *E. coli’* |
| **7/2004** | **Highschool**: Bilingual Highschool 'Miguel de Cervantes Saavedra', Department of Mathematics-Informatics |

|  |  |  |  |
| --- | --- | --- | --- |
| **LANGUAGES** |  | | |
| **Native language** | **Romanian** | | |
| **Foreign languages\*** | **Understanding** | **conversation** | **writting** |
| **English** | C1 | C1 | C1 |
| **Greek** | C1 | C1 | C1 |
| **Spanish** | Β2 | B1 | B1 |
|  | \*Common European Framework of Reference for Languages. | | |

**TEACHING ACTIVITY**

|  |  |
| --- | --- |
| **UNDERGRADUATE COURSES** |  |
| **Evaluation for teaching (4.84/5)** | Evaluated by students in teaching competitions: on first position (teaching in Greek language, Dec. 2022) in the Dept. of Mechanical Eng. & Aeronautics, University of Patras, Greece and on second position (teaching in Greek language, May 2023) in the Dept. of Materials Science, University of Patras, Greece |
| **2025** | **Biochemical Process Engineering,** Intermediate in Chinese system,Chemical Engineering Department, University of Patras, Greece, Language of instruction: English |
| **2025** | **Production and Project Management,** Intermediate in Chinese system,Chemical Engineering Department, University of Patras, Greece, Language of instruction: English |
| **2020-2023** | **Biomaterials,** Department of Mechanical Engineering and Aeronautics, Division of Applied Mechanics, Materials Technology and Biomechanics, University of Patras, Language of instruction: Greek |
| **2021-2023** | **Biomimetics,** Department of Mechanical Engineering and Aeronautics, Division of Applied Mechanics, Materials Technology and Biomechanics, University of Patras, Language of instruction: Greek |
| **POSTGRADUATE COURSES** |  |
| **2020-2022** | **Rehabilitation Engineering,** Interdepartmental Master Program – ‘Biomedical Engineering’, University of Patras, Language of instruction: English |
| **2019-2020** | **Biochemistry,** Department of Food Science and Technology, University of Peloponnese, Language of instruction: Greek |

**PARTICIPATION IN THE TRAINING AND SUPERVISION OF UNDERGRADUATE STUDENTS TO PREPARE THEIR FINAL YEAR THESIS**

1. Christos Vlassis, ‘***Simulation and chemical analysis of a microenvironment mimicking a 3D printed scaffold in the human body***’, in progress (planned for Febr. 2025).
2. Maria Thabet, ‘***Stufy of the surface properties of biomedical scaffolds with multifunctional properties for improved biointegration’***, 2023 (Greek)
3. Alexandra Aggelopoulou, ‘***Effect of simulated body fluid absorption on the mechanical behavior of 3D-Printed PLA composite scaffolds***’, 2023 (Greek)
4. Sofia Mamali, ‘***Biomimetic scaffolds with enhanced electrical properties for optimum biointegration***’, 2023 (Greek)
5. Tselepidi, Athanasia, ‘***Effect of scaffold stiffness on cell functions for bone tissue engineering***’, 2022-07 (English)
6. Pappa, Evanthia, ‘***Nitinol based micro/nano structures and hybrid nanocomposites’***, 2014-09 (English)
7. Krousouloudi, Maria, ‘***Investigation of the response of human bone cells to different substrates in an electrically active environment’***, 2019-06 (English)
8. Babounis, George, ‘***Degradation study and thermomechanical characterization of porous 3D printed PLA scaffolds with applications in bone regeneration after immersion in a biological fluid environment’***, 2021 (Greek)
9. Doulias, Christos, ‘***Synthesis, Characterization and Mechanical Behavior of 3D Printed Biomedical Scaffolds'*** 2018 (Greek)
10. Nitas, Gregory, ‘***Biomechanical Study of the Femur and Optimization of Total Hip Arthroplasty Implant Design Using Finite Elements Method'***, 2018 (Greek)
11. Petropoulos, Gregory, **‘*Study of the addition of nanoinclusions to the epoxy adhesive for use in single lap joints’*,** 2016 (Greek)
12. Arvanita, Eugenia, ‘***Fabrication of TiO2 nanotubes and study of parameters affecting their geometry’***, 2013-07 (Greek)

**COMMUNICATION AND ORGANIZATIONAL SKILLS**

Communication skills acquired by participating in international scientific conferences and as General Secretary of Greek and International Scientific Conferences.

|  |  |
| --- | --- |
| **2025** | General co-chairman of the upcoming International Conference on Structural Analysis of Advanced Materials (ICSAAM), Brasov 15-18 Sept. 2025, <https://icsaam2025.upb.ro/>. |
| **2024** | Main organizer and speaker for two workshops at the University of Medicine, Pharmacy, Science and Technology of Tg. Mures, Romania: *(1)* Friday, 6 Dec. 2024, ***Title***: Creating quality science within European projects and *(2)* Monday, 9 Dec.2024, ***Title***: A strategy for building a research group that is active in the framework of European projects. |
|  | Chairperson of the second general onsite meeting of NerveRepack project, HORIZON-KDT-JU-2022-2-RIA, Proposal number: 101112347, 24-25 January, Conference Centre of the University of Patras, Patras, Greece. |
| **2023** | General Secretary, and Chairperson, International Conference on Structural Analysis of Advanced Materials, ICSAAM 2023, 10-14 of September 2023, Zakynthos, Greece, <https://icsaam2023.upatras.gr/local-committee/> |
| **2019** | General Secretary, International Conference on Structural Analysis of Advanced Materials, ICSAAM 2019, 12-15 September 2019, Ischia, Italy |
| **2017** | Member of the Local Organizing Committee of the 28th Congress of the European Society of Biomaterials, Athens 2017 |
| **2013** | General Secretary, International Conference on Structural Analysis of Advanced Materials, ICSAAM 2013, 23 - 26 September 2013, Kos, Greece |
| **2011** | Member of the Local Organizing Committee, International Conference on Structural Analysis of Advanced Materials, ICSAAM 2011, 7-10 September, Bucharest, Romania. |
| **2010** | * Member of the Local Organizing Committee, Duracosys 2010, 9th International Conference on Durability of Composite Systems, 12-15 September 2010, Patras, Greece * Member of the Local Organizing Committee, Therma 2010, Greece, 4TH National Conference on Thermal Analysis, 23-24 October 2010, Patras, Greece |

RESEARCH/ SCIENTIFIC & SOCIETAL INTERESTS

|  |  |
| --- | --- |
| General keywords | * biomimetic materials, biomechanics, biocompatibility, primary human cells cultures, composite biomaterials, scaffolds for synthetic bone and synthetic skin, biodegradation of biomaterials, interface between tissues and biomaterial * ethics and deontology in research, gender equality in research |
| Topic 1  BIOMATERIALS | Manufacturing, processing, mechanical & overall characterization depending on specific applications. Soft biomaterials for replacement of tissues such as skin or endothelium, resistant biomaterials for hard tissue regeneration (e.g., bone). Focus is also on metals that can be used in implantable electronics and on 3D printed structures that enable biontegration |
| Topic 2  BIOINTEGRATION | Enabling biomechanics and bioelectrochemistry to achieve biointegration. Design of biomimetic materials with multifunctional properties, graded multilayered structure and electrical conductivity, that mimic the natural tissue and enable faster integration rate of the biomedical implant in the host body. Particular attention is given to the study of the processes at the interphase between biomaterials and tissue. |
| Topic 3  PRIMARY CELLS | Expertise on primary cell cultures, mainly stem cells and bone marrow cells, is used to build *in vitro* systems for the observation and study of the biological component in contact with synthetic biomaterials. Primary cell populations are the gold standard in biomaterial evaluation and assessment. |

|  |  |
| --- | --- |
| **Topic 4**  BIOCOMPATIBILITY TESTING | According to FDA’s rules and Regulation (EU) 2017/745 of the European Parliament to provide sufficient subject’s safety for prolonged implantation (< 30 days) and & ISO 10993 and EC’s guidelines. Surface characterization, mechano-chemical characterization, and evaluation with both primary cells and cell lines. |
| **Topic 5**  RELEVANT TESTING | The reduction of the use of animal models demands the buildup of complex laboratory setups for the assessment of novel biomedical implants and devices. The research is highly interdisciplinary or multidisciplinary. |
| **Topic 6**  ETHICS & DEONDOLOGY | Elaboration of new documents for submission to ethics and deontology committees in Romanian and Hellene institutions that upon approval allow performing complex studies with fresh biological materials (human cells) extracted from donors (volunteers). |
| **Topic 7**  GENDER EQUALITY IN RESEARCH | Promotion of gender equality in research according to the Legal framework Law 2839/2000. The research group is always gendering balance. Both scientists and beneficiaries (student, patients etc.) are selected to encourage a gender balance. |

**RESEARCH PROJECTS**

|  |  |
| --- | --- |
| **PROJECT NO.** | **Project title - Role – Funder – Budget** |
| **FORTH/ICE-HT,**  **ESO13681** | Greek grant, Acronym: **Biomim.REPARE**, Title: Research on the Development of Advanced Biomaterials with Applications in Biomedicine, Implant Manufacturing and Biocompatibility Regulation, Role: **main researcher,** Budget: 7.000,00€ |
| **HORIZON-KDT-JU-2022-2-RIA** | European grant, Proposal number: 101112347, Acronym ***NerveRepack***, Role - ***Leader of the Hellenic consortium****,* ***WP7 leader – New materials & Biocompatibility*,** Project Title: Intelligent neural system for bidirectional connection with exoprostheses and exoskeletons, obtained highest score at European level under the Topic 1, Budget for Greece: 1,7 million €, <https://www.nerverepack.eu/about-the-project> |
| **PN-IV-P2-2.2-MCD-2023-0011** | Romanian grant, CCAMF-UMFST, Role: ***invited researcher***, 19-25 Nov. 2023, Tg. Mures, Romania, Romanian Ministry of Education; Mobility projects for young researchers in the diaspora awarded by the Romanian Higher Education Funding, Research Development and Innovation Executive Unit, Budget 2,000 € |
| **Τ2ΕDΚ-03847, MIS 5069931** | Greek grant, Title: Design and development of a dietary supplement for osteoporosis through gut microbiome mechanisms. Study of the efficacy and tolerability of the innovative food supplement, Acronym: ***OSTEOME***, July 2022 – Dec. 2023, Role: ***main researcher*** in experimental part at ITE Patras, Greece, 500.000 €, <https://osteome.eu/en/> |
| **Τ2ΕDΚ-03681, ΜΙS 5129423** | Greek grant, Title: Biomimetic nanocomposite 3D scaffolds for bone regeneration: Controlling osteogenesis through physicochemical stimuli, July 2022-Dec.2023, Acronym: ***BioBON3D***, Role: ***researcher*** for the experimental part with cell cultures at the University of Patras, Dept. Of Mech. Eng. & Aeronautics, Patras, Greece, 500.000 €, <http://biobon3d.upatras.gr/> |
| **F.Κ.: 81081** | Greek grant, Title: Computational characterization of scaffolds used for fracture repair, Hellenic Foundation for Research and Innovation, ***COMPACT*,** 01.02.2022- Jan.2023, Role: ***researcher*** for the experimental part |
| **PN-III-P1-1.1-MCT-2017-0047** | Romanian grant, ***BIOMEDETI***, November 2017 (2 weeks), Role: ***invited researcher*** at the Politehnica University of Bucharest; Romanian Ministry of Education, Mobility projects for young researchers in the diaspora awarded by the Romanian Higher Education Funding, Research Development and Innovation Executive Unit |
| **PN-III-P1-1.1-MCT-2016-0042** | Romanian grant, ***NanoBio*** ***Comp***, November-December 2016 (45 days), Role: ***invited researcher*** at University ‘Petru Maior’ of Tg Mures, Romanian Ministry of Education; Mobility projects for young researchers in the diaspora awarded by the Romanian Higher Education Funding, Research Development and Innovation Executive Unit |
| **THALIS-Mis: 379412** | Greek grant, Title: Development of a self-healing composite material and innovative techniques for structural health monitoring in aerospace applications’, Role: ***researcher***, Acronym: ***S.H.Com & S.H***., ESPA 2014-2020 |
| **THALIS 4400** | Greek grant,Title:Synthesis and study of the Biological, Biomechanical and Micromechanical Properties of New Types of Nanosized Bone Biocements based on Calcium Phosphate and Geopolymers, Acronym: **NANO.GEO.S.CA.PHO.L.D**, 03.06.2013-02.04.2014, Role: **researcher,** ESPA 2014-2020 |
| **PED PN-III-P2-2.1-PED-2016-0142** | Romanian grant, Title: Optimized technologies of Electrochemical Anodization for the development of TiO2 nanotubes based nanostructured coatings on complex geometries of biomedical implants, Acronym: **NanoBio EA**, 1st of March 2017- 30of June 2018, Role: **researcher** |

**ELABORATED DELIVERABLES**

1. **Main author**, **Deliverable 7.1. Biocompatibility of component material**, Proposal number: 101112347, Acronym: NerveRepack
2. **Main author**, ***Deliverable 7.2. Biocompatibility of tested materials***, Proposal number: 101112347, Acronym: NerveRepack
3. **Main author**, ***Deliverable 11.8. Ethics Compliance Report***, Proposal number: 101112347, Acronym: NerveRepack

**JOURNALS’** **REVIEWER**

* International Journal of Molecular Sciences (MDPI)
* Frontiers in Physics (Frontiers)
* Romanian Journal of Laboratory Medicine (AMLR Romania)
* Polymers (Topic Advisory Board, MDPI)
* Biomimetics (MDPI)
* Emergent Materials (Springer)

**AWARDS & OTHER ACTIVITIES**

* December 2024, **Best researcher award** in polymers [biodegradation in relevant environments](Biodegradation%20in%20Relevant%20Environments), for the paper entitled ‘***Biodegradation and Thermomechanical Behavior of 3D-Printed PLA Scaffolds Under Static and Stirring Biomimetic Conditions’,*** <https://amo-physics-conferences.scifat.com/diana-portan-polymers-biodegradation-in-relevant-environments-best-researcher-award-4096/>
* **Thomaidio Award, National Technical University of Athens for the work**: Papanicolaou, G. C., Charitidis, C. A., **Portan, D. V.**, Perivoliotis, D. K., & Koklioti, M. A. (2014). Investigation of nanomechanical properties of multilayered hybrid nanocomposites. *Meccanica* 49(11), 2645-2655.
* Bica Cristina Ioana, Feier Andrei, Strnad Gabriela, **Portan Diana** (presenter), Manu Ramona Doina, Dobreanu Minodora, Russu Octav, Petrovan Cecilia, ‘Titanium based Nanostructured Surfaces for Biomedical Implants’, Bioremed 2017, Timisoara, Romania, **Best Flash talk**
* **Elected member** of theboard of the **Hellenic Society of Biomaterials** (2017-2018)
* **Elected member** of theorganizing committeeof the **28th Congress of the European Society of Biomaterials**, Athens 2017
* **Invitation to teach** at the **University of Leoben:** lecture on ‘Nanocomposites’, Department of Engineering and Polymer Science, April 2013, Leoben, Austria
* **Invited Lecture:** Nanotubes for Advanced Biomedical and Technological Applications, December 2010, **University of Lulea**, Sweden

**MEMBERSHIP**

* Member of the evaluation committee, Inov8 competition of application, science and technology for students, 12-13 Dec. 2024, Mures Camp, Romania
* Scientific committee member INTER-ENG 2024, Interdisciplinarity in Engineering, 3-4 October 2024, U.M.F.S.T. Târgu Mureş, Romania
* Member of the evaluation board for International Genetically Engineered Machine, iGEM 2024 (<https://competition.igem.org/>)
* CORPORATE MEMBER, European Society of Biomaterials (<https://esbiomaterials.eu/>)
* European Society of Artificial Organs (<https://www.esao.org/>)
* Materials Information Society (ASM International, <https://www.asminternational.org/>)

**MANUSCRIPTS IN INTERNATIONAL PEER REVIEWED JOURNALS & PROCEEDINGS**

1. Manu, D.R.; **Portan, D.V.\*; Vuţă, M.**; Dobreanu, M. Influence of Scaffold Structure and Biomimetic Properties on Adipose Stem Cell Homing in Personalized Reconstructive Medicine. *Biomimetics* **2025**, *10*, 438. https://doi.org/10.3390/biomimetics10070438
2. **Portan, D.V.**\*; Koliadima, A.; Kapolos, J.; Azamfirei, L. REVIEW ARTICLE, Biomimetic Design and Assessment via Microenvironmental Testing: From Food Packaging Biomaterials to Implantable Medical Devices. *Biomimetics* **2025**, *10*, 370. <https://doi.org/10.3390/biomimetics10060370>
3. Kontaxis, L.C.; Zachos, D.; Georgali-Fickel, A.; **Portan, D.V.**; Zaoutsos, S.P.; Papanicolaou, G.C. 3D-Printed PLA Mechanical and Viscoelastic Behavior Dependence on the Nozzle Temperature and Printing Orientation. *Polymers* **2025**, *17*, 913. <https://doi.org/10.3390/polym17070913>
4. **DV Portan**, A Angelopoulou, A Koliadima, LC Kontaxis, G Michanetzis, D Kouzoudis, E Michalopoulos and GC Papanicolaou (**2025**) Biodegradation, mechanical and biocompatibility evaluation of compact and porous polylactic acid after long-term dynamic fluid immersion, Journal of Chemical Technology and Biotechnology, pp. 1-13, <https://doi.org/10.1002/jctb.7893>
5. **Portan, D.V.\***, Moica, S., Koliadima, A., Kapolos, J., Papanicolaou, G.C., Gligor, A. (**2025**). A Biostatistical and Analytical Model for the in vitro Monitoring of Tissue Growth Correlated to Biochemical Signals. In: Moldovan, L., Gligor, A. (eds) The 18th International Conference Interdisciplinarity in Engineering. Inter-Eng 2024. Lecture Notes in Networks and Systems, vol 1249. Springer, Cham. <https://doi.org/10.1007/978-3-031-81685-7_14>
6. **D.V. Portan\***, G. Bampounis, A. Koliadima, T. Patsidis, G.C. Papanicolaou, Biodegradation and thermomechanical behavior of 3D printed PLA scaffolds under static and stirring biomimetic conditions, Biomimetics **2024**, 9, 743. <https://doi.org/10.3390/biomimetics9120743>.
7. **D.V. Portan*,*** Effect of the electric field on human cells: from *in vitro* response to *in vivo* feedback, IOP Conference Series: Materials Science and Engineering, Volume 1320, International Conference on Electromagnetic Fields, Signals and BioMedical Engineering (<https://icems-biomed.emcsb.ro/>), 06/06/**2024** - 08/06/**2024** Cluj-Napoca, Romania.
8. **D.V. Portan\***, S. Mamali, V. Kostopoulos, T. Katsila, P. Zoumpoulakis, P. Mallis, E. Michalopoulos, A. Koliadima, 3D non-conductive vs. conductive biomedical scaffolds: biodegradation and biocompatibility study under electrical exposure, Book of Proceedings of ICSAAM **2023**, 10th International Conference on Structural Analysis and Advanced Materials 10-14 September, Zakynthos, Greece, pp. 54-60, ISSN: 2559-7841

<https://publications.upatras.gr/el/books/157>

1. Kozaniti FK, Manara AE, Kostopoulos V, Mallis P, Michalopoulos E, Polyzos D, Deligianni DD, **Portan DV\*.** Computational and Experimental Investigation of the Combined Effect of Various 3D Scaffolds and Bioreactor Stimulation on Human Cells’ Feedback. Applied Biosciences. **2023**; 2(2):249-277. <https://doi.org/10.3390/applbiosci2020018>
2. Papanicolaou, G.C.; Kontaxis, L.C.; Kouris, N.; **Portan, D.V.** Application of an Eco-Friendly Adhesive and Electrochemical Nanostructuring for Joining of Aluminum A1050 Plates. Materials **2023**, 16, 2428. <https://doi.org/10.3390/ma16062428>.
3. Andrei Marian Feier, **Diana Portan\***, Doina Ramona Manu, Vassilis Kostopoulos, Athanasios Kotrotsos, Gabriela Strnad, Minodora Dobreanu, Andreea Salcudean and Tiberiu Bataga (**2022**) Primary MSCs for Personalized Medicine: Ethical Challenges, Isolation and Biocompatibility Evaluation of 3D Electrospun and Printed Scaffolds. *Biomedicines 10*: 1563, <https://doi.org/10.3390/biomedicines10071563>
4. George C. Papanicolaou, Dimitrios Karagiannis, Charoula Kousiatza, Lykourgos C. Kontaxis, and **Diana V. Portan** (**2022**) Flexural behavior of single-lap joints of similar and dissimilar adherends. *Journal οf Adhesion Science and Technology* AHEAD-OF-PRINT, 1-25, <https://doi.org/10.1080/01694243.2022.2035050>
5. Foteini K. Kozaniti, Despina D. Deligianni, Margarita D. Georgiou, **Diana V. Portan\*** (**2022**) The Role of Substrate Topography and Stiffness on MSC Cells Functions: Key Material Properties for Biomimetic Bone Tissue Engineering, *Biomimetics* 7: 7, <https://doi.org/10.3390/biomimetics7010007>
6. George C. Papanicolaou, Lykourgos C. Kontaxis, **Diana V. Portan**, Grigoris N. Petropoulos, Eleni Valeriou and Dimitris Alexandropoulos (**2021**) Mechanical Performance Enhancement of Aluminum Single-Lap Adhesive Joints Due to Organized Alumina Nanotubes Layer Formation on the Aluminum Adherends. *Appl Nano* 2(3): 206-221, <https://doi.org/10.3390/applnano2030015>
7. G.C. Papanicolaou, **D. Portan**, L.C. Kontaxis (**2021**) Interrelation between fiber-matrix interphasial phenomena and flexural stress relaxation behavior of a glass fiber polymer composite, *Polymers* 13(6): 978.

<https://doi.org/10.3390/polym13060978>

1. **D.V. Portan**, C. Ntoulias, G. Mantzouranis, A.P. Fortis, D.D. Deligianni, D. Polyzos, V. Kostopoulos (**2021**) Gradient 3D Printed PLA Scaffolds on Biomedical Titanium: Mechanical Evaluation and Biocompatibility, *Polymers*, Special Issue ‘Applications of Biopolymer Scaffolds’, Journal ‘Polymers’ 13(5): 682, <https://doi.org/10.3390/polym13050682>
2. Glaskova-Kuzmina T, Aniskevich A, Papanicolaou G, **Portan D**, Zotti A, Borriello A, Zarrelli M. (**2020**) Hydrothermal Aging of an Epoxy Resin Filled with Carbon Nanofillers. *Polymers* 12: 1153, <https://doi.org/10.3390/polym12051153>
3. Elisa-Florina PLOPEANU, George PAPANICOLAOU, **Diana PORTAN** (**2020**) Experimental Research on The Behavior of Biocompatible Magnesium Alloys when Immersed in Physiological Fluid. *Annals of the Faculty of Engineering Hunedoara*, Vol. 18, Iss. 1: 121-125.
4. Kostopoulos V., Kotrotsos A., Fouriki K., Kalarakis A., **Portan D.** (**2020**) Fabrication and Characterization of Polyetherimide Electrospun Scaffolds Modified with Graphene Nano-Platelets and Hydroxyapatite Nano-Particles. *Int. J. Mol. Sci.*, 21(2): 583, <https://doi.org/10.3390/ijms21020583>
5. **Portan DV**, Deligianni DD, Papanicolaou GC, Kostopoulos V, Psarras GC, Tyllianakis M. (**2019**) *Combined Optimized Effect of a Highly Self-Organized Nanosubstrate and an Electric Field on Osteoblast Bone Cells Activity*. *BioMed Research International*, Volume **2019**, Article ID 7574635, 8 pages, <https://doi.org/10.1155/2019/7574635>
6. Feier AM, Manu DR, Strnad G, Dobreanu M, Russu OM, **Portan D\*,** Bataga T (**2018**) A Step Forward Standardization of Biocompatibility Testing on Tissue Culture Polystyrene. *Materiale Plastice* 55(3): 303-307
7. **Portan D**, Strnad G, Feier AM, Russu OM (**2018**) Highly Self-Organized Materials: Formation Mechanism and Electrochemical Synthesis. *Materiale Plastice*, 55(3): 398-404
8. **Portan DV**, Deligianni DD, Deligianni K, Kroustalli AA, Tyllianakis M, Papanicolaou GC. (**2018**) Modeling of the interaction between osteoblasts and biocompatible substrates as a function of adhesion strength. *J Biomed Mater Res A*. 106(3): 621-628, <https://doi.org/10.1002/jbm.a.36265>
9. G Strnad, L Jakab-Farkas, R Cazacu, **D Portan** and C Petrovan (**2018**) Wettability of nanotubular titania layers for biomedical applications developed by electrochemical anodization. Materials Science and Engineering 400, IOP Conf. Series: 2018, 072005
10. Strnad G, German-Sallo Z, Jakab-Farkas L, Cazacu R, **Portan D.** (**2018**) Effect of potential ramp in the potentiodynamic stage of anodization on morphology of nanostructured TiO2 developed on Ti6Al4V alloy. *Procedia Manufacturing* 22: 19-26
11. Strnad G, **Portan D**, Jakab-Farkas L, Petrovan C, Russu O (**2017**) Morphology of TiO2 surfaces for biomedical applications developed by electrochemical anodization. *Materials Science Forum* 907 MSF: 91-98.
12. Strnad G, Jakab-Farkas L, **Portan D.** (**2016**) Current-Time Dependence in Self-Organized TiO2 Layers Synthesis by Electrochemical Anodization. *Academic Journal of Manufacturing Engineering* 14(4): 112-118.
13. G.C. Papanicolaou, D.V. Portan, G.N. Petropoulos, L.C. Kontaxis (**2016**)Effect of TiO2 Nanotubes Developed on Pure Titanium Substrates on the Mechanical Performance of Titanium-Titanium Single-Lap Adhesive Joints. *Cienc Tecnol Mater* 28: 130-137,

<https://doi.org/10.1016/j.ctmat.2016.02.004>

1. Papanicolaou GC, Charitidis P, Mouzakis DE, Karachalios E, Jiga G, **Portan DV.** (**2016**) Experimental and Numerical Investigation of Balanced Boron/ Epoxy Single Lap Joints Subjected to Corrosive Environmental Conditions. *International Journal of Adhesion and Adhesives* 40: 224-237.
2. **Portan DV**, Nikolopoulou F, Bairami V, Mouzakis D, Papanicolaou GC, Deligianni DD. (**2016**) Electrochemical Surface Processing Applied for the Functionalization of Titanium Screw Type Implants. *Journal of Materials Science & Surface Engineering* 4 (3): 376-382.
3. G.C. Papanicolaou, G. Kouveliotis, F. Nikolopoulou, K.P. Papaefthymiou, V. Bairami, **D.V. Portan** (**2014**) Thermal shock cycling effect on the compressive behaviour of Human teeth. *Biomechanics* 48(4): 681-686, <https://doi.org/10.1016/j.jbiomech.2014.12.039>
4. Papanicolaou GC, Charitidis CA, **Portan DV**, Perivoliotis DK Koklioti MA. (**2014**) Investigation of nanomechanical properties of multilayered hybrid nanocomposites. *Meccanica* 49(11): 2645-2655.
5. **Portan DV,** Papanicolaou GC, Jiga G, Caposi M (**2012**) A novel experimental method for obtaining multilayered TiO2 nanotubes through electrochemical anodizing. *Journal of Applied Electrochemistry* 42: 1013-1024.
6. **Portan DV**, Papaefthymiou K, Arvanita E, Jiga G, Papanicolaou GC. (**2012**) A combined statistical and microscopic analysis of TiO2 nanotubes synthesized under different electrochemical anodizing conditions. *J Mater Sci* 47(11): 4696-705.
7. **Portan DV**, Kroustalli AA, Deligianni DD, Papanicolaou GC. (**2012**) On the biocompatibility between TiO2 nanotubes layer and human osteoblasts. *Journal of Biomedical Materials Research - Part A* 100A(10): 2546-2553.
8. Papanicolaou GC, Xepapadaki AG, Drakopoulos ED, Papaefthymiou KP, **Portan DV.** (**2012**) Interphasial viscoelastic behavior of CNT reinforced nanocomposites studied by means of the concept of the hybrid viscoelastic interphase. *J Appl Polym Sci* 124(2): 1578-88.
9. Papanicolaou GC, Drakopoulos ED, Anifantis NK, Papaefthymiou KP, **Portan DV.** (**2012**) Experimental, analytical, and numerical investigation of interphasial stress and strain fields in MWCNT polymer composites. *J Appl Polym Sci* 123(2): 699-706.
10. Papanicolaou GC, Papaefthymiou KP, Koutsomitopoulou AF, **Portan DV**, Zaoutsos SP. (**2012**) Effect of dispersion of MWCNTs on the static and dynamic mechanical behavior of epoxy matrix nanocomposites. *J Mater Sci* 47(1): 350-359.
11. Ionita D, Mazare A, **Portan D**, Demetrescu I. (**2011**) Aspects relating to stability of modified passive stratum on TiO2 nanostructure. *Metals and Materials International* 17(2): 321-327.
12. **Portan D**, Papaefthymiou K, Pirvu C, Papanicolaou G, Demetrescu I. (**2011**) Manufacturing and characterization of TiO2 nanotubes on pure titanium surfaces for advanced biomedical applications. *UPB Scientific Bulletin, Series B: Chemistry and Materials Science* 73(2):181-196
13. Papanicolaou GC, Demetrescu I, **Portan DV**, Papaefthymiou KP. (**2011**) Interphase modeling of human osteoblasts spread on pure titanium surface covered with TiO2 nanotubes. *Composite Interfaces*, 18(1):23-35
14. Demetrescu I, Ionita D, Pirvu C, **Portan D.** (**2010**) Present and future trends in TiO2 nanotubes elaboration, characterization and potential applications. Molecular Crystals and Liquid Crystals 521: 195-203.
15. **Portan D**, Ionita D, Demetrescu I. (**2009**) Monitoring TiO2 nanotubes elaboration condition, a way for obtaining various characteristics of nanostructures. *Key Engineering Materials* 415: 9-12.

**CHAPTERS**

* G.C. Papanicolaou and **D.V. Portan,** 2015, **Carbon and TiO2 Nanotube - Polymer Composites: Manufacturing - Characterization and Interphasial Modeling**, Chapter 44, in ‘*Structural Integrity and Durability of Advanced Composites Innovative Modelling Methods and Intelligent Design’*, Edited by: Peter Beaumont, Cambridge University Department of Engineering and Wolfson College, Cambridge, UK; Constantinos Soutis, School of Mechanical, Aerospace and Civil Engineering and the Aerospace Research Institute, University of Manchester, UK; Alma Hodzic, Faculty of Engineering, The University of Sheffield, UK, Published: May 2015, Imprint: Woodhead Publishing, ISBN: 978-0-08-100137-0
* V. Iordache, M. C. Arama, L. Bodea, R. Budulache, **D. H. Portan**, L. Stoica, 2008, Chapter: *Biologia ca forma a culturii, English:* **Biology as an expression of culture***,* results of the program RENASCENT SP- C2005- PO4, Ed. Ars Docendi, Bucharest 2008.

**OTHER PUBLICATIONS**

* Papanicolaou GC, **Portan** **DV** (2015) **Measuring and Modeling the Dynamic Frictional Coefficient between Ice and TiO2 Nanotubes grown on Pure Titanium Plates**, Paper contribution in a volume edited in memory of Professor V. Papazoglou, Ed. National Technical University of Athens, pp. 349-357
* Kokkinos AP, **Portan DV**, Saridaki X, Katerelos DTG (2020) **Experimental and Numerical Approach in the Acoustical Behaviour of Kefalonian Traditional Instruments Made from Different Materials**. ***International Journal of Science and Research*** (IJSR), 9(5): 607-616, DOI: <https://doi.org/10.21275/SR20504173104>

**CONFERENCEs PARTICIPATION**

* **D.V. Portan, Invited Speaker**, 30 min Oral Presentation, Title: ***Effect of the electric field on human cells: from in vitro response to in vivo feedback***, International Conference on Electromagnetic Fields, Signals and BioMedical Engineering 6-8 June 2024, Cluj-Napoca, Romania, <https://icems-biomed.emcsb.ro/invited-speakers>
* M. Thabet, **D. Portan**, G. Michanetzis, V. Kostopoulos, A. Kotrotsos, D. Kouzoudis, Poster (5 min flash presentation), Title: ***Surface characterization of 3D biomedical scaffolds with enhanced bio-integration***, International Conference on Structural Analysis of Advanced Materials, **ICSAAM 2023**, 10-14 of September 2023, Zakynthos, Greece, ISBN: 978-960-530-190-3

<https://publications.upatras.gr/el/books/157>

* A. Angelopoulou, **D.V. Portan**, L.C. Kontaxis, D. Kouzoudis, G.C. Papanicolaou, Poster (5 min flash presentation), Title: ***Biodegradation profile of 3D printed PA scaffolds after long-term immersion in cell culture medium***, International Conference on Structural Analysis of Advanced Materials, **ICSAAM 2023**, 10-14 of September 2023, Zakynthos, Greece, ISBN: 978-960-530-190-3 <https://publications.upatras.gr/el/books/157>
* D. Karagiannis, Ch. Kousiatza, L.C. Kontaxis, **D.V. Portan**, G.C. Papanicolaou, Oral presentation, Title: ***Theoretical and experimental investigation of flexural behavior of single-lap joints of similar and dissimilar adherends***, International Conference on Structural Analysis of Advanced Materials, **ICSAAM 2023**, 10-14 of September 2023, Zakynthos, Greece, ISBN: 978-960-530-190-3, <https://publications.upatras.gr/el/books/157>
* **Diana V. Portan, Plenary lecture**, 30 min Oral presentation, Title: ***Biomimetic biomaterials: functioning principles, key properties and perspectives***, International Conference on Structural Analysis of Advanced Materials, **ICSAAM 2023**, 10-14 of September 2023, Zakynthos, Greece, ISBN: 978-960-530-190-3, <https://publications.upatras.gr/el/books/157>
* S. Mamali, G. Strnad, G.C. Papanicolaou, **D.V. Portan**, Poster (5 min flash presentation), Title: ***Immersion of 3D non-conductive vs. conductive biomedical scaffolds in cell culture medium: fluid absorption and biodegradation***, International Conference on Structural Analysis of Advanced Materials, **ICSAAM 2023**, 10-14 of September 2023, Zakynthos, Greece, ISBN: 978-960-530-190-3, <https://publications.upatras.gr/el/books/157>
* A.E. Manara, F.K. Kozaniti, V. Kostopoulos, **D.V. Portan**, Oral presentation, Title: ***A computational approach for the investigation of the combined effect of 3D scaffold features and bioreactor stimulation on human cells’ feedback***, International Conference on Structural Analysis of Advanced Materials, **ICSAAM 2023**, 10-14 of September 2023, ISBN: 978-960-530-190-3, Zakynthos, Greece, <https://publications.upatras.gr/el/books/157>
* F.K. Kozaniti, A.E. Manara, V. Kostopoulos, **D.V. Portan**, Oral presentation, Title: T***he combined effect of 3D scaffold features and bioreactor stimulation on human cells’ feedback***, International Conference on Structural Analysis of Advanced Materials, **ICSAAM 2023**, 10-14 of September 2023, Zakynthos, Greece, ISBN: 978-960-530-190-3, <https://publications.upatras.gr/el/books/157>
* Minodora Dobreanu, Doina Manu, **Diana Portan**, 30 min Plenary lecture, Title: ***Modern methods and techniques for testing artificial substrates biocompatibility***, International Conference on Structural Analysis of Advanced Materials, **ICSAAM 2023**, 10-14 of September 2023, Zakynthos, Greece, ISBN: 978-960-530-190-3, <https://publications.upatras.gr/el/books/157>
* **Diana V. Portan**, T. Katsila, P. Zoumpoulakis, V. Kostopoulos, **Invited lecture**, Title: ***Electrospun and printed 3D scaffolds with biomimetic features and growth factor delivery potential for in vitro maintenance of human bone cells***, International Summit on Biopolymers and Polymer Science, May 11-13, **ISBPS 2023**, Brussels, Belgium, <https://www.spectrumconferences.com/2023/isbps/speakers>
* **D. V. Portan**, D.Polyzos, D.D. Deligianni, 5 min ***Flash talk & POSTER,*** Title:***In vitro investigation of 3D electrospun and printed scaffolds for biomimetic programming of bone replacing artificial tissues***, Results of COMPACT project no. 2060, **ESAO 2022** Congress, 6-10 September, Krems, Austria
* **Diana Portan**, Despoina Deligianni, Demosthenes Polyzos, ***Invited speaker,*** Title: ***Biomimetic programming of biomaterial features based on modeling and experimental approaches***, Section: Performance Parameters in Laboratory Medicine – from theory to practical use, Results obtained in the context of the Project COMPACT no. 2060, **AMLR 2022,** 25-27 of May, Brasov, Romania
* **D.V. Portan**, V. Kostopoulos, C. Ntoulias, G. Mantzouranis, G. Sotiriadis, P. Yiallouro*, 30 min Plenary lecture,* ***Invited speaker,*** Title: ***3D printed bio-scaffolds on biomedical titanium: mechanical properties and biocompatibility, MTM 2019***, 31 of October – 1st of November, Istanbul, Turkey
* Strnad, G., Jakab-Farkas, L., Cazacu, R., **Portan, D**., Petrovan, C., Oral Presentation, Title: **Wettability of nanotubular titania layers for biomedical applications developed by electrochemical anodization**, **ModTech 2018**, 13-16 of June, Constanta, Romania
* **Portan, DV,** Papanicolaou GC. Oral Presentation*,* Title:***Properties predictive modeling through the concept of a hybrid interphase existing between phases in contact***. AIP Conference Proceedings **ICSAAM 2017**, 1932: 030033, 19-22 of September, Bucharest, Romania
* Papanicolaou GC, **Portan DV,** Oral presentation, Title: ***Analytical modeling of micro and nano-composites***. AIP Conference Proceedings **ICSAAM 2017**, 1932: 020003, 19-22 pf September, Bucharest, Romania
* Kontaxis LC, Pavlou C, **Portan DV,** Papanicolaou GC, Oral Presentation, Title: ***Effect of saline absorption on the flexural stress relaxation behavior of epoxy/cotton composite materials for orthopedics applications***. AIP Conference proceedings **ICSAAM 2017**, 1932: 030020, 19-22 of September, Bucharest, Romania
* Kontaxis L.C., Georgali A, **Portan DV**, Papanicolaou GC, Oral presentation, Title: ***Flexural creep behavior of epoxy/cotton composite materials before and after saline absorption for orthopedics applications***. AIP Conference proceedings **ICSAAM 2017**, 1932: 030044, 19-22 of September, Bucharest, Romania
* Papanicolaou GC, Pappa EJ, **Portan DV**, Kotrotsos A, Kollia E. Oral presentation, Title: ***Effect of stacking sequence and surface treatment on the thermal conductivity of multilayered hybrid nano-composites***. AIP Conference proceedings **ICSAAM 2017**, 1932: 030030, 19-22 of September, Bucharest, Romania
* Strnad G, German-Sallo Z, Jakab-Farkas L, Petrovan C, **Portan D,** Oral Presentation, Title: ***Influence of electrical parameters on morphology of nanostructured TiO2 layers developed by electrochemical anodization***. MATEC Web of Conferences 2017, 112: 04021**, IManE&E 2017,** 3rd of July
* Strnad G, German-Sallo Z, Jakab-Farkas L, Cazacu PR, **Portan D.,** Oral presentation, Title: ***Effect of potential ramp in the potentiodynamic stage of anodization on morphology of nanostructured TiO2 developed on Ti6Al4V alloy***, 5-6 of October, **InterEng 2017**, Tg Mures, University ‘Petru Maior’ of Tg Mures, Romania
* Strnad G, Jakab-Farkas L, Petrovan C, Bica C, **Portan D.,** Oral presentation, Title: ***Novel SB, AE and SLA surfaces for dental implants modified at nano scale level with titania nanostructures***. 5th International Conference on Powder Metallurgy and Advance Materials **RoPM & AM 2017**, 17-20 of September, Cluj, Romania
* Strnad G, German-Sallo Z, Jakab-Farkas L, Cazacu R, Russu O, Feier A, **Portan D,** Kontaxis L. Poster, Title: ***Self-organized nanotubular oxide layers’ synthesis on micro rough surfaces of Ti6Al4V alloy for bio-implants***, **ESB 2017**, 28th Annual Conference of European Society of Biomaterials, 4-8 of September 2017, Athens
* Strnad G, **Portan D**, Jakab-Farkas L, Petrovan C, Russu O, Oral presentation, Title: ***Morphology of TiO2 surfaces for biomedical applications developed by electrochemical anodization*,** 8-11 of March, **Bramat 2017**, Brasov, Romania
* **Portan DV,** Kroustalli AA, Papanicolaou GC, Deligianni DD,Poster, Title: ***Adhesion Strength and Modeling of Human Bone Cells on Advanced Biomedical Substrates,*** 11-14 of June, **MBE 2016** (Matrix Biology Europe), Athens
* **Portan DV**, Deligianni D, Psarras GC, Papanicolaou GC, Oral *presentation,* Title*:* ***Investigation of Human Bone Cells Response deposited on Different Substrates to an Electrical Active Environment****,* **10th Anniversary Conference of the Hellenic Society of Biomaterials, November 26-28, 2015, Athens**
* Bairami V, Nikolopoulou F, **Portan DV**, Mouzakis D, Oral presentation, Title: ***Micro – porous titanium surfaces for an Improved Biocompatibility of Titanium Dental Implants***, **10th Anniversary Conference of the Hellenic Society of Biomaterials, November 26-28, 2015, Athens**
* **Portan DV**, Petropoulos GN, Kontaxis L, Papanicolaou GC, Oral presentation, Title: ***Effect of TiO2 Nanotubes developed on Pure Titanium Substrates on the Mechanical Performance of Titanium-Titanium Single Lap Adhesive Joints***, **ICSAAM 2015**, 8-11 of September, Porto, Portugal
* **Portan DV**, Papanicolaou GC, Mouzakis D, Pappa EJ, Deligianni DD, Kroustalli AA, Oral presentation, Title: ***Biomedical Nitinol Investigation: Shape Memory Effect and Biocompatibility****,* **9th Meeting of the Hellenic Society of Biomaterials 2014,** November 7-8, Athens
* Papanicolaou GC, **Portan DV,** Oral presentation, Title: ***Modeling of tissue – implant interaction****,* **9th Meeting of the Hellenic Society of Biomaterials 2014,** November 7-8, Athens
* Nikolopoulou F, **Portan DV**, Bairami V, Mouzakis D, Oral presentation, Title: ***Micro – Porous Titanium Surfaces for Improved Biocompatibility of Titanium Implants in Dental Surgery*, 9th Meeting of the Hellenic Society of Biomaterials 2014,** November 7-8, Athens
* Economidou SN, **Portan DV**, Basturescu A, Kontaxis L, Papanicolaou GC.Oral presentation, Title: ***Electrochemical manufacturing of TiO2 nanotubes: effect on the interfacial pull-out mechanism***,**9th Meeting of the Hellenic Society of Biomaterials 2014,** November 7-8, Athens
* Papanicolaou GC, **Portan DV,** Oral p*resentation*, Title: ***Modeling of Interphases Created Between Living and Non-Living Materials***, 8th Annual Conference & Union Ceremony with the Italian Biomaterials Society, November 2013, Athens, Greece
* **Portan DV**, Papanicolaou GC, Caposi M, Oral presentation, Title: ***Heat treatment structural changes of nitinol***, **3rd ICEAF** **2013**, 26-28 of June, Kos, Greece
* **Portan DV**, Kontaxis L, Vazdoaga M, Cordoneanu A., Oralpresentation, Title: ***Creep and Relaxation Behavior of Micro and Nano TiO2 Particulate Epoxies****,* **ICSAAM 2013,** 23-26 of September, Kos, Greece
* Papanicolaou G.C., **Portan D.V.**, Kousiatza Ch, Sultan DM., Oralpresentation, Title: ***Experimental and Analytical Investigation of the Interfacial Stress Field in Single-Lap Joints between Similar and Dissimilar Materials***, **3rd ICEAF** **2013**, 26-28 of June, Kos, Greece
* Papanicolaou GC, **Portan DV**, Economidou S.Oral presentation, Title: ***The Role of the TiO2 Nanotubes on the Titanium-Polymer Interfacial Pull-out Mechanism***, **3rd ICEAF** **2013**, 26-28 of June, Kos, Greece
* **Portan DV**, Koutsomitopoulou A, Covaliu CI, Papanicolaou GC. Oral presentation, Title: ***Dynamic Mechanical Analysis of TiO2 Fe Nanoparticles - Reinforced Epoxies***, **Therma 2012**, 25-27 of May, Thessaloniki, Greece
* **Portan DV**, Papanicolaou GC.**,** Poster, Title: ***A Predictive Model for the Dynamic Friction Coefficient, 10th edition of the International Conference on Durability of Composite Systems***, **Duracosys 2012**, Vrije Universiteit van Brussel, 17-19 of September, Belgium
* **Portan DV**, Papanicolaou GC, Bouropoulos N., Oral presentation, Title: ***Manufacturing and Characterization of TiO2 Nanotubes for Solar Cells and Biomedical Applications***, **DFC-11 & SI-5 Conference** **2011**, Queens’ College, Cambridge, 13-15 of April, UK
* Papaefthymiou KP, Drakopoulos ED, Koutsomitopoulou AF, **Portan DV**, Zaoutsos SP, Papanicolaou GC., Oral presentation, Title: ***Dynamic Mechanical Behavior of Epoxy Matrix-MWCNT Nanocomposites***, **DFC-11 & SI-5 Conference** **2011**, Queens’ College, Cambridge, 13-15 of April, UK
* Papanicolaou GC, **Diana Portan,** Oral presentation, Title: ***Synthesis, Characterization and Biomedical Applications of TiO2 Nanotubes***, **8th International Conference on Nanosciences & Nanotechnologies – NN11** (**2011)** Thessaloniki, 12-15 of July
* Papanicolaou GC, **Diana Portan,** Oral Presentation, Title: ***Predictive Models for Tissue – Implant Interaction Behavio*r. Scientific meeting of the Hellenic Society of Biomaterials 2011**, Athens, November 18-19
* **Portan** **DV,** G.C. Papanicolaou. Oral presentation, Title: ***Parameters Affecting the Structure and Geometry of TiO2 Nanotubes Produced for Advanced Biomedical Application***, **5th Biomaterials Conference of the Hellenic Society of Biomaterials (EEB)** together with the Scientific Societies of Knee, Hip and Reconstructive Knee, Hip Surgery of the Hellenic Society of Orthopedic Surgery and Traumatology (EEXOT), Thessaloniki 2010, November 26-28

**NARRATIVE CV**

Dr. Diana V. Portan has obtained a MSc diploma in Biocompatible systems and two PhDs in interdisciplinary sciences related to biomaterials - manufacturing, mechanical characterization, biocompatibility assessment and modeling of interphases developed between material and human cells. She is currently a Postdocoral Fellow at the University of Patras, Greece, and an external collaborator of the Advanced Centre of Medical and Pharamaceutical Studies of UMFST Tg. Mures, Romania, as well as of the Robotech R&D company, Romania. The highlight of her research is the flexibility to work with both materials (manufacturing, processing, characterization) and human cell cultures by adapting the existing standards for biocompatibility testing. Her research topics are around biomimetic materials for implant manufacturing/ processing: mechanical characterization and biocompatibility, primary human cell cultures, composite biomaterials, scaffolds for synthetic bone and synthetic skin, biodegradation of biomaterials, interface between tissues and biomaterial. She published more than 35 articles and sustained more than 40 presentations around these topics.

As a consortium leader in Greece and a Work Package leader (WP7 New materials and Biocompatibility, HORIZON-KDT-JU-2022-2-RIA, Proposal number: 101112347), she played key role in correlating companies and scientific groups, working with scientists, physicians, stakeholders etc. Also, she is intensively developing laboratory models to replace animal models, following European Commission requirements. Finally, she focuses on personalized medicine and databases of patients with application in implantology. She has written the ‘ethics & deontology’ section of NerveRepack project (<https://www.nerverepack.eu/about-the-project>) and is actively involved in gender equality strategies for science, in Greece and Romania.