

### Curriculum vitae

Europass

# **Personall information**

Name / Surname Porojan Sorin

Adress 6 Socrate Str., Timişoara, România

Telephone 0744356180

E-mail porojan\_sorin@yahoo.com, porojan.sorin@umft.ro

citizenship Romanian

Date of birth 17.09.1979

Sex Male

Actual place of work / Assoc. Prof. Dr. at the University of Medicine and Pharmacy "Victor Babeş" Timişoara, Faculty of

Dentistry, Dental Technology Specialization, Oral Rehabilitation Department, 1989 Revoluţiei Blv no. 9,

300041 Timisoara, Romania

**Professional experience** 

ocupational area

Period 2005 -2006

Occupation or position held Intern

The main activities and Medical activity

responsibilities

Name and address of employer Timişoara County Emergency Clinical Hospital, Bd. Iosif Bulbuca No. 10, Code 300736, Timisoara,

Romania

Type of business or sector Medical

Period 2006-2009

The main activities and Teaching, reseasch, scientific

responsibilities

Name and address of employer "Victor Babeş" University of Medicine and Pharmacy Timişoara, Faculty of Dentistry, Dental Technology

Specialization, B-dul Revoluţiei from 1989 no. 9, 300041 Timisoara, Romania

Type or sectorof activity Education

Period 2009-2013

Occupation or position held Assistant Professor

The main activities and Teaching, reseasch, scientific

responsibilities

Name and address of employer "Victor Babeş" University of Medicine and Pharmacy Timişoara, Faculty of Dentistry, Dental Technical

Specialization, B-dul Revoluţiei from 1989 no. 9, 300041 Timisoara, Romania

The main activities and Teaching, reseasch, scientific

responsibilities

Period 2013-2016

Occupation or position held Lecturer

The main activities and Teaching, reseasch, scientific

responsibilities

Name and address of employer "Victor Babeş" University of Medicine and Pharmacy Timişoara, Faculty of Dentistry, Dental Technical

Specialization, B-dul Revoluţiei from 1989 no. 9, 300041 Timisoara, Romania

The main activities and

responsibilities

Teaching, reseasch, scientific

Period 2016- present

Occupation or position held Associate Professor

The main activities and Teaching, reseasch, scientific

responsibilities

Name and address of employer "Victor Babeş" University of Medicine and Pharmacy Timişoara, Faculty of Dentistry, Dental Technology

Specialization, B-dul Revolutiei from 1989 no. 9, 300041 Timisoara, Romania

The main activities and

responsibilities

Teaching, reseasch, scientific

**Educationand trading** 

Period 1994-1998

Qualification / diploma obtained Baccalaureate diploma

Main fields studied / skills acquired Theoretical highschool "M. Eminescu" highschool Bucharest Name and type of educational institution / Training provider Period 1998-2004 Qualification, diploma obtained Dentist Main fields studied / skills acquired dental medicine Name and type of educational "Titu Maiorescu" Independent University of Bucharest, Faculty of Dentistry institution / Trading provider Period 2006-2007. Qualification, diploma obtained Postgraduate pedagogy course for teachers module 1 Main fields studied / skills acquired Pedagogy, psychology West University of Timisoara Name and type of educational institution / Trading provider Period 2006-2009 Main fields studied / skills acquired dento-alveolar surgery Diploma in dento-alveolar surgery Qualification, diploma obtained Qualification, diploma obtained Diploma in dento-alveolar surgery Name and type of educational "Victor Babes" University of Medicine and Pharmacy Timisoara, institution / training provider Period 2006-2010 Qualification, diploma obtained Doctor in dental medicine Main fields studied / skills acquired Modern processes for welding base metal alloys used in dental prosthesis technology Qualification, diploma obtained Name and type of educational "Victor Babeş" University of Medicine and Pharmacy Timişoara, institution / Training provider Period 2013-Qualification, diploma obtained Diploma of specialist in dental prosthetics Main fields studied / skills acquired Prosthetic dentistry Qualification, diploma obtained Name and type of educational "Victor Babes" University of Medicine and Pharmacy Timisoara,

institution /

Trading provider

Period 2015-2016 Postgraduate pedagogy course for teachers module 2

Qualification, diploma obtained Main fields studied / skills acquired Name and type of educational

Pedagogy, psychology West University of Timisoara

institution / Trading provider

# Personal skills and competence

Foreign languages Autoevaluation European level (\*) english

# **English**

Spoken Written Comprehension Listening skills Reading skills Interaction Expression Independent C Advanced user С Independent С Independent Advanced user user user 1 user 1

(\*) Cadrului european de referință pentru limbi

Competences and social abilities

Participation in 6 research project teams.

Technical skills and competences

- Experience in research project management
- CNCSIS research project director type TD, 319/2007: Modern processes for welding non-noble alloys used in dental prosthesis technology
- Participation in research teams in 4 projects
- Member of the CNCSIS grant research team type AT, 171/2007: Experimental research on modern welding processes and evaluation of non-noble alloys used in dental prosthetics.
- Member of the PNII grant research team type IDEI ID 1264, contract no. 200 / 01.10.2007: Implementation and evaluation of computerized procedures in dental prosthesis technology.
- Member of the PNII grant research team type ID 1878, Experimental and analytical evaluation of the durability of materials and dental prostheses based on tensile strength and crack propagation speed.

- Member of the PNII project research team type TE\_217, contract no. 102 / 12.08.2010: Applied research on the effect of skeleton design on the accuracy and reliability of fixed dentures.
- Member of the project research team PN-II-RU-TE-2014-4-0476, contract no. 182 / 01.10.2015:
   Biomechanical aspects regarding fracture prediction and fatigue reliability of fixed dental prosthetic restorations.

#### Technical skills and competences

Experience in the technology of fixed, mobilizable and composite dentures Microsoft Office, Power Point, Photoshop, Corel Draw Computer modeling and graphics, technical skills

The fields of scientific research are focused on:

- modern processes for welding dental alloys in a shielding gas medium: laser welding, microplasma welding (experimental studies on the determination of welding parameters, nondestructive and destructive analyzes),
- structural aspects of non-noble dental alloys,
- numerical simulations (finite element analysis).
- operation of CAD / CAM systems
- ceramic systems

The dissemination of the research results was achieved by:

- 4 published books;
- over 100 scientific papers published in extenso (ISI BDI)
- over 130 papers published as abstracts;
- over 150 papers communicated at scientific events.

Participation in 6 research projects won through national competition, 1 as project director, and 5 as a member of the research team.

Participation in over 70 congresses and symposia. Participation in 7 courses and training programs.

Skills and knowledge of computer use

f computer use Yes
Driving license B cate

Additional information

B category

Other references can be provided on request

# LIST OF PUBLICATIONS ASSOC PROF. DR. Sorin Daniel POROJAN

2017-2021

#### books

1. Porojan Liliana, Savencu Cristina, Vasiliu Roxana, Porojan Sorin, Topală Florin, Tehnologii computerizate în protetica dentară, Ed. Eurobit, Timișoara, 2020, ISBN 978-973-132-641-2

#### Articles published in ISI Journals

- 2. Porojan, L.; Vasiliu, R.-D.; Porojan, S.-D.; Bîrdeanu, M.-I. Surface Quality Evaluation of Removable Thermoplastic Dental Appliances Related to Staining Beverages and Cleaning Agents. Polymers 2020, *12*, 1736
- 3. Porojan, L.; Vasiliu, R.-D.; Bîrdeanu, M.-I.; Porojan, S.-D. Surface Characterization and Optical Properties of Reinforced Dental Glass-Ceramics Related to Artificial Aging. Molecules 2020, *25*, 3407.
- Vasiliu Roxana Diana, Porojan Sorin Daniel, Bîrdeanu Mihaela Ionela, Uţu Ion Dragoş, Porojan Liliana, The Effect of Thermocycling and Surface Treatments on the Surface Roughness and Microhardness of Three Heat-Pressed Ceramics Systems, Crystals, 2020, 10(3), 160. doi:10.3390/cryst10030160, Accession Number: WOS:000523512100020, ISSN: 2073-4352
- 5. Vasiliu Roxana Diana, Porojan Sorin Daniel, Bîrdeanu Mihaela Ionela, Porojan Liliana, Effect of Thermocycling, Surface Treatments and Microstructure on the Optical Properties and Roughness of CAD-CAM and Heat-Pressed Glass Ceramics, Materials, 2020, 13(2), 381, Accession Number: WOS:000515499900128, eISSN: 1996-1944 IF 3.057/2019
- Porojan Liliana, Birdeanu Mihaela, Porojan Sorin, Multidisciplinary Approach on the Corrosion Behavior of Welded Nickel-free and Nickel-containing Stainless Steel Orthodontic Wires, REVISTA DE CHIMIE Volume: 70 Issue: 7 Pages: 2447-2451 Published: JUL 2019, Accession Number: WOS:000485843500032 ISSN: 0034-7752
- 7. Vasiliu Roxana-Diana, Porojan Sorin, Porojan Liliana, The Influence of Oral Environment on the Optical Properties of Heat- pressed Ceramics, MATERIALE PLASTICE Volume: 56 Issue: 1 Pages: 271-276 Published: MAR 2019, Accession Number: WOS:000464604100053 ISSN: 0025-5289
- Savencu, Cristina Elena; Porojan, Sorin; Porojan, Liliana, Analysis of Internal and Marginal fit of Metal-ceramic Crowns During Processing, Using Conventional and Digitized Technologies, REVISTA DE CHIMIE Volume: 69 Issue: 7 Pages: 1699-1701 Published: JUL 2018, Accession Number: WOS:000444595700020, ISSN: 0034-7752

- Iliescu, Alexandru Andrei; Perlea, Paula; Suciu, Ioana; Porojan, Sorin Daniel; Porojan, Liliana; Gheorghiu, Irina; Earar, Kamel, Thermographic analysis of burs and bone heating developed during osteotomy for dental implant placement: an in vitro study, ROMANIAN BIOTECHNOLOGICAL LETTERS, 2018, Volume: 23 Issue: 2 Pages: 13487-13495, Accession Number: WOS:000431317900014, ISSN: 1224-5984,
- Liliana, Porojan; Elena, Savencu Cristina; Virgil, Costea Liviu; Laurentiu, Dan Mircea; Daniel, Daniel, Porojan Sorin, Corrosion Behavior of Ni-Cr Dental Casting Alloys, INTERNATIONAL JOURNAL OF ELECTROCHEMICAL SCIENCE Volume: 13 Issue: 1 Pages: 410-423 DOI: 10.20964/2018.01.08 Published: JAN 2018, Accession Number: WOS:000428965800034, ISSN: 1452-3981
- Porojan, Liliana; Birdeanu, Mihaela; Savencu, Cristina; Porojan, Sorin, Surface Characteristics and Corrosion Properties of Co-Cr Dental Alloys Processed by Laser-based Methods, REVISTA DE CHIMIE Volume: 68 Issue: 11 Pages: 2538-2541 Published: NOV 2017, Accession Number: WOS:000416751800014, ISSN: 0034-7752
- 12. Porojan, Liliana; Topala, Florin; Porojan, Sorin; Savencu, Cristina, Effect of frame design and veneering material on biomechanical behavior of zirconia dental crowns veneered with overpressing ceramics, DENTAL MATERIALS JOURNAL Volume: 36 Issue: 3 Pages: 275-281 DOI: 10.4012/dmj.2016-096 Published: JUN 2017, Accession Number: WOS:000406729500005, PubMed ID: 28154316, ISSN: 0287-4547

#### **Articles published in BDI Journals**

- Porojan Liliana, Bîrdeanu Mihaela, Savencu Cristina, Porojan Sorin, Characterization of Dental Metal-Ceramic Interfaces of Heat Pressed Ceramics on Co-Cr Frameworks Obtained with Different Technologies, Applied Mechanics and Materials, 2018, 876, 25–30, ISSN 1662-7482 doi:10.4028/www.scientific.net/amm.876.25,
- Porojan, L., Porojan, S., Topală, F. Prediction of the Biomechanical Behavior of All-Ceramic Dental Restorations after Cyclic Loading using FEA, (2018) IOP Conference Series: Materials Science and Engineering, 416 (1), art. no. 012070, ISSN:1757-8981E-ISSN:1757-899X,DOI:10.1088/1757-899X/416/1/012070
- 3. Porojan, L., Rusu, L., Boloş, A., Savencu, C., Porojan, S. Fracture Behavior of Monolithic Hot-Pressed Posterior Ceramic Dental Crowns (2018) IOP Conference Series: Materials Science and Engineering, 416 (1), art. no. 012078, ISSN:1757-8981E-ISSN:1757-899X DOI: 10.1088/1757-899X/416/1/012078
- Porojan Liliana, Porojan Sorin, Rusu Lucian, Boloş Adrian, Savencu Cristina, Antoniac Aurora, Gradinaru Sebastian, Experimental evaluation of fracture pattern in bilayered all-ceramic molar crowns, Defect and Diffusion Forum, 2017, Vol. 376, pp. 101-110, ISSN: 1662-9507 DOI: 10.4028/www.scientific.net/DDF.376.101,
- 5. Savencu, C.E., Porojan, L., Bîrdeanu, M., Boloş, A., Porojan, S., Antoniac, A., Gradinaru, S. Surface characteristics of base metal dental alloys processed by alternative procedures (2017) Defect and Diffusion Forum, 376, pp. 1-11. ISSN: 1662-9507 DOI: 10.4028/www.scientific.net/DDF.376.1

#### ISI proceedings

- Porojan, Liliana; Savencu, Cristina; Bolos, Adrain; Rusu, Lucian; Porojan, Sorin, Mechanical approach of metal-ceramic crowns obtained with laser-based additive manufacturing methods, Edited by: Todea DC; Podoleanu AG; Duma VF, SEVENTH INTERNATIONAL CONFERENCE ON LASERS IN MEDICINE Book Series: Proceedings of SPIE Volume: 10831 Article Number: UNSP 1083107 DOI: 10.1117/12.2280228 Published: 2018, Accession Number: WOS:000453614200004, Conference Title: 7th Romanian-Society-for-Laserin-Dentistry (SRLS) International Conference on Lasers in Medicine / 1st Congress of Laser in Dentistry, Conference Date: JUL 13-15, 2017, Conference Location: Timisoara, ROMANIA, Conference Sponsors: Romanian Soc Lasers Dent, Univ Med & Pharmacy Victor Babes Timisoara, ISSN: 0277-786X, eISSN: 1996-756X, ISBN: 978-1-5106-2288-3
- 2. Savencu, Cristina E.; Birdeanu, Mihaela; Porojan, Sorin D.; Porojan, Liliana, Corrosion behavior of dental alloys-processed by laser-based additive manufacturing procedures, Edited by: Todea DC; Podoleanu AG; Duma VF, SEVENTH INTERNATIONAL CONFERENCE ON LASERS IN MEDICINE Book Series: Proceedings of SPIE Volume: 10831 Article Number: UNSP 1083108 DOI: 10.1117/12.2280250 Published: 2018 Accession Number: WOS:000453614200005, Conference Title: 7th Romanian-Society-for-Laser-in-Dentistry (SRLS) International Conference on Lasers in Medicine / 1st Congress of Laser in Dentistry, Conference Date: JUL 13-15, 2017, Conference Location: Timisoara, ROMANIA, Conference Sponsors: Romanian Soc Lasers Dent, Univ Med & Pharmacy Victor Babes Timisoara, ISSN: 0277-786X, eISSN: 1996-756X, ISBN: 978-1-5106-2288-3
- 3. Porojan, Liliana; Topala, Florin, Failure analysis of various monolithic posterior aesthetic dental crowns using finite element method, Book Group IOP, 6TH INTERNATIONAL CONFERENCE ON MANUFACTURING ENGINEERING AND PROCESS (ICMEP 2017) Book Series: Journal of Physics Conference Series Volume: 885 Article Number: UNSP 012003 DOI: 10.1088/1742-6596/885/1/012003 Published: 2017, Accession Number: WOS:000411394200003, Conference Title: 6th International Conference on Manufacturing Engineering and Process (ICMEP), Conference Date: MAY 27-29, 2017, Conference Location: Lisbon, Portugal, ISSN: 1742-6588
- 4. Porojan, Liliana; Savencu, Cristina E.; Topala, Florin I.; Porojan, Sorin D., Surface texture and hardness of dental alloys processed by alternative technologies, Book Group: IOP, 6TH INTERNATIONAL CONFERENCE ON MANUFACTURING ENGINEERING AND PROCESS (ICMEP 2017) Book Series: Journal of Physics Conference Series Volume: 885 Article Number: UNSP 012004 DOI: 10.1088/1742-6596/885/1/012004 Published: 2017, Accession Number: WOS:000411394200004, Conference Title: 6th International

- Conference on Manufacturing Engineering and Process (ICMEP) Conference Date: MAY 27-29, 2017, Conference Location: Lisbon, Portugal, ISSN: 1742-6588
- 5. Porojan, Sorin; Birdeanu, Mihaela; Savencu, Cristina; Porojan, Liliana, Structural and morphological approach of Co-Cr dental alloys processed by alternative manufacturing technologies, Book Group: IOP, 6TH INTERNATIONAL CONFERENCE ON MANUFACTURING ENGINEERING AND PROCESS (ICMEP 2017) Book Series: Journal of Physics Conference Series Volume: 885 Article Number: UNSP 012005 DOI: 10.1088/1742-6596/885/1/012005 Published: 2017, Accession Number: WOS:000411394200005, Conference Title: 6th International Conference on Manufacturing Engineering and Process (ICMEP), Conference Date: MAY 27-29, 2017, Conference Location: Lisbon, Portugal, ISSN: 1742-6588
- 6. Porojan, Liliana; Porojan, Sorin; Rusu, Lucian; Bolos, Adrian; Savencu, Cristina, Experimental Analyses for The Mechanical Behavior of Pressed All-Ceramic Molar Crowns with Anatomical Design, Edited by: Amir HFA; Khiew PS, 2017 INTERNATIONAL CONFERENCE ON MECHANICAL, AERONAUTICAL AND AUTOMOTIVE ENGINEERING (ICMAA 2017) Book Series: MATEC Web of Conferences Volume: 108 Article Number: UNSP 02001 DOI: 10.1051/matecconf/201710802001 Published: 2017, Accession Number: WOS:000407748100011, Conference Title: International Conference on Mechanical, Aeronautical and Automotive Engineering (ICMAA), Conference Date: FEB 25-27, 2017, Conference Location: Malacca, MALAYSIA, ISSN: 2261-236

#### Abstracts published at conferences

- 1. Porojan Liliana, Porojan Sorin, Birdeanu Mihaela Electrochemical Behavior of Welded Stainless Steel Dental Wires 2019 Continental European and Scandinavian Divisions Meeting (Madrid, Spain) J Dent Res 98, (Spec Iss B) ISSN: 1544-0591
- Vasiliu Roxana, Porojan Sorin, Porojan Liliana, In-vitro Comparison of Hot Pressed and Milled Feldspar Ceramic Regarding Optical Properties and Roughness 2019 Continental European and Scandinavian Divisions Meeting (Madrid, Spain) J Dent Res 98, (Spec Iss B) ISSN: 1544-0591
- Cristina Savencu, Costela Şerban, Liliana Porojan, Evaluarea adaptării interne şi marginale a coroanelor metalo-ceramice obținute prin tehnologia clasică şi tehnologii alternative, CONGRESUL DE MEDICINĂ DENTARĂ CU PARTICIPARE INTERNAŢIONALĂ, ZMB, 2019.
   Medicine in Evolution, Volume XXV, Nr. 1 suppl, 2019 ISSN 2065-376X
- 4. Roxana-Diana Vasiliu, Cristina Elena Savencu, Liliana Porojan, Influența prelucrării de suprafață și a grosimii asupra proprietățiilor optice a ceramicii obținute prin presare, ZMB, 2019. Medicine in Evolution, Volume XXV, Nr. 1 suppl, 2019 ISSN 2065-376X
- 5. Porojan Liliana, Restaurările ceramice monolitice reper în reabilitarea orală actuală, Zilele Medicinei Dentare Craiovene, 6-8 iunie 2019. Volum de rezumate 978-606-11-6914-6
- Vasiliu Roxana Diana, Porojan Sorin, Topală Florin, Porojan Liliana, Evaluation of optical properties and roughness of milled and hot pressed lithium disicate glass ceramic after imersion in artificial saliva, Zilele medicinei dentare Craiovene, 6-8 iunie 2019. Volum de rezumate 978-606-11-6914-6
- 7. Porojan Liliana, Aplicații ale procedeelor moderne de sudare în tehnica dentară, Al X-lea Congres Național Zilele Medicinei Dentare Craiovene, Craiova, 7-9 iunie 2018. Volum de rezumate 978-606-11-6439-4
- 8. Porojan Liliana, Savencu Cristina, Boloş Adrian, Rusu Lucian, Porojan Sorin, Particularități ale scheletelor metalice obținute prin prelucrarea computerizată a aliajelor dentare, CONGRESUL DE MEDICINĂ DENTARĂ CU PARTICIPARE INTERNAȚIONALĂ ZBS 10-12 Mai 2018, Suppl Medicine in Evolution, vol XXIV, nr. 1, 2018. ISSN 2065-376X
- Porojan Liliana, Multidisciplinary approach on the weldability of Nickel-free and Nickel-containing stainless steel orthodontic wires, 2nd Congress of the Balkanic Association of Orthodontic Specialists, 9th Congress of the Romanian Association for Excellence in Orthodontics, Iaşi, 24-26 mai 2018, Abstract book, ISBN 978-606-13-4404-8
- 10. Porojan Liliana, Savencu Cristina, Boloş Adrian, Rusu Lucian, Porojan Sorin, Metal-ceramic crowns failures related to the framework manufacturing procedure, FDI Congress 2017, 29 August 2 September 2017, Madrid. Free Communication, Abstract International Dental Journal 2017; 67 (Suppl. 1): 83. DOI: 10.1111/idi.12339 ISSN 0020-6539
- 11. Porojan Sorin, Boloş Adrian, Rusu Lucian, Savencu Cristina, Porojan Liliana, Effect of substrate on experimental failures of zirconia-based bilayered crowns, FDI Congress 2017, 29 August 2 September 2017, Madrid. Free Communication, Abstract International Dental Journal 2017; 67 (Suppl. 1): 83, DOI: 10.1111/idj.12339 ISSN 0020-6539
- 12. Liliana Porojan, Lucian Rusu, Adrian Bolos, Cristina Savencu, Sorin Porojan, Assessment of the fracture behaviour of bilayered zirconia-ceramic and metal-ceramic crowns, Biomaterials and regenerative medicine, Bioremed 2017 Today' research for tomorrow medicine 5-7 october 2017, Timisoara, Abstract book, vol 1-2017, pg. 109, ISSN 2601-0372
- 13. Sorin Porojan, Mihaela Bîrdeanu, Cristina Savencu, Liliana Porojan, Topographical and quantitative evaluation of Co-Cr dental alloys roughness related to the manufacturing technology, Biomaterials and regenerative medicine, Bioremed 2017 Today' research for tomorrow medicine 5-7 october 2017, Timisoara, Abstract book, vol 1-2017, pg. 110, ISSN 2601-0372
- Vasiliu Roxana-Diana, Savencu Cristina, Lazău Radu, Topală Florin-Ionel, Porojan Liliana, Effect of multiple firings on the optical properties of two dental ceramics, Biomaterials and regenerative medicine, Bioremed 2017 Today' research for tomorrow medicine 5-7 october 2017, Timisoara, Abstract book, vol 1-2017, pg. 179, ISSN 2601-0372

- 15. Cristina Savencu, Mihaela Bîrdeanu, Sorin Porojan, Liliana Porojan, Corrosion behavior of casted and CAD/CAM milled Co-Cr dental alloys -In vitro study, Biomaterials and regenerative medicine, Bioremed 2017 Today' research for tomorrow medicine 5-7 october 2017, Timisoara, Abstract book, vol 1-2017, pg. 180, ISSN 2601-0372
- Sorin Porojan, Mihaela Bîrdeanu, Cristina Savencu, Liliana Porojan, Caracteristici ale aliajelor de Co-Cr obţinute prin tehnologii alternative de fabricaţie, CONGRESUL DE MEDICINĂ DENTARĂ CU PARTICIPARE INTERNAŢIONALĂ, ZMB, 2017, Suppl Medicine in Evolution, vol XXIII, nr. 1, 2017. ISSN 2065-376X
- 17. Porojan Liliana, Actualități și perspective ale tehnologiilor digitale în tehnica dentară, Zilele Medicinei Dentare Craiovene, 8-10 iunie 2017. ISBN 978-606-11-5928-4