

CURRICULUM VITAE

Gabriela Marginean



Personal data

Present status : Dipl.-Ing, Dr. rer.nat.

Present address : Fachbereich Maschinenbau, Umwelt- und Gebäudetechnik
Westfälische Hochschule
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E-mail : Gabriela.Marginean@w-hs.de

Date of birth :

Marital status :

Nationality : German and Romanian

Languages : Romanian (mother tongue)
German (business fluent)
English (business fluent)

Experience

- **Mar 18 – today**

Coordinator of the Junior Research Group (Institute for Mechanical Engineering) and of the Graduate Center, Westfälische Hochschule
Tenured Lecturer: Chemistry (1.Sem. Bachelor Study) and Corrosion (1.Sem. Master Study)

- **Aug 15 – Feb 18**

Interim Prof. (W2, dedication: materials science and testing), Fachbereich Maschinenbau, Umwelt- und Gebäudetechnik, Westfälische Hochschule

- **Mar 02 – July 15**

Research Associate (Wissenschaftliche Mitarbeiterin TV-L 13), Institute for Mechanical Engineering, Materials Science and Testing, Prof. Dr.-Ing. Waltraut Brandl, Westfälische Hochschule

- **Jan 10 – Dec 12**

Projektengineer at the Company Thermico GmbH & Co.KG, Dortmund

- **Jan 00 – Dec 01**
„Stiftung Industrieforschung“ Fellow for research internship at the Department for Materials Science and Testing, Westfälische Hochschule

Education

- **Oct 99 – Jan 04**
Ph.D. in Technical Chemistry (Dr. rer.nat.), Ruhr-Universität Bochum
Defense: 28.01.2004, with mark „Magna cum Laude“ (sehr gut)
Title of Thesis: Thema: „Vapour Grown Carbon Fibres: Morphologie und plasma-chemische Funktionalisierung“
Supervisor: Prof. Dr. Martin Muhler
- **Sep 94 – Sep 99**
Undergraduate studies in chemical engineering (Dipl.-Eng), Politehnica University Timisoara, Romania
Final Exam: Sep 99; sehr gut
Title of Thesis: „Elektrochemische Beständigkeit verschiedener metallischer Beschichtungen in korrosiven Medien“

Achievements & Activities

- Oct 06 Dissertation Award „REHAU-Preis Technik 2006 - Sonderpreis“
- „Stiftung Industrieforschung“ Fellow for research internship (Jan 00 - Dec 01)
- 2016/2017 - Visiting Associate Professor at Politehnica University Timisoara, Romania
- 69 peer-reviewed scientific articles with >1300 citations, h-index = 18 (Web of Science)
- Guest Editor of Special Issue "Metal Coatings for Wear and Corrosion Applications", Materials, MDPI 2021/2022
- Guest Editor of Special Issue "Advances in the Mechanical Behavior of Polymeric Materials", Polymers, MDPI 2021/2022
- Reviewer for scientific journals, for example, Surface & Coatings Technology, Wear, Surfaces and Interfaces, Tribology International, Materials, Journal of Materials Engineering
- Expert-Reviewer/Rapporteur at “The Executive Agency for Higher Education, Research, Development and Innovation Funding”, Bucharest, Romania
- Host and organizer of the annual Network-Meeting “SME meets Applied Sciences” at Westfälische Hochschule

List of last ten important scientific publications

1. C.-R. Ciubotariu, D. Frunzaverde, **G. Marginean**, Investigations of Cavitation Erosion and Corrosion Behavior of Flame-Sprayed NiCrBSi/WC-12Co Composite Coatings, *Materials* 2022, 15(8), 2943; <https://doi.org/10.3390/ma15082943>
2. T. Schwanekamp, **G. Marginean**, M. Reuber, A. Ostendorf, Impact of cobalt content and grain growth inhibitors in laser-based powder bed fusion of WC-Co, *International Journal of Refractory Metals and Hard Materials*, Vol. 105, 105814, 2022, <https://doi.org/10.1016/j.ijrmhm.2022.105814>
3. Muntean R, Pascal D-T, Kazamer N, **Marginean G**, Şerban V-A. Sliding Wear Behavior of High-Temperature Vacuum-Brazed WC-Co-NiP Functional Composite Coatings. *Materials*. 2022; 15(1):88. <https://doi.org/10.3390/ma15010088>
4. Kazamer N, Valean P-C, Pascal D-T, Muntean R, **Marginean G.**, Serban V-A., Development, optimization and characterization of NiCrBSi-TiB₂ flame-sprayed vacuum fused coatings, *Surface and Coatings Technology* 406, 126747, 2021; doi.org/10.1016/j.surfcoat.2020.126747
5. N. Kazamer, R. Muntean, P.C. Valean, D.T. Pascal, **G. Marginean**, V.-A. Serban, Comparison of Ni-Based Self-Fluxing Remeted Coatings for Wear and Corrosion Applications, *Materials* 2021, Vol. 14, pp. 3293, doi.org/10.3390/ma14123293
6. T. Schwanekamp, **G. Marginean**, M. Reuber, "Laser beam Melting of Cr₃C₂-NiCr", *International Journal of Refractory Metals and Hard Materials*, vol. 85, 2019 / <https://doi.org/10.1016/j.ijrmhm.2019.105069>
7. Valean P-C, Kazamer N, Pascal D-T, Muntean R, Baranyi I, **Marginean G**, Serban V-A. Characteristics of Thermally Sprayed NiCrBSi Coatings before and after Electromagnetic Induction Remelting Process. *Acta Polytechnica Hungarica* 2019;16:7–18 [doi: 10.12700/APH.16.3.2019.3.1](https://doi.org/10.12700/APH.16.3.2019.3.1)
8. Kazamer N, Valean P-C, Pascal D-T, Muntean R, **Marginean G**, Serban V-A. Microstructure and Phase Composition of NiCrBSi-TiB₂ Vacuum Furnace Fused Flame-Sprayed Coatings. *IOP Conference Series: Materials Science and Engineering* 2018;416:012001. [doi: 10.1088/1757-899X/416/1/012001](https://doi.org/10.1088/1757-899X/416/1/012001)
9. Valean P-C, Kazamer N, Muntean R, Pascal D-T, Kilic Y, **Marginean G**, Serban V-A. Investigations on the Characteristics of Thermally Sprayed NiCrBSi Coatings Fused by Flame and Inductive Processing. *IOP Conference Series: Materials Science and Engineering* 2018;416:012002. [doi: 10.1088/1757-99X/416/1/012002](https://doi.org/10.1088/1757-99X/416/1/012002).
10. Pascal D-T, Kazamer N, Muntean R, Valean P-C, **Marginean G.**, Serban V-A. Electrochemical Corrosion Behavior of High Temperature Vacuum Brazed WC-Co-NiP Functional Composite Coatings. *IOP Conference Series: Materials Science and Engineering* 2018;416:012003. [doi: 10.1088/1757-899X/416/1/012003](https://doi.org/10.1088/1757-899X/416/1/012003).