

Curriculum Vitae: Dipl.-Ing. Dr. Wolfgang Waldhauser		
Organization	JOANNEUM RESEARCH, Institute for Surface Technologies and Photonics (JR)	
Date of Birth:	22. May 1964	
Place of Birth:	Klagenfurt	
Nationality:	Austrian	
Career-related Activities		
October 1984 - December 1991	Studies of Materials Science, University of Leoben Diploma thesis: Development of a testing method for anodized decorative small aluminium parts	
February 1992 - January 1997	Research Assistant, University of Leoben, (MUL-MW), (A) PhD thesis (finished July 2006): Deposition and characterisation of sputtered hexaboride coatings	
May 1995	Visiting Scientist, Department VIII: Materials Protection; Non-Destructive Testing, Division VIII.2: Surface Technologies; Federal Institute for Materials Research and Testing, Berlin (D)	
February 1997 - August 1999	Scientific Assistant and Project Manager, MUL-MW	
since September 1998	Visiting Lecturer, University of Applied Sciences (FH JOANNEUM), Kapfenberg (A); <u>Lectures</u> : Materials Science, Production Technology	
September 1999 - June 2010	Research Engineer and Project Manager, Head of the Thin Film Group, Laser Center Leoben (JR-LZL), Niklasdorf (A)	
since February 2000	Senior Researcher, Materials Center Leoben (MCL), (A)	
since July 2005-	Head of NanoSurface Engineering Center, (JR)	
September 2007- June 2010	Deputy Head of Laser Center Leoben (JR-LZL), Niklasdorf (A)	
July 2010 – June 2016	Head of Research Group Functional Surfaces, JOANNEUM RESEARCH, Institute for Surface Technologies and Photonics (JR)	
since July 2016	Head of Research Group Laser and Plasma Processing, JOANNEUM RESEARCH, Institute for Surface Technologies and Photonics (JR)	
Awards (selected)	2004: Grand Prix and Gold Medal with Extinction for the invention „Implantable Pump for the PolPHAS (Polish Pneumatic Heart Assist System)“ of the 53th World Exhibition for Innovation, Research and New Technology EUREKA 2004 in Brussels (main European fair for inventions) 2004: Diploma of the Polish Minister of Science and Innovation for the most valuable Polish innovation in 2004 2016: Johann Puch Automotive Award (5 th prize), Project HighTempCFK	
Publications:	Approx. 90 publications in scientific journals, 3 patents	
Research Interests: Nanostructured hard coatings, Laser an plasma assisted thin film technology, Applied development of functional coatings, Carbon based coatings, Coatings and materials for medical applications, Additive Manufacturing (SLM, LMD)		

Selected Publications:

Thirumalai S., Hausberger A., Lackner J., Waldhauser W., Schwarz T.: Anode layer source plasma-assisted hybrid deposition and characterization of diamond-like carbon coatings deposited on flexible substrates, *Thin Solid Films*, Volume 655, 2018, Pages 54-61

G. Meneghetti, D. Rigon, D. Cozzi, W. Waldhauser, M. Dabalà, Influence of build orientation on static and axial fatigue properties of maraging steel specimens produced by additive manufacturing, *Proc. 3rd International Symposium on Fatigue Design and Material Defects, FDMD 2017*, 19-22 September 2017, Lecco, Italy

W. Waldhauser, J.M. Lackner, E. Brandstätter; Oberflächenfunktionalisierung durch Plasmen; *dIALOG (5)* 2016, 48-49, Deutsche Gesellschaft für Materialkunde e.V.

J.M. Lackner, W. Waldhauser, C. Ganser, C. Teichert, M. Kot, L. Major, Mechanisms of topography formation of magnetron-sputtered chromium-based coatings on epoxy polymer composites, *Surface and Coatings Technology* 241 (2014) pp. 80-85

J.M. Lackner, W. Waldhauser, Bio-mimetic design for surface protection of plastic materials based on properties of human skin [Biomimetisches Design für den Oberflächenschutz von Kunststoffen basierend auf Eigenschaften menschlicher Haut], *Galvanotechnik* 105 (2) (2014) pp. 234-243

J.M. Lackner, S. Gümüş, S. Polat, L. Major, W. Waldhauser, Growth of biomimetic films – influences of polymer topography and phase structure, *Bioinspired, Biomimetic and Nanobiomaterials* 3 (3) (2014) pp. 146-159

J.M. Lackner, W. Waldhauser, Plasma polishing and coating of titanium alloys for implants [Plasma-Polieren und-Beschichten von Titanlegierungen für Implantate], *Galvanotechnik* 105 (6) (2014) pp. 1294-1301

J.M. Lackner, W. Waldhauser, R. Major, L. Major, P. Hartmann, Biomimetics in thin film design – Wrinkling and fracture of pulsed laser deposited films in comparison to human skin, *Surface and Coatings Technology* 215 (2013) pp. 192-198

J.M. Lackner, W. Waldhauser, P. Hartmann, O. Miskovics, F. Schmied, C. Teichert, T. Schöberl, Self-assembling (nano-)wrinkling topography formation in low-temperature vacuum deposition on soft polymer surfaces, *Thin Solid Films* 520 (2012) 2833-2840

W. Waldhauser, M. Kahn, P. McGuinness, A. Konrad; Structure and gas barrier properties of DLC coatings, *Extended Abstract, 2nd Austrian Symposium on Carbon Based Coatings (CBC 2012)*, 30-31 May 2012, Leoben (Austria).

J.M. Lackner, W. Waldhauser, P. Hartmann; Vakuumbeschichtung bei Raumtemperatur: F&E zur Funktionalisierung von Oberflächen für Optik, Verschleißschutz und Medizintechnik von temperaturempfindlichen Materialien, *Galvanotechnik* 6 (2012) 1342-1349.

Diploma and Doctoral Theses:

W. Waldhauser: Qualitätsprüfung der Eloxalschichten von anodisierten Aluminium-Kleinzierteilen, *Diploma Thesis (1990 - 1991)*, The University of Leoben

W. Waldhauser: Abscheidung und Charakterisierung aufgestäubter Hexaboridschichten, *Doctoral Thesis (1992 - 1996)*, The University of Leoben