Curriculum Vitae of
Prof. Dr. mont. Dr. rer. nat. h.c. Dr. h.c. Ewald A. Werner

1. Family name: Werner
2. Given names: Ewald A.
3. Date of birth: 17 March 1956
4. Place of birth: Leoben, Austria
5. Citizenship: Austrian
6. Education:

Institution	Degree obtained
Montanuniversität Leoben (1975-1980) Materials Science	Dipl. Ing.
Karl-Franzens-Universität Graz (1981-1982) Pure Mathematics	---
Montanuniversität Leoben (1981-1984) Physical Metallurgy	Dr. mont. (Dr. rerum montanarum)
Montanuniversität Leoben (1987-1991) Metal Physics	Habilitation (Dr. mont. habil.)

7. Employment History:

09.1997 - present	Full Professor of Mechanics (until 2001), then of Materials Science and Mechanics of Materials, Technical University of Munich, Department of Mechanical Engineering, Chair of Materials Science and Mechanics of Materials
09.1997 - present	Head of the State Materials Testing Laboratory, TU Munich
1998-2005	Head of the Christian-Doppler-Laboratory for Modern Multiphase Alloys
1996 - 1997	Associate Professor at the Montanuniversität Leoben
1991 - 1996	Assistant Professor at the Montanuniversität Leoben
1987 - 1991	Senior Researcher at the Institute for Metal Physics, Montanuniversität Leoben
1984 - 1986	Post-doctoral Researcher at the Institute of Metals Research, ETH Zurich, Switzerland
1981 - 1984	Doctoral student at the Erich Schmid Institute for Solid State Physics, Austrian Academy of Sciences, Leoben

1977 - 1980	Student assistant (50% employment) at the Institute of Mathematics, Montanuniversität Leoben and at the Erich Schmid Institute of Solid State Physics

8. Research and Projects:

8.1. Fields of Interest:

- Topological characterization of polycrystalline microstructures
- Diffraction studies with X-rays, electrons and neutrons
- Martensitic transformations
- Strengthening mechanisms in single- and multi-phase alloys
- Thermomechanics and thermodynamics of solids
- Alloy and process development
- Micromechanical analytical and numerical modelling
- Propagation of elastic stress waves in ceramics
- Electrochemical machining
- Tungsten alloys for fusion science
- High Entropy alloys
- Additive manufacturing

8.2. Research Projects:

- Christian-Doppler-Research-Society, Vienna: Head of the Christian-Doppler Laboratory for Modern Multiphase Alloys (Development, testing and modelling of ferritic-martensitic-, ferritic-austenitic-, TRIP-, complex-phase- and interstitial free-steels, titanium- and nickel-base alloys, bainitic steels for rails)
- Numerous national research grants (DFG, LuFo, Bavarian Research Foundation, Humboldt Foundation, DAAD)
- Scientific Co-coordination of EU-projects
    - DP-grades with improved formability (RFS-CR-04035; 2005-2007)
    - Microdamage (RFSR-CI-2008-00027; 2008-2011)
- Bilateral research collaborations with numerous companies (Siemens AG, MAN, MTU aeroengines, BMW, Heidenhain, voestalpine AG (Austria), Böhler-Uddeholm (Austria), Böhler Forging (Austria)

8.3. Contributions to Technology Transfer:

- Commercialization of Advanced High Strength Steels in collaboration with voestalpine AG (Austria)

- Commercialization of direct aged titanium alloy Ti17 for aeronautical applications in collaboration with Böhler Forging (Austria)
- Commercialization of tape casting process for tungsten alloys in collaboration with Siemens AG

8.4. Patent:

Production of a Refractory Metal Component

Patent Number: PCT/EP2013/065198

Abstract: The invention relates to a method (S1-S12) for the production of a refractory metal component by means of casting, said method having the following steps: provision (S3) of a slip (S) which contains a powder consisting of at least one refractory metal or a compound thereof, in addition to at least one binding agent; and processing the slip (S) by means of casting (S4), in particular film casting or slip casting to form at least one slip coating (4), said slip (4) being devoid of a metal binding agent. A component was produced by means of this method (S1-S12). The invention can be used in particular on X-ray tubes, accelerator targets, or fusion reactors, in particular for a surface of an X-ray anode, or a wall of a fusion reactor.

Inventors: Stefan Lampenscherf, Mathias Sommerer, Steffen Walter, Ewald Werner, Hubertus von Dewitz

9. Academic Teaching:

- Lectures in the bachelor curriculum on Mechanical Engineering and Chemical Engineering at TU Munich in “Materials Science 1 and 2” (since 2002)
- Lectures in the diploma and bachelor curriculum on Mechanical Engineering and Chemical Engineering at TU Munich in “Mechanics I-IV” (1997-2001)
- Lectures in the bachelor curriculum on Mechanical Engineering at TU Munich in “Materials Technology I” (since 2005)
- Lectures in the master curriculum on Mechanical Engineering at TU Munich in “Materials Technology II” (since 2005)
- Lectures in the master curriculum on Materials Science jointly between TU Munich and the University of Salzburg in “Scanning Electron Microscopy” (2012-2014)
- Seminar on “Dislocations”, TU Vienna (1991)
- Lectures in the diploma curriculum on Materials Science at the Montanuniversität Leoben in “Mathematical Modelling of Problems in Metal Physics” (1988-1997), “Diffraction Techniques” (1987-1997), “Dislocation

Theory" (1988-1997), "Metal Physics" (1981-1984, 1987-1997), "Practicals in Analysis" (1977-1979, 1987-1997)
- Practicals in the diploma curriculum on Materials at the ETH Zurich in "Advanced Materials" (1984-1986)
- Advisor of over 40 PhD students (Munich, Leoben)
- Advisor of over 100 master and bachelor theses (Munich, Leoben, Salzburg)
- Member of external PhD examination boards in Aachen, Karlsruhe, Bayreuth, Vienna, Graz, Leoben, Salzburg, Zurich

10. Scientific Activities, Boards, Committees and Memberships:

10.1. Editorial Activities:

- Editor of the *Materials Science and Engineering A* (Elsevier) (since 1999)
- Associate editor of the *ASME Transactions of the Journal of Engineering Materials and Technology* (1999-2003)
- Member of the editorial advisory board of *Acta Mechanica* (Springer) (since 2000)
- Member of the editorial board of *Archive of Applied Mechanics* (Springer) (1998-2009)
- Guest editor of a special issue in commemoration of H. Lippmann (Archive of Applied Mechanics, 80(1) (2010) 1-102).

10.2. Academic Tasks and Member of Committees:

- Dean of Studies of the Faculty of Mechanical Engineering at TU Munich (2010-2016)
- Member of the permanent accreditation board of AQAS, Cologne, Germany, conducting accreditation of German and foreign study programs within the rules set up by the European standards and guidelines (since 2012)
- Speaker of the advisory board and member of the strategic council to the Heinz Maier-Leibnitz neutron source FRM2 of the TU Munich (2002-2010)
- Scientific advisor of the Federal Minister of Defense of Austria (since 2008)
- Member of the board of trustees of the Erich-Schmid- Institute of Materials Science of the Austrian Academy of Sciences, Leoben (2002-2007)
- Head of the board of trustees of Timoschenko-Föppl-Foundation (since 1998)
- Vice-chairman of the Senate of the Montanuniversität Leoben (1995-1997)

10.3. Memberships to Professional Organizations:

- Association for Iron and Steel (AIST, USA)
- American Society of Mechanical Engineers (ASME, USA)
- American Society for Testing and Materials (ASTM, USA)
- Society for Experimental Mechanics (SEM, USA)
- The Metallurgical Society (TMS, USA)
- Austrian Mathematical Society (ÖMG, Austria)
- Society for Applied Mechanics and Mathematics (GAMM, Germany)
- Austrian Metallurgical Society (AMS, Austria)
- German Society for Materials (DGM, Germany)
- Iron and Steel Institute of Japan (ISIJ, Japan)

10.4. Organization of Conferences and Workshops:

- Co-organizer of the workshop “Mechanics of Materials” at the Mathematical Research Institute Oberwolfach, Germany (2020, 2016, 2012: jointly with R. Kienzler (Bremen), S. Müller (Bonn), D. McDowell (Atlanta); 2007: jointly with R. Kienzler (Bremen), D. McDowell (Atlanta); 2002: jointly with R. Kienzler (Bremen); 1998: jointly with H. Lippmann (Munich), G. Herrmann (Stanford), R. Kienzler (Bremen)
- Co-Chairperson of the Euromech Colloquium 466 on “Computational and Experimental Mechanics of Advanced Materials” at Loughborough University, 2005, jointly with V. Silberschmidt (Loughborough) and H. Böhm (Vienna)
- Chairperson of the Euromech Colloquium 429 on “Computational and Experimental Mechanics of Advanced Materials” at TU Vienna, 2001, jointly with H. Böhm (Vienna)

10.5. Talks at Conferences and Workshops

- Author or co-author of more than 440 scientific lectures held in many European countries, USA, China, Japan, Australia
- 9 invited plenary lectures
- Over 50 invited talks

10.6. Publications (see separate list)

- Co-author of five textbooks on materials science, materials technology and mechanics
- Author or co-author of approx. 300 scientific publications in journals, proceedings and book chapters

11. Awards

- Honorary Doctorate (Dr. h.c.) from the Polytechnical University of Timisoara, Romania (2019)
- “Goldene Lehre” Teaching Award from the Department of Mechanical Engineering of TU Munich (2011)
- Honorary Doctorate (Dr. rer. nat. h.c.) from the University of Salzburg, Austria (2010)
- Co-recipient of the Sawamura Award of the Iron and Steel Institute of Japan (2007)
- “Bronzene Lehre” Teaching Award from the Department of Mechanical Engineering of TU Munich (2005)
- Co-recipient of the Robert W. Hunt Award from the American Iron and Steel Society (2003)
- Co-recipient of the Gilbert R. Speich Award from the American Iron and Steel Society (2003)
- Co-recipient of the Michael Tenenbaum Award from the American Iron and Steel Society (2003)
- Co-recipient of the Gilbert R. Speich Award from the American Iron and Steel Society (2002)
- Co-recipient of the Michael Tenenbaum Award from the American Iron and Steel Society (2002)
- Co-recipient of the Young Tribologists Award from the Austrian Tribological Society (2001)
- Co-recipient of the Michael Tenenbaum Award from the American Iron and Steel Society (2000)
- Erich Schmid Award for Physics from the Austrian Academy of Sciences (1996)
- Research Award (main prize) from the State of Styria, Austria (1994)