

Short CV

SERGIO D. FELICELLI, Ph.D., Fellow ASME

Professor and Department Chair
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BIO SUMMARY

Dr. Sergio Felicelli is Professor and Chair of the Department of Mechanical Engineering at The University of Akron, in Akron, OH. As leader of the largest department in the College of Engineering, he manages an annual budget of \$5M, 40 faculty members, and over 1,400 students.

Before joining the University of Akron, Dr. Felicelli served as the Coleman and Whiteside Professor of Mechanical Engineering and Associate Director of the Center for Advanced Vehicular Systems at Mississippi State University (MSU), where he worked for 9 years. Previously to MSU, he worked 17 years for the Argentine Atomic Energy Commission, where he was head of the Computational Mechanics Division, and 2.5 years for the Crystals Division of Saint-Gobain High Performance Materials in Northborough, Massachusetts.

Dr. Felicelli has worked for nearly three decades in the area of computational modeling of solidification processes, with particular application to casting, welding, and additive manufacturing. He has also led several projects involving multi-scale transport phenomena, nano-fluidics, magnesium alloys, and tire heating. He is the author of some of the pioneer works in computer modeling of freckle segregation during solidification, having written several journal articles in the area of macrosegregation and porosity defects in solidification processes and more than 120 peer-reviewed publications during his career. He has directed projects related to casting and solidification, additive manufacturing, and large-scale parallel simulations of microstructures, among other subjects. His work has been sponsored by NSF, DoE, DoD, NASA, and industry, with a total funding of over \$15M as PI or co-PI.

Dr. Felicelli is a Fellow of The American Society of Mechanical Engineers. He received a bachelor's and master's degree in Nuclear Engineering from Instituto Balseiro (Argentina) and a Ph.D. degree in Mechanical Engineering from the University of Arizona.

EDUCATION

Ph.D.	Mechanical Engineering	1991	University of Arizona
BS, MS	Nuclear Engineering	1985	Instituto Balseiro, Argentina

PROFESSIONAL EXPERIENCE

2013-	Department Chair	University of Akron
2011-2013	Associate Director	Center for Advanced Vehicular Systems
2010-2013	Endowed Professor	Mississippi State University
2009-2010	Professor	Mississippi State University
2004-2009	Associate Professor	Mississippi State University

2002-2004	Research Associate	Saint Gobain, Inc., Northborough, MA
2001-2002	Visiting Professor	University of Arizona
1998-2001	Adjunct Professor	Instituto Balseiro, Argentina
1995-2004	Research Scientist	National Atomic Energy Agency, Argentina
1995-1997	Visiting Scientist	University of Arizona
1993-1995	Division Head	National Atomic Energy Agency, Argentina
1985-1993	Research Engineer	National Atomic Energy Agency, Argentina

ADMINISTRATIVE EXPERIENCE

As Department Chair of Mechanical Engineering (University of Akron)

- Leads the largest department in the University of Akron's College of Engineering, supervising 40 faculty members, 6 staff members, and over 1,400 students. The department offers BS, MS, and PhD degrees in Mechanical Engineering and Aerospace Systems Engineering.

As Associate Director at Center for Advanced Vehicular Systems (MSU)

- Leader of Computational Engineering and Science in Mechanics group. Supervised a group of 8 research faculty, 3 postdocs, and 1 research associate. Responsibilities included technical/budget supervision, coordination of proposal efforts, personnel planning, hiring, and annual evaluations.
- Member of the center leadership team. Weekly meetings with center director to evaluate/discuss center progress, administrative actions, and development plans.

As Endowed Professor at Department of Mechanical Engineering (MSU)

- Project Director. Managed budget and resources of 8 projects for a total of \$1.5M in funding. Supervised and coordinated activities, meetings, progress and final reports of several multidisciplinary teams of professors, researchers and students.
- Chair of Promotion & Tenure Committee. Directed the P&T review process for the Dept. of Mechanical Engineering and submits applicants' evaluation to the department head. Supervised that department and university policies are applied.
- Chair of Faculty Hiring Committees. Directed the hiring process of new faculty in the department, including position description, posting, selection of candidates, and interviews.

As Research Associate at Saint-Gobain Inc.

- Lead modeler for the Crystals Division. Designed and coordinated validation experiments with plant engineers in North America and Europe.
- Interviewed and recruited personnel. Purchased and administered computing and software resources.
- Went through the company's management training program.

As Division Head at the Argentine Nuclear Agency

- Lead the Computational Mechanics Division, managing a group of 10 doctoral and professional members.
- Managed and coordinated submission of research proposals, organization of conference meetings, contracts with industrial customers, and overall activities for the Division.
- Prepared budgets, activity reports, and growth projections for reporting to the center director.