

College of Engineering

BOARD APPROVED December 12, 2025 Cindy Ream **Corporate Secretary**

To:

Patrick Wolfe, Provost

From:

Arvind Raman, John A. Edwardson Dean of Engineering Awind Ramau

Date:

November 4, 2025

Subject:

Recommendation for a Named Professorship, Dr. David Bahr as Reilly Professor of

Materials Engineering

I am pleased to recommend Dr. David Bahr for the position of Reilly Professor of Materials Engineering. Dr. Bahr. The Engineering Named Professors Committee met and provided a strong recommendation for him being advanced to the position of the Reilly Professor of Materials Engineering.

Dr. Bahr's scholarly activities focus on how and why materials deform at the micro and nano-scale, using combinations of experimental testing and complementary theory and modeling of deformation; and then how to scale these up to more macroscopic material failure predictions. He's most well-known for his efforts in identifying the onset of deformation in crystalline materials, both in bulk materials such as tungsten and molecular organic materials such as pharmaceuticals, as well as thin films used in microelectronics. External evaluators, such as Dr. G.M. Pharr, NAE member at Texas A&M, notes he "has significantly contributed to our understanding of complicated deformation phenomena through cleverly designed and carefully executed experiments... Dr. Bahr's work is not just an esoteric academic exercise, but research that has directly or indirectly led to dramatic improvements in our fundamental understanding of the strength of advanced alloy systems"

Dr. Bahr has been recognized by the professional community, having been named a fellow of ASM International in 2012, and the American Association for the Advancement of Science (AAAS) in 2016. He was named a Presidential Early Career Award for Scientists and Engineers winner in 2000 for his work with the Department of Energy on stockpile stewardship and has received society awards such as ASM International's Bradley Stoughton Award; and, from TMS, the AIME Robert Lansing Hardy Award and the Alexander Scott Distinguished Service Award. He serves as the founding editor-in-chief of MRS Advances. Additionally, he led the School of Materials Engineering at Purdue from 2012-2024, being elected national chair of the University Materials Council from other MSE heads in 2018-19.

In summary, the ENPC committee unanimously determined that Dr. Bahr's strong performance in research and leadership make him an ideal candidate for the Reilly Professor of Materials Engineering named professorship and I agree with this designation.

/17/2025

Approval Recommended:

Provost

Miller Family Professor of Statistics and

Computer Science

Mung Chiang

President

Roscoe H. George Distinguished Professor of Electrical and Computer

Engineering

Cc:

David Bahr Brittany Vestal Will Sondgerath **COLLEGE OF ENGINEERING** Armstrong Hall of Engineering 701 W. Stadium Avenue, Suite 3000 West Lafayette, IN 47907