

BOARD APPROVED

JUNE 14, 2019

JANICE INDRUTZ

CORPORATE SECRETARY

KRANNERT SCHOOL OF MANAGEMENT OFFICE OF THE DEAN

To: Jay T. Akridge, Provost and Executive Vice President for Academic Affairs and Diversity

From: David Hummels, Dr. Samuel R. Allen Dean of the Krannert School of Management

Date: April 30, 2019

Re: Prof. Mohit Tawarmalani for the position of Allison and Nancy Schleicher Chair in Management

I write to strongly recommend Professor Mohit Tawarmalani be appointed to hold the Allison and Nancy Schleicher Chair in Management. He has held this chair on a limited-term basis for the past five years; Krannert's Committee on Named and Distinguished Professors has considered his case for holding the chair on a permanent basis and he received a unanimous 12-0 vote.

Professor Tawarmalani is one of the world's leading experts on optimization and in particular Mixed Integer Nonlinear Programming (MINLP). In his research he develops theory, develops the software for implementing the theory, and then applies it to important problems. He has 39 refereed publications, 95% of which are in top journals in this field. He serves on the editorial boards of Global Optimization and Mathematical Programming Computation.

Professor Tawarmalani's book (*Convexification and Global Optimization in Continuous and Mixed-Integer Nonlinear Programming: Theory, Software and Applications*) was recognized with the INFORMS Computing Society (ICS) Prize for research excellence in the interface between Computer Science and Operations Research. He was further recognized with the Beale-Orchard-Hays prize, which is awarded by the Mathematical Optimization Society every three years for the development of a new computational method that improves the state-of-the-art in computer implementations of mathematical programming. This recognition was earned by his 2005 *Mathematical Programming* article, "A Polyhedral Branch-and-Cut Approach to Global Optimization" and for the development of the BARON (Branch and Reduce Optimization Navigator) software for obtaining global optimum solutions for MINLPs and is the standard by which new research proposals are often compared. More recently, he has begun collaborating with coauthors in Chemical Engineering on research that models and optimizes energy producing processes, earning over \$1.8M in NSF and DOE grants.

His external letter writers strongly and unanimously support this case, noting that he is "...the world leader in convexification for global optimization...", "His work is tremendously influential...", he is the "leading expert" in MINLP techniques. I would particularly direct your attention to the letter written by Distinguished Professor of Chemical Engineering, Rakesh Agarwal, who writes that his collaboration with Professor Tawarmalani has been the highlight of his Purdue career.

Professor Tawarmalani is an outstanding teacher, providing great rigor and earning him runner up status for our Salgo Noren award (best Masters teacher) on five occasions.

Professor Tawarmalani has provided exemplary service to Krannert and Purdue. Perhaps most notable he was an inaugural co-director of both our Business Information and Analytics Center and our MS-Business Analytics

and Information Management degree. In three short years MS-BAIM has grown to 100 students, nearly \$5M in annual revenue, and a #1 ranking in Business Analytics degrees.

Approved:

Jay/TJ. Akkridge

Provost and Executive Vice President for Academic Affairs and Diversity

Mitchell E. Daniels, Jr

President