

DASAN M. THAMATTOOR

**J. Warren Merrill Professor in Chemistry and Natural History,
Colby College**

Visiting Professor, Dartmouth College



Thursday, January 29th

10:30 AM - 11:30 AM

Steele 006

"Thrills and Spills: Tales from an Undergraduate Research Laboratory"

Abstract: In this seminar, experimental and computational research on reactive intermediates and strained molecules, performed by undergraduate students at Colby College, will be presented. In particular, the photochemical generation of unusual carbenes from phenanthrene-based precursors, and inventive routes to strained cyclic alkynes, cyclic allenes, and systems containing bridgehead double bonds will be discussed. The use of techniques such as time-resolved transient absorption spectroscopy, matrix isolation spectroscopy, X-ray crystallography, and high-level theoretical calculations in this work will be described. Research projects in the Thamattoor lab are specifically designed to engage undergraduates as partners in the discovery process and enable them to contribute to the advancement of fundamental knowledge in organic chemistry. The synergy of synthetic, mechanistic, analytical, and computational chemistry in their work provides students with a wholesome research experience and aims to prepare them for success in their future careers.

Bio: Dasan M. Thamattoor is the J. Warren Merrill Professor in Chemistry and Natural History at Colby College in Waterville, Maine. He is currently a Visiting Professor at Dartmouth College during his sabbatical leave from Colby. Das received a B.Sc. degree in chemistry from the Government Arts and Science College, Karwar, India and an M.Sc. degree in organic chemistry from Karnatak University, Dharwad, India. After obtaining a Ph.D. from Princeton University, he spent a year at Oberlin College as a Visiting Assistant Professor. He then worked for a year as a postdoctoral research associate at the University of Notre Dame before joining the Colby College chemistry department in 1999. Over the years, he has established a robust and productive research program in physical organic chemistry primarily driven by undergraduate students. His research work has been supported by various funding agencies such as the National Science Foundation, Department of Health and Human Services, the Petroleum Research Fund administered by the American Chemical Society, and the Research Corporation for Science Advancement. Das has received several teaching awards in his career and was appointed a Fulbright Global Scholar to Japan, the Czech Republic, and Singapore. He was an International Faculty Fellow in Germany last summer at the Ruhr Universität Bochum RESOLV Cluster of Excellence and will return to Germany in the summer of 2026 as a Liebig Faculty Fellow at the Justus Liebig Universität in Giessen. Das has been Chair of the Colby chemistry department and currently serves on the editorial board of *Photochemistry and Spectroscopy*.