

Departmental Seminar

Seminar Title	: Conference Return Seminar: Combine Effect of Sulphur-Chitin on Aging Susceptibility of Asphalt Binder
Speaker	: Dr. Aditya Kumar Das
Supervisor	: Dr. M. Gattu
Venue	: CE Seminar Hall
Date and Time	: 11 Jan 2025 (10:30 AM)
Abstract	: Modifying asphalt profoundly impacts the oxidation of asphalt considering the performance characteristics for high and intermediate temperature conditions. Aging significantly impacts the inherent properties of asphalt concerning intermolecular properties, which are responsible for the service life of the asphalt mix. Thus, it is important to have a constructive understanding of the role of modifiers in asphalt aging behavior before consideration. Therefore, this present study utilizes a comprehensive laboratory approach to the aging behavior of asphalt and to understand the impact of chitin as a modifier. The aging behavior of chitin-modified asphalt was investigated using different aging indices concerning different physical, rheological, and chemical parameters, tested at high and intermediate temperatures. The investigated parameters inferred that the inclusion of chitin can enhance the resistance of base asphalt and can be more effective at high dosages of chitin.