



The Composite and Nanocomposite Advanced Manufacturing (CNAM) Center, launched in September 2013, is focused on meeting the urgent commercial need for strong, lightweight, multifunctional composites and nano-composites at high volume and low cost. Funded through a 5-year award from South Dakota Governor's Office and the participation of a consortium of leading corporations, the CNAM Center is poised to develop and rapidly commercialize new, advanced manufacturing techniques for high performance composites with applications in automotive, construction, aerospace, and energy.



The high manufacturing cost of advanced composites remains a significant impediment to their wider use in industrial and commercial applications despite their enormous strength-to-weight ratio advantage over metals. A consensus among industry leaders has emerged that rapid advancement can be made by coordinated, collaborative research across the entire composites supply chain. The CNAM Center is pioneering this approach; and it is committed to the development, scale-up and implementation of new material combinations and manufacturing processes enabled by the advanced technologies brought together by the participating academic and industrial organizations. In addition, the industrial partners will provide channels for streamlined commercialization of the technologies developed.

The CNAM Center is being led by the Composites and Polymer Engineering (CAPE) Laboratory at the South Dakota School of Mines and Technology (SDSMT), which possesses an exceptionally wide range of advanced equipment - from bench scale to the industrial scale - and unusual capability to take materials science or engineering concepts through to prototyping and pilot production. Within the CNAM Center, the full time researchers and engineers at the CAPE Lab are collaborating with various, specialized faculty members at SDSMT and at the two other participating universities: South Dakota State University (SDSU) and the University of South Dakota (USD). The technical areas covered by these organizations can be broadly classified as: Process-Structure-Properties and Advanced Manufacturing (SDSMT); Nanotechnology (SDSMT); Computational Modeling (SDSU and SDSMT); Surface Science (USD); Destructive and Non-Destructive Evaluation (SDSU, SDSMT).

Corporate members of the CNAM Center:

- Continental Structural Plastics (CSP)
- Falcon Plastics
- Innegra Technologies
- PolyOne Corporation
- Raven Industries
- SGL Group
- Steelcase

The CNAM Center is interested in expanding this group on a limited basis.

If your organization is interested in becoming a member of the CNAM Center, or would like additional information, please contact:

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