

**SOUTH DAKOTA BOARD OF REGENTS**

**Committee on Budget and Finance**

**AGENDA ITEM: II - A**

**DATE: May 21-22, 2009**

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**SUBJECT: Capital Asset Purchases Greater than \$100,000**

**South Dakota State University** requests approval of the following items:

A **3D Violet Laser Microscope** at an estimated cost of \$151,205. This new piece of equipment is vital to SDSU’s newly established Materials Evaluation and Testing Lab (METLAB). It will be used to conduct nondestructive and destructive testing of engineering materials. It will detect very small cracks and flaws in material that will not be possible with an ordinary microscope or the naked eye. Funding for this equipment purchase will come from a US Department of Defense (DoD) ANFO (Advanced Non-Destructive Evaluation and Testing and Fatigue Odometer for DoD Components and Gun Barrels) Grant.

An **X-View Computed Tomography (CT) System** at an estimated cost of \$454,350. This CT system will be an excellent addition to our NDE&T (non-destructive evaluation and testing) Lab (METLAB). This system will be utilized by other departments and colleges at SDSU and will identify internal cracks and flaws of parts and components that otherwise will not be possible with any other equipment. It is vital to continue research funded by the US Department of Defense. Funding for this equipment purchase will come from a US Department of Defense (DoD) ANFO (Advanced Non-Destructive Evaluation and Testing and Fatigue Odometer for DoD Components and Gun Barrels) Grant.

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**RECOMMENDED ACTION OF THE EXECUTIVE DIRECTOR**

Approve SDSU’s request to purchase a 3D Violet Laser Microscope at an estimated cost of \$151,205. Funding for this purchase will come from US Department of Defense ANFO Grant funds.

Approve SDSU’s request to purchase an X-View Computed Tomography System at an estimated cost of \$454,350. Funding for this purchase will come from US Department of Defense ANFO Grant funds.

Approve the Executive Director’s emergency approval of SDSU’s request to purchase a Plasma Enhanced Chemical Vapor Deposition chamber at an estimated cost of \$335,000. Funding for this purchase will be \$46,800 from the National Science Foundation Photo Active Nanoscale Grant; \$80,400 from EPSCoR jurisdictional commitment through the NSF and \$227,800 from the NSF PCVD grant funds.

A **Plasma Enhanced Chemical Vapor Deposition (PCVD)** chamber at an estimated cost of \$335,000. This new piece of equipment will be used as the major research instrument for synthesis of a variety of semiconductors and dielectrics thin films for photovoltaics and a large area of electronics applications. This item will support the SDSU Electrical Engineering PhD program as well as the SD Photoactive Nanoscale System (PANS) infrastructure. More than 12 ongoing and future research projects statewide will benefit from this system. Funding for this purchase will be \$46,800 from the National Science Foundation (NSF) Photo Active Nanoscale Grant; \$80,400 from EPSCoR jurisdictional commitment through NSF and \$227,800 from a NSF PCVD grant.

**SOUTH DAKOTA BOARD OF REGENTS**

**Committee on Budget and Finance**

**AGENDA ITEM: II - B**

**DATE: May 21-22, 2009**

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**SUBJECT: Maintenance and Repair – Institutional**

**Black Hills State University** requests approval of the following items:

**Young Center Seat Replacement:** Replacement of 1,230 wooden bleacher seats with chair back seats and plastic bleachers at an estimated cost of \$300,000. The project includes installation of approximately 500 chair back seats and 400 bleacher seats on one side of the Young Center gymnasium. Funding for this project will come from BHSU Yellow Jacket Foundation funds.

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**RECOMMENDED ACTION OF THE EXECUTIVE DIRECTOR**

Approve Black Hills State University's request to replace 1,230 wooden bleacher seats in the Young Center gymnasium with chair back seats and plastic bleachers at an estimated cost of \$300,000. This project will be funded from BHSU Yellow Jacket Foundation funds.