



CENTERS OF EXCELLENCE APPLICATION
NORTH DAKOTA DEPARTMENT OF COMMERCE
 SFN 59095 (1/10)

Centers of Excellence Application

Approved by the Centers of Excellence Commission January 5, 2010

I. Requesting Institution or Foundation:

NOTE: Boxes will expand as information is entered.

Name of Requesting Institution or Foundation: North Dakota State University

Project Title: Center for Advanced Technology Development and Commercialization (CATCOM)

Amount of Request: \$ 3,900,000

Amount of Matching Funds: \$ 7,800,000

Number of New Private Sector Jobs to be Created: Triton Systems projects at least six (6); additional jobs to be created by future private sector partner(s)

List Private Sector Participants: Triton Systems Inc.

Campus contact person or principal investigator

Name: Dennis K. Anderson Title or Position: Assoc. Vice President, RCATT

Mailing Address: 1735 NDSU Research Park Drive, Dept. 4000, PO Box 6050
 Fargo, North Dakota 58108-6050

Telephone Number: (701) 793-2915 (cell) Fax Number: (701) 231-6661

E-mail Address: dennis.k.anderson@ndsu.edu

Name of local developer (if any) familiar with project: n/a

Essential Qualifying Factors:

1. The center must be an institution of higher education under the control of the State Board of Higher Education or a non-profit university-related or college-related foundation of an institution of higher education under the control of the board. All applications must go through the process established by their university or college and

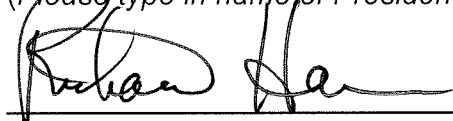
be signed by their institution's president. Each campus may submit up to two applications per round of funding.

2. The institution or foundation must be working in partnership with the private sector and create high value private sector employment opportunities.
3. Two dollars of matching funds are required for each dollar of state funds. These matching funds cannot be state funds and must be either funds from private sector partners or funds facilitated through the collaboration of the private sector partners with other funding entities. Of the two dollars of matching funds, at least one dollar must be cash, of which at least fifty cents must be from the private sector.
4. Funds cannot be used for infrastructure, to supplant funding for current operations or academic instructions, or to pay indirect costs.
5. Workforce may not be the primary need addressed by a Center.

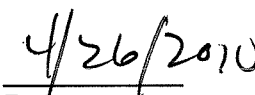
II. Approval by Institution:

The approval and recommendation by the president/dean of the university or college is required to insure the funding request is consistent with the mission and development plans of the institution. Please sign below to indicate your approval and recommendation.

(Please type in name of President/Dean when submitting electronic copies)



Signature of President / Dean



Date

III. Executive Summary (limited to one page)

The Center for Advanced Technology Development and Commercialization (“CATCOM”) will assist its private sector partners in commercializing new inventions, technologies, and other intellectual property (IP) discovered or created by NDSU faculty, staff, and students and/or private sector partners. If fully funded, CATCOM will combine the market knowledge, product specifications, and commercialization capabilities of its private sector partners with NDSU’s research capabilities and expertise to improve and refine NDSU and/or private sector inventions, technologies and other IP leading to the development and manufacturing of new products. A powerful commercialization ally to other NDSU ED-COE centers (CAEDM, CSP, and CIES), CATCOM will bridge the technical “valley of death” that separates laboratory discoveries from commercialized products thereby propelling inventions, technologies, and other IP from “bench to market”. In doing so, CATCOM will enable private sector partners to bring new products to the market as well as grow and enhance their businesses. It will also create opportunities for the formation of new start-up and spin-off companies that address other associated markets with related technologies. The economic development impacts of CATCOM will be many, including the possibility of new additions to N.D.’s advanced manufacturing industry cluster, e.g., growth of a new N.D.-based company using NDSU’s “liquid silicon” to produce new photovoltaic/solar cells, printable/flexible electronics, improved energy storage systems (advanced batteries) and new functional (antimicrobial) coatings.

CATCOM will assist its private sector partners by: 1) performing market-driven, applied R&D needed to convert inventions and technologies into commercial products; 2) making product enhancements leading to better market penetration and market share , 3) developing, qualifying, and implementing new or better test methods, quality assurance and control procedures for technologies and products; and 4) collaborating with private sector in building and operating new processing and manufacturing facilities in N.D. and elsewhere.