
Document Header Id #: 38857 ACTIVE
Project #: E-25-L54 Cost share #: Rev #: 2
Center #: 10/24-6-R0036-0A0 Center shr #:
OCA file #: Project type: RES

Contract #: 596-2290 Mod #: LETTER DATED 5-30-9 Award type: GRANT
Prime #: Contract entity: GTRC

CFDA: N/A
PE #: N/A

Project unit: MECH ENGR Unit code: 28
Project director(s):
PDPI- MELKOTE S N MECH ENGR (404)894-8499

Sponsor : SME MFG ENGR EDUCATION FDN/DEARBORN, MI
Division Id: 500 / 6049
Award period: 01-JUL-1996 to 30-SEP-1997 (performance) 30-SEP-1997 (reports)

Sponsor amount	New this change	Total to date
Contract value:	0.00	67,628.00
Funded:	0.00	67,628.00
Cost sharing amount:	0.00	0.00

Does subcontracting plan apply?

Title: MANUFACTURING EDUCATION & RESEARCH

PROJECT ADMINISTRATIVE DATA

OCA contact: Michelle A. Starmack (404) 894-4820

Sponsor technical contact:	Sponsor issuing office:
DORA L. MURRAY	DORA L. MURRAY
SOCIETY OF MANUFACTURING ENGINEERS	SOCIETY OF MANUFACTURING ENGINEERS
ONE SME DRIVE	ONE SME DRIVE
P.O. BOX 930	P.O. BOX 930

Phone: 3132711500	Phone: 3132711500
Fax: DEARBORN, MI 48121	Fax: DEARBORN, MI 48121
Email:	Email:

Security class (U,C,S,TS): U	ONR resident rep is ACO (Y/N): N
Defense priority rating : N/A	Supplemental sheet: N/A

Equipment title vests with: S

Administrative comments -
Letter dated 5-30-97 extends period of performance to September 30, 1997.

4
(1)

Closeout Notice Date 06-OCT-1997

Project Number E-25-L54

Doch Id 38857

Center Number 10/24-6-R0036-0A0

Project Director MELKOTE, SHREYES

Project Unit MECH ENGR

Sponsor SME MFG ENGR EDUCATION FDN/DEARBORN, MI

Division Id 6049

Contract Number 596-2290

Contract Entity GTRC

Prime Contract Number

Title MANUFACTURING EDUCATION & RESEARCH

Effective Completion Date 30-SEP-1997 (Performance) 30-SEP-1997 (Reports)

Closeout Action:	Y/N	Date Submitted
Final Invoice or Copy of Final Invoice	N	
Final Report of Inventions and/or Subcontracts	N	
Government Property Inventory and Related Certificate	N	
Classified Material Certificate	N	
Release and Assignment	N	
Other	N	

Comments

Distribution Required:

Project Director/Principal Investigator	Y
Research Administrative Network	Y
Accounting	Y
Research Security Department	N
Reports Coordinator	Y
Research Property Team	Y
Supply Services Department	Y
Georgia Tech Research Corporation	Y
Project File	Y



Georgia Institute of Technology

The George W. Woodruff School of Mechanical Engineering

E-25-L54
#1

September 29, 1997

Ms. Dora Murray, Grants Coordinator
SME Education Foundation
One SME Drive, P.O. Box 930
Dearborn, MI 48121-0930

Dear Ms. Murray,

Please find enclosed my final report for grant proposal number 595-2290. The invoices for the project expenses will be separately mailed/faxed to you by our Office of Contracts Administration. I would like to thank the SME Education Foundation for providing the financial and in-kind support. If you have any questions regarding my final report, please do not hesitate to contact me at the number given below.

Sincerely,

U

Shreyes N. Melkote, Ph.D.
Assistant Professor
Ph: (404) 894-8499, Fax: (404) 894-9342

encl.

Atlanta, Georgia 30332-0405 U.S.A.
Administration Office 404-894-3200
Finance Office 404-894-7400

Graduate Program 404-894-3204
Undergraduate Office 404-894-3203
Fax 404-894-8336 or

web site: <http://www.me.gatech.edu/>

FINAL REPORT FOR SME GRANT

Grant Proposal No.: 596-2290

Funded Areas: Faculty Development, In-Kind Gifts

Name of Awarded Institution: Georgia Institute of Technology

Name of Project Director: Dr. Shreyes N. Melkote

SME Education Foundation Grant Report

Abstract

The 1996 SME Education Foundation Grant to the Georgia Institute of Technology consisted of a cash grant (\$850) for the project director's faculty development efforts and in-kind software gifts (worth \$66,778) to support his teaching and research activities in manufacturing. This report describes the manner in which the funds and in-kind gifts were utilized to improve and advance manufacturing education at Georgia Tech.

Faculty Development Grant

The \$850 cash grant provided for faculty development were used to cover the project director Dr. Shreyes Melkote's travel expenses to attend the Twenty Fifth North American Manufacturing Research Conference held at the University of Nebraska in Lincoln, Nebraska from May 20 - 23, 1997. This is the premier manufacturing research conference in North America and has significant international participation. The project director attended several technical sessions in the material removal and manufacturing systems areas and also served as a co-chair for a technical session on machine tool accuracy. The information obtained in this conference is being incorporated in a new graduate course on Automated Manufacturing Process Planning being taught by Dr. Melkote in Fall 1997. The total cost of this conference was \$883.67.

In-Kind Gifts

In-kind software gifts totaling \$66,778 were awarded to Georgia Tech by the SME Education Foundation to support the manufacturing research and education activities of the project director. The specific software gifts included: Algor finite element software from Algor, Inc. (\$20,333); Autocad R13 for the Sun Sparc platform from Autodesk, Inc. (\$3,750); one Carr-Lane Tool Designer's Assistant from Carr-Lane, Inc. (\$795); and ADAMS software by Mechanical Dynamics Inc. (\$41,900). Of the four (4) software gift awards only the first three could be obtained from the vendors. The fourth software gift (ADAMS) could not be obtained from Mechanical Dynamics Inc. due to difficulties in signing the software licensing agreement as well as the inability of the project director to make the mandatory training session fee.

The software gifts acquired by the project director have been successfully installed on a Sun Sparc 5 workstation. All three softwares (Algor, Autocad, and Carr-Lane) are being used by the project director's graduate students in their research on machining fixture performance analysis and optimization.

Impact of SME Support

The SME Education Foundation research initiation grant has had an extremely positive impact on the project director's academic and research programs in manufacturing at Georgia Tech. The grant enabled Dr. Melkote to attend the 25th North American Manufacturing Research Conference at the University of Nebraska, Lincoln, Nebraska. Attendance at this conference allowed the project director to learn about the most recent research results and future research directions in manufacturing. The relevant information derived from this conference is being

incorporated into a new graduate course on Automated Manufacturing Process Planning being taught by Dr. Melkote in Fall 1997.

The software gifts have provided the project director with a valuable resource that supports his research program in the fixturing area. The gift has also allowed the project director to leverage additional research funds for fixturing research from the NSF/DARPA Machine Tool Agile Manufacturing Research Institute at the University of Illinois at Urbana-Champaign.