

FACULTY RESEARCH INTEREST DIRECTORY 2003 - 2004



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AND ENGINEERING

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Faculty Research Interest Directory

College of Science and Engineering

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Including faculty contact information and research interest keywords

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Including department contact information and faculty list

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Building Codes

BH	Brown Hall
ECC	Engineering and Computing Center
HH	Headley Hall
MC	James W. Miller Learning Resources Center (library)
MS	Mathematics and Science Center
SH	Stewart Hall

Keyword Index

“Academe Needs More Leaders of Asian-Pacific Heritage,” The Chronicle of Higher Education, April 23, 1999

Roy Saigo

advanced channel electronics

Peter George

advanced dynamics

Umesh A. Korde

affordable housing

Kurt Helgeson

air traffic control

Patrick Mattson

airport

Patrick Mattson

aldehyde dehydrogenases

Lakshmaiah Sreerama



algebra

Dale Buske

Sandra Zaroodny Keith

algorithms

Pranava Jha

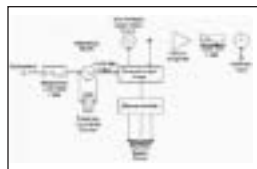
Sarnath Ramnath

American Association of State Colleges and Universities Board of Directors

Roy Saigo

analog and digital communications

Yi Zheng



analysis

Dale Buske

analytical chemistry

Michael Jeannot

anatomy

Heiko Schoenfuss

applied experimental design

Mary Evenson

applied mathematics

Mohammed Bahauddin

appropriate technology

Michael Karian

aquatic ecology

Matthew Julius

aquatic toxicology

Heiko Schoenfuss

archaeoastronomy

Mark Nook

artificial life

Theresia Fisher

assessment

Sandra Zaroodny Keith

Anthony E. Schwaller

astronomy

Planetarium and Observatory

astronomy education

Mark Nook

astrophysics

Planetarium and Observatory

asynchronous

Jie Hu

ATC

Patrick Mattson

atmosphere

Gregory Nastrom

automata theory

Pranava Jha

automation

Andrew Bekkala

Umesh A. Korde

automorphic form

Jeff Chen

aviation

Steven L. Anderson

Patrick Mattson

aviation education

Robert I. Aceves

Steven L. Anderson

aviation history

James Goke



aviation safety

Robert I. Aceves

Steven L. Anderson

bakery goods product development

Mary Evenson

basin and range tectonics

Alfred Pekarek

behavioral ecology

Anthony Marcattilio

bibliographic database

Herbarium

biodiversity

Sandra J. Turner

bioinorganic chemistry

Mohammad Mahroof-Tahir

Biology: A Personalized Approach (activity-based high school biology textbooks) co-authored 1989

Roy Saigo

bootstrap

David H. Robinson

cancer

Mohammad Mahroof-Tahir

cancer biology

JoAnn Meerschaert

Timothy J. Schuh

cancer chemotherapy

Lakshmaiah Sreerama



carcinogenesis/chemoprevention

Lakshmaiah Sreerama

categorical data analysis

Hameed Bayo Lawal

cell biology

JoAnn Meerschaert
Timothy J. Schuh

cell migration

JoAnn Meerschaert

chemical composition of comets

Maria Womack

child health

Susan Johnson Warner

circadian/jet lag

Robert I. Aceves

circumstellar polarization

Mark Nook

client/server

Computer Network Research Center

climate

Robert Weisman

climate dynamics

Tony Hansen

clinical laboratory science

Allied Health Programs -
Medical Technology and
Nuclear Medicine Technology

coding theory

Jeff Chen

collections

Brown Hall Museum

combinatorial optimization

Bryant Julstrom

communications

James A. Nicholson

computability theory

Stephen Walk

computational chemistry

Daniel Gregory

computational geometry

Sarnath Ramnath

computational information retrieval

Andrew Anda

computer applications

Sura Lekhakul

computer architecture

Jayantha Herath

computer design

Sura Lekhakul

computer ethics

Theresia Fisher

computer networking

Richard Mowe

computer science

Ralph W. Carr

computer science education

Richard Mowe

computer security

Computer Networking and Applications

computer simulation of communications

Mark Petzold

computer-aided design

James A. Nicholson



computers with internet access and office amenities

Alumni/Emeriti Center

computing networking, computer security

Computer Network Research Center

conservation

Jorge E. Arriagada

construction

Kurt Helgeson

contemporary teaching strategies

Anthony E. Schwaller

contracts, financial support for research

Applied Research Center

contributions

Development Center

control systems

Andrew Bekkala
Ling Hou

controls

Umesh A. Korde

cooperative learning

Sr. Del Marie Rysavy

coordination chemistry

Mohammad Mahroof-Tahir

COSE alumni lounge area

Alumni/Emeriti Center

crystallography

Nathan Winter

cylindrical grinding

Bantwal Baliga

data analysis

Statistical Consulting Center

data entry

Statistical Consulting Center

data structures

Sarnath Ramnath

deep ecology

Michael Karian

demonstrations (chemical)

Jack McKenna

density estimation

David H. Robinson

designing surveys or questionnaires

Statistical Consulting Center

development

Development Center

developmental biology

Timothy J. Schuh

diabetes and insulin mimetic

Mohammad Mahroof-Tahir

diagnostic imaging

Michael Garrity

diatom(s)

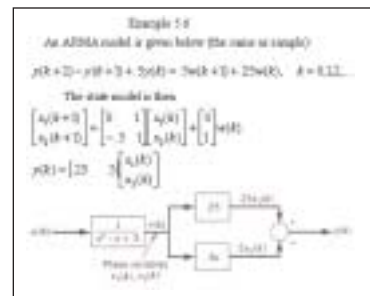
Matthew Julius

differential and integral equations

Ralph W. Carr

digital signal processing

Yi Zheng



Keyword Index

Dimensions news journal

Development Center

discontinuous dynamical systems

Ling Hou

discrete computational structures

Gary D. Buls

discrete mathematics

Daniel J. Scully

disk drive technology

Peter George

dissemination of research information

Applied Research Center

distributed computing

Jayantha Herath

drug metabolism/ resistance/proteomics

Lakshmaiah Sreerama

dynamic meteorology

Tony Hansen

eco-morphology

Heiko Schoenfuss

ecopsychology

Michael Karian

education

Susan Haller

Sr. Del Marie Rysavy

educational psychology

Robert I. Aceves

electricity/electronics

James Goke

electromagnetic probes

Kevin Haglin

electronic material design

Peter George

EM algorithm

Olcay Arslan

endangered species

Marco Restani

Sandra J. Turner

energy technology

Anthony I. Akubue

Anthony E. Schwaller

engineering of numerical software

Andrew Anda

entomology

Standley E. Lewis

environmental and technology education

Balsy Kasi

environmental education

Michael Karian

environmental soil science

Mitch Bender

ergodic theory

Danrun Huang

error correcting codes

Mark Petzold

ethnobotany

Jorge E. Arriagada

evolution

John C. Cronn

Matthew Julius

evolutionary computation

Bryant Julstrom

experimental design

Hameed Bayo Lawal

experimental methods

Steven J. Covey

Kenneth Miller

experimental use of greenhouse

Greenhouse

extended shelf-life of bakery products

Mary Evenson

faculty and student research and activities

Applied Research Center

Faculty Research Interest Directory

Applied Research Center

faculty, student and staff awards

Applied Research Center

financial management and investment

Balsy Kasi

finite element methods

Steven J. Covey

fish ecology

Steven F. Williams

flight training

Steven L. Anderson

floristics

Jorge E. Arriagada

foraging and food preferences in animals

Anthony Marcattilio

forecasting

Robert Weisman

fossils

Brown Hall Museum

fractional calculus

Ravindra Nath Kalia

freshwater ecology

Neal J. Voelz

freshwater invertebrates

Neal J. Voelz

frozen dough product development

Mary Evenson

functional analysis

Danrun Huang

general animal behavior

Anthony Marcattilio

general engineering

Balsy Kasi

genetic algorithms

Bryant Julstrom

geochemistry

Alfred Pekarek

geometry

Peiyi Zhao

gift recognition

Development Center

gift stewardship

Development Center

glacial geology

Alfred Pekarek

graph theory

Pranava Jha

Peiyi Zhao

graphics

James A. Nicholson

greenhouse design

Greenhouse

greenhouse gas emissions from soil

Mitch Bender

greenhouse management

Greenhouse

health physics

Michael Garrity



health policy
Susan Johnson Warner

heavy ion collisions
Kevin Haglin

heavy quarkonia
Kevin Haglin

herbarium database (online)
Herbarium

hf magnetic measurements
Peter George

high frequency response
Peter George

high performance numerical computation
Andrew Anda

history of mathematics
Jeff Chen

hormones
A.I. Musah

hospital laboratory
Allied Health Programs -
Medical Technology and
Nuclear Medicine Technology

human factors
Robert I. Aceves

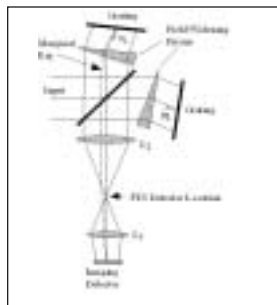
hybrid dynamical systems
Ling Hou

hydrology
Charles Nelson

immunology
JoAnn Meerschaert
Janet Collins Woodard

inflammation
JoAnn Meerschaert

instrumental spectroscopy
John Harlander



instrumentation
Kenneth Miller

integral transforms and equations
Ravindra Nath Kalia

integrated circuits
Tim Vogt

internet
Patrick Mattson

internets, intranets
Computer Network Research
Center

interpreting statistical analysis
Statistical Consulting Center

Kaizen
Andrew Bekkala

kinetics
Jack McKenna

lab technology
Allied Health Programs -
Medical Technology and
Nuclear Medicine Technology

lakes
Charles L. Rose

LAN, WAN
Computer Network Research
Center

landscape and ecosystem ecology
Sandra J. Turner

laser discharge of metal vapors
Periasamy Ramalingam

laser Raman spectroscopy of non-linear optical materials
Periasamy Ramalingam

lasers
Richard Brundage

leadership
Susan Johnson Warner

lean manufacturing
Andrew Bekkala



learning
Sr. Del Marie Rysavy

limnological mapping
Charles Nelson

limnology
Matthew Julius
Charles Nelson

linear algebra
Daniel J. Scully

linear models
Olcay Arslan

livestock
Oladele Gazal

magnetic head design
Peter George

magnetoresistive memory
Tim Vogt

manufacturing
Balsy Kasi
James A. Nicholson

manufacturing processes
Steven J. Covey
Kenneth Miller

manufacturing systems
Bantwal Baliga



manure management
Mitch Bender

mass spectrometry
Michael Jeannot

materials science
Donald Neu

materials science and engineering
Balsy Kasi

math 070 - Basic Mathematics Concepts
Mathematical Skills Center

math 072 - Intermediate Algebra
Mathematical Skills Center

math placement
Mathematical Skills Center

math skills
Mathematical Skills Center

Keyword Index

math tutoring
Mathematical Skills Center

mathematical logic
Stephen Walk

mathematical modeling
Mohammed Bahauddin

mathematics
Susan Haller

mathematics education
Bishnu Naraine

matrix theory
Danrun Huang

mechanical design
Steven J. Covey

medical imaging
Yi Zheng

medical laboratory
Allied Health Programs -
Medical Technology and
Nuclear Medicine Technology

medical physics
Michael Garrity

medical technology
Allied Health Programs -
Medical Technology and
Nuclear Medicine Technology

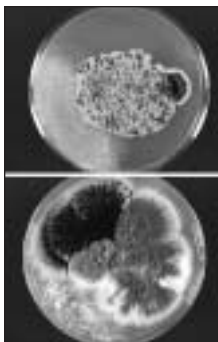
medicinal chemistry of metals
Mohammad Mahroof-Tahir

**meeting area for business, social, or
research activities**
Alumni/Emeriti Center

meteorology
Gregory Nastrom
Robert Weisman

microbial physiology
John C. Cronn

microbiology
Gordon D. Schrank



microcomputer applications
Computer Networking and
Applications

microextraction
Michael Jeannot

microprocessor applications
Sura Lekhakul

microprocessor design
Sura Lekhakul

migration and dispersal
Marco Restani

modern algebra
Daniel J. Scully

**modified atmosphere packaging
for bakery products**
Mary Evenson

molecular biology
Timothy J. Schuh

morphology
Heiko Schoenfluss

motion control
Yi Zheng

multivariate estimation
Olcay Arslan

Native American health
Susan Johnson Warner

network performance
Computer Network Research
Center

networking (LAN, WAN)
Computer Networking and
Applications

neuroendocrinology
Oladele Gazal

nonabelian harmonic analysis
Jeff Chen

nuclear (hadronic) matter
Kevin Haglin

nuclear medicine
Allied Health Programs -
Medical Technology and
Nuclear Medicine Technology
Michael Garrity

nuclear theory
Kevin Haglin

number theory
Jeff Chen

numerical analysis
Gary D. Buls

nutrient cycling
Mitch Bender

nutrition
Oladele Gazal

object oriented software design
Sarnath Ramnath

occupational safety
James Goke

off-round cylindrical grinding
Bantwal Baliga

optical design
John Harlander

optics
Richard Brundage

paleobiology
Brown Hall Museum

paleontology
Standley E. Lewis

parallel computing
Jie Hu

petroleum
Alfred Pekarek



pharmacogenetics
Lakshmaiah Sreerama

photo-organic chemistry
Daniel Gregory

phycology
Matthew Julius



physical organic chemistry
Daniel Gregory

physiology
Oladele Gazal

planetary science
Planetarium and Observatory

plant collection
Greenhouse

plant ecologic physiology
David K. DeGroot

plant ecology
Sandra J. Turner

plant growth and development
David K. DeGroot

plant layout
Bantwal Baliga

plant physiology
David K. DeGroot

plant propagation
Greenhouse

plant specimens collection
Herbarium

plant taxonomy
Jorge E. Arriagada

plant-microbe interaction
John C. Cronn

**post-graduate studies in agriculture -
University of California at Davis**
Roy Saigo

precambrian geology
Alfred Pekarek

predator/prey interactions
Marco Restani

**President of second largest university
in Minnesota**
Roy Saigo

process improvement
Kurt Helgeson

product design
James A. Nicholson

programming languages
Annette Schoenberger

protein purification
John C. Cronn

protein structure
Nathan Winter

public service
Herbarium

quality engineering
Bantwal Baliga



quark gluon plasma
Kevin Haglin

quartz crystal microbalances
Donald Neu

queuing theory
David H. Robinson

radar
Gregory Nastro

radiation oncology
Michael Garrity

**Raman spectroscopy study of
enzyme inhibition reactions**
Periasamy Ramalingam

rare earths
Richard Brundage



recording technology
Peter George

renewable energy
Michael Karian

representation theory
Jeff Chen

reproduction
Oladele Gazal

reproductive endocrinology
A.I. Musah

research
Brown Hall Museum

research resource
Herbarium

**retired COSE emeriti, faculty and
staff lounge area**
Alumni/Emeriti Center

**returning to campus to attend
business, social or research activities**
Alumni/Emeriti Center

robotics
Andrew Bekkala



robust statistical analysis
Olca Arslan

rural development
Kurt Helgeson

rural health
Susan Johnson Warner

sample preparation
Michael Jeannot

scale in ecology
Sandra J. Turner

science education
Planetarium and Observatory
Patricia L. Hauslein
Patricia Simpson

self-organize map
Jie Hu

semiconducting
Donald Neu

separations
Michael Jeannot

**severe weather for deaf/hard-of-
hearing**
Robert Weisman

signal validation
Ling Hou

simulation
David H. Robinson

skeletons
Brown Hall Museum

Keyword Index

software engineering

Annette Schoenberger

sol-gel surface modification for chemical sensors

Donald Neu

solid mechanics

Kenneth Miller

solid state devices

Tim Vogt



space science

Planetarium and Observatory

spectroscopy and imaging of comets

Maria Womack

spread spectrum communications

Mark Petzold

stability analysis

Ling Hou

statistical software

Statistical Consulting Center

stellar astronomy

Mark Nook

stream ecology

Neal J. Voelz

student t- and generalized t- distributions

Olcay Arslan

student training

Herbarium

surface hydrology

Charles Nelson

survival analysis

Hameed Bayo Lawal

symbolic dynamics

Danrun Huang

systems engineering

Theresia Fisher

teacher preparation

Patricia Simpson

teaching

Sr. Del Marie Rysavy

technology

Bishnu Naraine
Sr. Del Marie Rysavy

technology and social change

Anthony E. Schwaller



technology and third world development

Anthony I. Akubue

technology education

Kurt Helgeson

technology transfer

Anthony I. Akubue

terrestrial ecology

Sandra J. Turner

theoretical and applied matrix computation

Andrew Anda

thermal sciences

Steven J. Covey
Kenneth Miller

thermodynamics

Jack McKenna

TMR heads

Peter George

topological dynamics

Danrun Huang

topology

Peiyi Zhao

tropical rainforest

Jorge E. Arriagada

ultrasound

Yi Zheng

vanadium

Mohammad Mahroof-Tahir

vertebrates

Heiko Schoenfuss

vibrations

Umesh A. Korde

virology

John C. Cronn

visual basic

Computer Networking and
Applications

VLSI physical design

Sarnath Ramnath

water quality

Mitch Bender
Charles L. Rose
Neal J. Voelz



wave energy

Umesh A. Korde

weather

Gregory Nastrom
Robert Weisman

WEB

Computer Networking and
Applications

wetlands

Jorge E. Arriagada
Charles L. Rose



wild rice

Sandra J. Turner

wildlife disease

Marco Restani

wildlife ecology

Marco Restani

winds

Gregory Nastrom

wireless communications

Mark Petzold

writing

Sandra Zaroodny Keith

Alphabetical Faculty Index

Robert I. Aceves Assistant Professor
 Department: Aviation
 Terminal Degree: Ed.D. 2000, Oklahoma State University
 Certification/Licensure: Commercial Pilot - ASEL, ASES, AMEL; Multiengine Instrument Flight Instructor; Mechanic - Airframe and Powerplant
 Building/Office: HH 102
 Telephone: (320) 654-5325
 Fax: (320) 654-5122
 E-mail: aceves@stcloudstate.edu
 Web site:
 Keywords: aviation education, aviation safety, circadian/jet lag, educational psychology, human factors

Anthony I. Akubue Professor
 Department: Environmental and Technological Studies
 Terminal Degree: Ed.D. 1989, West Virginia University
 Certification/Licensure:
 Building/Office: HH 207
 Telephone: (320) 255-3235
 Fax:
 E-mail: akubue@stcloudstate.edu
 Web site:
 Keywords: energy technology, technology and third world development, technology transfer

Andrew Anda Assistant Professor
 Department: Computer Science
 Terminal Degree: Ph.D. 1995, University of Minnesota
 Certification/Licensure:
 Building/Office: ECC 223
 Telephone: (320) 255-2044
 Fax: (320) 255-4269
 E-mail: anda@eeeyore.stcloudstate.edu
 Web site: <http://web.stcloudstate.edu/aanda>
 Keywords: computational information retrieval, engineering of numerical software, high performance numerical computation, theoretical and applied matrix computation

Steven L. Anderson Associate Professor
 Department: Aviation
 Terminal Degree: Ph.D. 2001, University of Minnesota
 Certification/Licensure: Airline Transport Pilot, Certified Flight Instructor
 Building/Office: HH 106
 Telephone: (320) 255-2978
 Fax: (320) 654-5122
 E-mail: slanderson@stcloudstate.edu
 Web site: <http://web.stcloudstate.edu/slanderson>
 Keywords: aviation, aviation education, aviation safety, flight training



Jorge E. Arriagada Associate Professor
 Department: Biological Sciences
 Terminal Degree: Ph.D. 1994, Ohio State University
 Certification/Licensure:
 Building/Office: MS 219
 Telephone: (320) 255-3456
 Fax: (320) 255-4166
 E-mail: jeearriagada@stcloudstate.edu
 Web site: <http://web.stcloudstate.edu/jeearriagada>
 Keywords: conservation, ethnobotany, floristics, plant taxonomy, tropical rainforest, wetlands

Olcay Arslan Fixed Term
 Department: Statistics
 Terminal Degree: Ph.D. 1993, Leeds University, UK
 Certification/Licensure:
 Building/Office: ECC 141
 Telephone: (320) 255-2221
 Fax: (320) 255-4269
 E-mail: oarslan@stcloudstate.edu
 Web site:
 Keywords: EM algorithm, linear models, multivariate estimation, robust statistical analysis, student t- and generalized t-distributions

Alphabetical Faculty Index

Mohammed Bahauddin Professor
 Department: Mathematics
 Terminal Degree: Ph.D. 1969, New Mexico State University
 Certification/
 Licensure:
 Building/Office: ECC 155
 Telephone: (320) 255-2191
 Fax:
 E-mail: baha@stcloudstate.edu
 Web site: <http://condor.stcloudstate.edu/~baha/>
 Keywords: applied mathematics, mathematical modeling

Bantwal Baliga Associate Professor
 Department: Mechanical and Manufacturing Engineering
 Terminal Degree: Ph.D. 2000, Swinburne University of Technology
 Certification/
 Licensure:
 Building/Office: ECC 114C
 Telephone: (320) 255-3843
 Fax: (320) 229-5653
 E-mail: brbaliga@stcloudstate.edu
 Web site: <http://web.stcloudstate.edu/brbaliga>
 Keywords: cylindrical grinding, manufacturing systems, off-round cylindrical grinding, plant layout, quality engineering

Andrew Bekkala Professor
 Department: Mechanical and Manufacturing Engineering
 Terminal Degree: Ph.D. 1990, Michigan Technological University
 Certification/
 Licensure: Professional Mechanical Engineer, California; Professional Manufacturing Engineer, California; Professional Mechanical Engineer, Minnesota
 Building/Office: ECC 101C
 Telephone: (320) 229-5655
 Fax: (320) 229-5653
 E-mail: bekkala@stcloudstate.edu
 Web site: <http://condor.stcloudstate.edu/~mme/faculty/bekkala.html>
 Keywords: automation, control systems, Kaizen, lean manufacturing, robotics



Mitch Bender Assistant Professor
 Department: Environmental and Technological Studies
 Terminal Degree: Ph.D. 2001, Auburn University
 Certification/
 Licensure:
 Building/Office: HH 202
 Telephone: (320) 255-3891
 Fax: (320) 654-5122
 E-mail: mrbender@stcloudstate.edu
 Web site: <http://web.stcloudstate.edu/mrbender/>
 Keywords: environmental soil science, greenhouse gas emissions from soil, manure management, nutrient cycling, water quality

Richard Brundage Professor
 Department: Physics, Astronomy and Engineering Science
 Terminal Degree: Ph.D. 1985, University of Wisconsin-Madison
 Certification/
 Licensure:
 Building/Office: MS 318
 Telephone: (320) 255-3154
 Fax: (320) 255 4262
 E-mail: rbrundage@stcloudstate.edu
 Web site: <http://einstein.stcloudstate.edu/brundage/>
 Keywords: lasers, optics, rare earths

Gary D. Buls Professor
 Department: Mathematics
 Terminal Degree: Ph.D. 1986, Iowa State University of Science and Technology
 Certification/
 Licensure:
 Building/Office: ECC 240
 Telephone: (320) 255-2087
 Fax:
 E-mail: gbuls@stcloudstate.edu
 Web site: <http://condor.stcloudstate.edu/~gbuls/>
 Keywords: discrete computational structures, numerical analysis

Dale Buske Associate Professor
 Department: Mathematics
 Terminal Degree: Ph.D. 1997, Iowa State University of Science and Technology

Certification/
 Licensure:
 Building/Office: ECC 153
 Telephone: (320) 255-4821
 Fax: (320) 255-4269
 E-mail: drbuske@stcloudstate.edu
 Web site: <http://web.stcloudstate.edu/drbuske/>
 Keywords: algebra, analysis

Ralph W. Carr Professor
 Department: Mathematics
 Terminal Degree: Ph.D. 1977, University of Wisconsin-Madison

Certification/
 Licensure:
 Building/Office: ECC 234
 Telephone: (320) 255-2274
 Fax: (320) 255-4262
 E-mail: rcarr@stcloudstate.edu
 Web site: <http://condor.stcloudstate.edu/~rcarr/>
 Keywords: computer science, differential and integral equations

Jeff Chen Assistant Professor
 Department: Mathematics
 Terminal Degree: Ph.D. 1996, Yale University

Certification/
 Licensure:
 Building/Office: ECC 226
 Telephone: (320) 255-4260
 Fax:
 E-mail: jjchen@stcloudstate.edu
 Web site: <http://web.stcloudstate.edu/jjchen>
 Keywords: automorphic form, coding theory, history of mathematics, nonabelian harmonic analysis, number theory, representation theory

Steven J. Covey Professor
 Department: Mechanical and Manufacturing Engineering

Terminal Degree: Ph.D. 1993, University of Cincinnati
 Certification/
 Licensure: Professional Engineer, State of Minnesota
 Building/Office: ECC 101D
 Telephone: (320) 654-5161
 Fax: (320) 229-5653
 E-mail: covey@stcloudstate.edu
 Web site:
 Keywords: experimental methods, finite element methods, manufacturing processes, mechanical design, thermal sciences

John C. Cronn Professor
 Department: Biological Sciences
 Terminal Degree: Ph.D. 1974, University of Nebraska-Lincoln

Certification/
 Licensure:
 Building/Office: MS 270
 Telephone: (320) 255-3207
 Fax:
 E-mail: jcronn@stcloudstate.edu
 Web site:
 Keywords: evolution, microbial physiology, plant-microbe interaction, protein purification, virology

David K. DeGroot Professor
 Department: Biological Sciences
 Terminal Degree: Ph.D. 1980, University of Iowa

Certification/
 Licensure:
 Building/Office: MS 275
 Telephone: (320) 255-3065
 Fax:
 E-mail: degroote@stcloudstate.edu
 Web site:
 Keywords: plant ecologic physiology, plant growth and development, plant physiology

Mary Evenson Assistant Professor
 Department: Chemistry
 Terminal Degree: Ph.D. 1976, North Dakota State University

Certification/
 Licensure:
 Building/Office: MS 351
 Telephone: (320) 529-1692
 Fax: (320) 255-4262
 E-mail: mevenson@stcloudstate.edu
 Web site:
 Keywords: applied experimental design, bakery goods product development, extended shelf-life of bakery products, frozen dough product development, modified atmosphere packaging for bakery products

Alphabetical Faculty Index

Theresa Fisher Associate Professor
Department: Computer Science
Terminal Degree: M.S. 1985, North Dakota State University

Certification/
Licensure:
Building/Office: ECC 258
Telephone: (320) 255-4962
Fax:
E-mail: fisher@stcloudstate.edu
Web site: <http://condor.stcloudstate.edu/~csci/faculty/fisher.html>
Keywords: artificial life, computer ethics, systems engineering

Michael Garrity Professor
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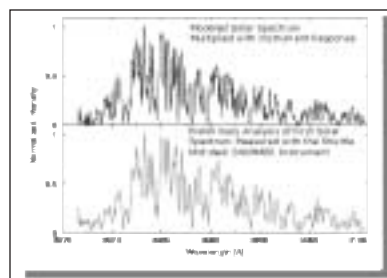
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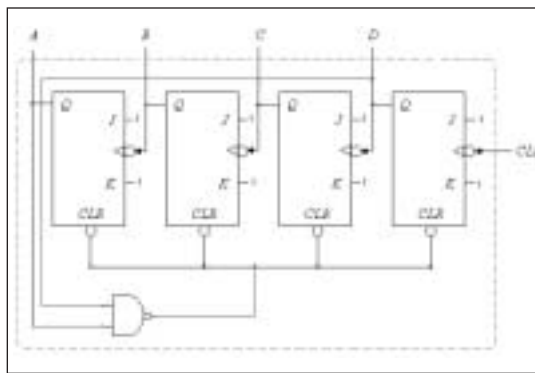
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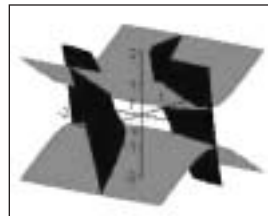
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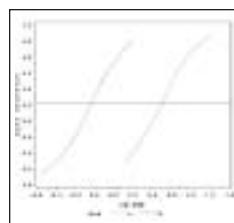
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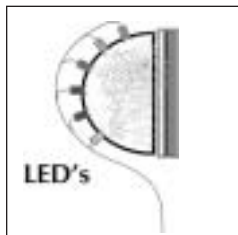
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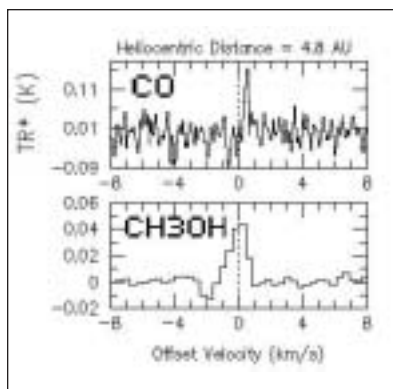
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Department Index

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Department Index

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Academic Center Index

Allied Health Programs - Medical Technology and Nuclear Medicine Technology Mathematics and Science Center (MS) 273

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Academic Adviser Nuclear Medicine Technology: Dr. Michael Garrity, Professor of Physics, Astronomy and Engineering Science
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<http://bulletin.stcloudstate.edu/ugb/programs/nmdt.asp>

The Medical Technology and Nuclear Medicine Technology Programs prepare graduates to become nationally certified and actively recruited clinical laboratory scientists or nuclear medicine technologists. The strong foundation in biology and chemistry leads to a variety of possible career directions. The programs offer students unique and challenging internships at affiliated hospitals.

Alumni/Emeriti Center Headley Hall (HH) 227A

Contact Person: Jennifer Kolden, Information Officer 1
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Web site(s):

The Alumni/Emeriti Center (A/EC) was opened January 12, 2000, and is housed in the College of Science and Engineering (COSE) Research and Development Center. The A/EC was established to provide a lounge area for retired COSE emeriti, faculty, and staff and COSE alumni upon their return to campus to attend social, business or research activities.

The A/EC offers a comfortable lounge area and meeting table for business or social meetings; computers with internet access; office amenities and telephone service. The staff of the COSE Research and Development Center looks forward to A/EC visitors and hope that the Center will become a common meeting ground for retired emeriti, faculty, and staff, and alumni.

Applied Research Center Headley Hall (HH) 227A

Director: Dr. H. Bayo Lawal, Professor of Statistics
Assistant: Jennifer Kolden, Information Officer 1
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The mission of the Applied Research Center is to assist faculty, students and staff with all aspects of research, including planning, obtaining support, doing research, publicizing activities and disseminating results.

The Center works together with the College of Science and Engineering (COSE) Dean, the Office of Sponsored Programs, the university-wide research Applied Research Committee and other university research centers to establish short and long term research goals for COSE and St. Cloud State University.

Brown Hall Museum Brown Hall (BH) 240R

Director: Dr. Standley Lewis, Professor of Biological Sciences
Telephone: (320) 255-4284
E-mail: slewis@stcloudstate.edu
Fax:
Web site(s):

The Brown Hall Museum is designed to serve as a depository for fossil collections, as a depository for selected skeletons used in several College of Science and Engineering biology courses, as a research laboratory for Dr. Lewis's research activities with both invertebrate and vertebrate fossils and as a research laboratory for Dr. Lewis's paleobiology students. For information concerning the availability of museum tours, please contact Dr. Lewis.

Academic Center Index

Computer Network Research Center Headley Hall (HH) 213

Director: Dr. Monte Johnson, Professor of Statistics
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The mission of the Computer Network Research Center is to maintain, and further develop, as a nucleus of information in the field of computer networking. As well as providing test and implementation facilities for new networking technology as it becomes available.

Computer Networking and Applications Engineering and Computing Center (ECC) 139

Director: Dr. Monte Johnson, Professor of Statistics
Program Secretary: Sue Pope
Telephone: (320) 203-6084
E-mail Monte Johnson: monte@stcloudstate.edu
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<http://bulletin.stcloudstate.edu/departments/stat.asp>

The Computer Networking and Applications program offers 17-credit and 24-credit minors in Computer Networking and Applications. These programs are designed as support programs for students who need to become knowledgeable and sophisticated users of microcomputers.

In addition, a 27-credit minor is offered in Data Communication that is designed to provide students with a conceptual background and some practical experience in configuring a network. The Network Modeling and Simulation major provides a balance between the theoretical and practical skills needed in the networking field.

Development Center Headley Hall (HH) 227A

Director:
Writer/Editor *Dimensions* news journal: Jennifer Kolden,
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The Development Center supports the College of Science and Engineering (COSE) through the initiation of gift giving to the College, the stewardship of gifts received and the gift recognition program for the College.

Dimensions, a COSE news journal, publicizes the research and activities of COSE students, faculty and staff.

Greenhouse Mathematics and Science Center (MS) - Greenhouse

Director: Dr. David DeGroot, Professor of Biological Sciences and Chairperson
Telephone: (320) 255-4736
E-mail: degroot@stcloudstate.edu
Fax:
Web site(s):

The Greenhouse was completed in the fall of 1991. This is a small facility, with 1600 square feet of growing space and an attached head house area. Two small isolation rooms afford the opportunity to grow plants at moderate (temperate to warm) temperatures and control the day length. The greenhouse growing area is divided into five individually controlled environments.

Currently, these five environments are operating as a tropical display room; two temperate rooms for stock plants and research; a topical research room; and an arid display and research room. A large number of student projects are carried out in this facility each semester. Insect control is generally done using natural products rather than synthetic pesticides.

Herbarium

Mathematics and Science Center (MS) - Herbarium

Director: Dr. Jorge Arriagada, Associate Professor of Biological Sciences

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jeaarriagada@stcloudstate.edu

Fax:

Web site(s):

<http://herbarium.stcloudstate.edu/>

The Herbarium is a significant research and teaching resource that serves the public, academic, and professional communities. It provides an important source for identification of plant specimens as well as training in plant taxonomy.

The plant collection (25,000 specimens) is especially strong in Central Minnesota counties holdings dating from 1800s to the present. Currently, a bibliographic and an online database are being developed to make the wealth of information contained in our collections more readily and widely available.



Mathematical Skills Center

Stewart Hall (SH) 203

Director: Dr. James Wilmesmeier, Associate Professor of Mathematics

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jmwilmesmeier@stcloudstate.edu

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Web site(s):

<http://www.stcloudstate.edu/~mathskl/>

The Mathematical Skills Center prepares students for success in college level mathematics courses. Students using the Mathematical Skills Center typically have two needs: first to develop skills in basic mathematical thinking and operations; secondly to develop study skills for mathematics as well as other academic disciplines.

Two courses are offered through the Mathematical Skills Center: Basic Mathematics Concepts (Math 070) for students next taking the Core Math/Stat course 193 and Intermediate Algebra (Math 072) for students preparing for Mathematical Thinking and Modeling (Math 196) or a pre-calculus course. Peer tutoring is available at the center during regular hours of operation.

Academic Center Index

Planetarium and Observatory

Mathematics and Science Center (MS) 24

Director: Dr. Mark Nook, Professor of Physics, Astronomy and Engineering Science and Chairperson

Office Manager: Linette Simonson

Telephone: (320) 255-2011

E-mail Mark Nook: manook@stcloudstate.edu

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Web site(s):

Planetarium: <http://www.stcloudstate.edu/~physics/>

Observatory:

<http://r2d2.stcloudstate.edu/~cw/equipment.html>

The Planetarium is a unique educational facility that strives to educate university students and the people of Central Minnesota about the natural world above them.

The Observatory strives to further our understanding of the natural world beyond Earth's atmosphere through astronomical research, the training of scientists and educators in astronomical research methods and outreach to the public.

Statistical Consulting Center

James W. Miller Learning Resources Center (MC) 204D

Contact person: Dr. David Robinson, Professor of Statistics and Chairperson

Telephone: (320) 255-2149

E-mail: dhrobinson@stcloudstate.edu

Web site(s): <http://www.stcloudstate.edu/~stat/scc.html>

The Statistical Consulting Center can provide help with designing surveys or questionnaires, entering data once surveys are collected, running statistical software to analyze the data and interpreting the results of the analysis.

College of Science and Engineering

Academic Centers

Allied Health Programs -

Medical Technology

Nuclear Medicine Technology

Applied Research Center

Brown Hall Museum

Computer Network Research Center

Computer Networking and Applications

Development Center

Greenhouse

Herbarium

Mathematical Skills Center

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Chemistry

Computer Science

Earth and Atmospheric Sciences

Electrical and Computer Engineering

Environmental and Technological Studies

Mathematics

Mechanical and Manufacturing Engineering

Nursing Sciences

Physics, Astronomy and Engineering Science

Statistics



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