

**AKRON COUNCIL OF
ENGINEERING AND SCIENTIFIC SOCIETIES
64th ANNUAL
HONORS AND AWARDS BANQUET**



**Akron Council of Engineering
and Scientific Societies**

Incorporated 1946

www.ACESInc.org



IEEE



AIChE
AMERICAN INSTITUTE OF CHEMICAL ENGINEERS



Akron Physics Club



**Thursday, November 3, 2011
Guy's Party Center**

**64th ANNUAL
ACCESS HONORS & AWARDS BANQUET PROGRAM**

Guy's Party Center

November 3rd, 2011

• <i>Welcome, Opening Remarks</i>	-Dr Missi Zender-Sakach President, ACCESS
• <i>America the Beautiful</i>	-Marissa Durbin, Twinsburg High School
Dinner	
• <i>Banquet Introductions</i> -ACCESS Advisory Council	-Dr Missi Zender-Sakach
• <i>Speaker Introduction</i>	-Dr Missi Zender-Sakach
• <i>Speaker</i> Making a Point for Physics Everyday	- Christine Milcetch
• <i>Outstanding High School Student Science / Math Awards</i> -Presentation of Certificates of Recognition to Outstanding Students from High Schools in Summit County	-Certificates presented by Dr Anoop Krishen / Brent Sisler -Winners announced by Dr Missi Zender-Sakach / Ms Katrina Halasa
• <i>Honors & Awards</i>	-Dr Lloyd Goettler President-Elect, ACCESS
- <i>Best of Show Akron Science & Technology Expo -Middle School</i>	-Cambria Barkley National Inventors Hall of Fame School, Akron
- <i>Best of Show Akron Science & Technology Expo -High School</i>	-Ashley Nichols, Jaquea Latimer East Community Learning Center, Akron
- <i>Best of Show Western Reserve District 5 Science Day</i>	-Leat Perez Beaumont High School, Cleveland Heights
- <i>ACCESS / OMNOVA Teacher Grant Awards</i>	-Deborah Geffken, Barber Community Learning Center -Betty Indriolo, St Sebastian School
- <i>ACCESS / ExxonMobil Teacher Grant Awards</i>	-Margaret Busker-Postlethwait, Buchtel High School -Maginel Natof, Kenmore High School -Monique Binkley, Garfield High School -Josh Oldham, East Community Learning Center
- <i>ACCESS Teacher Grant Awards</i>	-Elizabeth Terrill, Buchtel High School -David Hardwick, Hyre Middle School
- <i>Summit County Teacher of the Year Award</i>	-Shari Gardner, Nolley Elementary, Manchester Local Schools
- <i>ExxonMobil / ACCESS Scholarship Award</i>	-Nicholas Tietz, Kent State University
- <i>Bridgestone Americas / ACCESS Scholarship Award</i>	-Sunandini Chopra, The University of Akron



• <i>Honors & Awards (continued)</i>	-Dr Lloyd Goettler President-Elect, ACCESS
-ACCESS Outreach Partnership Presented by Ms Katrina Halasa, Akron Public Schools	-Akron Public Schools and UA-UARF
-OMNOVA / ACCESS Scholarship Awards Presented by Dr Ray Weinert, OMNOVA Solutions Inc	-Andrew Bruck, The University of Akron -Matthew Mechler, The University of Akron
-ACS Chemistry Scholarships Presented by Dr Bryan Katzenmeyer, ACS	-Austin Raper, Mt Union College -Jeffrey Brown, Kent State University -Adam Miller, Hiram College -Eun (Grace) Kim, The University of Akron -Allison Balloon, Malone University -Rachelle Miller, Walsh University
-Gene Easter Award for Exemplary High School Chemistry Teaching Introduced by Dr Bryan Katzenmeyer, ACS	-Heidi Lynn Gaunter, Hudson High School
-SPE Special Merit Scholarships Presented by Dr Kevin Cavicchi, SPE	-Sophie Grodsinsky, Carnegie Mellon University -Matthew Konderson, The Ohio State University -Andrew Schaffer, The University of Akron -Meredith Lynne Scott, The Ohio State University
-SPE Ken Sharp Memorial Scholarship Presented by Dr Kevin Cavicchi, SPE	-Brian Phillips, The Ohio State University
-SPE Jim Steiner Memorial Scholarship Presented by Dr Kevin Cavicchi, SPE	-Samantha Moskowitz, The Ohio State University
-SPE Rubbermaid Scholarship Presented by Dr Kevin Cavicchi, SPE	-Andrew McBain, Purdue University
-SPE Goodyear Scholarship Presented by Dr Kevin Cavicchi, SPE	-Kathleen Angel, The University of Akron
-SPE Wonders of Plastics Essay Contest Presented by Dr Kevin Cavicchi, SPE	-Middle School Todd Lensman, North Canton Middle School -High School Cody Hufstetler, Hoover High School
-SPE Plastics Hall of Honor Inductee Presented by Dr Kevin Cavicchi, SPE	-Edward Shen
-SPE William C Zekan Memorial Award Presented by Dr Kevin Cavicchi, SPE	-Professor Sadhan Jana, The University of Akron
-SPE Pinnacle Gold Award Presented by Dr Kevin Cavicchi, SPE	-SPE Akron Section
-ACCESS Award	-Dr Michael B Dowell Student Chemistry Teacher, John Hay High School Cleveland, Ohio Woodrow Wilson Foundation Fellow John Carroll University
-Distinguished Award of Council	-Mr Robert W Handlos Vice President of Research Bridgestone Americas
• <i>Closing Remarks</i>	-Dr Missi Zender-Sakach





**2011-2012
ACCESS OFFICERS**

President:	Missi Zender-Sakach, PhD ACS	Summit County Educational Service Center
President-Elect	Lloyd Goettler, PhD SPE	Retired
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<u>APC:</u> Ernst von Meerwall, President Dan Galehouse, Delegate Robert Erdman, Delegate	<u>SME:</u> Bill Kessler, Chair Bill Marzich, PE, Delegate
<u>ASCE:</u> Brian Hanna, PE, President Gregg Loesch, PE, Delegate	<u>SPE:</u> Lloyd Goettler, PhD, President David Schultz, Delegate Joe Mattingly, Delegate

AKRON COUNCIL OF ENGINEERING AND SCIENTIFIC SOCIETIES (ACCESS)

The purpose of the Akron Council of Engineering and Scientific Societies (ACCESS) is to enhance the technical environment in the Greater Akron area through coordination and cooperation with technical societies, industry and academia by:

- Providing a forum for action on matters of concern and interest to the technical and scientific communities.
- Serving as a focal point for contact between the technical community and the business community, academia and society at large.
- Promoting inter-society communication, professional interchange of ideas and coordination of society activities.
- Promoting interest in and encouraging careers in technical professions.

ACCESS is a non-profit 501(c)(3) organization, incorporated under the laws of the State of Ohio, operating exclusively for scientific and educational purposes.

Societies eligible for council membership are professional technical organizations with acceptable ethical standards, which have, as their objectives, the advancement of the theory and practice of the science concerned. Societies include:

- Akron-Canton Section of the American Society of Civil Engineers (ASCE)
- Akron District Society of Professional Engineers (ADSPE)
- Akron Physics Club (APC)
- Akron Section of the American Chemical Society (ACS)
- Akron Section of the American Institute of Chemical Engineers (AIChE)
- Akron Section of the American Society of Mechanical Engineers (ASME)
- Akron Section of the Institute of Electrical and Electronic Engineers (IEEE)
- American Society of Heating, Refrigerating, & Air Conditioning Engineers (ASHRAE)
- American Society of Safety Engineers (ASSE)
- Association for Computing Machinery (ACM)
- Society of Manufacturing Engineers (SME)
- Society of Plastics Engineers (SPE)



2011-2012
ACCESS ADVISORY COUNCIL

• Dr Michael Askew	Director, Walter A Hoyt Jr Musculoskeletal Research Laboratory, Dept of Orthopaedic Surgery, Summa
• Dr Raj Chowdhury	Professor College of Technology, Kent State University
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• Dr George Newkome	Vice President for Research The University of Akron
• Mr Clark Reed	Chief Technologist Lockheed Martin Corporation (retired)
• Ms Mary Ann Roach	Community Affairs Bridgestone Americas Tire Operations
• Dr Nick Triantafillopoulos	Manager & Fellow, Akron Technology Center OMNOVA Solutions Inc

The ACCESS Advisory Council consists of six or more business and/or technical leaders of the Greater Akron Area who are selected annually by the ACCESS President. The purpose of the Advisory Council is to act in an advisory capacity to the ACCESS Board of Directors.

Members of the Advisory Council are also available, as needed, to assist the ACCESS Board of Directors in the accomplishment of ACCESS objectives. The Board of Directors of ACCESS expresses thanks to the Advisory Council members for their time and assistance.

2011 ACCESS HONORS & AWARDS
BANQUET COMMITTEE

• Ken Batcher, PhD, ACM	Retired
• Mike Buza, ASME	Committee Co-Chair, Retired
• George Deisz, ACS	Retired
• Michael Dowell, PhD, ACS	John Hay High School
• Joseph Feil, AIChE	Retired
• Lloyd Goettler, PhD, SPE	Retired
• Katrina Halasa, ACS	Akron Public Schools
• Bill Kessler, SME	Committee Co-Chair, Retired
• Anoop Krishen, PhD, ACS	Retired
• Gregg Loesch, PE, ASCE	City of Akron
• Robert Osterhout, IEEE	Lanier Consulting, LLC
• Mary Ann Roach	Bridgestone Americas Tire Operations
• Marian Rousek, ACS	Retired
• Brent Sisler, PE, ADSPE, ASME	The Babcock & Wilcox Company
• Missi Zender-Sakach, PhD, ACS	Summit County Educational Service Center



OUTSTANDING STUDENTS **from High Schools in Summit County**



Recognition is extended to the following math and science students from high schools in Summit County.

SCHOOL	STUDENTS
• <i>Akron Early College, Akron</i>	-Josephine Watson -Tyler Brown
• <i>Buchtel High School, Akron</i>	-Jade Shropshire -Nevan Strobelt-McCann
• <i>East High School, Akron</i>	-Tayler LeGrair -Matthew Schertz
• <i>Ellet High School, Akron</i>	-Amanda Rowe -Tyler Sherrard
• <i>Firestone High School, Akron</i>	-Sarah Meek -Evan Yetter
• <i>Garfield High School, Akron</i>	-Kashmire Crislip -Dezmond Love
• <i>Kenmore High School, Akron</i>	-Angelique Rackley -Jonathan Waszkiewicz
• <i>North High School, Akron</i>	-Nirmala Ghimirey -Ryan Cantrell
• <i>Barberton High School</i>	-Duska Maljkovic -David Macko
• <i>Copley High School</i>	-Olga Eliseeva -Michael Dugan
• <i>Coventry High School</i>	-Allison Pulley -Wolfgang Davidson
• <i>Cuyahoga Falls High School</i>	-Keenan Brooks -Logen Breehl
• <i>Green High School</i>	-Amanda Pinheiro -Wesley Peng
• <i>Hudson High School</i>	-Stephanie Lee -Greg Bulger
• <i>Manchester High School</i>	-Heather Shaffer -Kyle Daily
• <i>Mogadore High School</i>	-Lauren Brodie -Jack McDowall
• <i>Nardon Hills High School</i>	-Sara Andrasik -Nehal Patel
• <i>Norton High School</i>	-Katlyn Walker -Collin Foltz
• <i>Revere High School</i>	-Annie Sun -Edwin Zhang
• <i>Springfield High School</i>	-Gabby Lessak -Dylan Harris



OUTSTANDING STUDENTS **from High Schools in Summit County**



(continued)

Recognition is extended to the following math and science students from high schools in Summit County.

SCHOOL	STUDENTS
• <i>Stow-Munroe Falls High School</i>	-Maia Marchetti -Robert Moorehead
• <i>Tallmadge High School</i>	-Michael Strand -Peyton Patrick
• <i>Twinsburg High School</i>	-Divya Naik -Evan Smith
• <i>Woodridge High School</i>	-Kayla Saldat -Nate Tompkins
• <i>Archbishop Hoban High School</i>	-Caren Dieglio -Paul Wischt
• <i>Our Lady of the Elms High School</i>	-Catherine Culp -Alicia DuBois
• <i>Walsh Jesuit High School</i>	-Elizabeth Reeves -Derek Allman
• <i>St Vincent St Mary High School</i>	-Hannah Roberts -John Friess
• <i>Cuyahoga Valley Christian Academy</i>	-Heather Alberson -William Van Bjuskirk



SCIENCE FAIR WINNERS

Best of Show Akron Science & Technology Expo

Middle School - Cambria Barkley won the ACESS Award for the outstanding project at the Akron Science & Technology Expo held at the North High School on January 29, 2011. The title of her project was "Stealthy Shapes (To Make an Aircraft Invisible)". Cambria is currently in the 8th grade at the National Inventors Hall of Fame School in Akron, Ohio. Her science advisor was Ms Christine Justiss.

High School – Ashley Nichols and Jaquea Latimer won the ACESS Award for the outstanding project at the Akron Science & Technology Expo held at the North High School on January 29, 2011. The title of their project was "When Mold Attacks". Ashley and Jaquea are currently in the 11th grade at East Community Learning Center in Akron, Ohio. Their science advisor was Mr Josh Oldham.

Best of Show 63rd Western Reserve District 5 Science Day

Leat Perez won the ACESS Award for the outstanding project at the 63rd Western Reserve District 5 Science Day held at The University of Akron on March 19, 2011. The title of her project was "Killer Immunoglobulin-like Receptors (KIR) Gene Polymorphism and BKV Infection in Post-transplant Kidney and Kidney/Pancreas Recipients". Leat is currently in the 12th grade at Beaumont High School, Cleveland Heights. Her science advisor was Mrs Gretchen Santo.



ACCESS GRANT AWARD WINNERS

ACCESS recognizes the need for students to carry out experiments and projects to further math or science education at their school. One-time grants of \$500 are being awarded to six winners based on their grant applications.

Family Polymer Science Night Project

Sponsored by ACCESS / OMNOVA

Deborah Geffken

Barber Community Learning Center, Akron

Hang on Sloopy II: A Natural Balance in the Buckeye State II

Sponsored by ACCESS

Elizabeth Terrill

Buchtel High School, Akron

Where Does our Water Go?

Sponsored by ACCESS / ExxonMobil

Margaret Busker-Postlethwait

Buchtel High School, Akron

Field Trip to Math & Physics Day at Cedar Point

Sponsored by ACCESS / ExxonMobil

Maginel Natof

Kenmore High School, Akron

Continuing Forensic Explorations!

Sponsored by ACCESS / ExxonMobil

Monique Binkley

Garfield High School, Akron

2011 National Chemistry Week – Chemistry & Health

Sponsored by ACCESS / OMNOVA

Betty Indriolo

St Sebastian School, Akron

Forensic

Sponsored by ACCESS / ExxonMobil

Josh Oldham

East Community Learning Center, Akron

Hyre Nature Study Area

Sponsored by ACCESS

David Hardwick

Hyre Middle School, Akron



SUMMIT COUNTY TEACHER OF THE YEAR AWARD

The Summit County Educational Service Center holds an annual event to honor teachers that have made long-term contributions to education. \$500 is awarded by ACCESS to the Summit County Teacher of the Year to spend on classroom materials and enrichment experiments.

Shari Gardner

Nolley Elementary School, Manchester Local Schools

3rd Grade Teacher



ExxonMobil / ACESS SCHOLARSHIP AWARD

One \$1,000 scholarship is awarded each year to a deserving student at either The University of Akron or Kent State University. To be eligible, the student must be a junior and working toward a four-year degree in a technical area that is related to at least one of the areas represented by ACESS member societies.

Nicholas Tietz, Computer Science, Kent State University

BRIDGESTONE AMERICAS / ACESS SCHOLARSHIP AWARD

One \$1,000 scholarship is awarded this year to a student at The University of Akron.

Sunandini Chopra, Mechanical-Polymer Engineering, The University of Akron

ACESS OUTREACH PARTNERSHIP

APS and UA-UARF

The University of Akron Research Foundation (UARF) and The University of Akron (UA) were the recipients of a grant to participate in the creation of the High Institute for Elastomer Industries (HIEI) in Yanbu, Saudi Arabia. Akron Public Schools (APS) and UA-UARF are delighted to have entered in a partnership called "Train the Trainer" Program.

PARTICIPANTS

Arab Sadeq S Abuaarab with Joe DeAngelis at Ellet High School
Saad Baghdad A Almotari with Karen Rummell at Garfield High School
Mansour Abdulhamid A Alyas with Angela Demchak at Garfield High School
Moataz Abulaiz K Alhaddad with Bill Alkire at North High School
Ahmed Abdulrahman H Aleid with Penny Porter at Buchtel High School
Talal Mohammed F Namankani with Steve Remenaric at Ellet High School
Ayoub Ibrahim A Awaji with Edwin Cauffield at Firestone High School

INSTRUCTORS

Dr Harold Wilcox
Dr Peter Richter
Dr Mohamed Hassan
Dr Victor Monroy

OMNOVA / ACESS SCHOLARSHIP AWARD WINNERS

Two \$1,500 scholarships are awarded this year to students at The University of Akron by Dr Ray Weinert, Technology Manager & Fellow, OMNOVA Solutions Inc.



Andrew Bruck, Mechanical-Polymer Engineering
Matthew Mechler, Chemistry



ACS CHEMISTRY SCHOLARSHIPS



Each year the Akron Section of the American Chemical Society (ACS) provides six \$500 scholarships to outstanding junior Chemistry majors in nearby colleges and universities. This year's winners are:

<u>Mt Union College</u> Austin Raper Dr Jeff Draves, Advisor	<u>Kent State University</u> Jeffrey Brown Dr Nicole Brasch, Advisor
<u>Hiram College</u> Adam Miller Dr Carol Shreiner, Advisor	<u>The University of Akron</u> Eun (Grace) Kim Dr David Modarelli, Advisor
<u>Malone University</u> Allison Balloon Dr Jeffrey Goff, Advisor	<u>Walsh University</u> Rachelle Miller Dr Neil Walsh, Advisor



ACS 2011 GENE EASTER AWARD for EXEMPLARY HIGH SCHOOL CHEMISTRY TEACHING

Heidi Lynn Gauntner, Hudson High School

The Gene Easter Award was established in 1995 by the Akron Section of the American Chemical Society to recognize an outstanding chemistry teacher at the high school level who combines innovative and relevant methods of presenting chemistry subjects in order to illustrate the importance of chemistry in our everyday lives. The award is named after Gene Easter who taught chemistry at Streetsboro High School.



STEM SHOWCASE (Science, Technology, Engineering, Math)



Colleges, Universities and Organizations represented at the
ACCESS Honors & Awards Banquet

College Advantage – Ohio Tuition Trust Authority

Hiram College

Kent State University

Malone University

The University of Akron – Akron Global Polymer Academy

The University of Akron – STEM Program

Western Michigan University



SPE SCHOLARSHIPS



Each year the Society of Plastics Engineers (SPE) awards scholarships to deserving students. This year's winners are:

Special Merit Scholarships

Sophie Grodsinsky, Carnegie Mellon University
Matthew Konderson, The Ohio State University
Andrew Schaffer, The University of Akron
Meredith Lynne Scott, The Ohio State University

Ken Sharp Memorial Scholarship

Brian Phillips, The Ohio State University

Jim Steiner Memorial Scholarship

Samantha Moskowitz, The Ohio State University

Rubbermaid Scholarship

Andrew McBain, Purdue University

Goodyear Scholarship

Kathleen Angel, The University of Akron



SPE Akron Section

WONDERS OF PLASTIC ESSAY CONTEST



Middle School

Todd Lensman, 8th grade, North Canton Middle School
"Plastics: A Brief History"
Teacher – Valerie Heban

High School

Cody Hufstetler, 11th grade, Hoover High School
"Printing in Plastic"
Teacher – Steven Wood

SPE PLASTICS HALL OF HONOR INDUCTEE

Edward Shen for his contributions to the Thermoplastic Elastomer Industry during his work at Monsanto and Advanced Elastomer Systems and his involvement in the SPE Thermoplastics Elastomers Special Interest Group



SPE WILLIAM C ZEKAN MEMORIAL AWARD

Professor Sadham Jana, Department of Polymer Engineering, The University of Akron for his involvement and leadership with the Akron SPE Board of Directors, Akron SPE Student Chapter, and TOPCON meeting on electronic displays

SPE PINNACLE GOLD AWARD

Akron Section

The Pinnacle program was established in 2005 to recognize Sections and Divisions that successfully create and deliver member value. Sections and Divisions report on these activities in the area of organization, technical programming, and communication.

THE ACESS AWARD

The ACESS Award is presented annually to an individual who has made an outstanding contribution to the Akron Council of Engineering & Scientific Societies (ACESS). The 2011 recipient of this award is Dr Michael B Dowell.

Michael B Dowell has managed marketing and development of new products for companies in the chemical, electronics and advanced energy industries for many years. He has been involved in plant expansions, joint ventures, acquisitions and distribution alliances in 15 countries, and has worked with many governmental and intergovernmental agencies. Dr Dowell has started up six US companies, three of which have foreign partners. He has diligently worked with ACESS for the past five years.



Dr Dowell holds a BS degree from Fordham University and a PhD from Penn State, both in chemistry, and a Marketing Manager's Certificate from Columbia University Graduate School of Business. Currently he is a Woodrow Wilson Foundation Fellow at John Carroll University and is doing his student teaching in Chemistry at Early College at John Hay High School in Cleveland. When he completes his student teaching and has his Master's from John Carroll, he hopes to be a high school chemistry teacher.

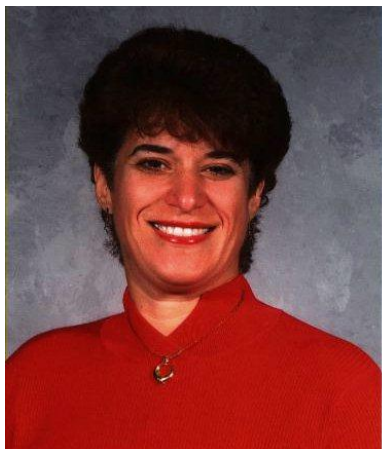
THE DISTINGUISHED AWARD OF COUNCIL

The Distinguished Award of Council is presented annually to an outstanding citizen for his/her technical and managerial achievements and involvement in civic activities. The 2011 recipient of this award is Robert (Bob) W Handlos, Vice President - Research for Bridgestone Americas Tire Operations.



Bob has 30 years of experience in the tire and rubber industry, including 25 years with the Bridgestone Americas family of companies. His work experience includes such varied areas as materials development, product development, strategic planning and race tire manufacturing. He has a Bachelor of Science degree in chemical engineering from the University of Pittsburgh and a Master of Business Administration degree from Kent State University. Bob led the team that made the recommendation to build a new technical center for Bridgestone Americas in Akron, which will be completed in the spring of 2012.

Bob is an advocate of education, especially public education. He was a member of the Lake Local Board of Education for six years, including three as President. He is a member of the Bridgestone Americas Trust Fund Committee, Northern Ohio Golf Charities Foundation Board, United Way Board, a graduate of Leadership Akron and is a 2011 Pink Tie Guy for the Susan G. Komen organization.



BANQUET SPEAKER

CHRISTINE MILCETICH

“Making a Point for Physics Everyday”

Christine Milcetic holds a Bachelor of Science degree from Walsh University, North Canton, Ohio and a Master of Science in Education from The University of Akron. She is a National Board Certified Teacher (NBCT) and has been awarded the Presidential Award of Excellence in Mathematics & Science Teaching (PAEMST). Christine is currently the Physics teacher and Planetarium Director at Firestone High School. She is an active member in the American Association of Physics Teachers, the Association for Supervision & Curriculum Development, Phi Chapter of Delta Kappa Gamma, the National Science Teachers Association, the Science Education Council of Ohio, and Phi Delta Kappa. Christine volunteers as an Akron Public Schools Science Fair judge, is an apheresis donor at Mercy Medical Center in Canton, Ohio and is the Chair for the Football Hall of Fame Kickoff Sunday race.

Where is physics? Physics is everywhere! Most of the things we use in our modern technological society are based on a few, basic concepts of Physics. Everything in our everyday lives can be accounted for by a handful of particles (electrons, protons, and neutrons) interacting via forces (nuclear forces, gravity, and electromagnetism) subject to the basic rules of quantum mechanics and general relativity. That is a remarkably short list of ingredients to account for all the marvelous diversity of things we see in the world! Physics describes natural laws with a set of concepts.



Christine explores several areas where physics is seen in our everyday lives from our childhood playground experience to watching a cement block being broken while the teacher reclines on a bed of nails. We experience things going on around us all the time in our complex world...leaves are moving in the wind, the sun is shining, the stars are twinkling, light bulbs are glowing, cars are moving, computer printers are printing, people are walking, streams are flowing, etc. When we examine these actions, questions arise. Physics is an inquiry into these questions and how the world works, from the most basic to the most highly complicated. At root, physics is all about getting conscious about our world.



The things going on around us can be described by observations and measurements of each action which then can be translated into mathematical models. Christine examines the concepts of physics in a child on a swing (force/resonance/amplitude), in bridges (compression/tension), in a shuttle launch (time delay between the speed of light and the speed of sound), in cell phones and iPads (electricity/EMS), in massing a car projectile (coefficient of friction, forces, 2D motion), in a balancing bird (center of mass/balancing forces), and in a bed of nails. The fundamental concepts of motion, force, energy, thermodynamics, electricity and magnetism define all of these actions that we observe. They are the physical laws or principles of Physics.





OMNOVA Solutions Foundation's (OSF) highest priority is education. OSF wants to help motivate our future leaders and workers to gain the desire, knowledge and work-readiness skills required for corporations like theirs. The Foundation offers two \$1500 scholarships and two \$500 teacher grants.



Bridgestone Americas

— T R U S T F U N D —



The Bridgestone Americas Trust Fund is pleased to support ACESS in their efforts to promote careers in science and engineering. The Trust Fund offers one \$1,000 scholarship.



ExxonMobil *Chemical*

A special thanks to ExxonMobil Chemical Company for their generous gift to support the activities of ACESS! ExxonMobil Chemical sponsors one \$1,000 scholarship and four \$500 teacher grants.

**The Akron Council of Engineering & Scientific Societies
gratefully acknowledges the financial support
of the following organizations:**



**Akrochem Corporation
Akron Section American Chemical Society
Akron Section American Society of Mechanical Engineers
Akron Section Society of Plastics Engineers
Babcock & Wilcox Power Generation Group, Inc
Bridgestone Americas Trust Fund
Chemstress Consultant Company
Eagle Elastomer Inc
ExxonMobil Chemical Company
Hottle and Associates
Lockheed Martin Corporation
OMNOVA Solutions Foundation
Society of Manufacturing Engineers
The University of Akron Research Foundation**

