

# PLM~Knowledge 21

"Empowering Knowledge for 21st Century Engineers"

Volume 2 Issue 1

January 2004

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### University of Connecticut Receives Academic Grant at \$146M



Dr. Amir Faghri leads Press Conference

Storrs, CT—The grant-in-kind grant announced 13 Nov 03, in UConn's Information Technologies Engineering Building, will provide students and faculty with a suite of world-class PLM industry software that will help them conceive, design, engineer and validate projects using the same tools today's leading manufacturing and technology companies employ. "This grant signifies an enormously valuable collaboration between one of the nation's major public research universities, and one of the nation's most innovative and far-sighted companies," said President Philip E. Austin. "The nature and scope of the grant are unparalleled in UConn's history. "The grant will further strengthen a School of Engineering that is already making great strides in research, instruction, and service to

the wider community," Austin added. "E-engineering and e-commerce are vital components of Connecticut's economic growth. We are delighted to partner with EDS in this great venture." The software grant from UGS PLM Solutions includes products used by technologists and engineers at General Motors, Boeing, Toyota, AT&T, Hitachi, Lockheed Martin, Pratt & Whitney, General Dynamics, and many other top global companies. There are approximately 2.6 million licensed users of software incorporating UGS PLM Solutions technology worldwide.

"This grant will position the University of Connecticut among the leaders in engineering education and will ensure that UConn's students and faculty have access to world-class e-engineering support," said Dr. Amir Faghri, dean of the School of Engineering. "UGS PLM Solutions will serve as UConn's educational partner, helping to train engineering students using the most cutting-edge product design and development software on the market today." The grant will provide UConn engineering students with the tools they need to transition smoothly from an academic environment into careers in industry, says Faghri. "It gives our students a real competitive advantage in the career marketplace." The grant covers a suite of product lifecycle management tools for computer aided design, computer aided manufacturing, computer aided engineering, and collaborative visualization, with advanced features such as finite element analysis, optimization programs, and advanced solid modeling.

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**Read More :** <http://www.advance.uconn.edu/story1.htm>



UConn and EDS Teammates



**Global Strategic Partnerships**  
... adding Value through  
Industry, Government, Academic and Community Leadership

**PACE**

**Youth Development Programs**

**PLM Regional Productivity Programs**

**Academic Partnership Program**

**Global Strategic Partnerships**  
13690 Riverport Dr.  
MC 285  
Maryland Heights, MO 63043

# Partners for the Advancement of Collaborative Engineering Education

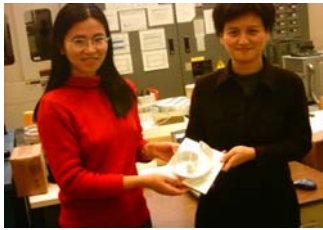
The PACE Partnership links GM, Sun Microsystems, EDS & UGS PLM Solutions in the support of strategically selected Academic Institutions worldwide, to develop the automotive PLM team of the future

# PACE



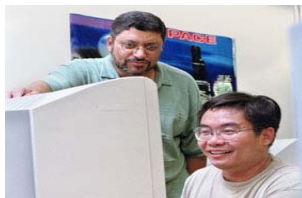
## UBC PACE- Increases UBC Students' Educational Velocity

**Vancouver, BC-** The Partners for the Advancement of Collaborative Engineering Education (PACE) announced an in-kind grant with a commercial value of approximately \$240 million to the University of British Columbia (UBC). This grant consists of computer-aided design, manufacturing, and engineering software, hardware, and training. It is the largest in UBC's history. Michael Grimaldi, president of General Motors of Canada said, "As a result of PACE's contribution, UBC Faculty of Applied Science undergraduate students will have the opportunity to use state-of-the-art computer-aided engineering tools. PACE partners are playing a key role in fostering innovation in Canada by enabling students to work with world-class tools and preparing them for future success as a designing engineer. A highly skilled workforce will attract additional high tech jobs and investment, improving the overall economic outlook for Canada." "UBC is joining a growing international community of leading institutions participating in the PACE program," said Stéphane Boisvert, president of Sun Microsystems of Canada. "In today's global competitive marketplace, it is essential that students have access to industry-leading resources. The implementation of this computing infrastructure in UBC's classrooms is the foundation of future innovation." John Dowd, president of EDS Canada, said, "With this PACE contribution, students at UBC will learn computer-aided engineering concepts used in a broad range of industry sectors through a unique combination of hardware, software, and training."



Student Machining Research

UBC Faculty of Applied Science undergraduate students will have the opportunity to use state-of-the-art computer-aided engineering tools. PACE partners are playing a key role in fostering innovation in Canada by enabling students to work with world-class tools and preparing them for future success as a designing engineer. A highly skilled workforce will attract additional high tech jobs and investment, improving the overall economic outlook for Canada. "UBC is joining a growing international community of leading institutions participating in the PACE program," said Stéphane Boisvert, president of Sun Microsystems of Canada. "In today's global competitive marketplace, it is essential that students have access to industry-leading resources. The implementation of this computing infrastructure in UBC's classrooms is the foundation of future innovation." John Dowd, president of EDS Canada, said, "With this PACE contribution, students at UBC will learn computer-aided engineering concepts used in a broad range of industry sectors through a unique combination of hardware, software, and training."



Orientation to new PACE tools

**Read More:**

[http://www.tenlinks.com/NEWS/PR/eds/111803\\_pace.htm](http://www.tenlinks.com/NEWS/PR/eds/111803_pace.htm)

## Core Team Visits Mexican PACE Institutions

**Mexico -** Core team members and several local GM Mexico / EDS teammates visited PACE institutions in Mexico to review progress to date embelishing GM's PLM tools and processes into their engineering curriculum. This team also evaluated numerous collaborative projects that are under way to bring real-world PLM experience into the class room. Each institution provided well defined implementation plans to continuously raise the bar for developing to a high caliber of PLM engineers at all PACE institutions.

**The institutions visited were:**

- Instituto Tecnológico y de Estudios Superiores de Monterrey Campus Toluca
- Campus Monterrey
- Campus Estado de México
- Universidad Iberoamericana
- Instituto Politécnico Nacional
- Instituto Tecnológico Autónomo de México



Mexican PACE Institution class room in action

PACE team participates performing the audits included Elaine Chapman Moore (PACE Manager), Hulas King (UGS PLM Solutions Global Strategic Partnerships Director) Alfredo Treviño (President UGS Operations México), Roberto Vázquez (UGS México), Karla Reyes Bedoya (PACE Global Coordinator for México), Rocío Casarín (TEP & PACE Assistant), Victor Zepeda (Math Strategies & Dimensional Engineering Support Manager) plus a number of GMM engineers: Marcos Braña, Teresa Soriano, Juan Carlos Caballero, Alberto Jardón, Marco Ocaña.



PACE Core Team in Mexico

## PACE Sponsors CAD competitions at MSU and MTU

**Lansing & Houghton, MI -** PACE recently sponsored student design competitions at two PACE Institutions in Michigan as part of its commitment to encourage students to use digital data in the product development and analysis processes critical to modern engineering practices. Teamwork and collaborative design were stressed throughout these competitions. Judges for both competitions included representatives from GM, EDS and UGS PLM Solutions. Michigan State University hosted the first PACE Competition on December 3<sup>rd</sup> in the sophomore-level class: ME 285 – Computer Aided Design Tools. The design project within the course provided the foundation upon which the competition was based. Four student teams competed to parametrically design a small remote-controlled car. This project competition helped students learn and utilize the software donated by PACE. The students used Uni-

# MICHIGAN STATE UNIVERSITY



MTU winners, Greg Ives, Joe Littlefield and Casey Carr with PACE judges

graphics NX and MSC.ADAMS to design and simulate movement of the car. Michigan Technological University held their PACE competition on December 8<sup>th</sup>. Professor Bernie Bettig's senior-level MEEM 4403 – Computer Aided Design Methods Class was selected for this competition and students were allowed to design any item they wished. The competition was comprised of two separate events: an individual competition, based on the best work submitted by each student from the entire semester, and a team competition, based on the final lab assignment, collaborative design and simulation of a mechanism.



Jim Feeney and Josh Hall, Team JJ Racer, were the winners of the MSU-PACE competition.

# MichiganTech

# REGIONAL PRODUCTIVITY PROGRAMS

Create manufacturing technology environment where underutilized citizens of the world can work together to improve their economic conditions and promote peace.

## Uganda, EDS and USAID Ink Public/Private Partnership



President Museveni & USAID / EDS Executives

**Kampala, Uganda** -- Andrew S. Natsios, Administrator of the U.S. Agency for International Development (USAID), H.E. Yoweri Museveni, the President of the Republic of Uganda and Bill Sweeny, EDS VP Global Government Affairs, executed a public-private partnership with EDS and Cisco Systems, Inc. The combined value of this memoranda of understanding could reach \$14.3 million.

Natsios hailed the collaborative relationship between Uganda, Cisco and EDS and USAID as "another chapter in a very successful information technology alliance. USAID's public-private alliances bring a new dimension to our work -- new ideas, new expertise and new resources to our partners. In 2003, our global development alliances have brought in new partners and leveraged more than \$1.2 billion in private funds. "Uganda is a leader in bringing the Internet and improved telecommunications to Africa. EDS will provide Uganda's universities with advance PLM (Product Life-cycle Management) software. EDS provides leading edge technology that will give the Ugandan students real-world, hands-on design and engineering experience. The EDS grant will establish Uganda as a future hub for manufacturing expertise and engineering in central Africa. The EDS grant is valued at \$4.2 million. USAID will provide an additional \$100,000 in assistance.



**Read More / Learn More about Makerere University:**  
<http://www.usaid.gov/press/releases/2003/pr031105.html>

## EDS Teams with Beijing Institute of Technology to Support Mechanical & Vehicular Engineering Education Initiatives

**Beijing, China** – EDS announced it will provide a grant of Product Life-cycle Management (PLM) software to the Mechanical & Vehicular School at Beijing Institute of Technology (BIT). The estimated commercial value of the grant, which includes UGNX2, I-DEASNX, SE, E-factory, and OEV along with training and technical support, is \$145 million. At BIT, the software will be incorporated into current and new curricula to help students at both the undergraduate and graduate levels develop a wide range of skills in mechanical & vehicular product development. Students will gain experience with the same PLM software that is used by leading companies worldwide to create products and manage their lifecycles from initial concept through, design, analysis, testing, manufacturing, service and retirement. "On behalf of Beijing Institute of Technology, I want to express sincere appreciation to EDS for providing this industry-leading software to the school," Dr. Jing Ming Kuang said, President of BIT. "Based on the advanced software, BIT & EDS established a new 'BIT-EDS Digital Collaboration & Innovation Technology Center', a place where students, faculty and our industry partners can benefit from the latest digital design and manufacturing technologies and research. This center will also enable our students to make significant contributions to the Chinese Mechanical & Vehicular Industry upon graduation." Hans-Kurt Lübberstedt, President – Asia Pacific for EDS PLM Solutions, provided a keynote speech at the grant presentation ceremony. "I am very happy to represent EDS for the official formation of the "BIT-EDS Digital Collaboration & Innovation Technology Center" and to celebrate with you all this important milestone", "BIT is a major and top level university in China and its schools of engineering are well known for the caliber of their programs. As a world-leading provider of software and services that help companies involved in engineering and product development work more productively, we are proud to build this alliance and look forward to new opportunities to enhance the value of BIT to Chinese industry.



Dr. Jing Ming Kuang & Hans Kurt Leberstedt

## MONASH MOTORSPORT



Monash University: Winning team

**Clayton Australia** - The fourth-year mechanical engineering students at Monash University designed and built a new Formula style racing car to compete on a national and international basis. With the aid of UGS PLM Solutions software the Monash SAE-A Team built a racing car capable of accelerating from zero to one hundred km/h in

less than four seconds. Creating a racing car from scratch is not an easy task, but it provides a fantastic learning experience for the team of 35 students at Monach. "Using Uni-graphics NX and Solid Edge, the team was able to develop a car that was smaller, lighter and a month ahead of schedule, enabling the team the vital testing time that was a key factor in the car being the fastest car at the 2003 competition, beating fifteen local and six international Universities," says Alister McVean, team leader.

**Learn More:** <http://www-personal.monash.edu.au/~fsae/frameset.htm>



## Herald Sun

Australia's biggest-selling daily newspaper

### Students crack formula for speed

WATCH out McLaren, Ferrari and Williams -- there is a new racing team in town. Twenty engineering students from Monash University have designed and built a 900cc car. The students spent up to 100 hours a week over the past year to build it and raised \$40,000 to do so. They are heading to Adelaide in December to test the car against other university competitors in the Formula SAE 2003.



Pit crew: Alex Lockie lies in front of the race car he and other Monash University students constructed. Picture: JON HARGEST

## International Recognition

# YOUTH DEVELOPMENT PROGRAMS

Develop advanced manufacturing career opportunities  
for at risk youth and displaced workers.

## Ford Project: Operation Good Cheer

**Okemos, MI** - Operation Good Cheer started in 1971 when a group of Ford Motor Company employees decided to pool money they were spending on Christmas cards to assist Michigan's abused and neglected children. 66 children received gifts that first year. Operation Good Cheer has since grown to include 31 private non-profit social agencies all over Michigan. Now more than 50,000 participants have had their Christmas wish come true as a result of Operation Good Cheer. This is a voluntary program, which touches the lives of thousands of youths, places in foster care, residential treatment facilities and group homes. This year UGS PLM Ford Program has joined in sponsorship during Christmas 2003 UGS PLM Ford sponsor 151 of the 932 foster children from the Child and Family Services in Michigan. "UGS PLM Solutions is proud to be a partner with Ford and Operation Good Cheer to provide lifelong learning experiences for Detroit area youth. We are also committed to creating career development opportunities for at risk youth in our global communities," says Perrisa Millender, Technical Lead, UGS PLM Solutions Ford Program Office.

**Learn More:**

<http://www.c fsm.org/OperationGoodCheer.htm>

## EDS / UGS PLM Solutions Teammate Appointed to Manufacturing Training Alliance Board of Directors



Desiree Smith, new member of MTS Board of Directors

**Wellston, MO** - Desiree Smith was recently selected to the board of directors for MTA (Manufacturing Training Alliance). The MTA provides opportunities for youth, dislocated workers and incumbent workers to obtain training, employment, and continuous career development in manufacturing while maximizing each individuals potential and enhancing the global competitiveness of the St. Louis manufacturing industry.

**The programs include:**

- \* **Manufacturing Technology Prep (MTPP)**
- \* **Computer Aided Manufacturing (CAM)**
- \* **Computer Aided Drafting / Design (CADD)**

Graduates of the MTA programs can apply for paid apprenticeships that will result in a DOL (Department of Labor) certificate as an CNC Machine Setup / Operator Journeyman or SE (Solid Edge), UG (Unigraphics) CAD Apprentice. An elated Desiree Smith said, "As a newly elected board member, EDS is honored to be a viable part of MTA, many of our St. Louis teammates participate in similar outreach partnerships."

**Learn More: 314-977-0970**



## Co-Founder Eleanor Josaitis Receives EDS World Citizen Award



Presenting the award to Mrs. Josaitis were:  
EDS Executives: Clay Snyder,  
Tony Hemmelgarn, Hulas King

**Detroit, MI**— EDS Recently presented Eleanor M. Josaitis (executive director and co-founder of Focus: HOPE) with a World Citizen Award for her commitment to diversity and community and for Focus: HOPE's excellence in manufacturing. Mrs. Josaitis has played a major role in the development of Focus: HOPE's nationally recognized training programs which promote movement from poverty to

the financial mainstream. These programs include: First Step; FAST TRACK; the Machinist Training Institute; the Center for Advanced Technologies and the Information Technologies Center. Mrs. Josaitis has received numerous awards and honors including the University of Michigan School of Business Administration Leadership Award; Detroit NAACP Presidential Award. Mrs. Josaitis is the recipient of the National Council of Women of the United States Inc's Women of Conscience Award. And she is the first woman to have received the Boy Scouts of America's "Good Scout Award". Mrs. Josaitis recently received the SME Education Award for her leadership in developing manufacturing-related curriculum, fostering sound training methods and inspiring students to enter the profession of manufacturing. We congratulate Mrs. Josaitis for celebrating 35 years of diversity with passion, persistence and partnerships.

**Learn More about Focus: HOPE** <http://www.focushope.edu/>

## GWEC Partners Named Wireless Educators of the Year



Dr. Mitchell and Dr. Brown

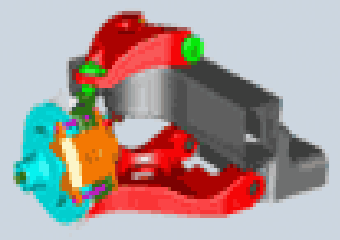
**Arlington, VA** - The Global Wireless Education Consortium (GWEC) announced the recipients of the first annual GWEC Wireless Educator of the Year Award. The award recognizes distinguished educators and their pivotal role in preparing tomorrow's wireless technology leaders. The award is presented in two academic categories. At the two-year community college level, the 2003 award recipient is Dr. Myrtle J. Mitchell, Executive Dean for Workforce Education at Seattle Central Community College in Seat-

tle, Washington and Dr. Timothy X. Brown is the recipient of the university program level award for 2003. Candidates for the new GWEC Wireless Educator of the Year Award were evaluated based on a number of criteria, including demonstrated educational leadership in the wireless field through teaching, research, publications, and other awards; demonstrated involvement and/or support of students in wireless projects or initiatives; documented collaboration with the wireless industry; and contributions to the development and/or implementation of the GWEC Wireless Curriculum. The Global Wireless Education Consortium is a membership organization committed to the development and expansion of current wireless technology curricula in academic institutions worldwide. GWEC industry members include AT&T Wireless Services, Award Solutions Inc., Cingular Wireless, UGS PLM Solutions, Emona Instruments, IEEE, Motorola, Movilnet, and Verizon Wireless. Nearly 90 colleges and universities participate in GWEC as education partners. **Learn More:** [www.gwec.org](http://www.gwec.org).

# ACADEMIC PARTNERSHIP PROGRAM

Improve the technical stature of Academic Institutions and their ability to develop top-notch PLM Engineers and technologists for our communities, customers, and business partners.

## Academic Partners Join JT Open Initiative



JT is a mature lightweight data format that already enjoys widespread use in the automobile and aerospace industries and is equally suitable for all manufacturing industry applications. The success of JT and applications that exploit it is such that JT has become the preferred common data format for many large end-users. Software product development organizations have developed translators from the popular MCAD systems into JT. It is nearly always the only format common to the major applications that might be used in an enterprise.

JT data can be very lightweight, holding little more than facet data or it can be richer and hold associations to the original CAD information, assemblies, product structure, geometry, attributes, meta data and PMI. It supports multiple tessellations and level-of-detail generation. **Learn More:** <http://www.itopen.com/>

### Plano, TX / Provo, UT / Ann Arbor, MI / Darmstadt Germany / Shanghai China

Four world-class Academic Partners were recently selected to join the JT Open initiative. This global initiative is designed to promote open data sharing, enhance collaboration and expand visualization across the extended enterprise and throughout the PLM Industry. The initial academic partners include Brigham Young University, Technical University Darmstadt, Shanghai Jiao Tong University and University of Michigan.

JT is a common data format for enabling product visualization and information distribution and enhancing data sharing between PLM software applications. The robust functionality and lightweight nature of JT technology makes it possible to view and share product data and dynamic images worldwide, in real-time and throughout all phases of the product lifecycle.

"We are grateful to EDS for the grant and are pleased to be selected as one of the few universities with access to this software," said K. Fred Skousen, vice president of advancement at BYU. "Furthermore, BYU students are excited for the chance to take their education to another level by working with these cutting-edge tools." C. Greg Jensen, an associate professor of mechanical engineering at BYU, explains that he will use the software in his classroom and research to integrate previously incompatible outputs from design, analysis and manufacturing programs with one another, essentially creating a bridge between programs that allows them to be visualized with in a common, standardized environment. "For example, we can take the surface representation of a car in one design program, its stress analysis output from another and a flow analysis test from still another and, using this software, bring them together to more easily understand how a car would perform driving down the street," said Jensen. "The ability to view, examine and modify designs regardless of the program being employed tremendously reduces costs for a company and speeds up the manufacturing process."

The involvement of researchers of the Darmstadt University in international development processes of data format standards in the field of product data technologies is part of the history of the University. The new JT-software package supplied by EDS will help the Darmstadt University continue its all-embracing research in data modeling and data handling in the fields of applied computer science as well as computer integrated design. Particularly Darmstadt University has introduced a broad high level usage of computer-aided design and simulation as well as graphical data visualization in the past years. Professor Reiner Anderl, Manager of the PACE membership at Darmstadt University, regards the JT Open Academic partnership as both a recognition and an incentive. He affirmed "After being nominated as the first PACE University in Europe in February this year, we are proud to now receive in succession international recognition as one of the leading Universities in the fields of graphic data modeling through our JT Open partnership. The JT Open strategy enables Darmstadt University to start new innovative research areas dedicated to increase value for industrial applications."

"Our education objectives are focused on to foster potential leaders in engineering science and industry with solid fundamentals, success in practice, spirit of creative capability and patriotic devotion," says Dr. Zhonggin Lin Dean of Engineering & Professor Shanghai Jiao Tong University. JT Open will facilitate collaboration with Automotive OEM's and suppliers, providing first hand learning experiences for our students. Because we have tight cooperation with a lot of multi-national and local industrial partners, including Shanghai General Motors, Pacifica Automotive Technology Center, etc. JT Open Visualization tools will provide and enhanced the educational environment for our students, who have a golden opportunity to apply what they learn in the classroom to important industry projects. A lot of graduates are now working in automobile industries."

"In today's economy, all manufacturers are faced with the challenge of reducing costs while maintaining productivity," said Dr. Michael Grieves, University of Michigan PLM Development Consortium. "JT Open provides members with the opportunity to work together to develop common business practices around the JT format, and by doing so, reduce expenses in the process. An open forum of this kind, where members cooperate in developing and promoting solutions that enhance prosperity for everyone is the model for the future of collaboration in the PLM industry." We appreciate EDS' support in expanding the reach and improving the effectiveness of our curriculum. This new method of product data exchange is exciting and we look to incorporating this tool into our work here at Michigan Engineering," says Daryl Weinert, Director of Corporate Relations, Michigan State University.

Read More: [http://www.eds.com/news/news\\_release\\_template.shtml?rowid=3575](http://www.eds.com/news/news_release_template.shtml?rowid=3575)

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- <http://www.tu-darmstadt.de/tud/profil.en.tud>
- <http://www.situ.edu.cn/>



### EDS PLM Solutions Software Grant Accelerates Career Opportunities For Iowa State University Students -



Ames, IA -- Iowa State University and EDS announced an in-kind software grant that will prepare Iowa State engineering graduates to more quickly and productively enter the corporate world UGS PLM Solutions will provide Iowa State with industry leading software tools for product lifecycle management (PLM) with a commercial value of \$282 million. The in-kind grant is the largest in Iowa State University history. The EDS PLM Solutions grant will allow students to gain practical experience with the full range of PLM technologies, including computer-aided design (CAD), computer-aided manufacturing (CAM), computer-aided engineering (CAE), visualization, digital manufacturing, collaboration, product data management (PDM) and engineering process management. Students will be able to use the software to create complete product models, simulate their operation, and quantitatively evaluate their performance. "This is a great day for Iowa State University, and we thank the people of EDS for making it happen," said Iowa State University President Gregory Geoffroy. This industry-leading software will have a very significant and positive impact on all three aspects of our mission as Iowa's land-grant university. It will help us do an even better job of preparing students to get top jobs in industry. It will help us meet the critical research needs of industry. And it will provide the technology to help Iowa industries be more competitive and achieve a higher return on investment," James Oliver, associate professor of mechanical engineering, has been working the past several months with UGS PLM Solutions and Iowa State University Foundation officials to secure the grant. Oliver characterized the software as a "concept-to-completion solution," meaning that it can be used to create products and manage the product lifecycle from concept through design, analysis, testing, manufacturing, service and retirement. "Iowa State students will have the same computer tools used by contemporary engineers in Fortune 100 companies such as General Motors, Ford, Lockheed Martin, Deere and Boeing," Oliver said. UGS PLM Solutions provides academic grants to help universities, such as Iowa State, use leading-edge technology to provide greater value to their communities and broader career development opportunities to students. This also helps to ensure a talented base of candidates who can help regional and global manufacturers become more competitive, said Mike Sellberg, director of product management for UGS PLM Solutions. "EDS PLM Solutions is pleased to provide this grant to Iowa State University," Sellberg said. "Today's leading manufacturers compete on the basis of time to market, product cost, quality and innovation. Students must have the opportunity to gain experience with technology that supports these objectives."

ISU President Geoffroy with EDS Executives at Press Event

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This industry-leading software will have a very significant and positive impact on all three aspects of our mission as Iowa's land-grant university. It will help us do an even better job of preparing students to get top jobs in industry. It will help us meet the critical research needs of industry. And it will provide the technology to help Iowa industries be more competitive and achieve a higher return on investment," James Oliver, associate professor of mechanical engineering, has been working the past several months with UGS PLM Solutions and Iowa State University Foundation officials to secure the grant. Oliver characterized the software as a "concept-to-completion solution," meaning that it can be used to create products and manage the product lifecycle from concept through design, analysis, testing, manufacturing, service and retirement. "Iowa State students will have the same computer tools used by contemporary engineers in Fortune 100 companies such as General Motors, Ford, Lockheed Martin, Deere and Boeing,"



## IOWA STATE UNIVERSITY

Oliver said. UGS PLM Solutions provides academic grants to help universities, such as Iowa State, use leading-edge technology to provide greater value to their communities and broader career development opportunities to students. This also helps to ensure a talented base of candidates who can help regional and global manufacturers become more competitive, said Mike Sellberg, director of product management for UGS PLM Solutions. "EDS PLM Solutions is pleased to provide this grant to Iowa State University," Sellberg said. "Today's leading manufacturers compete on the basis of time to market, product cost, quality and innovation. Students must have the opportunity to gain experience with technology that supports these objectives."

Read More

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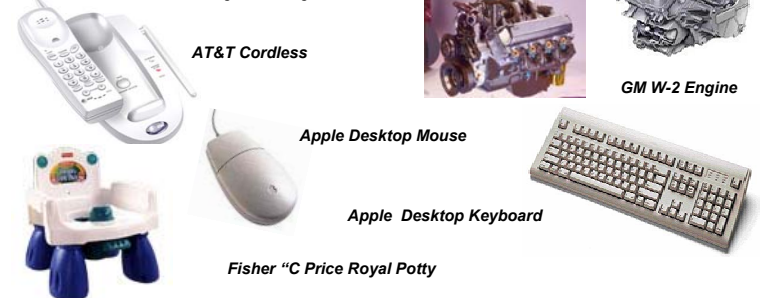
### University of Buffalo Develops Case Base Product Design Courseware with Solid Edge

Buffalo, NY - Dr. Kempin Lewis developed a case based approach to teaching product design. This research was conducted with the direction of Dr. Krovi. The University of Buffalo courseware team integrated Solid Edge and reverse engineering to give students value added learning experiences. In the introduction to Mechanical Engineering and Aerospace Engineering practice course (MAE 277). Student teams prepare solid CAD models of 5-6 components within various products. Chosen components are assembled together to form a model within the product. Screen shots of CAD modules are combined using Macromedia Flash to form product assembly sequence animations. "Sophomore level students are not very experienced with 3d Solid Modeling," says Dr. Krovi. "Solid Edge is easy to learn and implement easier than comparable mid-range sold models. Solid Edge also provides all necessary sold modeling functionalities including protractors, revolves, cuts, threading, shelling, rounding ... etc. Products used in the close projects include:

\* **Automotive Products:**

\* **Computer & Telecommunications Products**

\* **The Fisher Price Royal Potty**



These parts and briefing material are available for used by other academic partners and may be found at: [http://mechatronics.eng.buffalo.edu/research/WebBasedTutorials/Product%20Design\\_files/frame.htm](http://mechatronics.eng.buffalo.edu/research/WebBasedTutorials/Product%20Design_files/frame.htm)

### Annual 3D SME Solid Modeling Design Competition Winners is Academic Partner



First Place winners from MSU included (l-r) Kenneth Mohre, Rachel Clinard, Megan Glazier, and Daniel Liang.

SME chapters in Michigan and Windsor, Ontario, Canada, plan to again host the annual 3D Solid Modeling design competition again for members of Michigan and Windsor student chapters. The competition will take place in February 2004. Last year's winning team, Michigan State University, was given three weeks to parametrically design the necessary components and assembly of a toy car, and were judged for creativity, teamwork and design planning and execution. For information about the 2004 competition, contact Rao Potru, PhD, CMfgE, at (248) 874-6010.]

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both good basic books. (Again, check the search carefully, since there are older versions of both of these books, also.) You should also take a serious look at the free online tutorials built into the help system. There are about 100 tutorials covering the range of I-deas. "I would recommend that you start with the basic Design tutorials in the order suggested," says Mark Lawry, Courseware Development, UGS PLM Solutions.

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