

TECHNICAL ASSISTANCE PROGRAM

Engaging with Indiana business to build our economic future



A Year in Review

July 2002 — June 2003

PURDUE
UNIVERSITY

OUR MISSION: INDIANA'S

Working to improve the state of Indiana's economy is an important task for Purdue University in the next several years, and our Technical Assistance Program is at the heart of the effort.

Assisting in the business areas of advanced manufacturing, information technology, and life sciences, TAP has had a tremendously positive effect on the state's economy.

Every business with which TAP has worked has been helped, and many have experienced dramatic improvements. By connecting the business community to the expertise and vast resources at Purdue, TAP can greatly improve a firm's ability to compete and succeed in the global market.

The numbers are impressive. Last year, TAP engaged 200 faculty, staff, and students with 400 Indiana companies. The activities included 321 assistance projects and 10,941 information documents delivered. In addition, 46 Indiana

employers and 1,200
Purdue students



As a student intern at Willow Marketing, Stephanie Rhoads assisted with client interviews, pitched stories to the media, and conducted market research.



attended the High Tech Job Fair, which TAP conducts for Indiana companies to help increase the number of Purdue graduates who accept jobs with firms in our state.

Since its founding in 1986, TAP has worked with 4,500 companies, saving approximately 4,000 jobs, providing about \$292 million in increased sales, \$61 million in increased capital investment, \$33 million in loss prevention, and \$27 million in cost reductions.

Purdue is extremely proud of this highly successful effort. We know that providing funds for TAP is one of the best things our state can do for itself. I will continue to work hard to bring about expansion for this program in the future.

Martin C. Jischke
President, Purdue University

www.purdue.edu/TAP

*Data based on client evaluations of TAP assistance

EXPERT ADVICE FOR INDIANA

Each year, the Technical Assistance Program provides free, confidential consulting services for hundreds of Indiana companies, local governments, and nonprofit organizations. The success stories on these pages give a few highlights from the 321 assistance projects completed in 2002-03.

Since **1986**, TAP has completed more than **5,000** assistance projects.

Suros Surgical Systems, Inc., Indianapolis

COMPANY Suros Surgical Systems manufactures medical devices for minimally invasive methods of tissue excision and biopsy within multiple surgical specialties.

CHALLENGE As a start-up company, Suros Surgical Systems did not have the resources to conduct an analysis on how the organization could maximize the production capacity of its growing business.

ACTION Suros contacted TAP, which put the company in touch with Jack Posey, an advanced manufacturing projects manager at Purdue, and Pornthep Anussornnitisarn, a Purdue graduate assistant. The Purdue team worked with Suros engineering and production teams to review current operations and recommend a move from batch to flow processing.

RESULTS The company's production capacity more than doubled to nearly 5,000 units a month, up from an estimated 2,000 units a month. Annual cost savings exceeded \$250,000 per year. The project will allow Suros to stay in its current facility for at least six months longer than anticipated, which

will allow the company time to further analyze the economic impact of its growth plan.



"The availability of Purdue resources has been invaluable to Suros and has allowed us to utilize our current resources in the most effective and economic way possible. As a start-up company, we lacked the experience and resources to conduct the appropriate analysis that would allow the company to grow in a positive and upward direction. The TAP program has been a tremendous resource that has put the company on a path for continued success."

RICH RELLA
Chief Financial Officer
Suros Surgical Systems, Inc.

R & S Welding and Fabricating, Winamac

COMPANY R & S Welding specializes in stainless and aluminum small tank manufacturing and machining services. Its customers include small job shops and Fortune 500 companies.

CHALLENGE R & S Welding turned to TAP for assistance in making a fixture that could hold a bushing and a tube in alignment during welding.

ACTION TAP introduced R & S Welding to Mileta Tomovic, Purdue professor of mechanical engineering technology. The weldment that was created by the team was a success.

RESULTS The fixture contains a magnet that holds the bushing and tube together in perfect alignment. Without such alignment, the part would not fit into the plastic injection machine for the final process. The success of the project resulted in \$150,000 in sales.



"By running this test fixture we will now be able to place 60 individual fixtures in a circle on a rotating table for production welding of the part. The company needs 1,360,000 parts per year. The rotary welding table will help us meet that demand by producing 5,700 parts per day based on an eight-hour day."

BOB ROSENBAUM
President
R & S Welding and Fabricating, Inc.

Lear Corporation, Edinburgh

COMPANY Lear Corporation, founded in 1939, is the world's largest automotive interior systems supplier. Annual net sales were \$14.4 billion in 2002. With 450 employees, the Edinburgh plant focuses on plastic injection molding of interior doors and trim for the automotive industry.

CHALLENGE To ensure the safety of end-of-line inspectors in a work area where there is forklift traffic.

ACTION Lear contacted TAP for its perspective on workplace safety. Jack Posey of the Schools of Engineering and Pornthep Anussornnitisarn, a Purdue graduate student, met with Lear operations and traffic management to discuss safety improvements. Lear implemented some of the suggestions, including the use of orange safety flags that communicate hazard areas to forklift drivers. Lear is also considering designating specific areas on the plant floor for walking and others for forklift traffic.

RESULTS Lear has had no accidents in the production area since the implementation of the Purdue recommendations and employees feel safer.



"The relationship with Purdue has been extremely beneficial to us, especially regarding access to new ideas, tools, and technology."

MIKE LOVE
Continuous Improvement Manager
Lear Corporation

EXPERTISE FOR ANY NEED

TAP provides up to five days of free consulting on the full range of technical issues, including:

Advanced Manufacturing

- Lean manufacturing
- Facility planning
- Process improvements
- Quality management
- Environmental issues

Business Management

- Growth strategies
- Financial evaluation
- Costing systems
- Marketing options

Information Technology

- Networking, programming, and parallel processing
- Hardware, software, and ISP assessments
- Broadband infrastructure for communities
- Management of the information technology function

Product Development and Engineering*

- Design input and review
- Rapid prototyping
- Design method selection
- Problem solving
- Product evaluation and testing

*TAP does not support projects involving litigation or projects geared toward developing patented technologies. Contact us for expert referrals.

www.purdue.edu/TAP (765) 494-6258

CULTIVATING INDIANA'S

TAP is committed to helping

Indiana employers connect with

Purdue's talented, hardworking,

and highly skilled student

body — and to making

Purdue students aware

of the many career

opportunities available

right here in Indiana.

■ HIGH TECH JOB FAIR FOR INDIANA COMPANIES

At TAP's annual job fair, Indiana employers meet hundreds of Purdue students studying technology, engineering, management, science, and agriculture. Approximately 1,200 undergraduate and graduate students and 46 businesses attended the 2002 job fair.



Cornerstone Controls Inc., based in Indianapolis, Cincinnati, and Louisville, provides process control equipment, instrumentation, and services as a manufacturer's representative for Emerson Process Management. Cornerstone has hired multiple Purdue graduates through the High Tech Job Fair because Purdue's engineering and technology schools are well known and well regarded among the company's client base.

"The standards maintained by Purdue for curricula and grades let us rest assured that a Purdue graduate will know how to work hard, be organized, and understand what it takes to set and meet goals. These are all critical things in our project engineering business."

LARRY FRECHIN
Group Manager
Cornerstone Controls, Indianapolis

2002 JOB FAIR DATA

Businesses in attendance 46

Students in attendance 1,200

ADDITIONAL STUDENT RECRUITMENT RESOURCES

Purdue Center for Career Opportunities

Phone: (765) 494-3981

www.cco.purdue.edu

careersInsite

Phone: (317) 275-2080

www.careersInsite.com

FUTURE JOB FAIR DATES

October 27, 2004

October 26, 2005

www.purdue.edu/jobfair

SUMMER INTERN PROGRAM

Through the Summer Intern Program, TAP helps Indiana companies connect with innovative, technically savvy, and cost-effective assistance for summer projects. The intern program is also a great way to find future employees.

Fanger Communications, Indianapolis

At Fanger Communications, intern Patricia Wiyono performed a variety of duties ranging from data entry and letter composition to creating a business directory.

"Patty was essential in moving our main database project ahead of schedule. She helped build a database that exceeds over 75,000 members of a target market. Without her assistance, this number would have undoubtedly been much lower."

ROBERT FANGER
President
Fanger Communications



"As an intern, sometimes the most valuable qualities you can bring to a company are your availability, your willingness to do whatever needs to be done, and your ability to solve problems."

PATRICIA WIYONO
Management
Also pictured:
Intern FieFie Jin

McCoy Miller, Elkhart

During his internship at McCoy Miller, an ambulance manufacturer, Kevin Jant was a lead engineer on projects including analysis of the company's bill of materials and the redesign of fiberglass van caps for ambulances.

"Purdue student interns have a strong problem-solving background that allows them to contribute to the organization immediately. The employer obligation is to present them with a clear challenge, and the intern provides a different perspective to the challenge."

JAMES KEOUGH
Engineering Manager
McCoy Miller



"My internship was very helpful in seeing how classroom materials could be applied in the real world. It also gave me insight into aspects of the workplace that are not taught in the classroom."

KEVIN JANT
Mechanical Engineering

2003 SUMMER INTERN DATA

Participating businesses	27
Participating students	33

PURDUE UNIVERSITY: A COMPLETE RESOURCE

■ PARTNER CONTACTS

■ Workforce Development, Education, and Training

Office for Continuing Education and Conferences

Mark Pagano, Dean

mapagano@purdue.edu (765) 496-2321

Purdue Statewide Technology

Michael O'Hair, Associate Dean

mtohair@purdue.edu (765) 494-2554

■ New Business Development

Purdue Gateways Program

Sam Florance, Director

florance@purdue.edu (765) 496-6246

Purdue Research Park

Greg Deason, Director of Research Park Development

gdeason@purdue.edu (765) 494-8572

■ Technical Assistance

Purdue Technical Assistance Program (TAP)

David McKinnis, Director

tap@purdue.edu (765) 494-6258

Purdue Cooperative Extension Service

David Petritz, Director

dpetritz@purdue.edu (765) 494-8489

Purdue Technical Information Service (TIS)

Suzanne Ward, Manager

ward@purdue.edu (765) 494-9876

Indiana Clean Manufacturing Technology and Safe Materials Institute

Lynn Corson, Director

corson@purdue.edu (765) 463-4749

Leadership and Community Development

Sam Cordes, Program Leader

smcordes@purdue.edu (765) 494-3573

Industrial Research Projects and 21st Century Research and Technology Fund Partnerships

John Schneider, Assistant Vice Provost

jas@purdue.edu (765) 494-0743

Technology Transfer - Patents and Licensing of Intellectual Property

Office of Technology Commercialization

Simran Trana, Interim Director

strana@purdue.edu (765) 494-6725



Purdue Office of Engagement

Don K. Gentry, Vice Provost for Engagement, is leading Purdue's efforts to form partnerships with Indiana businesses, leaders, and citizens.

dkgentry@purdue.edu

(765) 494-9095

■ OTHER CONTACTS

Science Bound

Wesley Campbell, Director

wesley1@purdue.edu (765) 494-0018

Indianapolis Engagement Office

Tom Carroll, Director

tjcarroll@purdue.edu (317) 275-9303

Community Service Student Grant Program Office of Engagement

Michelle Davis, Administrative Assistant

davisma@purdue.edu (765) 494-9095

CONTACT US

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■ SUBSCRIBE TO TAP'S E-NEWSLETTER

www.purdue.edu/TAP/update

www.purdue.edu/TAP