



SPED Newsletter

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SPED Sets Dates for Annual Plant Layout Course

The Society of Piping Engineers and Designers (SPED) has set the dates for its annual offering of its flagship Plant Layout Course. The Course will be offered starting February 3 and run through May 28. The course has trained over 1,000 plant design professionals over the years.

The cost of the course is \$995.00 for SPED member or employees of SPED corporate members and \$1195.00 for nonmembers. One copy of the Process Plant Layout and Piping Design Textbook is included.

“The Plant Layout Course is unique to SPED and to Houston,” says Bill Beazley, SPED Executive Director. “There is nothing like it anywhere in the world.” Over 50 copies of the videotaped

course sessions have been sold world-wide.

Because of the cost and difficult logistics of producing the course, SPED is only offering it once in 2003. “It is becoming increasingly difficult to find qualified instructors who can commit the time needed to prepare and have the willingness to share their years of experience,” says Dr. Beazley. “With 66 hours of live instruction by the top experts in their field, it is the most incredible professional development bargain offered in the field.” Call (713) 221-8224 for Enrollment Information.

SPED Annual Meeting
November 21, 2002, 6:30 PM
HESS, 5430 Westheimer Road
RSVP to 713-221-8224

2003 Plant Layout Course		
Current Schedule, Content and Instructor Assignments		
DATE	CONTENT	INSTRUCTOR
Feb. 3	Intro. To Plant Layout	Wayne Dolbec, Technip
Feb. 5	Basics of Plant Layout	Wayne Dolbec
Feb. 10	Plant Layout Specs	Ross Van Wormer, ABB Lummus Global
Feb. 12,17	Plot Plans	Ross Van Wormer
Feb. 19,24	Drums	Ross Van Wormer
Feb. 26, Mar. 3,5,10	Compressors	Ross Van Wormer
Mar. 12	Exchangers	Jerry Cutshall, Dow Chemical USA
Mar. 17	Exchangers	Roman Koroncok, Dow Chemical USA
Mar. 19,24,26	Furnaces	Vic Robson, ABB Lummus Global
Mar. 31, Apr. 2	Pumps	Ross Van Wormer
Apr. 7,9	Reactors	Joe Martinez, Jacobs Engineering (Ret)
Apr. 14,16,21	Towers	Joe Martinez
Apr. 23	Pipe Racks	Joe Martinez
Apr. 28	Structures	Joe Martinez
Apr. 30, May 5	Underground Piping	Joe Martinez
May 7	Instrumentation	Ross Van Wormer
May 12	Storage Tanks	Bob Sumrall, Brown & Root, Inc.
May 14,19,21	Stress Analysis	Wayne Dolbec
May 28	Computer Aided Design	Bob Sumrall

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Process Plant Layout Course Now Available In VCD Format

The Process Plant Layout and Piping Design Course is now available in **VCD (Video Compact Disc)** format. It consists of 63 VCDs, each lasting for approximately an hour. The VCDs can be played on any standard multimedia computer as well as on many DVD players. The price of the VCDs offer a discount to existing Plant Layout Course Video Tape customers who want to upgrade to VCD media. The prices are:

Item	New	Upgrade
Complete Videocourse	\$4,000	\$2,000
First two-hour session and one Text	300	190
Each additional two-hour session)	220	110

ENR TOP 20 IN CHEMICALS		
RANK*	FIRM	\$ MIL.
1	Kellogg Brown & Root	155.0
2	Jacobs	152.3
3	Day & Zimmermann	136.0
4	The Kvaerner Group	122.4
5	Bechtel	94.0
6	BE&K Inc.	82.3
7	URS	71.3
8	Foster Wheeler Ltd.	64.0
9	AMEC	50.0
10	Lockwood Greene	44.4
11	Washington Group International Inc.	35.0
12	Fluor Corp.	34.8
13	Parsons	32.9
14	CDI Engineering Group	17.1
15	Burns & McDonnell	11.0
16	MACTEC Inc.	7.0
17	S&B Engineers & Constructors Ltd.	6.7
18	SECOR International Inc.	6.6
19	Orbital Engineering Inc.	6.5
20	Fugro Inc.	5.5

*Based on supplemental market revenue data from 2001 provided by participating industry firms on ENR's Sourcebook Market Survey.

Lewis Predicts Continued Downturn in Process Market

New project starts may continue its downturn in 2003, according to Ed Lewis, president and CEO of Industrial Information Resources Inc., Houston.

ENR TOP 25 IN PETROLEUM		
RANK*	FIRM	\$ MIL.
1	Fluor Corp.	785.4
2	ABB Lummus Global	690.6
3	Kellogg Brown & Root	660.0
4	Jacobs	415.3
5	McDermott International Inc.	365.6
6	Foster Wheeler Ltd.	324.0
7	Bechtel	312.0
8	Mustang Engineering LP	236.0
9	VECO Corp	191.0
10	S&B Engineers and Constructors Ltd.	182.5
11	Matrix Service Co.	181.9
12	URS	150.1
13	Parsons	134.8
14	CDI Engineering Group	116.3
15	Fugro Inc.	112.0
16	The Shaw Group Inc.	94.2
17	Paragon Engineering Services Inc.	73.8
18	Petrocon Engineering Inc.	69.5
19	Gulf Interstate Engineering Co.	64.8
20	Willbros Group Inc.	59.1
21	SECOR International Inc.	52.6
22	GDS International Inc.	50.7
23	Natchiq Inc.	48.6
24	Washington Group International Inc.	45.0
25	ENSR International	35.0
25	MACTEC Inc.	35.0

*Based on 2001 design revenue from petroleum as reported in ENR's Survey of Leading Contractors and Design Firms.

In a recent article (10/14/2002) in Engineering News Record (see <http://enr.construction.com/news/powerIndus/archives/021014.asp>), Lewis was quoted as saying, "IIR has identified a growing trend in the number of capital projects being canceled, delayed or put

on hold because of economic conditions," he said. The decreases are most severe in the petroleum and chemical markets, while the biotech and pharmaceutical industries have been less affected.

ENR also rates the top firms in construction categories (See enclosed tables or consult: <http://enr.construction.com/people/sourcebooks/top500Design/>)

ENR TOP 25 IN POWER		
RANK*	FIRM	\$ MIL.
1	Bechtel	941.0
2	Duke Engineering & Services	386.5
3	Sargent & Lundy LLC	351.0
4	Black & Veatch	334.0
5	Fluor Corp.	276.0
6	The Shaw Group Inc.	180.2
7	Burns and Roe Group Inc.	163.2
8	Foster Wheeler Ltd.	154.0
9	Parsons Brinckerhoff Inc.	139.8
10	Washington Group International Inc.	131.0
11	MWH	107.8
12	Burns & McDonnell	107.0
13	URS	106.6
14	Utility Engineering Corp.	104.5
15	Bibb and Associates Inc.	103.4
16	Parsons	97.7
17	AEP Pro Serv	78.6
18	CDI Engineering Group	55.1
19	POWER Engineers Inc.	52.1
20	CH2M HILL Cos. Ltd.	45.9
21	R.W. Beck Inc.	44.9
22	Tetra Tech Inc.	40.0
23	Earth Tech	39.0
24	VECO Corp.	38.0
25	BE&K Inc.	36.4

*Based on 2001 design revenue from power as reported in ENR's Survey of Leading Contractors and Design Firms.

In 2002, construction kickoffs for petroleum refining projects fell 43.5%, or \$3.6 billion, leaving \$4.7 billion of projects still active, said Lewis. In 2003, he expects a 59% decrease, leaving \$3.9 billion of active projects. This slowdown will continue until oil prices stabilize. But refineries will continue heavy investment on

unit additions for fuel-sulfur reduction to comply with federal regulatory deadlines, said Lewis. The same driver will make air-emissions retrofits for nitrogen and sulfur oxides a priority. Capital spending will continue for fluid catalytic-cracking unit modernization to increase light-end products, but capital spending in general will be reduced because of rising costs for sweet crude oil.

ENR TOP 20 IN PHARMACEUTICAL PLANTS		
RANK*	FIRM	\$ MIL.
1	Jacobs	168.4
2	Fluor Corp.	115.8
3	Foster Wheeler Ltd.	70.0
4	The Kvaerner Group	68.0
5	Washington Group International Inc.	65.0
6	Lockwood Greene	57.7
7	Clark, Richardson & Biskup Consulting Engineers Inc.	41.4
8	Process Facilities Inc.	31.0
9	Earth Tech	27.0
10	AMEC	25.0
11	CH2M Hill Cos. Ltd.	21.7
12	Parsons	19.1
13	Burns and Roe Group Inc.	18.6
14	CDI Engineering Group	16.9
15	URS	11.5
16	Paulus Sokolowski and Sartor LLC	11.4
17	Ewing Cole Cherry Brott Inc.	9.0
18	SSOE Inc.	8.0
19	O'Neal Inc.	7.1
20	Syska Hennessy Group Inc.	7.0

*Based on supplemental market revenue data from 2001 provided by participating industry firms on ENR's Sourcebook Market Survey.

"Chemical processing looks like it's turning around," said Lewis. But "the sluggish economy will keep chemical producers in a cautious mode through 2003."

The "bright side" of the picture is the pharmaceutical and biotechnology market. Lewis said announced capital expenditures for that segment decreased only 7.7% in 2002, leaving active projects worth \$10.8 billion. He expects projects totaling \$9.1 billion to kick off in 2003. Biopharmaceutical manufacturing facilities are in short supply. Owners will centralize scattered manufacturing and research and development

SPED Courses For Spring 2003

(Subject to Change, Contact SPED for Updates)

Title	Schedule	Location	Cost
Plant Layout	Feb. 3 – May 28	Kellogg Brown & Root	\$995(SPED member) \$1195(Non member)
Intergraph PDS I	Jan. 27-Mar 5 Mon.&Wed, 6-9 p.m. Feb 4-Mar 13 Tues.&Thurs, 6-9 p.m.	UH-Downtown, One Main St.	\$600(SPED member) \$700(Non member)
Intergraph PDS II	Mar 10-April 23 Mon.&Wed., 6-9 p.m. Mar 18-April 24 Tues.&Thurs, 6-9 p.m.	UH-Downtown, One Main St.	\$600(SPED member) \$700(Non member)
Intergraph PDS III	To be Determined Tue.&Thurs., 6-9 p.m.	UH-Downtown, One Main St.	\$600(SPED member) \$700(Non member)
ASME B31.3 Code	April Four Days 9 a.m. to 5 p.m.	Dow Chemical, 400 West Sam Houston Pkwy.	\$995(SPED member) \$1195(Non member)

facilities, consolidating 23 separate sites into five campuses, said Lewis. Research and development facilities for both industry and universities are in the pipeline, and Lewis foresees continued investment by pharmaceutical manufacturers in Puerto Rico, a "prime location."

About SPED

The Society of Piping Engineers and Designers (SPED) is only professional organization devoted exclusively to the betterment of Plant Design Professionals. It advances the profession through publications, training and other professional development activities.

This publication is mailed free of charge to all SPED members. Annual individual membership dues are \$35 for professionals, and \$20 for full time students. Corporate memberships for companies with fewer than 75 employees are \$300 per year (includes 3 individual memberships). Corporate memberships for companies with 75 or more employees are \$500 per year (includes eight individual memberships).

2002 SPED Corporate Members

SPED acknowledges and appreciates the support of the following **Corporate Members** in 2002.

1. **ABB Lummus Global, Inc.**
2. **CAD Centre, Inc.**
3. **COADE Engineering Software, Inc.**
4. **Design Power, Inc.**
5. **Dow Chemical, Inc.**
6. **Halliburton Kellogg Brown & Root, Inc.**
7. **Kvaerner Process, Inc.**
8. **Research Engineers International, Inc.**
9. **Southwest Design Services, Inc.**
10. **Technip-Coflexip, Inc.**
11. **University of Houston-Downtown.**
12. **Washington Group International, Inc.**

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