

President's Message



How do you like the new look of our newsletter? Dave Novak and the rest of the Communications Committee have been working very hard to improve the Boston Area Chapter's newsletter. They have beefed up the technical articles, increased the frequency, and added the color cover. Hopefully, you agree that all of these

changes are for the better. For those of you who are always on the go, we also are considering an electronic distribution. As always we appreciate your input into how we can improve our service. Speaking of changes, please check out the new look to our Web site: <http://www.ispe.org/boston/>.

I hope everyone is enjoying his or her summer vacation. This summer is a busy one for our Chapter. On Tuesday August 12, we will hold the Chapter's first ever golf tournament. The Social Committee has put in a lot of effort selecting the location and organizing the event. I expect it to be a big success, and become an annual event. This year's tournament will be held at the Cyprian Keyes Golf Club in Boylston, MA. Here in the Boston area, the summers come and go all too quickly. Stay tuned for an end of summer social sometime in September.

September marks the start of a new program year. The program committee is building on last year's success, and launching a new exciting season. Our first program will be on September 25 at the Sheraton Needham Hotel. The topic will be disposable technology. The Program Committee also is looking into new ways to better serve our members. One way is to reach members who find it difficult to travel to the Boston area. To address this concern, we are planning commuter programs. These programs would be offered at a remote location. Two areas under consideration are New Hampshire and Cape Code. Another way to reach members who cannot travel to our meetings is to use Web technology to offer members an opportunity to watch the presentations remotely. Stay tuned for the details.

In closing, this is a good time to start reflecting on my year as President of the Boston Area Chapter. I feel that the Board of Directors has done an excellent job running the Chapter. I'm especially grateful to all the members who volunteered their time this past year. By getting more volunteers involved, we have been able to share the workload and come up with new and innovative services. For all those volunteers who served the Chapter this year, thank you for your efforts. For all of those volunteers who offered their services, but were not given the opportunity to help, thank for your patience. You are still on our list and we will contact you. 🌐

Joe Musiak

ISPE Plant Tour of Wyeth BioPharma

On May 1, 2003, Wyeth BioPharma in Andover hosted the monthly ISPE Boston Area Chapter meeting, which featured presentations given by Scott Harrison, Greg Spotts, and Pat Peretto.

Scott Harrison, Director of Development Production Operations, reported the status of the Andover Development Facility (ADF). He communicated that the expansion will lead to increased flexibility with process development and scale-up of clinical drug substances. The ADF project will result in the optimization of process design/operations.

Greg Spotts, Manager of Systems Engineering, presented an automation overview in regards to ADF as well as the new commercialization suites, Suites E/F. He provided a historical account of the technological advances associated with the automation systems onsite. He also highlighted the challenges and accomplishments of using high-reliability infrastructure, redundancy, and back up systems to increase the quality of the product.

Pat Peretto, Manager of Quality Assurance Technical Support, summarized the validation approach used throughout the ADF and E/F projects. He stressed Wyeth's efforts to comply with FDA and EU requirements for clinical pharmaceutical drug products.



Tour group eagerly awaiting to see the utilities.

continued on page 7.

Validation

Environmental Chamber Validations

Specializing at performing precise thermal and humidity mapping, empty chamber distribution and load penetration studies with in-depth analysis.

Over 1,000 Chamber Validations Performed

Facilities Monitoring

- Monitor & Autodial Alarm Critical Parameters
- Designed for cGMP and 21 CFR Part 11 Compliance
- Easy to Install, Validate and Change
- Automated Reports and Event Logging
- Remote View & Control (via LAN or Internet)



- IRTD Calibrations (2-3 Days Typical)
- Equipment Rentals
- Ultra Premium Thermocouple Probes & Wire
- Relative Humidity Sensor Assemblies
- Shipper Container Studies

For more info, please call Sheldon Lathrop

978-433-MASY

or email us at sales@masy.com.

ISO 9001:2000 Certified

18 Lomar Park Drive
Pepperell, MA 01463

Tel: 978-433-MASY (6279)
Fax: 978-433-0442

www.masy.com



MASY SYSTEMS, INC.

Validation Services

Additional calibration services are available for all members of the Digi family and K2000.
CALL FOR PRICES.

The Life Cycle of a Consent Decree

Mark A. Lynch, Senior Compliance Consultant, KMI

Introduction

Consent Decrees of Permanent Injunction are used by the FDA for companies with continuing GMP problems. The process that a company goes through to remove or prevent a Decree has become relatively standard.

Recognition

An important step in the life cycle is recognizing that your company may be on the FDA's radar screen for a Consent Decree. If top management recognizes this risk early, then there is a greater chance that actions taken can prevent it. For example, a company may decide to cease manufacturing the problematic product or product line. In order to be able to recognize the symptoms, a company must have a comprehensive corporate compliance measurement mechanism operated by an effective Quality Organization. In addition to monitoring FDA Form 483s, company response correspondence, and FDA Warning Letters, the mechanism should capture informal communications with Agency officials at the District and Center levels about scheduling preapproval inspections, government contracts, applications and supplements, and other relevant intelligence. Also, you should understand that silence (the reluctance to meet to discuss an issue) from Agency officials also is a signal.

Initiation

Discussion with an experienced Food and Drug law firm is essential because a consent decree will require a multi-year effort and the Decree will be in effect for the duration. If there are statutory or procedural errors that you believe the Agency made, it is worth considering litigation. However, companies must consider the effect that litigation might have on their business, partners, customers, and stockholders.

Once you have decided entry into the Consent Decree is inevitable, there is still an opportunity to have your experienced legal counsel negotiate language that is favorable to the company. For example, the Agency may agree to exclude orphan drugs, or medically necessary drugs in short supply from some of the terms. Also, the decree language may identify only a few specific GMP systems and sites that need to be repaired. An experienced counsel will negotiate the most favorable terms possible.

Commitment to Organizational Culture Change

Top corporate management support is essential. The FDA expects to see involvement and communication from a key corporate executive. Also, regular communication by a corporate executive to impacted personnel is essential to convince them it is necessary to change the organizational culture and to assure them that progress is being made.

Plan

A management structure will need to be formed and key personnel made responsible for forming plans, directing daily activities, solving problems, and reporting progress to management and to the FDA. Frequently, this is a multi-layered structure with a Task Group reporting to an Executive Committee or Steering Committee. The Executive Committee frequently includes a representative from the outside counsel, and a third party GMP regulatory consultant company as well as necessary corporate officials. Personnel may need to be reassigned. Plan to perform the activities required by the Decree with an ultimate objective of vacating it in the shortest possible time.

A Comprehensive Corrective Action Plan must be developed, updated, and provided to the FDA at requested intervals. Management should consider information systems availability to house this information and the efficiency of any necessary interface with other company systems (deviations, change control). Planning should include FDA communication and reporting activities with the goals of demonstrating top executive involvement and building a rapport and level of confidence between the local FDA district and company personnel.

Plan to address large and difficult issues first. Plan to address any personnel issues that may be detrimental to the effort. Decide on and publish the process that will be used to track and document corrections.

Complying with the Decree Provisions

The FDA communications and the Consent Decree will identify systems to address. These communications also will suggest the deficiencies may not be all-inclusive. Therefore, it is important to assure that all the important deficiencies, including information from internal audits and customer audits, are collected in the beginning of the effort. This usually involves comprehensive reassessment of GMP systems, areas, and issues identified in FDA inspections and specifically mentioned in the Consent Decree by an expert GMP consultant. You should consider if the same expert consultant company or personnel should perform initial assessments and help with corrective activities as those who will perform the surrogate FDA assessment under the terms of the Consent Decree. All of the collected issues should be identified in the Comprehensive Corrective Action Plan.

One of the dilemmas will be how to keep doing business and have key personnel involved in effective change at the same time. Also, if expert GMP consultants are helping with corrections, the efficiency of information exchange is extremely important. It is important to address inefficient processes and large physical changes early. Some issues that require special consideration are: start-up protocols for classified areas; new equipment purchase, delivery, and installation; revalidation/requalification; regulatory filings required for A/NDA product changes; and training.

Some companies elect to use a third party GMP consultant to verify changes are effective in solving the identified problems. They do this because they recognize there may be institutional confusion about what was done when compared to what the original problem was.

Communication

It is essential to plan, assign personnel, rehearse, and document all communications, particularly those reporting plans and progress to the FDA District(s) and Center(s). A key corporate official and task group representatives should deliver the initial Corrective Action Plan. You should plan to include legal counsel and key consultants who can answer questions about qualifications, methods, and plans for performing Consent Decree audits, as well as personnel assigned to take notes and observe behaviors. Status reports should be delivered by the method agreed upon with the FDA District Office, but meetings should be conducted to assure activities are explained and feedback is received. It will be necessary to continue to communicate and coordinate the timing of needed FDA inspection to measure progress under the Consent Decree or conduct other inspections. It is important for the company to get FDA agreement on the method to be used to convey auditors' recommendations or concurrence with the company's corrective action plan if this is not clear in the Consent Decree.

continued on page 5.

Ambient Temperature, NO Downtime, NO Problems - GUARANTEED!

We can modify your Purified Water System to provide water of exceptional quality suitable for ANY technical application.

Bacteria less than 10 cfu/100mL - ALWAYS!
Endotoxin less than 0.001 EU - ALWAYS!
TOC less than 5 ppb - GUARANTEED!
Resistivity greater than 18 MegOhm - NO SURPRISES!

Only one scheduled day of maintenance per year,
and many of our customers even skip that for a year or two!

What do you want to do with Arion Water?

arion
water, inc.

Pure made simple

67 Willow Avenue
Hyannis, MA 02601
www.arionwater.com
508.778.6975

Putting Innovation to Work for the:
Pharmaceutical, Biologics and Specialty Chemical Industries.

Consulting and Systems
Integration for:
Manufacturing Execution
Systems, Batch Process
Control and SCADA.



Adding value to industry
through analysis and
problem resolution using
advanced tools and
methods.

innovative

P R O C E S S S O L U T I O N S

Boston

Ann Arbor

Philadelphia

(978) 263-3548

130 Main Street, Acton, MA

The Life Cycle of a Consent Decree

continued from page 3.

It is equally important to report progress during a Consent Decree to company personnel, parent corporations, board of directors, key customers and partners, stockholders, and the public.

Expert Assessment

It is essential to invest in sufficient planning. Ideally, this should include a face-to-face meeting with a prepared agenda for company representatives, audit team and management, company liaison, and legal counsel. Any unique methodologies required by the Consent Decree or other limitations should be discussed to assure understanding. The ground rules, arrangements, and contacts for the auditors while onsite should be discussed in detail. The host company's expectations for copies of audit plans, preview of documents, auditor safety, security, and discussion of issues at conclusion should be addressed. Planning for audit activities should assure minimal disruption of normal operations. The audit should be managed similar to an FDA inspection except that the host company should assure auditors completely understand important issues. The company should be able to identify all records requested and reviewed during the audits, all discussions with personnel, and all areas visited. Observations should be discussed and a process that is agreed upon before the audit begins should resolve any disputes. Discussion of observations should take place before auditors leave the premises. The method for the auditors to obtain clarification after leaving the site should be identified. The entire audit preparation, conduct, report drafting, editing, and delivery with corrective action plan should be mapped to assure it meets the Consent Decree or District timeframe. The Consent Decree usually requires for the expert consultant to make some statement about the state of compliance of the firm as determined by the audit. The company, expert consultant, and the FDA should agree on a mechanism to begin formulation of corrective actions in response to the audit findings as soon as possible. It may even be possible to begin this during the audit if the audit process is lengthy.

Deliver the audit report and corrective action plan to the FDA on time or ahead of schedule. Either at the time of delivery or afterwards meet with the District and Center personnel face-to-face in order to clarify issues and ask for honest feedback. It is essential to have the correct team present, rehearse any presentations, decide who will respond, and document all discussions and decisions.

It is a good idea to debrief with the GMP expert consultant in order to learn what worked and what needs improvement before the next annual audit.

Continue Corrections

The items identified by the audit should be incorporated into the comprehensive corrective action plan and assure that the commitments made to the FDA are either met or the reason they were not met is communicated to the Agency.

Some companies retain GMP consultants to perform a correction verification function. This is to assure that what was done completely addresses the issue(s) initially identified. If this is undertaken, then there must be an efficient exchange of information between the consultant group and the company's subject matter experts. Also, the standard that the consultant is assuring compliance with must be carefully defined. It is essential that this process be carefully designed to assure the intended result or deliverable.

Plan Next Cycle

Based on the results of the first year's audit, comments by the FDA, debriefing of the audit and liaison team plans can be made for year two.

Petition to Vacate

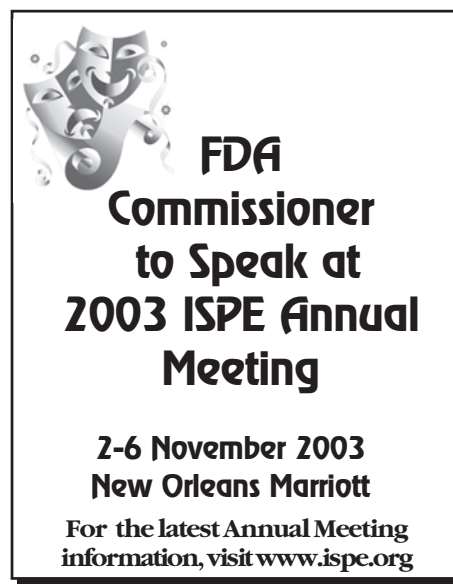
Based on a history of consistent compliance, the company will direct their counsel to move for vacation of the Consent Decree. The company should petition the District Office with evidence of their compliance record. The FDA's Regulatory Procedures Manual (RPM) states "*FDA has a general rule that it will not even consider dismissal until the firm has operated in compliance continuously for at least three years.*" The RPM also advises that "*...FDA does not usually initiate dismissal of an injunction. If dismissal has been requested by the defendants, the district should prepare a recommendation for action on the dismissal. A long violative history or lack of cooperation by the defendant will justify a further extension of the Decree.*" In the current environment, any evidence of recidivism (being in and out of compliance) would be used by the FDA as a reason to deny the company's petition and keep the consent decree in place. 🌐



Erland
Advanced Technology Division

PROGRAM MANAGEMENT | PROCESS TECHNOLOGY | DESIGN/BUILD

83 Second Avenue | Burlington, Massachusetts 01803 | tel: 781.272.9440 | email: rjensen@erland.com | www.erland.com



FDA
Commissioner
to Speak at
2003 ISPE Annual
Meeting

2-6 November 2003
New Orleans Marriott

For the latest Annual Meeting
information, visit www.ispe.org

Mixers Blenders Homogenizers



MVP BLENDER

Solids Blending, Drying, and Containment



Patterson-Kelley www.pkblenders.com

BEE INTERNATIONAL, INC.

Next Generation Homogenizers

- Highest process intensity on the market
- Modular Homogenizing Cell with NO moving parts
- Includes Extra Nozzles to optimize your process of Cell Rupture, Emulsifying, Dispersing, and more...
- Particle Size Reduction to > 20 Nanometers
- Unmatched Results...often in only ONE PASS!
- Linear scale-up to full production sizes
- Test samples free at our lab in South Easton, MA
- Visit www.beei.com

Micro DeBEE Lab Homogenizer with pneumatic driver



LIGHTNIN[®] MAG-MIXERS

Mixer runs completely dry

SIP and spray ball cleanable

Ultra sanitary and no sleeves

Call for a free Mag-Mixer demo

www.lightninmixers.com

For mixing solutions

Please call Mike Matton today at 617-686-0843

mmatton@charter.net www.maolson.com

ISPE Plant Tour of Wyeth BioPharma

continued from page 1.



Tour attendees viewing process equipment.

Upon completion of the presentations, two tours were conducted by enthusiastic and knowledgeable Wyeth employees. The "hardhat" tour explored the utilities throughout ADF. The "bootie and bouffant" tour provided an overview of the ADF processing infrastructure.

In addition to the valuable information communicated at this meeting, the event also was an excellent networking opportunity. It recognized the engineering marvels that have occurred at the Wyeth BioPharma site in Andover. 🌐

By Christine Lindberg and Monique Sprueill, Wyeth BioPharma

MEET REGULATORY AND BUSINESS OBJECTIVES



COMMISSIONING AGENTS, INC.

Commissioning, validation and cGMP compliance services worldwide for pharmaceutical manufacturing equipment, systems and facilities.

(317) 241-7120

www.commissioningagents.com

VIBRATION OR PULSATION A PROBLEM?

3D INSTRUMENTS
UNIQUE PRESSURE/VACUUM GAUGE
Only One Moving Part!

6 year warranty
Both Sanitary and NPT



M.A. SELMON CO.

203-377-3525 • 377-5238 fax

3DINSTRUMENTS.COM • MASELMON.COM

MUELLER BIOPHARM SYSTEMS



Contact Jack Stewart • jstewart@muel.com
1-800-MUELLER • www.muel.com

Specializing In the
Manufacture of:

Modular Systems
WFI/Pure Steam Systems
Production Bioreactors
Heat Exchangers
Processing/Storage Tanks

OAKLEY®

Specialized Services, Inc.

PASSIVATION, DEROUGING,
SPECIALTY CHEMICAL CLEANING SERVICES

PHARMACEUTICAL & BIOTECH SERVICES GROUP

50 Hampton Street, Metuchen, NJ 08840
Toll Free 800-243-6744 FAX (732) 549-9311
EMAIL contact@oakleyservices.com
WEB SITE www.oakleyservices.com

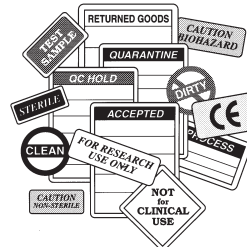
USP Sterility <71>
USP Microbial Limits <61>
USP Preservative Effectiveness <51>
USP Water, LAL and BI Testing
AAMI Bioburden, Recovery, Verification
CTFA Testing • Microbial Identifications

Tel (978) 263-2624
Fax (978) 263-2786

Microbiology Research Associates, Inc.

33 Nagog Park • Acton, MA 01720
Visit our Web Site: www.mra-bact.com • Email: mra.ma@rcn.com

GMP & ISO compliance made easier!



✓ Over 100 different labels to identify material status, shipped from stock

✓ Custom labels shipped in 48 hours

For catalog and samples
call 800-637-4487 or visit
www.gmplabeling.com

GMP Labeling®, Inc.
Sunnyvale, CA

ISPE Boston Area Chapter Programs Committee

The Programs Committee has been working diligently to offer seminars of interest to the general membership. Below is a tentative schedule of main programs for our upcoming program season. A tentative schedule for the new "Commuter Series" will follow. The "Commuter Series" will offer a few programs at satellite locations North, South, and West of Boston.

September 25, 2003	Disposable Technology
October 28, 2003	Part 11 - What's New?
January 8, 2004	Filtration Chromatography, Viral or Mycoplasma Removal
February 18, 2004	Regulations and Drug Development
March 18, 2004	Process Analytic Technology (PAT)/Risk Analysis
May 18, 2004	Plant, Network Security, or Intellectual Property

Please be advised that the schedule or topic is subject to change. 

Pure Water by Design

Fluid Solutions designs, fabricates, installs and services quality pure water systems for use in a variety of research and industrial environments. We combine advanced applications knowledge with quality products and responsive, personalized service so that pure water is the last thing our customers have to worry about.

Equipment and Technology

- USP Purified Systems
- Water for Injection Systems
- pH Neutralization Systems
- Laboratory Water Systems

Engineering Services

- Turnkey System Designs
- System Specifications
- Design Consultation
- Full CAD Capabilities



Fluid Solutions

Pure Water by DesignSM

For more details, call
978-453-9600 or
contact us via e-mail at
info@fluid-solutions.com

ISPE Members Spotlight



Hank Moes

What influenced your interest in pursuing a career in biotech/ pharmaceutical industry?

I received a job offer from E.R. Squibb & Sons (now Bristol-Myers Squibb) and stayed there for 30 years.

How long have you been a member of ISPE?

16 years

What do you like most about ISPE?

Interaction with people at the local and national level. It is a great networking opportunity.

What advice do you have for new members?

Be as active as possible. Go to a national meeting. Support and get involved with the local chapter.

What firm do you represent?

I consult for Arion Water, Inc. We are high purity water consultants for the pharmaceutical and other industries.

What do you see for our industry in the next five years?

I believe that there will be continued consolidation in the biopharmaceutical sector. Large companies will buy out the more successful smaller entities. Emphasis on small molecules and contract manufacturing will continue to expand. Growth in the industry will pick up from the present lull.

Favorite Pharmaceutical Term or Process?

We didn't get any 483's.

Least Favorite Pharmaceutical Term or Process?

The FDA will be in tomorrow.


If you could have three Scientists (living or deceased) visit for dinner, who would they be?

Albert Einstein, Alexander Fleming, Bob Langer (M.I.T.)

What is your most memorable moment of ISPE?

Our first Boston Area steering committee meeting in Charlestown in 1990. It got us started.

Anything else you would like to add?

Being involved with ISPE is fun and the most fun is the Annual Meeting. In second place is our local Product Show. 

NEWSBRIEFS IN BIOTECHNOLOGY

Genentech's Avastin Extends Life

Avastin has been found to extend the lives of colon cancer patients by slowing the growth of tumors.

(source: **Reuters**, May 19, 2003)

Viragen Files Patent Application For Drug To Target SARS

This involves the use of the "natural human leukocyte-derived alpha interferon" to treat and prevent the spread of SARS.

(source: **Viragen, Inc.**, May 20, 2003)

NOMOS Corporation: Image Sync (TM) Real Time Imaging/ Positioning Technology

This technology can be used to detect the location of cancer cells in real time prior to radiation therapy treatments. This will help increase the accuracy of targeting these cells during treatment.

(source: **NOMOS Corp.**, May 20, 2003)

Infectech's Mycobacterial Identification Technique Found to be Faster Than Traditional Methods in German Trial

Identification of atypical Mycobacteria can be achieved up to 42% faster by using the Infectech method.

(source: **Infectech, Inc.**, May 21, 2003)

Cambridge Scientific Patents Increase Bone Repair Product Line

This company has acquired new patents for products, which help prevent problems associated with spine fusion devices.

(source: **Cambridge Scientific, Inc.**, May 21, 2003) 

Monique Sprueill

**Visit us online
www.ISPE.org/Boston**

Regulatory Highlights

FDA and Lincoln Technologies, Inc. to Collaborate on Developing Tools for Safety Data Mining

The FDA has established a Cooperative Research and Development Agreement (CRADA) with Lincoln Technologies, Inc. The purpose of this partnership is to use data mining to enhance the FDA's ability to monitor the safety of drugs, biologics, and vaccines after they have been approved for use.

(Source: FDA Web site, May 1, 2003).

FDA Issues Final Two Proposed Food Safety Regulations

The FDA has published the final two food safety proposed regulations required by the Public Health Security and Bioterrorism Preparedness and Response Act of 2002, which gave the FDA new authority to protect the nation's food supply. These two proposals deal with establishing and maintaining records among food firms, and the administrative detention of foods that may pose a risk to public health. (Source: FDA Web site, May 6, 2003).


FDA to inform public regarding status of postmarketing studies

The FDA plans to inform the public about the status of manufacturers' commitments to carry out further clinical studies following the FDA's

approval of certain drugs and biological products. The publication of FDA's first annual *Federal Register (FR)* report on these postmarketing studies covers commitments that are required by the FDA as well as those voluntarily accepted by the manufacturers. In addition to the *FR* report, the FDA is posting a searchable database with most of the same information on its Web site.

(Source: FDA Web site, May 22, 2003).

FDA Approvals

- Iressa (gefitinib) tablets, a single agent treatment for patients with advanced non-small cell lung cancer (NSCLC). Its manufacturer, AstraZeneca LP, will market Iressa. (Source: FDA Web site, May 5, 2003)
- Velcade (bortezomib) injection, a new treatment for multiple myeloma, a cancer of the bone marrow. Velcade is distributed and marketed by Millennium Pharmaceuticals, Inc. (Source: FDA Web site, May 13, 2003)
- Gleevec (imatinib mesylate) tablets, a treatment for pediatric patients with Philadelphia chromosome positive (Ph+) chronic myeloid leukemia (CML) in chronic phase. Novartis Pharma AG manufactures Gleevec for Novartis Pharmaceuticals Corporation. (Source: FDA Web site, May 20, 2003) 

Christine Lindberg,

OLYMPIC SYSTEMS CORPORATION



Olympic Systems Corporation is the most complete integrated machining assembly contract manufacturing plants in the United States. We serve customers in the Pharmaceutical, Biotechnology, Medical, Analytical Instruments, Gas & Fluid Processing Industry. Quality Systems certification to ISO 9002.

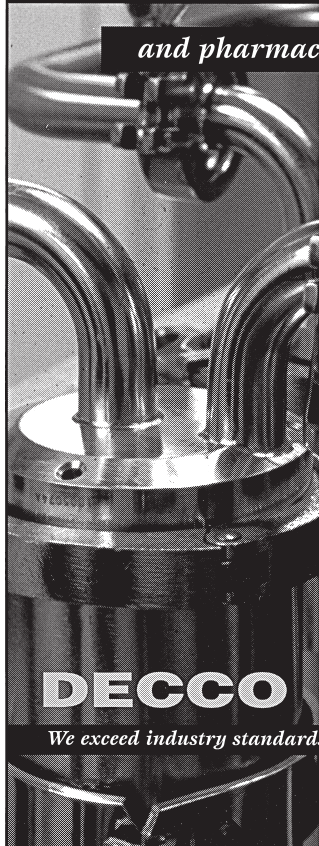
Increase Your Product Yield

Olympic Systems can assist you in upgrading, maintenance and redesign of your manufacturing equipment to eliminate contamination from your processes.

Olympic Systems Corporation
15 Lowell Avenue.
Winchester, MA. 01890

www.olympicssystemscorp.com
Phone: 781-721-2740
Fax: 781-729-4831

**Services for the biotechnology
and pharmaceutical industries**



- Process & utility piping
- High purity installations
- Design/build
- Skid fabrication/modularized construction
- Specialized services
- Process system maintenance
- Staff augmentation

DECCO

We exceed industry standards at every turn.™


Donovan Engineering & Construction Co., Inc.

Route 13, Brookline, NH 03033
Tel 603-673-2200
Fax 603-672-8610

New Members

Jiwan Adhikari, Software Engineer, Millipore Corporation
 Raymond L. Boudreau, Controls Engineer, Lonza Biologics
 John T. Bratz, Associate Director, Wyeth Biopharma
 Janice M. Brousseau, Lonza Biologics
 Alfredo Canhoto, Validation Engineer IV, Wyeth BioPharma
 Gregg A. Conboy, Project Manager, Erland Construction Inc.
 Alberto Correia, VP, VelQuest Corporation
 Richard C. Crispin, Mgr, QA & Training, Fresenius Medical Care
 Ronald J. Duft
 Robert J. Edgerly, Process Engineer, Tuchenhagen
 Aiqi Fang, Fermentation Dev Assoc, Acambis
 Adam S. Goldstein, RSO Manager Engineering, Amgen Inc.
 Richard G. Gonthier, Application Engineer, Baumann Inc.
 Richard M. Harty, Quality Assurance Engineer, Cytoc Corp
 Yasunori Hashimura, Graduate Researcher, Massachusetts Institute of Technology
 Philip M. Henry, Chemical Engineer, New England Controls Inc.
 Leon M. Heredia, Manager, Stelex-TVG
 Christopher M. Hogan, Controls Engineer, Lonza Biologics
 Lindsey S. Humphrey, Director of Sales, Bematek Systems, Inc.
 William J. Kessler, Principal Research Scientist, Physical
 Jonathan K. Lyna, Process Engineer, Integrated Process Technologies
 Laurie Masiello, President, Masy Systems Inc
 Stephen Masiello, Project Manager, Masy Systems Inc.
 Kevin W. McDonald, Process Development, Millennium Pharmaceuticals
 Sean M. McGrath, Viral Fermentation Assoc., Acambis
 Andrew L. McKenzie, Process Engineer, Abbott Bioresearch Center
 Eduardas V. Meilus, Technical Director, Industrial Analytical Services, Inc.

Deborah Meshulam, Head, Process Development, ImmunoGen Inc.
 Richard Monroe, President, Pak Tech Inc.
 David J. Page, Project Executive, Turner Construction Co.
 Heather M. Poirier, QA Product Disposition Specialist, Biogen Inc.
 Steven G. Richter, Microtest Laboratories
 John J. Romano, Mgr, Ind Plastics Div., F W Webb Co.
 Jose E. Rosales, Manufacturing Associate, Acambis Inc.
 Bradford Ross, Project Manager, Invensys Validation Technologies
 Robert Ryland, Manager of Mftg, Altus Biologics Inc.
 Barbara N. Saltz, QA Documentation Specialist, EMD Pharmaceuticals Inc.
 Andrew J. Santo, Project Manager, Millipore
 Richard Sbordone, Project Manager, Bovis Lend Lease
 William E. Smith, Business Process Engineer, Wyeth BioPharma
 Joe Sousa, District Manager, Rockwell Automation
 Fred A. Sowa, FASPAK Machinery Corp.
 Dean Takahata, Project Manager, Invensys
 John Vandenberg, Automation Engineer, Amgen Inc.
 Marc A. Vandenbulcke, Regional Manager, Document Control Systems
 Keith W. Whited, PE, Senior Engineer, Process Facilities Inc.
 Sasha A. Zbitnoff, Compliance Manager, Wyeth BioPharma
 Mark Zemler, Assoc Director, QA, EMD Pharmaceuticals

Student Members
 Matthew J. Nelson Student University of Massachusetts at Lowell
 Daryl P. St. Laurent, Grad Student, M.I.T. 

2002-2003 ISPE Boston Area Chapter Officers

Joe Musiak, President
 Biogen, Inc.
 617/679-3345

James V. Blackwell, PhD, Vice President
 Abbott Bioresearch Center
 508/849-2976

Lawrence W. Weiner, Treasurer
 Massachusetts Biologic Labs
 617/983-6543

Jim Grunwald, Secretary
 SPEC Process Engineering
 781/221-0123

2002-2003 Board of Directors

Janice T. Abel
 Invensys
 508/549-6373

Carolyn M. Ball, PE
 Process Facilities, Inc.
 617/449-1205

Douglas C. Castle
 Schering-Plough Corp.
 908/298-7331

Patricia J. Charek
 Linbeck/Kennedy & Rossi
 781/372-1100

Tim Crowley
 Northeast Sentrol, Inc.
 508/564-5668

George C. Enos
 Hart Design Group
 401/949-5300

Niall Johnson
 TKT
 617/613-4459

Marita A. King
 Maritek Inc.
 781/925-9691

Daniel P. Lavin
 PFI
 978/468-5140

Hank Moes
 Arion Water Inc.
 508/778-6975

David H. Novak, Jr.
 Erland Bioscience Group
 781/272-9440

James N. Polando, PE
 SMMA
 617/547-5400

Beth M. Wescott, PE
 Wyeth Biopharma
 978/247-1008

Past President
Andre L. Walker
 Biogen, Inc.
 617/679-4977

Advisory Board
Richard Priester
 Strategic Facility Planning LLC

Richard Schoenfeld
 EMD Pharmaceuticals

Bob Steininger
 Millenium

Jon Voss
 Genzyme

John Ward
 Biogen

Chris Perley
 Wyeth



HIGH PURITY

NEW ENGLAND

MARK A. SITCOSKE

High Purity New England, Inc.
11 Ridgewood Road
Barrington, RI 02806

tel. 401.247.1144
fax 401.245.1114
mark@highpurityne.com

www.highpurityne.com

Industrial Process Group

Real Service...Real Results

R & D Laboratories
Pilot Plants
cGMP Utilities
Clean Rooms

- **Process Engineering**
- **Architectural Design**
- **Equipment layout**
- **High Purity Piping Design**
- **Instruments & Controls**
- **Validation Services**



323 Andover Street
Wilmington MA 01887
www.ipgusa.com

Tel: 978-988-1318
Email: info@ipgusa.com



SEAR·BROWN/SIKORSKI

ARCHITECTURE
ENGINEERING
PLANNING
COMMISSIONING
CONSTRUCTION SUPPORT

R&D Facilities
Fill & Finish
Pharmaceutical Chemicals
Biotechnology
Pilot Plants
Packaging & Warehousing

Offices nationwide 800.724.4131 www.searbrown.com

KMI Consulting Services provides direct, immediate service tailored to our clients' needs.

KMI
PAREXEL.

- ✓ Strategic Compliance
- ✓ Validation Consulting
- ✓ Training and Technical
- ✓ Information Technology Consulting
- ✓ Compliance Auditing
- ✓ Quality Systems Consulting

www.kminc.com • Waltham, MA • (781) 434-4800



International Society for Pharmaceutical Engineering
3109 W. Dr. Martin Luther King, Jr. Blvd. Suite 250
Tampa, FL 33607

PRESORTED
FIRST-CLASS MAIL
U.S. POSTAGE PAID
TAMPA, FL
PERMIT NO. 2661