NEXT MEETING . . . . Thursday, March 20, 2003 . . . . PLANT TOUR

Dayton T. Brown, Inc.

1175 Church Street, Bohemia, New York 11716

The tour will cover many of Dayton T. Brown, Inc.'s activities in their Engineering and Test Division, with an emphasis on the metallurgical aspects and the metallographic laboratory.

Tourists should plan on assembling at the plant at 6:00 pm and enjoying a pre-tour buffet dinner graciously provided by our hosts. This will be followed by a brief introductory talk, after which people will be divided into small groups of 5-10 persons. It is anticipated that the tours will be concluded around 8:00 - 8:30 pm.

In order to help with planning, people planning to attend should phone Ken Trelewicz at (631) 244-6238 or via email ktrelewicz@daytontbrown.com.

Please note that NO CAMERAS are permitted within Dayton T. Brown's facilities.

DIRECTIONS TO THE DAYTON T. BROWN, INC. FACILITY

Via LONG ISLAND EXPRESSWAY  Take the LIE to Exit 59. Go south on Ocean Avenue. Bear left on Lakeland Avenue. Cross over Veteran's Highway. Continue South on Lakeland Avenue for two traffic lights to Church Street. Turn left onto Church Street and continue to Dayton T. Brown, Inc. (on north side of road).

Via SUNRISE HIGHWAY  Take Sunrise Highway to Lakeland Avenue exit. Go north on Lakeland Avenue then turn right onto Church Street - this will be either the third or fourth traffic light, depending on whether you were travelling west or east, respectively, on Sunrise Highway. Continue on Church to Dayton T. Brown, Inc. (on north side of road).

The phone number at Dayton T. Brown is (631) 589-6300.
The LIASM Executive Committee appreciates the support received from all our advertisers. Let's make every effort to direct our business to them, if at all possible.

Sulzer Metco

A World of Surface Engineering Solutions and Services

We provide:

♦ A broad range of thermal spray, thin film and other advanced surface technology equipment, integrated systems and materials
♦ Specialized coating and surface enhancement services
♦ Manufactured components for the turbine, automotive and other industries
♦ Global customer support services

☎ (516) 334-1300 / ☎ (516) 338-2414 / ☑ www.sulzermetco.com

OUR HOST THIS MONTH

DAYTON T. BROWN, INC. was founded by Dayton T. Brown, Sr. in 1950. It began in a 16,000-square foot building in Copiague, Long Island, equipped with a few pieces of World War II surplus equipment and subsequently developed into a 300,000 sq. ft. multi-divisional corporation in Bohemia. Today, the company, under the direction of the founder's son, Dayton T. Brown, Jr., includes four distinct business units whose operations are widely diversified:

MANUFACTURING DIVISION
This was DTB’s first operational division and now has over fifty (50) years of experience providing precision sheet metal fabrication and contract manufacturing. Their products include covers, panels, doors, card cages, cabinets, frames, etc.

ENGINEERING & TESTING DIVISION
From its inception as an environmental testing laboratory, the Engineering & Testing Division has expanded its capabilities and services to accommodate short and long term design, engineering and test programs for military, government, aerospace and commercial and industrial clients.

TEST SYSTEMS DIVISION
The systems in this Division are used in development, production and overhaul facilities wherever accuracy, repeatability and durability are required in aerospace, automotive, off-highway, and industrial applications.

TECHNICAL INFORMATION DIVISION
This Division comprises a comprehensive team of subject matter experts, information developers and skilled managers, and is designed to provide comprehensive information development, management, and delivery services.

The Electronic Metallagram

The Metallagram is now available in PDF format and members can arrange to have the latest issue emailed directly to them - contact Biays Bowerman (phone (631) 344-2946; email bowerman@bnl.gov). It and some back copies can also be viewed at the Chapter's web site http://www.matscieng.sunysb.edu/asm.
2003 SPRING "HANDS ON" COURSE OFFERING

SCANNING ELECTRON MICROSCOPY

Location: Stony Brook University Dates: either the first four or the last four Saturdays in May (your choice)

Times: meet at 9 AM on first day; approx. 4 hours instruction per day Cost: $500 per person/four sessions

Instructor: Dr James Quinn, Director of the Materials Characterization Laboratory, SBU (631-632-6663)

Equipment: state-of-the-art LEO 1550 field emission scanning electron microscope

Enrollment limit: six (6) persons maximum CEUs: to be announced

Course Synopsis:

1) Principles of operation
   Image generation
   Vacuum
   Sample preparation
   Secondary electron generation
   Gun parameters
   Beam current
   Selecting a voltage
   Charging
   Stage motion
   Sample coating
   Good/bad samples
   Feature size
   Focus/magnification
   Brightness/contrast
   Stigmation

2) Detectors
   SE2, inlens, backscatter
   Dual screen
   Dual magnification
   Center point/feature

3) Elemental information
   Energy dispersive xray spectroscopy
   Picking a voltage
   Identifying elemental peaks
   Quantitative analysis
   X-ray mapping
   Simulations
   Excitation volume
   Thin films

4) Samples to be examined:
   YOURS
   plus
   prickly Au stigmation sample
   Au grid magnification standard
   Polymer fibers
   Thermal spray splats
   Faraday cup
   Assorted microchips
   Fracture surfaces
   Au/Cu/Al grids for X-ray maps
   Quantitative X-ray analysis (brass, stainless steel)

Registration: Dr Henry J. White
Dept. of Mats. Science & Engineering
Stony Brook University
Engineering Bldg. (Room 209)
Stony Brook, NY 11794-2275

(631) 632-3234 (phone)
(631) 632-8052 (fax)
hwhite@notes.cc.sunysb.edu (email)

WELCOME TO THE CHAPTER!

We're pleased to welcome into the Chapter Marc Devine of Hitemco. Marc, you and all new members are invited to dine free at a regular meeting of your choice. Please take us up on this offer, meet with other Chapter members, and start networking.

WANTED: NEW MEMBERS FOR THE EXECUTIVE COMMITTEE - ELECTIONS COMING UP.

Contact Henry White for information and nominations: (631) 632-3234 or hwhite@notes.cc.sunysb.edu.
The LIASM Executive Committee appreciates the support received from all our advertisers. Let's make every effort to direct our business to them, if at all possible.

**FURNACE BRAZING**
- Vacuum & Atmosphere Furnace Brazing of Stainless Steels, OFHC copper, Nickel, Monel and Other Alloys
- Gold, Silver, Copper and Nickel-Based Filler Metals
- Clean Fluxless Brazing in Vacuum, Hydrogen, Argon

**HEAT TREATING**
- Bright Annealing, Tempering, Normalization, Stress Relief, Aging or Precipitation Hardening
- AISI 300 and 400 Series Stainless, 17-4, 17-7, 15-5, 15-7, A286, Custom 455, Monel, Inconel, Oxygen-Free Copper, Air-Hardening Tool Steels (A-2, A-10, D-2, etc.)

**SPECIALTY PRODUCTS**
- DYNAPORE® Multi-Layer Sintered Wire Mesh Laminates
- SPM™ Sintered Porous Powder Metals and Elements
- SWM™ Stainless Steel Filter Elements, Discs and Plates
- Controlled Permeability Porous Metallic Media
- Flame Arrester and Pressure Snubber Media

---

**Overlays/Inlays**
- Base Metals/Exotic Alloys
- Contact Materials
- Rerolling-Slitting

**CLAD METAL SPECIALTIES**
1516 FIFTH INDUSTRIAL COURT
BAYSHORE, NEW YORK 11706-3401

[www.cladmetal.com](http://www.cladmetal.com)

DENISE SALVATI
ISO9002:1994
ISO9001:2000
QS9000 AS9000

---

**Long Island Testing Laboratories, Inc.**
Specialists in Aerospace Materials Testing, Since 1985
243-A Wyandanch Avenue, North Babylon, New York 11704
Phone (631) 643-6792, Fax (631) 643-5628
[www.litlab.com](http://www.litlab.com) Email: rao@litlab.com

**METALLURGIS – ANALYSTS**
- Chemical Analysis
- Expert Testimonies
- Mechanical Testing
- Metallography
- Metallurgical Failure Analysis
- Welder’s Qualifications

T. RAO TIPIRNENI
President

TEL (631) 694-1818 FAX (631) 694-1848

---

(l) Tony Favale addressing the joint ASM-ANS meeting on the subject of free electron lasers; (r) a pre-dinner discussion on … what? Ken and Jason Trelewicz await SBU grad student Brian Keyes's thoughts.

---

**UNITRON**

PETER D. INDRIGO
Vice President

120 Wilbur Place, P.O. Box 469
Bohemia, New York 11716, U.S.A.
Telephone: (631) 589-6666 X2617
Fax: (631) 589-6975
Email: peterd@unitronusa.com
Website: www.unitronusa.com
The LIASM Executive Committee appreciates the support received from all our advertisers. Let's make every effort to direct our business to them, if at all possible.

2002-2003 CHAPTER OFFICERS

Chairman
Henry White - (631) 632-3234
Stony Brook University

Vice Chairman
Mel Cowgill - (631) 344-2082
Brookhaven National Laboratory

Secretary
Lorraine Tawfik - (631) 277-2875
Suffolk County Community College

Treasurer
Peter Indrigo - (631) 589-6666 ext. 2617
Unitron Incorporated

Executive Committee Members
Chris Berndt - (631) 632-8507
Stony Brook University
John Coyle - (631) 589-6666 ext. 2619
Unitron Incorporated
Carl Czajkowski - (631) 344-4420
Brookhaven National Laboratory
Gary Elgort - (212) 460-4693
Consolidated Edison of NY
Perena Gouma - (631) 632-4537
Stony Brook University
Rao Tipirneni - (631) 643-6792
Long Island Testing Laboratories Inc.
Ken Trelewicz - (631) 244-6238
Dayton T. Brown Inc.
Al Wirth - (516) 333-7429
Retired

ADVISORY
Biays Bowerman - (631) 344-2946
Brookhaven National Laboratory

EMERITUS
Richard Richards - (631) 567-6163
Retired
Clifford Shaver - (631) 586-1842
Retired

CHAPTER MEETING SCHEDULE

April 16, 2003
Thermal Spray Night
Students' Night
Speaker: TBA

"You've Got to Pick a Pocket or Two" - the Bowermans and the Indrigos audition for Oliver! at a recent Chapter meeting.