

The METALAST NEWSREPORT

VOL. 11 ****

A NORTHERN NEVADA PUBLICATION

* * * * 1997 YEAR IN REVIEW

NEVADA-DAYS OF YESTERDAY



WALLEY'S HOT SPRINGS IN 1876

Adaptation from Grace Dangberg's Carson Valley - Historical Sketches of Nevada's First Settlement.

n 1860 David Walley noted the excellence of the hot springs near Genoa, Nevada. He sent for his wife, Harriet, and together during the next thirteen years they built a "magnificent" hotel, stabling, and a ballroom from a mere rock pile on the emigrant road. With neverfailing industry and enthusiasm, they converted the surrounding burn-up tule beds into beautiful flower and useful vegetable gardens. The Walleys not only provided delightful physical surroundings for their clientele but, as reported by a traveler in 1869, they also kept a physician in residence to serve their guests. To ensure the benefits of the

continued on page 2

HENKEL AND METALAST EXPLORE ALLIANCE

ETALAST has entered into discussions with Henkel Corporation's Surface Technologies Group for a strategic alliance that would be of mutual benefit in marketing, integration of existing aluminum products and services, and development of related new products and technologies serving the metal finishing industry.

Henkel Corporation, through its parent Henkel KGaA, is the world's leading producer of surface treatment technologies and services. The 120 year old parent company is

headquartered in Germany, and has world-wide sales in excess of \$12 billion with over 46,000 employees.



The decision to explore an alliance was solidified after a visit in November by Pat Harrison, President North America of Henkel Corporation's Surface Technologies Group and Dr. Robert Hart, VP/Technology. Additional discussions were held recently with Mr. Bill Sharp, Henkel's Commercial Development Manager, who has been familiar with METALAST since it's inception. Accompanying Mr. Sharp on his latest visit were Jon Nylen, Marketing Manager Aluminum, and Chris Hanthorn, Technical Manager Aluminum/Extrusion. The details of an alliance are being formulated and an announcement will be made in the near future.

Henkel Technologies



EVP/COO Len Semas with Henkel representatives Chris Hanthorn, Jon Nylen, and Bill Sharp displaying new placards for the anodizing line.

WHAT'S NEWS —

AAC Workshop in Cherry Hill, NJ attended by METALAST representatives.

(Story on Page 2)

Strategic Alliance opportunity with providers of products and services in the metal finishing industry is significant.

(Story on Page 4)

METALAST International, LLC brings \$12,000,000 Private Placement to market.

(Story on Page 5)

METALAST's Trade Show Schedule Expanded to include industry forums serving users of anodized products.

(Story on Page 5)

The METALAST Sales

Process includes four phases designed for the major technical sale.

(Story on Page 6)

Preliminary Research Completed by METALAST research scientists Drs. Shi Hua and Lin Zhang.

(Story on Page 7)



METALAST INQUIRIES

If you are a prospective licensee and would like more information about becoming a METALAST Licensee, please contact:

> Suzann Bene Sales Assistant Sales Department (888) 638-2527

e-mail: SBene@metalast.com

If you are a manufacturer interested in finding out more about the process and experiencing the benefits of this revolutionary technology, please contact:

Dana Foster
Administrative Assistant
Marketing Department
(888) 638-2527
e-mail: DFoster@metalast.com



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UPCOMING EVENT Location **Event** Date Pomona, CA Southern California Job February 24-26 Shop Show Detroit, MI IAM '98 - International May 12-14 **Automotive Manufacturing** Conference Long Beach, CA AMTC - Aerospace June 2-4 Manufacturing **Technology Conference** & Exposition Minneapolis, MN SUR/FIN '98 June 23-25 IMTS '98 - International Chicago, IL September 9-16 Manufacturing **Technology Show** Dearborn, MI AAC Anodizing Workshop September 14-17

► Walley's Hot Springs, continued from page 1

mud baths to their patrons, masseurs were also employed.

David Walley's untimely death on March 6, 1875 left his widow in possession of the hostelry which was considered elegant for those days. The parlor was graced with two fine sofas, three large easy chairs, six hair-bottom chairs, one double rocking chair, a stove, five sets of window curtains, a whatnot, one marble-top center table, one marble-top stand, two spittoons, two rugs, and a stationary lamp. The forty bedrooms were furnished with double and single beds with springs, straw and moss mattresses, two pairs of white blankets, feather pillows, and a washstand, bowl and pitcher. There were eleven bathrooms, containing glass and comb in each. It was asserted at the time of Mr. Walley's death that there had been a hundred thousand dollars spent on the resort.

Harriet sold the hostelry which was known as "Walley's Hot Springs Resort." The For Sale advertisement July 10, 1876 states: "After being given up as incurables by the 'most eminent physicians on the Pacific Coast and elsewhere' thousands of persons have found that the 'magic waters' seldom failed to cure 'rheumatism, syphilis, dropsy, gout, Bright's disease of the kidney's, dyspepsia and hundreds of the diseases which flesh is heir to, and particularly all scrofulous affections'."

AAC Workshop

ETALAST represen-

tatives attended the Aluminum Anodizer's Council workshop in Cherry Hill, New Jersey on September 8-11, 1997. The workshop provided educational seminars on all aspects of the anodizing industry. META-LAST Chief Operating Officer, Aluminum Len Semas gave a presentation on the state of the anodizing industry, emphasizing the benefits of the METALAST technology in

meeting the needs of the industry.

There were 140 participants, 25 speakers and 18 vendors with table top displays. The METALAST table top booth was on display and the staff received a number of inquiries regarding the META-LAST technology, as well as holding discussions with many current prospects. METALAST Technical Director, Charlie Grubbs and Sales Director, John Dempsey hosted the exhibit. Several vendors came by the METALAST display and requested information regarding the METALAST technology, and Len Semas had productive discussions regarding strategic alliances with several of the attendees.

Attendance at events such as this workshop are an integral part of the METALAST marketing and sales program. Trade show attendance has proven to be very effective in ensuring prominent name recognition for METALAST in the anodizing industry as well as with vendors servicing the industry and manufacturers who are the ultimate end users of the anodizing process.





NEWS REPORT FORMAT CHANGE

ommencing with this issue, the METALAST News Report will be published semi-annually, in January and July. A number of other more specific programs are available to meet the needs of our licensees, shareholders, and users of anodized products. In addition to the News Report, METALAST publishes a Licensee Newsletter, Anodizing Technical Bulletins, Technical Data Sheets and Research Reports. We also maintain a comprehensive website - METALAST OnLine at www.metalast.com. We believe this change will allow us to continue to provide both general and targeted company information in a professional and timely manner.

JUST THE FACTS

luminum is the second most abundant metallic element in the Earth's crust after silicon, yet it is a comparatively new industrial metal that has been produced for just over 100 years. It weighs one-third as much as steel or copper; is malleable, ductile, and is easily machined and cast; and has excellent durability. Measured in either quantity or value, aluminum's use exceeds that of any other metal except iron, and it is important in virtually all segments of the world economy. The annual U.S. usage or consumption of aluminum is equal to 59 lbs. per person.

Source: U.S. Department Of The Interior

METALAST MILESTONES

JULY - DECEMBER 1997

JULY

- Sales trips to Seattle and Denver market areas produce significant interest.
- Representative from newest licensee ENS of Santa Clara, CA visits METALAST.
- Representatives from R-Amtech International visit to finalize plans for joint venture to explore Russian-developed anodizing technology.

AUGUST

- Sales trips to Portland and San Diego markets affirm expansion of METALAST sales efforts.
- Chief Operating Officer Len Semas attends Metalworking Software Expo with an eye on possible software alliance in conjunction with METALAST's MPCS 2000.
- Development of manufacturer marketing program commences with goal of approvals and licensing by major manufacturers.

SEPTEMBER

- METALAST is specified for work by Culligan Systems and approved for work by Johnson & Johnson.
- Drs. Shi Hua and Lin Zhang join METALAST as Technical Associates. Their initial focus is on research work analyzing and characterizing the oxide formed by METALAST technology.
- Beth MacKay, former Sales Administrator, is promoted to Account Representative position for Nevada and northwest.
- Dana Foster joins as Administrative Assistant in Operations/Marketing.
- LECO Corporation demonstrates metallurgical microscope system with planned acquisition for METALAST lab expansion.
- National Sales Director John Dempsey leads sales staff while exhibiting at the Aluminum Anodizers Council workshop held in Cherry Hills, NJ. EVP/COO Len Semas gives presentation on anodizing industry.

OCTOBER

- Annual shareholder meeting and BBQ is held. METALAST International, Inc. is unanimously reappointed as manager for METALAST International, LLC.
- METALAST sales team attends AESF Regional forum in Las Vegas.
- Continued sales trips develop further interest throughout California and Nevada. Plans are made to expand sales program with regional sales reps in midwest, northeast, and south.
- 1998 Advertising campaign with Thomas Register finalized, including development of METALAST representation on Thomas Register's web site.

NOVEMBER

- Len Semas and John Dempsey attend Nevada Governor's Economic Development Conference in Las Vegas.
- President/CEO David Semas makes presentation in San Antonio, TX to investment community in conjunction with planned private placement offering by METALAST.
- METALAST sales team attends and exhibits at metal finishing Vendor Showcase in San Jose, CA.
- Takashi Katsuma of International Alloy Corporation in Japan toured the Tech Center. International Alloy Corporation has a long-term relationship with METALAST licensee Universal Metal Finishing.
- Pat Harrison, President of North America/ Henkel Corporation visits with executive staff to explore strategic alliance between Henkel and METALAST.

DECEMBER

- Sales trips made to Southern California.
- METALAST Sales Plan reviewed for expansion to regional concept and remotely based account representatives and to introduce new sales programs.
- METALAST Strategic Plan under review and development for implementation in 1998.
- Strategic Alliance and Manufacturer Marketing Programs designed and implemented.



David Michael Semas

FROM THE PRESIDENT/CEO

he year of 1997 has been both rewarding and extremely challenging. With the licensing and fine tuning of our process control systems at our first four METALAST "Beta Sites" in Newport Beach, CA; Hollywood, CA; Denver, CO; and Chicago, IL; the anodizing and metal finishing industries are beginning to take notice.

Over the past year, we hired a national sales director and two key scientists in the R&D department. We continue to process sample parts for manufacturers around the country and to demonstrate the benefits of our technology. Visitors to the METALAST Tech Center and prospective licensees continue to appreciate the sophistication and quality of the METALAST technology. In addition, as the METALAST Process Control Sys-

tem (MPCS) is continually fine tuned and upgraded, our licensees and their customers can fully appreciate the benefits of process control automation in anodizing.

In retrospect, last year was a time to synergize, organize, and to generally prepare the META-LAST Technology for its worldwide introduction in 1998. Hundreds of manufacturers have already inquired about the benefits of our process.

At this time, it is appropriate to express appreciation for everyone's efforts; therefore, I would like to thank the METALAST team for doing a great job and making so much progress in the past year. Also, a sincere thank you to all those associated with our organization who have supported us in various ways. Thank you to the anodizers who are beginning to realize that the anodizing industry can greatly benefit from the METALAST technology and know that the time has come to move aggressively toward the 21st Century. Lastly, thank you to those anodizers who have already become licensees. Our commitment to you is stronger than ever.

I know that the year 1998 has good things in store for everyone.

Sincerely,

David Michael Semas President/CEO



inoru Mitani, inventor of the METALAST process in Japan, has notified, Takanori "Ted" Ozaki, Managing Director of Asian Operations for METALAST International, Inc., that Hitachi

NASA

Corporation has received confirmation from NASA that they will specify the METALAST process on undisclosed aluminum components used on the Space Shuttle.



STRATEGIC ALLIANCES

hile there are many companies that provide high-level products and services, there is no other anodizing program which integrates chemistry, computerized process control, research, education and training, complete tech center facilities, and marketing support. META-LAST is the only complete anodizing technology in the world. As we expand, there is significant opportunity for alliances with other providers of products and services in the metal finishing industry. We welcome the opportunity to explore such professional alliances.

Some ways in which an alliance can be beneficial include:

- Internet web site links and cross referrals (www.metalast.com)
- Joint social, technical, and educational programs at trade shows
- Joint advertising and other marketing programs
- Co-hosting technical and educational programs at the METALAST Tech Center
- Joint research projects within the metal finishing industry
- Joint research projects serving the needs of targeted metal finishing users such as automotive, aircraft/aerospace and electronics
- Joint sales calls and cross referrals
- Shared resources in developing sales and marketing support data and materials
- Prime provider pricing and support programs

While a particular alliance relationship may not include all of these elements, we will explore each as mutually beneficial and appropriate. Companies interested in exploring an alliance should contact Len Semas, EVP/Chief Operating Officer (LSemas@metalast.com).



SALES ACTIVITY

uring July the META-LAST Sales Team made sales trips to Northern California, Denver and Seattle. The purpose of these trips was to introduce METALAST to new prospective licensees and to move towards closure on various accounts that had been previously exposed to METALAST. Key prospects called on were Hytek, Skills, Front Range Plating, CAI, Anodizers Inc., Electrochem, Cal-Tech and Anoplate.

The METALAST Sales Team made sales trips in August to Portland, San Diego, Phoenix and the San Fernando Valley in Southern California. The key accounts visited were Astroplate, CRC Chem Research, Apex Anodizing, Technical Finishings, Jesse's Plating, Gem Enterprises and Metal Chem.

Sales trips to Salt Lake City, Cleveland, Seattle, San Diego and Orange County in Southern California were conducted in September. Key accounts visited included Quality Plating, Aerospace Engineering & Support, Luke Engineering, H & R Metal Finishing, Commercial Anodizing, Pacific Metal Finishing, General Extrusions and Aluminum Anodizers Inc.

In addition, licensee visits were made to Swiss Lenox in Denver during July for company indoctrination and to Highland in Los Angeles during August for training planning. METALAST Technical Center tours were conducted on July 19, August 23, and September 20 with attendance increasing each month.

Training classes in Chemistry and Basic Anodizing were conducted September 22-25 for Hobey Hewitt and Tony Wallace from Universal Metal Finishing in Chicago and for Catherine Davydov and Hassan Dibiri of Highland Plating of Los Angeles. The training classes instructors were Charlie Grubbs, Rod Friedline, Dr. Sjon Westre and Dr. Tami Westre.

The focus of the METALAST Sales Team is now on signing new licensees from the Hot Prospect list that has been generated as a result of the marketing and sales activities to date. The current Hot List has 54 prospective licensees who are expected to sign license agreements in 90 to 120 days.



The METALAST table top display that will be used at anodizing and manufacturing conventions and trade shows this year.

TRADE SHOW SCHEDULE EXPANDED

ETALAST continues to participate in metal finishing industry trade shows such as SUR/FIN which is sponsored by the AESF (American Electroplaters and Surface Finishers Society) and the AAC (Aluminum Anodizers Council) annual conference. This year, our convention schedule will be expanded to industry forums serving users of anodized products as well. Marketing to manufacturers is a primary tool for METALAST, with the objective of approving and specifying our technology for anodizing by METALAST licensees.

Three key programs have been targeted: the Aerospace Manufacturing Technology Conference (AMTS), the International Automotive Manufacturing Conference (IAM), and the International Manufacturing Technology Show (IMTS). In addition, METALAST will also exhibit at a number of regional manufacturer oriented shows.

The AMTS show in June will be held in Long Beach, CA. This show is focused on aircraft and aerospace manufacturers, with an expected attendance of 800-1,000. The IAM show and conference in Detroit will be held in May and attendance is expected to exceed 10,000. The IMTS is one of the largest manufacturing technology shows in the world with over 1.3 millions square feet of exhibits and 120,000 attendees. METALAST will be represented at both the IAM and IMTS by our major show exhibit booth.

CORPORATE CORNER

METALAST International, LLC ("MILLC") has just brought to market a \$12,000,000 Private Placement which will be offered to Accredited Investors by a group of regional NASD Broker Dealers. In a letter to David Semas, President/ CEO of MILLC, Mr. Joe Miller, Executive Vice President of United Pacific Securities (the NASD Broker Dealer firm responsible for raising \$10,000,000 in MILLC's last Private Placement) stated that "We find METALAST's accomplishments to date impressive and more importantly, the anodizers utilizing the process to be committed, enthusiastic, and profiting from METALAST. I believe that METALAST is poised to be a great success, and we at UPS

look forward to being a part of it."

THE METALAST SALES PROCESS

igning a METALAST licensee agreement is appropriately defined as a major technical sale. In order to understand and appreciate the METALAST sales process it is necessary to comprehend the definition of a major technical sale and the distinct phases that a customer experiences during such a sale.

A major sale is characterized by the following elements:

- Decision is made over a relatively long period of time, rather than in a single meeting or sales call.
- There are competing alternatives to choose from.
- There are penalties or risks in making a bad decision.

The customer decision process in a major sale normally progresses through distinct phases. Three of these stages take place before the decision and a fourth stage happens after the decision has been made.

The four phases are as follows:

Phase 1 - Recognition of Needs

The decision process begins when the people in the organization become dissatisfied with the existing situation and recognize a need to change.

Phase 2 - Evaluation of Options

During this phase the prospect weighs the various options and their merits. This stage ends when there is a consensus in the prospect on which option adequately meets their criteria.

Phase 3 - Resolution of Concerns

Prior to final commitment, the customer may demonstrate anxiety about moving forward, either openly or hidden. Often, price issues are used to cloak this anxiety in a more "respectable" form. The key to dealing with the customer in this phase is to uncover the true causes of concern and assist in resolving them.

Phase 4 - Implementation and Account Maintenance

In smaller sales the process typically ends at the previous stage, when a decision is made. In a major sale, especially the technical sale, it is the beginning of a continuing transaction involving

installation, training, technical support and a relationship that is oriented toward the long term.

In summary, the sales process is about meeting the needs of customers. In the major, technical sale, those needs are more complex, time consuming, competitive, costly and support intensive. To achieve success, it is critical to fully understand the process, the essential phases and the potential barriers to success.

The potential barriers to success for a METALAST sale are as follows:

- Technical nature of the product
- Intangible nature of the product
- Fragmentation of the industry
- Dependence on external market forces

 Geographic dispersal of potential customers





- Technical and production staff "buy-in"
- Cost and value issues

The METALAST Marketing and Sales Program is designed for success in the consummation of major technical sales. The advertising campaign, website, company database, sample program, manufacturer program, convention booth and industry organization membership and participation all contribute to identifying, qualifying and signing licensees.

TRAINING CLASS A SUCCESS

licensee training class was held September 22-24 at the METALAST Tech Center for personnel from Highland Plating and Universal Metal Finishing and new members of the METALAST team.

This class was the first to experience the complete audio-visual technology connecting the class-room and the laboratory. Participants were able to learn through the use of classroom and laboratory cameras, as well as, the central control system for the classroom MPCS, remote lab speakers, VCR control, a projection system and Macintosh computers. In ad-

dition, the technical presentation was updated to include 240 information slides, a revised Reference Manual and a new Training Manual.

For the first time, licensee's analytical personnel received special "Chemistry Training" which included hands-on instruction in the laboratory and an updated Analytical Manual written for specifically for chemists.

Feedback from the attendees indicated they learned a great deal in the training class and they were enthusiastic about applying what they learned.

LAB EXPANSION PLANNED

lans are underway to add an additional research area for metallurgical, testing, and electrical engineering studies to the current state-of-the-art anodizing and chemistry lab at the METALAST Tech Center. The new research area will include: additional office area for research staff, a metallurgical microscope station, and areas for other analytical equipment. In addition, testing equipment for abrasion, microhardness, corrosion, smoothness, and other testing requirements meeting industry standards will be available to the research team.

PEOPLE PROFILES-I

r. Lin Zhang has joined METALAST as a Tech nical Associate and member of the Research Team. Her focus is on research in connection with the current METALAST technology, expansion of the technology, and applied research and process development in response to manufacturers and METALAST licensees.

Prior to joining METALAST, Lin was employed as a Research Associate by the University of Manchester Institute of Science and Technology (UMIST), UK. She worked on a project sponsored by AKZO NOBEL (the Netherlands) to asses coatings pigmented with modified silicate inhibitors using electrochemical impedance spectroscopy (EIS). Her doctoral research concerned mixed electrolyte anodizing of aluminum and aluminum alloys, specifically in terms of morphology, growth mechanisms, and corrosion performance. Dr. Zhang holds a Ph.D. in Corrosion Science and Engineering from UMIST.

Lin was an honors student and re-



Dr. Lin Zhang -Technical Associate

ceived a Bachelor of Science in Applied Chemistry from South China University of Technology. Her work emphasized electrochemistry, principles and prevention of corrosion, metal finishing, metallography and mechanics of materials. After graduation form South China University of Technology, she was employed as a Chemical Engineer by Guangzhou Research Institute of Non-ferrous Metals in China where her research included work with anodic films, surface finishing and morphology studies, and other areas of electroplating research.

We welcome Lin and look forward to her contributions to META-LAST.

PRELIMINARY RESEARCH COMPLETED

ETALAST research scientists Drs. Shi Hua and Lin Zhang have completed preliminary investigations into the influence of the METALAST process on several characteristics of the anodic oxide. Chemical dissolution rate, coating weight, coating ratio, and apparent coating density were investigated. While additional studies are under-

way, initial results confirm a positive benefit of the METALAST process in producing an anodized surface that is more dense, builds more efficiently, and results in lower aluminum dissolution in oxide formation than conventional anodizing. Details of the report and other investigations will be published at a later date.

PEOPLE PROFILES-II

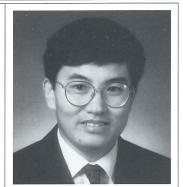
r. Shi Hua Zhang is a Technical Associate member of the META-LAST Research Team. His focus is on research in connection with the current METALAST technology, expansion of the technology, and applied research and process development in response to manufacturers and METALAST licensees.

Prior to joining METALAST, Shi Hua was employed by the Massachusetts Institute of Technology (MIT) as a Postdoctoral Associate. His research at MIT included characterizing organic coatings for electronic packages with electrochemical impedance spectroscopy (EIS) and studying corrosion in supercritical water oxidation. Dr. Zhang's consulting work at MIT was in the area of assessment of the reliability of electronic packages and the study of polymers for electronic packaging.

Shi Hua served as an Assistant Professor in Corrosion Science and



Cross section of an anodic oxide at a magnification of 100,000x.



Dr. Shi Hua Zhang -Technical Associate

Technology at South China University of Technology where he conducted several projects related to industrial services including projects in the areas of surface finishing technology of aluminum and corrosion and protection of steel structures. While in China, he was a key participant in the development of two anodizing facilities.

He holds a Ph.D. in Corrosion Science and Engineering from the University of Manchester Institute of Science and Technology (UMIST), UK. He also attended the South China University of Technology where he earned an M.S. in Material Science and Engineering and a B.S. in Applied Chemistry.

Dr. Zhang has a broad back-ground in corrosion science, anodic processes, and related electrochemistry problems, and has authored numerous publications in his areas of research.

We look forward to his contributions to the METALAST team. \blacksquare





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VISIT METALAST

RENO/LAKE TAHOE/CARSON VALLEY ACTIVITIES





GLIDING

Gliding provides an unforgettable view of Lake Tahoe thanks to the thermals that make the Carson Valley an ideal location for this sport.

◄ FISHING

There are hundreds of lakes in the high country and almost as many fishing techniques employed in the quest for fish.



GAMING

Gaming is a popular activity in the area. Come try your luck!

SKIING

The Lake Tahoe area provides some of the finest skiing in the world.

Variety

