We are pleased to invite you to attend the:

Agtron Scientific Coffee Roasting Workshop

Learn new innovative roasting techniques!

Dramatically improve the quality of your coffee!

Achieve total control of the roasting process!

Have confidence in the consistency of your product!

Instructed by Mr. Carl Staub, recipient of the 1998 Specialty Coffee Association of America's "Outstanding Contribution Award".

If your customers can depend on the quality of your coffee time and time again, they will always come back! Let the experts in quality control show you how to stay on top in these competitive times.

Call Now 775-850-4600 Fax 775-850-4611 E-mail Agtron@aol.com

A Scientific Method Of Roasting For The Specialty Roaster

This introduction to a controlled roasting system touches on the basic thermal-dynamics, chemistry and variables that effect cup character and consistency. The author has developed a scientific method for roasting coffee that most roasters will be able to implement by installing inexpensive monitoring and control electronics. The result will be the ultimate in control, flexibility, and general coffee quality.

* The Quintessential Cup Characteristics of Coffee:

- Sensory Evaluation
- The Cupping Chart

* Roast Classification:

- Color Method
- Cupping Method
- Key Constituent Analysis Method

* The Complexity of Coffee Chemistry:

- The common chemistry of all coffee.
- The number of constituents.
- Pyrolysis

* Uniformity of Roast:

- Flat coffee vs. complex/dimensional coffee.
- Controlling uniformity
- Cellulose as the thermal conductor.

* <u>Identifying Key Constituents</u>:

- Water
- Cellulose
- Sucrose
- Trigonelline
- Nicotinc Acid
- Quinic Acid

* Key Chemical Reactions:

- Cellulose as a thermal conduction medium.
- Sucrose Carmelization
- Trigonelline / Nicontinic Acid Ratio

* Green Bean Density:

- It's effect on energy propagation and roast uniformity.
- A simple method of approximating green bean density.
- Accommodating various green bean densities to ensure more consistent roasts.

* Factors Effecting Consistency:

- Fuel Quality
- Density Altitude
- Green Bean Density

* Implementing the Roasting System:

- Installing monitoring and control electronics
- Initial set-up and calibration
- Adjusting for green bean density
- Using the charts
- Establishing the benchmark
- Keeping the scientific Roastmasters Log
- Cupping charts

Seminar Reservations:

All reservations should be made as soon as possible to guaranty seminar availability. Contact our Sales Department to schedule dates.

Accommodations:

At your request, Agtron will recommend one of Reno's best Hotel-Casinos for your stay. Our local corporate rates are very reasonable.

Transportation:

Attendants should plan to arrive in Reno the night prior, or by 9:00am. the morning of the seminar. Those traveling by air will book flights to Reno-Tahoe International Airport. Ground transportation is provided by many of the local hotels. All hotels in the area are approximately 10 - 15 minutes from the airport. Agtron is 10 minutes from the airport and students are responsible for their own transportation.

Schedule:

- Contact Agtron to discuss your desired class dates.
- This is a One Full Day Seminar. Starting at 9:30am, and ending at 5:00pm.
- · Lunch will be provided for you by Agtron.
- All students will be invited back to the Agtron facility the day following the class for a half day review from 11:00am 2:00pm (lunch will not be provided on this day).

Rates: Agtron Analyzer Owners Pay Half of Prices Stated Below

Private or Semi-private Class
\$950.00(ea.)

Additional attendees with the same organization \$300.00(ea.)

Seminars must be paid for in full a minimum of 15 days prior to the seminar date. Agtron accepts Visa or MasterCard, or you may prepay with a check or money order. Mail payment to:

Agtron, Inc. 9395 Double "R" Blvd. Reno, NV 89511

Any cancellations 15 days or less before the class date, will be charged 50% of the class fee. Students that do not show-up on the day of class will be billed 100% of the class fee.