

THE CENTER FOR ADVANCED MINERAL AND
METALLURGICAL PROCESSING(CAMP) ON THE CAMPUS OF
MONTANA TECH OF THE UNIVERSITY OF MONTANA

Fundamentals and Applications of Fire Assay Short Course

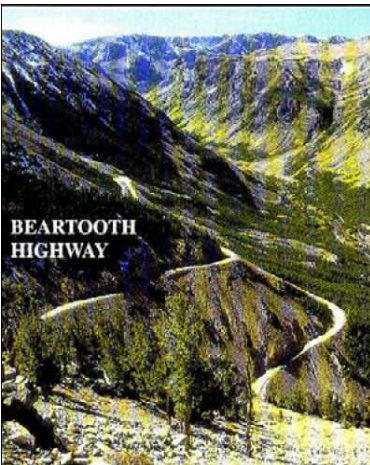
Confirmed Dates:

AUGUST 14 - 19, 2011

Hosted at
*Best Western
Butte Plaza Inn
Butte, MT*

1-800-543-5814

Melissa Bolton, Contact



This is a comprehensive 2-credit course designed to provide fundamental, laboratory and industrial training in Fire Assay. This course will be valuable to both technical and non-technical personnel. The course is proposed to include:

2 Days

- ◆ Fundamentals of Sampling Lectures
- ◆ Fundamentals of Au, Ag and PGM Fire Assay Lectures
- ◆ Comprehensive Fire Assay Lab Session

3 Days

- ◆ Tours of Industrial Primary and Secondary PGM, Au and Ag Fire Assay Facilities
- ◆ Lab, Smelter & Refinery Tours at Stillwater Mining Company's PGM Mine

For more information and
registration information, please
check our website at:

www.camp-montanatech.net/

The Center for Advanced Mineral and Metallurgical Processing (CAMP)
Montana Tech of The University of Montana • 1300 West Park Street • Butte, MT 59701

Phone: 406-496-4652 Fax: 406-496-4512

Email: camp@mtech.edu

To Have a **Registration & Information Packet** Mailed:
Please e-mail your name, address, phone, fax and e-mail
information to:

DaNette Rule at drule@mtech.edu with
FIRE ASSAY in the subject box.

Please contact DaNette Rule at Phone: (406) 496-4652,
Cell: (406) 498-5720 or Fax: (406) 496-4512 for further
information or questions.

In addition, registration information and forms will be
available on our website at **www.camp-montanatech.net/**

Proposed Industrial Tour Sites

Stillwater Mining Company

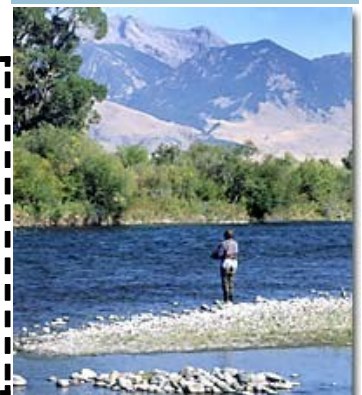
Columbus, MT
Primary and Secondary
PGM Production

Barrick Gold Corp. Golden Sunlight Mine

Whitehall, MT
Primary Au Production

Visit Majestic Southwest Montana

- Blue Ribbon Fly Fishing
- Camping, Hiking
- Golfing
- White Water Rafting
- Lewis & Clark Trail
- Yellowstone National Park
- Glacier National Park



FUNDAMENTALS AND APPLICATIONS OF FIRE ASSAY REGISTRATION FORM

Confirmed Date:
August 14 - 19, 2011

Mail or Fax Form *Without Payment Information* to:
Center for Advanced Mineral and Metallurgical Processing
(CAMP), Located on the Campus of Montana Tech
Attn: DaNette Rule
1300 West Park Street
Butte, MT 59701
Fax: (406) 496-4512

Registrants Information

(Please Type or Print Clearly)

Name _____ Title _____
 Company _____
 Address _____
 City _____ State/Province _____
 Country _____ Zip _____ E-mail _____
 Phone _____ Fax _____

Method of Payment

Payment may be paid by check, Visa, MC or Discover

Please call our MT Tech Business Office directly at 1-800-445-8324, Select Option 2. Patty or Joan will be happy to assist you. Please mention that your payment is for The CAMP Fire Assay Class. Sorry we cannot accept American Express. Please note CAMP is not responsible for payments, only registrations. Please fax this information form to CAMP to register your attendance information only at 406-496-4512.

Registration Fees

**Mark if
Attending**

INSTRUCTION AND TOURS

IPMI/NWMA/SME Member On or Before 7/30/11.... \$1,100.00 _____
 IPMI/NWMA/SME Member After 7/30/11..... \$1,200.00 _____
 Non-Member \$1,750.00 _____

INSTRUCTION ONLY

IPMI/NWMA/SME Member On or Before 7/30/11... \$ 800.00 _____
 IPMI/NWMA/SME Member After 7/30/11..... \$ 900.00 _____
 Non-Member \$1,025.00 _____

INDUSTRIAL TOURS ONLY

Mine Tours Only.....\$ 325.00 _____

No Refunds After August 1, 2011

Total \$ _____

HOTEL RESERVATIONS & TRANSPORTATION

HOTEL RESERVATIONS - BUTTE PLAZA INN, BUTTE, MT

- ◆ A block of rooms has been reserved for our Fire Assay Course participants at the [Best Western Butte Plaza Inn](#). All rooms are non-smoking. The cut off date for the special rate is **August 1, 2011**. Cancellations must be made at least 24 hours in advance to avoid the charge for one night.
- ◆ A special State rate of \$92.02.00/USD including tax, per room, per night has been obtained. Please call 1-800-543-5814 (US & Canada only) and ask for Melissa Bolton, Director of Sales for your room reservation and she will be happy to assist you. Please mention the [CAMP/MONTANA TECH-FIRE ASSAY SHORT COURSE](#) to obtain their special State room rate.
- ◆ Melissa has requested our guests **not book** rooms on-line but call her directly instead due to the Wednesday night stay in Red Lodge. The front desk will **not give** you the special rate so please ask for Melissa directly so we can coordinate & accommodate our guests. Please visit their website at www.bestwestern.com/butteplazainn for the Hotel information only. Business services are available at the Hotel and a free continental breakfast each morning.

HOTEL RESERVATIONS - WEDNESDAY NIGHT - THE LUPINE INN-RED LODGE, MT

- ◆ Wednesday night's stay is booked at The Lupine Inn in Red Lodge, Montana after the mine tours. A block of 15 2 queen size beds per room has been held for a late check-in arrival. Please **do not** call for a room on your own as a discount for that night's stay has been obtained. That night expense is not part of the registration fee but you are welcome to share a room. A State rate with tax included has been obtain for \$77.00/night.
- ◆ The Butte Plaza Inn will hold your luggage in their locked closet Wed. & Thurs. or you can keep your room but you will be responsible to pay for that night you are not there. Please mention to Melissa Bolton when you book your room if you will check out Wed. night or keep your room.

TRANSPORTATION

- ◆ The Hotel will provide [free shuttle transportation](#) upon your arrival & departure so please call at the airport courtesy phone for arrangements to the Hotel. You may also mention your flight arrival time to Melissa when you book your room so the shuttle will be waiting for you when you arrive.
- ◆ The Hotel also provides [free shuttle transportation](#) to and from Montana Tech and will drop off our guests in front of the Student Union Bldg., Sunday & Monday. The shuttle will also be available Friday morning to drive guests to and from the Mining Museum. All shuttle arrangements should be reserved daily at the Hotel Front Desk for an accurate count in case they need to drive two vehicles.
- ◆ The Butte Plaza Inn Hotel is approximately 3 miles from the Butte airport and about 5 miles from Montana Tech.
- ◆ [Free bus service](#) is provided to Deer Lodge on Tuesday and to both mine locations on Wednesday then to Red Lodge. The bus will stay overnight in Red Lodge and then drive through Yellowstone Park on Thursday. The bus will be waiting outside the Hotel lobby both Tues. & Wed. mornings. Lunches with bottled water and pop will be packed in coolers of ice and packed on the bus Tues. & Wed. visits.
- ◆ Butte's Bert Mooney Airport (BTM) services Butte and surrounding areas. We recommend flying Delta directly into Butte Sat. night & leaving the following Sat., morning. Other Montana airports and approximate driving distances from Butte include: [Helena](#)-1 hour drive; [Belgrade](#)-1 hour drive; [Missoula](#)-2 hour drive; [Billings](#)-3 hour drive; [Great Falls](#) - 2.5 hour drive.
- ◆ Hertz, Avis, and Budget rental car companies operate directly out of the airport but all transportation is provided.
- ◆ **Note:** If renting a car you must park in designated "B" Lots on the Montana Tech campus.

OTHER INFORMATION

- ◆ Dress for the whole week is very casual but a light jacket is recommended for the mine tours. Heavy jeans and closed toe shoes [are required](#) for the mine tours. Both mine tours provide safety glasses & hard hats.
- ◆ We recommend bringing a camera for the scenic drive from Red Lodge over the Cook City Highway into Yellowstone Park. The bus driver will stop anytime along the way for guests to take pictures so please feel free to let him know. During both mine tours, camera's must be left on the locked bus and not allowed to be carried.
- ◆ You are never alone during the week so feel free to ask questions at any time. We carry our cell phones and our business cards contact numbers will be in your notebooks. The course notebook provided will be yours to keep.

PRELIMINARY COURSE SCHEDULE

COURSE INSTRUCTORS:

Dr. Corby G. Anderson QP CEng FIChemE, Allihies Engineering, Inc., Butte, MT

Dr. Courtney Young, Q.P., Prater Professor & Department Head, Metallurgical & Materials Engineering, MT Tech

Gary Wyss, Senior Scientist - Analytical & Geochemistry, CAMP, located on the Campus of MT Tech

John Krstulich, Project Engineer, GT Solar, Inc., Missoula, MT, CAMP Board Member

Tom McIntyre, Senior Process Engineer, REC Silicon, Butte, MT, Metallurgy Advisory Board Chairman, CAMP Board Member

Jay McCloskey, Senior Project Engineer/Interim Director, CAMP, located on the Campus of MT Tech

Nick Gow, Metallurgical & Materials Engineering Ph.D Student, MT Tech

Wayne Olmstead, Proprietor, Mount Powell Laboratories

Sunday, August 14th - MT Tech Campus

Student Union Building - Kelly-Stewart Room

8:00 a.m. - 9:00 a.m.

- ◆ Welcoming & Introductions by Dr. Corby Anderson

9:00 a.m. - 9:30 a.m.

- ◆ Fire Assay: History - Instruction by Dr. Anderson

9:30 a.m. - 10:15 a.m.

- ◆ Fire Assay: Methodology I - Instruction by Dr. Anderson

10:15 a.m. - 10:30 a.m. (15 Minute Break)

10:30 a.m. - 11:30 a.m.

- ◆ Fire Assay: Methodology II - Instruction by Dr. Anderson

11:30 a.m. - 12:15 p.m.

- ◆ Fire Assay: Challenges - Instruction by Dr. Anderson

12:15 p.m. - 1:30 p.m. (One Hour Lunch Break)

1:30 p.m. - 2:45 p.m.

- ◆ Sampling Theory - Instruction by Dr. Courtney Young

2:45 p.m. - 3:00 p.m. (15 Minute Break)

3:00 p.m. - 4:00 p.m.

- ◆ Sampling Instrumentation - Instruction by Dr. Young

4:00 p.m. - 5:45 p.m.

- ◆ Other Analytical Methods - Instruction by Gary Wyss

6:30 p.m. - 10:00 p.m.

- ◆ Hay Ride & BBQ - Hosted by John Krstulich and Family

Monday, August 15th - MT Tech Campus

Student Union Building - Kelly-Stewart Room

8:00 a.m. - 9:00 a.m.

- ◆ CAMP & Metallurgy Lab Tours by Gary Wyss

9:00 a.m. - 10:30

- ◆ Sampling Applications - Instruction by John Krstulich

10:30 a.m. - 10:45 a.m. (15 Minute Break)

10:45 a.m. - 12:00 p.m.

- ◆ Chemistry: Theory - Instruction by Tom McIntyre

12:00 p.m. - 1:00 p.m. (One Hour Lunch Break)

1:00 p.m. - 2:00 p.m.

- ◆ Chemistry: Calculations - Instruction by Tom McIntyre

2:00 p.m. - 2:45 p.m.

- ◆ Overview of Mine Tour, Golden Sunlight Mine - Instruction by Jay McCloskey

2:45 P.M. - 3:00 p.m. (15 Minute Break)

3:00 p.m. - 4:00 p.m.

- ◆ MT Tech Bookstore Visit

4:00 p.m. - 5:15 p.m.

- ◆ Overview of Mine Tour, Stillwater Mining Company - Instruction by Jay McCloskey

5:15 p.m. - 6:30 p.m.

- ◆ Review of Lab Procedures - Instruction by Nick Gow

Tues., August 16th - Mount Powell Lab, Deer Lodge, MT

7:30 a.m. - 8:45 a.m.

- ◆ Meet in Hotel Lobby, 45 Minute Drive to Deer Lodge.

8:45 a.m. - 9:00 a.m.

- ◆ Introduction to Wayne and Marlene Olmstead, Lab Prep

9:00 a.m. - 12:00 p.m.

- ◆ All Day On-Hands Lab Instruction

12:00 p.m. - 1:00 p.m. (One Hour Lunch Break)

1:00 p.m. - 6:00 p.m.

- ◆ Finish Lab Instruction & Drive Back to Hotel Lobby

7:00 p.m. - 10:00 p.m.

- ◆ Catered Banquet, Hotel Meeting Room in Lobby

Wednesday, August 17th - Thursday, August 18th

7:45 a.m. - 9:00 a.m.

Meet in Hotel Lobby, 30 minute drive to Whitehall, MT

9:00 a.m. - 10:15 a.m.

Barrick Gold Corp.- Golden Sunlight Mine Tours

- ◆ Primary Au Production, Lab & Mill Tour

10:15 a.m. - 11:45 a.m.

- ◆ 30 Minute Drive to Three Forks, Lunch at Wheat Montana

11:45 a.m. - 2:00 p.m.

- ◆ Two Hour Drive to Columbus, MT

Stillwater Mining Company Tours

- ◆ Primary and Secondary PGM Production

2:00 p.m. - 5:00 p.m.

- ◆ Lab, Smelter & Mill Tour (3 Separate Tours/1 Hour Each)

5:00 p.m.

- ◆ Drive 30 minutes to the Grizzly Bar & Steak House. Dinner and drinks are not part of the registration fee. Their menu is excellent, reasonably priced & the group will enjoy the relaxed atmosphere along with fun and laughter guaranteed!

- ◆ Drive 20 miles to Red Lodge and check in at The Lupine Inn. Rooms held are guaranteed for late arrival but not part of the registration fee. You are welcome to share a room.

Thursday, August 18th

- ◆ Drive to breakfast (your choice), drive over the Bear Tooth Mountains, stop to take pictures, as you drive through the North Entrance of Yellowstone Park to Old Faithful. Stop to watch Old Faithful, eat dinner, then visit the ice cream store that is highly recommended. Bus drive back to the Hotel Lobby. Check back into the Hotel and relax!

Friday, August 20th - The World Museum of Mining

9:00 a.m. - 3:00 p.m.

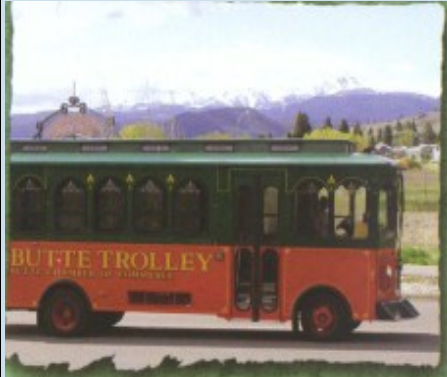
- ◆ Meet in Hotel lobby, Hotel Shuttle will provide transportation to Mining Museum behind MT Tech.
- ◆ Museum tour w/Guide from 10:00 a.m. to 11:30 a.m. Lunch will be delivered at 11:30 for picnic lunch inside the museum park (weather permitting).
- ◆ Class certificates handed out at lunch and completed course evaluation sheets returned. Farewells after lunch.
- ◆ Underground tour w/Guide at 12:30 p.m. for approx. 1 1/2 hours. Visit the Gift Shop to shop before leaving.
- ◆ Hotel shuttle will provide transportation back to the Hotel.

SPOUSE/GUEST PROGRAM

Spouse/Guest Program - August 14 - 19, 2011

Monday, August 15th

Old No. 1 Trolley Tour

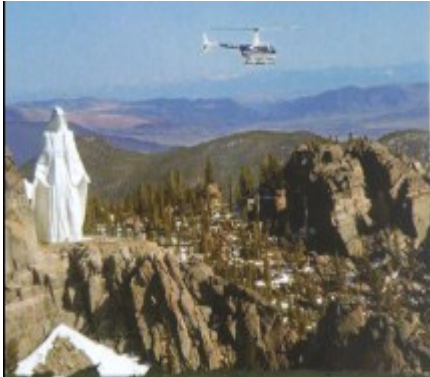


Old No. 1 Trolley Tours...

The fastest and most colorful way to learn about Butte is a Trolley Tour. In about two hours, you'll see where the characters, famous folk, miners and scoundrels lived and worked. Plus, you'll hear how they made Butte the lively, urban center it was. Runs Late.

Wednesday, August 17th

Lady of the Rockies Tour

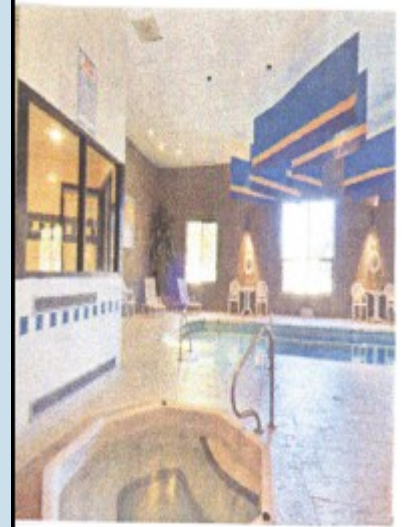


Our Lady of the Rockies...

There's no better place to get a bird's-eye view of Butte than from Our Lady of the Rockies. This half-day tour winds up mountain roads high above town to "Our Lady." About the size of the Statue of Liberty, Our Lady was built by blue-collar volunteers. It's a great trip and an inspiring story.

Friday, August 19th

Relax at the Butte Plaza Inn Pool or enjoy the day shopping



Spouse/Guest Information (Please Type or Print)

Name of Spouse/Guest _____

Name of Course Registrant you are traveling with _____

Method of Payment

\$100.00 per Spouse or Guest

Please call our MT Tech Business Office directly at 1-800-445-8324, & Select Option 2. Patty or Joan will be happy to assist you. Please mention that your payment is for The CAMP Fire Assay Class/Guest. Sorry we cannot accept American Express.

EVENING ENTERTAINMENT AND SPOUSE/GUEST PROGRAM

Spouse/Guest programNo. of Persons _____ @ \$ 100.00 per person _____

No Refunds After August 1, 2011 Total \$ _____