



MAY 3 -31, 201

Whether you're an Alaskan, a first-time visitor to our beautiful state, or somewhere in between, I'm confident that you'll find this event both informative and inspiring.

That's because Alaska is an Arctic leader, a living laboratory for our nation, and the perfect proving ground for new technologies.

Throughout these sessions, you'll be able to explore and learn more about our state's unique opportunities and challenges—from our vast energy and mineral deposits, to the high cost of power generation in our villages, receding sea ice along our coasts, and melting permafrost that threatens our infrastructure.

Over the next few days, I encourage you to focus on forging meaningful partnerships between our communities, academia, industry, the national labs, and government. This is our chance to form an enduring bond that will help us pioneer solutions that can be replicated not just here, but around the world, as we seek to address a range of energy and environmental issues.

A special thanks to the University of Alaska Fairbanks for hosting National Lab Day and to the Department of Energy for making it possible.

I also want to thank you for attending—I hope you have a great time, and get out to enjoy the beauty and wonder of our great state.

UAF Campus Information

UAF photo by JR Ancheta

UAF photo by Todd Paris

Refreshments

Engineering Learning and Innovation Facility, Usibelli Coal Mine Student Atrium (main lobby)

All-day coffee/tea service with light morning and afternoon snacks provided (lobby pictured above, left).

**Included with conference registration*

Arctic Java, Wood Center

Open 7:30 a.m.–5 p.m. On-the-go coffee, espresso, baked goods, sandwiches and salads.

Dine 49, Wood Center

Open 11 a.m.–1 p.m. Lunch only.
Meals at Dine 49 are not included with registration.

UA Museum Café, UA Museum of the North

Open 9 a.m.–4 p.m. Snacks and locally roasted coffee and espresso.

A Meeting Space

The Nook

A quiet common area providing wireless internet, conference tables, data ports and meeting spaces (pictured above, right).

Location: Bunnell, Room 319

Open: 8 a.m.–9:30 p.m.

Emergency and Safety

907-474-7721

907-474-PARK (7275)

907-474-RIDE (7433)

907-474-7721

2018-2019 Campus Tours and Attractions

UAF Campus Walking Tour

Get to know UAF on student-led, 90-minute tours. Start by checking in at the kiosk located in the Signers' Hall lobby. Free.

Web: www.uaf.edu/admissions/visit/

Days & Times: Weekdays, 10 a.m., 2:30 p.m.

UAF Museum of the North

Discover millions of years of biodiversity and thousands of years of cultural traditions at one of Alaska's premier visitor attractions. Entry fee.

Web: www.uaf.edu/museum/ Phone: 907-474-7505

Days & Times: Mon.-Sat., 9 a.m.-5 p.m.

Geophysical Institute

Visit this world-renowned institute, where scientists study everything from the center of the Earth to the center of the sun. Free. Phone: 907-474-7558

Days & Times: Self-guided tour, weekdays, 8 a.m.-4 p.m.

Georgeson Botanical Garden

Enjoy seeing flowers and vegetables starting to flourish in Alaska's long summer days. Don't miss the popular children's garden boasting the largest hedge maze in Alaska. Suggested donation \$5.

Web: www.georgesonbotanicalgarden.org

Days & Times: Daily, 8 a.m.-8 p.m.

International Arctic Research Center

Explore our lobby displays and get a glimpse of the dynamic state of the Arctic and the abundance of Arctic and global climate change research conducted at IARC.

Free. Phone: 907-474-1544

Days & Times: Weekdays, 8 a.m.-4 p.m.

Robert G. White Large Animal Research Station

Get up close and personal with reindeer and muskoxen, survivors from the Ice Age. Gift shop on site with items by Alaska artists. Entry fee. Web: www.uaf.edu/lars/

Phone: 907-474-5724

Days & Times: Daily, 9:30 a.m.-4:30 p.m.

Be inspired by the light of the Aurora Borealis. Renew your energy under the Midnight Sun. Experience the warmth of Fairbanks—Alaska's Golden Heart—and the gateway to Denali, Interior and Arctic Alaska. Make the Morris Thompson Cultural and Visitors Center your first stop to planning your Alaskan adventure.

Morris Thompson Cultural and Visitors Center

101 Dunkel Street • Downtown Fairbanks

8am – 9pm Summer • 8am – 5pm Winter

Agenda

Goals and Anticipated Outcomes

Wednesday, May 30

\$ _ ; r u r o v ; o = t - v h - - o m - t - - 0 8-9 a.m. by | o 1 u ; - | ; t b m h v
- m 7 ; r t o u ; o r r o u | m b ; v = o u r - u ! ; m | u o 7 u 1 D o m | ; ; m
| _ ; ; r - u | l ; m | o = m ; u] m - o m - t t - 0 7 u & y b 0 t ; v b - m 0 7 - t b m ; " | 7 ; m | |
| _ ; & m b ; u v b | o = t - v h - 7 b | _ | ; ; 1 0 - t o = t ; ; u -] b m]
l ; u b 1 - = v m - o m - t t - 0 o u - | o u b ; v | o - 7 - m 1 ; t - v h - = v
- m 7 | _ ; m - o m = v] o - t v = o u] u o 7 u 1 D o m | ; ; 1 o m o l 7
7 ; ; t o r b m] - m 7 b l r t ; l ; m m] v v | _ b m - 0 t ; ; m ; u]
v o t o m v 7 - m 7 m 7 ; u v | - m 7 b m] | _ ; b l r t b 1 - o m v o = -
1 _ - m] b m] u 1 1 ; m b u o m l ; m | : u v r ; 1 b C 1 0 0 f ; 1 _ b ; b v
| o b m 1 u ; - v ; - - u ; m ; v v - m 7 m 7 ; u v | - m 7 b m] o = t - v h - = v
m b t ; ; m ; u] J u ; t - | ; 7 u ; v o u 1 ; v 7 9-15-10-15 a.m. 1 | u ; - m 7
; m b u o m l ; m | b m o u 7 ; u | o 9
Q 7 ; m = u ; v ; - u 1 _ - u ; - v - m 7 l ; 1 _ m b y l v | u o 7 u 1 D o m |
_ b 1 _ m - o m - t t - 0 v 1 o t 7 1 o m | u 5 0 | ; | o - 7 7 u ; v v b m]
t - v h - = v ; m ; u] J u ; t - | ; 7 1 _ - t t ; m] ; v 8 b m 7 u h o v h b 7 & : " ; m - | o u = o u
Q 7 ; m = o r r o u | m b ; v | o t b ; t - v h - ; r ; u v ; - u 7 " | - m = o u 7 & m b ; u v b |
- m 7 u ; v o u 1 ; v | o v r r o u | u ; v ; - u 1 _ b m ; m ; u] 7
1 t b l - | ; - m 7 v ; 1 u b | - | | _ ; m - o m - t t ; 10-15-10-30 a.m.
B u ; - h S L S " r o m v o u ; 7 O y B - t ; t t ;
7 & v b 0 ; t t b o - t b m ; " | - ° g | -

Check-in and registration, coffee and refreshments provided.

Moderated by Larry Pinzman, UAF Vice Chancellor for Research

outside and within the state share their perspectives regarding identification and leverage of these "living laboratory" opportunities.

- u 1;)-th;u7 vvbv|-m| ";1u;|-u 7 mmp; :uv m]7 - u;m1; b ;ulo t;1|ub1b| ;tb ;u -m7 m;u] !;tb-0b{B}-|ou
- !b1_ -utbm7 L1; o= - -t !;v;-u1_ -u m ;tt;u7 - om-t !;m; -Ot; -Oou-|ou
- -m;| !;bv;u7 t-vh- m;u] |_oub| o; -t;;t7 -h !b7]; - om-t
- ;u- o_t;u7 t-vh- (btt-); t;1|ub1 oor;u- ; -umv7 u]omm; - om-t
- ;m ot7l-mmS7 & t-vh- ;m|;u =ou " ;-m t-v mvhb7 - om-t m;u] -Oou-|ou

11:45 a.m.-noon

)-th |o t m1_ -m7 v_o 1-v; ;m ;

Noon-1:30p.m.

Lum 1_ -m7 N-Dom-t L-Oou-|ouy "ow1-v;

7 omo1o _bttbrv t-vh- b]_ \$;v m] -O PCuv| YoouQ

The Department of Energy and its national laboratories are global leaders for scientific discovery, energy innovation and national security technology development. Visit the National Lab Showcase to learn about the labs' world-leading research and scientific user facilities, how to partner with them, and opportunities for collaboration.

1:30-2:45p.m.

Pt;m-uy P-m;tSLS)_-|bv - N-Dom-t L-O5

"1_-bOt; 7b|oub l o7;u-|;7 0 -uh ;|;uv6 7-_o -...om fure t-reou|ou m,7
Paul Dabbar, DOE Under Secretary for Science

The personnel, facilities and relational network resources of the Department of Energy's national laboratories are deep and diverse. The panel provides an introduction to the overall national lab system, with special attention to their roles in scientific discovery and application, education and equipping of the next generation of scientists, support for small business innovation and entrepreneurship, and impact as regional economic drivers.

- "|r_;m v_o 7 -1bC1 ou|_ ;v| -Oou-|ou
- : : > oub? ttbv7 "-m7b- - o
- mmp; :uv m]7 - u;m1; b ;ulo t;1|ub1b| ;tb ;u -m7 m;u] !;tb-0b{B}-|ou
- -u m ;tt;u7 - om-t !;m; -Ot; -Oou-|ou
- o; -t;;t7 -h !b7]; - om-t
- -umv7 u]omm; - om-t
- "-m t-v mvhb7 - om-t m;u] -Oou-|ou
- -u m "1_oom;m7 uooh_- ;m -
- 7-l "1_ -u| 7 l;v - om-t -Oo
- \$;uu)-tt-1;7 ov t-lov - om-
- bh;)b|_u;tt7 - u;m1; ;uht; -Oou-|ou

2:45-3p.m.

Bu;-hSLS"Potmvou;7 Oy B-t;tt

7 &vb0;ttb o-t bm; "| 7;m| Cof ee and refreshments provided.

3-4:15p.m.

Pt;m-uy P-m;tSLSAt-vh- l m 7

"1_-bOt; 7b|oub l
Moderated by George Roe, UAF ACEP

Panelists describe key sectors in Alaska's statewide industrial base and provide insights about their requirements for electrical, thermal and transportation energy. The panel's scope includes both current practice and future trends in the maritime, mining and petroleum sectors, and possible value-add opportunities associated with evolution in manufacturing technology.

- u-7 ou-m7 & ott;]; o= bv_ "1b;m1;v
- !-fb ; -m] tb7 & ott;]; o= bm;v
- o_m -um;v7 bt1our t-vh-
- u-b] t ;7 -h !b7]; - om-t -
- ot-m to 7-7 &mb ;uvb| o= t ;m|;u =ou 1omolb1 ;;torl;m|

4:15-4:30p.m.

4:30-5:45p.m.

Pt ; m - u y P- m ; t S L S " u 1 1 ; v v = u t & m b v ; u v b | y F
N-D o m - t L- 0 C o t t - 0 o u -D o m

" 1 _ - b 0 t ; 7 b | o u b l
o 7 ; u - | ; 7 0 ; ì ; - ; r r ; H - l ; u 6 & ; o r _ v b 1 - r
m v ... | | ;

While multiple pathways are available to facilitate research collaboration, often it is difficult to know how to start. Some ideas include teaming on responses to specific funding opportunities and working together in technical committees and meetings. The genesis of a long-term, large-scale collaboration can be elusive, even with Cooperative Research and Development Agreements (CRADAs) and other funding mechanisms in place. Researchers from the University of Alaska Fairbanks and Department of Energy share from their

.....

.....

Co-chairs: u;m | "_;;|v7 & ;|uot; l ; ;torl;m|
- O o|uo u
!- m7 ;m|u 7 \$

Panelists:

- \$o77 ubmhl-m7 & mv | |; o= u1 1 boto]
- -u;7 b=;umo7 \$
- !ommb; --m;m7 t-vh- b bvbom o= ;oto]b1-t -m7
;or_ vb1-t " u ; v
- -vb; - b7vom7
- "_;t7om bv_;u7 o1lbvnbom;u o= !; ;m ;7
"|-|; o= t-vh-
- !-fb ; -m] tb7 &
- o_m ;m7ub 7 "|-|; o= t-vh-
- - ; omv7 \$
- ";-m t-v mvhb7 \$
- ;|; "|oh;v7 ;|uo|;1_mb1-t !;vo u1;v
t-vh-

P- m;t C9 N- |uu- t H- z- u7v - m7
D; = ; m v ; F A ; u o v r - 1 ;

7 omo1o _bttbrv t-vh- b]_ - "|u 1| u-t
\$;v m] -O PCuv| YoouQ

Alaska is a complex and vast geophysical laboratory.
The University of Alaska has a wide array of ground,
airborne and space test resources that can gather the

C the
t fAl labor C thbA ceqhÚ # 1 D f e r
C thp fh esf^a b

Local Tours

Thursday, May 31

1:30-6p.m.

At - v h - Em ; u] y " y v | ; l v

) o o 7 ; m | ; u \$ u - m v b | t - -

T u ; H u ;] b v | u - ... o m u ; t b u ; 7

Find out about microgrid research at UAF's combined heat and power plant, and the Alaska Center for Energy and Power. Gain additional insight into Alaska's diverse energy systems at ACEP's Power Systems Integration Laboratory and the Cold Climate Housing Research Center.

1:30-6p.m.

Ev b 7 ; m 1 ; o | @ A t ð g ç u 0 " i ð o o 7 C ; m | ; u \$ u - m v b | P t - z -

` \$ G @ p

- m 7

; m ? p - t

- 5)] v b

Fairbanks Shut le Schedules



