# 第16回日米先進超伝導ワークショップ

## 16th US-Japan Workshop on Advanced Superconductors

University of Dayton Research Institute, Dayton, OH, USA July 9-12, 2013

## Program (tentative):

The 16th US-Japan workshop on advanced superconductors will cover the following research fields of superconductivity.

- Superconducting Tapes and Wires (LTS and HTS)
- Large Scale and Novel Applications
- Flux Pinning and Critical Current
- Basic Materials Science (Cuprates, MgB<sub>2</sub>, Fe-based compounds, Thin Films, other)
- Search for New Superconductors
- Energy-related Applications and Technologies

#### Conference site:

University of Dayton Research Institute (Old NCR World Headquarters) 1700 S. Patterson Blvd. Dayton, OH 45479 U.S.A.

## **Registration Fees:**

\$115 (U.S.) includes all meals

\$50 (U.S.) without meals

**\$0 (Students, Retirees, DOD)** without meals

**\$0 (Japan\*)** includes all meals **\$500 (Sponsor)** see info below

#### **Meal Fee options:**

\$20 Wed: lunch and all-day service \$20 Thurs: lunch and all-day service

\$25 Thurs: evening banquet

\* The history of this workshop is the visiting country attendees do not pay these costs.

#### Schedule:

- Jul. 9 (Tuesday) Arrive in Dayton
- Jul. 10 (Wednesday) –
   Registration/Workshop, Evening No-Host
   Dinner at Thai9 Restaurant

- Jul. 11 (Thursday) Workshop, Late-Afternoon Exhibitor/Poster Session, Evening Banquet (UDRI)
- Jul. 12 (Friday) Tours:
   i) Morning Carillon Historical Park, National Aviation Heritage
  - ii) Afternoon choice a) The USAF Museum, or b) tbd Columbus OH sites including Cryogenic companies and Bixby HTS transmission line



U.S. Air Force Museum

#### **Important Deadlines:**

Workshop registration: July 1, 2013
 Hotel registration: July 1, 2013
 Extended abstract: July 1, 2013



University of Dayton Research Institute (Old NCR World Headquarters)

#### **Conference Chairs:**

Timothy Haugan, Air Force Research Lab Eric Hellstrom, Applied Superconductivity Center/NHMFL/FSU Jun-ichi Shimoyama, University of Tokyo Bang Tsao, The University of Dayton Ted Collings, The Ohio State University Michael Sumption, The Ohio State University

#### **Secretary General:**

Timothy J. Haugan AFRL/RQQM

The Air Force Research Laboratory Wright-Patterson AFB, OH 45433 USA

Phone: 937-255-7163 Fax: 937-255-4132

timothy.haugan@wpafb.af.mil

## **Conference Organizer:**

Annie Brunswick AFRL/RQPM, UDRI The Air Force Research Laboratory Wright-Patterson AFB, OH 45433 USA

Phone: 255-4101 Fax: 937-255-3211

annie.brunswick.ctr@wpafb.af.mil

Hotel: see p. 4 for details

## Organized and Hosted by:

- Applied Superconductivity Center
- National High Magnetic Field Laboratory
- The Air Force Research Laboratory
- The Ohio State University
- The Society for Non-Traditional Technology (Japan)
- The University of Dayton Research Institute

#### Posters:

Attendees interested in displaying a poster may do so without charge, and the posters can be on the same topic as presentations if desired. Posters size should be up to 36" x 48" size (vertical or horizontal orientation alright), and can be set up as soon as the workshop begins. Those who wish to display a poster must note this on their registration form, and also request if a support board is needed, so stands and materials can be provided. Fliers and advertising material may be

displayed by registering as a sponsor.

Posters are encouraged as educational material.

#### **Extended Abstracts:**

This workshop traditionally has published a proceedings of 2-page extended abstracts. The format for those abstracts will be posted sent to attendees later, or posted on the website.

#### Welcome/Invitation:

On behalf of the conference organizers, we invite you to attend the 16th US-Japan Workshop on Advanced Superconductors. It is an honor that we are able to host such an exemplary workshop in the evolving field of advanced superconductors, and host this workshop in Ohio for the first time since the 1<sup>st</sup> U.S.-Japan Workshop held in Columbus in 1987. We are also very proud to be presenting a lineup of distinguished speakers from Japan and around the United States who will be traveling to describe their latest research.

Dayton is an hour drive from Cincinnati OH or Columbus OH, and a 15 minute drive from Wright-Patterson Air Force Base. An exhibitor/poster session will be held Thursday late afternoon.

Timothy Haugan, Eric Hellstrom, Jun-ichi Shimoyama, Bang Tsao, Ted Collings and Michael Sumption, Conference Chairs

Annie Brunswick, Conference Coordinator at the University of Dayton Research Institute.

## Sponsorships:

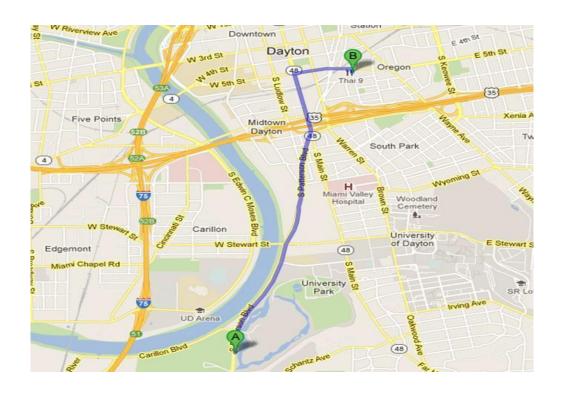
Industries, universities, publishers, and government agencies can partially sponsor this workshop by purchasing a one page sponsor advertisement in the workshop extended abstract for \$500. Sponsors will receive two attendee full registrations including all meals, and also have the privilege of distributing fliers and advertising materials at the workshop. Tables will be set up in the back of the conference hall for sponsor displays. Sponsors may also display posters for no extra charge. To register as a sponsor, please contact to Annie Brunswick or one of the conference chairs. Sponsors interested should also e-mail a one slide powerpoint presentation for inclusion in the extended abstract proceedings.

This workshop is held for academic purposes and is not for profit. Sponsorships are used to cover part of the costs of running the workshop. Because of sponsorships, we are able to keep the workshop registration fee low. We ask that attendees please consider registering as a sponsor to support the operation of the workshop.

Questions regarding sponsorship should be directed to Registration Coordinator: Annie Brunswick, by phone: (937-255-4101), or by e-mail: annie.brunswick.ctr@wpafb.af.mil.

#### **No-Host Dinner:**

There will be an informal, no-host networking dinner at Thai9 restaurant on Wed. Jul 11 at 6:30 pm. <a href="http://www.thai9restaurant.com/Main.html">http://www.thai9restaurant.com/Main.html</a> Thai9 is located in Dayton's historic Oregon district at 11 Brown Street (and East 5<sup>th</sup> Street).



## **Hotel Reservations:**

- Courtyard by Marriott U. of Dayton 2006 S. Edwin Moses Boulevard, Dayton, OH 45417 USA Reservations: 1-800-321-2211; Tel: 1-937-220-9060; Fax: 1-937-220-9223
- \$109 plus tax per night includes parking, breakfast, internet
- Refer to the US JAPAN SUPER CONDUCTOR for this rate
- Check-in: Sun Jul 07, 2013 (earliest available)
- Check-out: Sat Jul 13, 2013
- Special rate available until: Friday Jun 21, 2013
- Book directly at conference rates using the below weblinks:

<a href="http://www.marriott.com/lmages/Brands/CYM/Logos/CY\_logowhitefield\_120x60.gif">http://www.marriott.com/lmages/Brands/CYM/Logos/CY\_logowhitefield\_120x60.gif</a> COURTYARD DAYTON-UNIVERSITY OF DAYTON

King /Sofa Sleeper 109.00 per night

Book King /Sofa Sleeper at Courtyard Dayton-University of Dayton for 109.00 per night <a href="http://www.marriott.com/hotels/travel/DAYUD?groupCode=JSCJSCA&app=resvlink&fromDate=7/7/13">http://www.marriott.com/hotels/travel/DAYUD?groupCode=JSCJSCA&app=resvlink&fromDate=7/7/13 &toDate=7/13/13&stop\_mobi=yes></a>

Double Queen 109.00 per night

Book Double Queen at Courtyard Dayton-University of Dayton for 109.00 per night <a href="http://www.marriott.com/hotels/travel/DAYUD?groupCode=JSCJSCB&app=resvlink&fromDate=7/7/13&toDate=7/13/13&stop\_mobi=yes>"http://www.marriott.com/hotels/travel/DAYUD?groupCode=JSCJSCB&app=resvlink&fromDate=7/7/13&toDate=7/13/13&stop\_mobi=yes>"http://www.marriott.com/hotels/travel/DAYUD?groupCode=JSCJSCB&app=resvlink&fromDate=7/7/13

Welcome to the US Japan Super Conductor group reservation page. Please verify your arrival and departure dates, and enter any Marriott Rewards information; then proceed with your reservation process.

If you need additional nights, or assistance, you may call directly to 937-220-9060.

Other nearby hotel options include:

0.5 miles – Dayton Marriott, 1414 S. Patterson Boulevard Dayton, Ohio 45409 USA. 1-937-223-1000 or 1 (800) 228-9290

2.1 miles – Dayton Grand Hotel (formerly Doubletree by Hilton): 11 South Ludlow, Dayton, Oh 45402, (937) 461-4700 http://www.daytongrandhotel.com/

#### **Other Contact Information:**

Timothy Haugan: <a href="mailto:timothy.haugan@wpafb.af.mil">timothy.haugan@wpafb.af.mil</a>
Eric Hellstrom: <a href="mailto:hellstrom@asc.magnet.fsu.edu">hellstrom@asc.magnet.fsu.edu</a>

Michael Sumption: <u>sumption.3@osu.edu</u>

Ted Collings: collings@ecr6.ohio-state.edu

Juni-ichi Shimoyama: shimo@sogo.t.u-tokyo.ac.jp

Bang Tsao: bang.tsao.ctr@wpafb.af.mil

#### **Maps and Directions:**

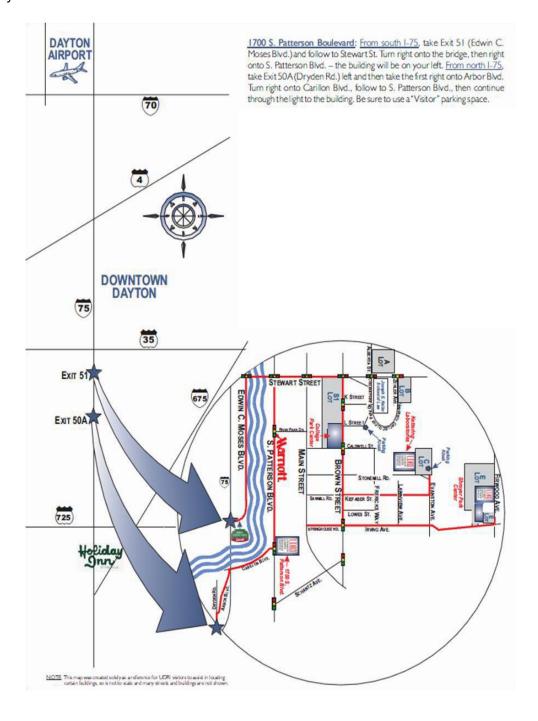
Directions to UDRI campus.

The 16<sup>th</sup> US-Japan Workshop is being held at UDRI, 1700 South Patterson Blvd, Dayton, OH 45479.

From south I-75, take Exit 51 (Edwin C. Moses Blvd.) and follow to Stewart St. Turn right onto the bridge, then right onto S. Patterson Blvd. – the building will be on your left.

From north I-75 (airport, take Exit 50A (Dryden Rd.) left and then take the first right onto Arbor Blvd. Turn right onto Carillon Blvd., follow to S. Patterson Blvd., then continue through the light to the building.

The following map shows the workshop location relative to the surrounding major highways. Note: not to scale.

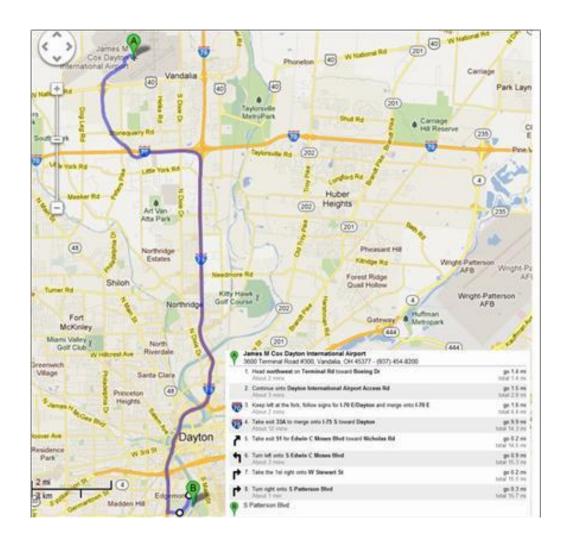


## Airports:

The closest airport is Dayton International Airport (DAY), a 25 minute drive to the workshop and nearby hotels.

3600 Terminal Rd # 300, Vandalia, OH 45377, (937) 454-8200

(http://www.daytonairport.com/).



The next closest airport is the Greater Cincinnati/Northern Kentucky International (CVG) airport in Kentucky (<a href="http://www.cvgairport.com/">http://www.cvgairport.com/</a>). An 80 minute drive up I-75.

The Columbus International Airport (CMH: Port Columbus Airport) 4600 International Gateway, Columbus, OH 43219 is a 90 minute drive, mostly heading west on I-70.

## **Eateries:**

Snacks, refreshments, two lunches, and a banquet will be provided at the workshop, as part of registration or optional charge.

There are a variety of restaurants near the front entrance of the University of Dayton campus, that are both sit-down or convenience restaurants. These located are just a mile from the workshop and Courtyard Marriott, and are mostly on Brown Street.

South of Stewart Street: Buffalo Wild Wings: wings, burgers, sports

bar Milano's: pizza, subs, Restaurant/sports bar The Pine Club: higher end steak, cash

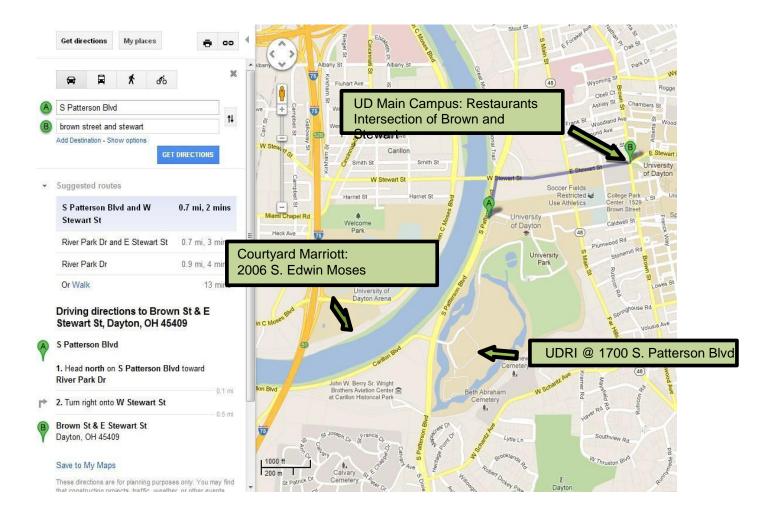
only; many more

North of Stewart Street: Starbucks, Chipolte, Penn Station, Arby's,

Subway, Panera Bread, Jimmy John's Gourmet Sandwiches, Pot Belly's subs and sandwiches, Five Guys, Skyline Chili (Cincinnati style) Hickory BBQ, Jimmy's Ladder 11 – restaurant/bar in renovated 19<sup>th</sup> century fire station (last on street), Asian Fusion, Mediterranean, On Stewart Street:

Dewey's Pizza, Smash Burger

At the end of East Stewart Street, head just a bit North on Wayne Avenue. Tank's Bar and Grill has the <u>best burger in Dayton.</u>



## Things to do in Dayton:

National Museum of the United States Air Force

- The world's oldest and largest museum of military aircraft from all eras and many nations
- Free admission
- Open daily 9 am to 5 pm
- More than 360 aircraft on display
- See directions above, the NMUSAF is on Springfield Street
- http://www.nationalmuseum.af.mil/virtualtour/panoramas.asp



## **Dayton Area History:**

Dayton is the sixth largest city in the state of Ohio, with city population around 140,000 however in a 25-30 mile surrounding region Dayton-Springfield-Greenville has population of ~ 1.07 million from the 2010 census, 43<sup>rd</sup> largest in the U.S.. The area has a rich history for inventing and developing mechanical devices, and the Dayton-Cincinnati corridor is sometimes jokingly referred to as "Shock-Absorber" valley. Some examples of mechanical inventions include:

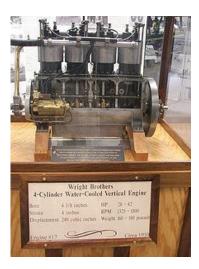
- The cash register (National Cash Register Company, fortune 500 company)
- The automotive starter (Charles F. Kettering, Delco Electronics)
- Powered flight, and the airplane propeller (Orville and Wilbur Wright)
- General Motors auto inventions (off-shoot divisions)
- 3<sup>rd</sup> largest printing center in the U.S., around 1900

## Dayton Aviation Heritage National Historical Park – Orville and Wilbur Wright first flight:

The most famous invention to come from Dayton is the first powered airplane, and the entire Dayton area has been designated as a National Historic Park. Orville and Wilbur Wright grew up in downtown Dayton, and made their airplane inventions there. The stories of their inventions is interesting, and is told and recreated in the several historical parks in the area. They obtained the first U.S. contract for a military aircraft in 1909, and became world-famous with their flights in Europe in 1909.



The first practical fixed-wing powered flight in history on 17 Dec 2003; Orville Wright piloting and Wilbur Wright running at wingtip.



Lightweight Al-block based Engine, required by the Wright brothers for their first flight.

Above info from http://en.wikipedia.org/wiki/Wright Brothers