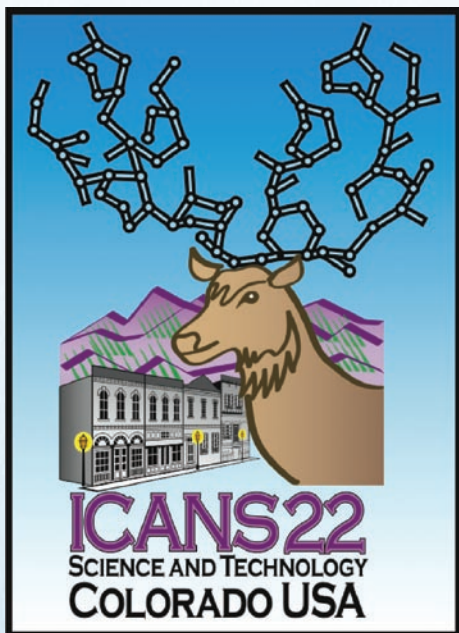


First Announcement



ICANS 22

22nd International Conference on Amorphous and Nanocrystalline Semiconductors

Beaver Run Resort
Breckenridge, Colorado, USA

19–24 August 2007

www.icans22.org



Welcome to ICANS 22 in Colorado!

The 22nd International Conference on Amorphous and Nanocrystalline Semiconductors (ICANS 22) continues the tradition of biennial conferences that have served since 1965 (Prague) as the premier forum for scientific and technological exchange among researchers investigating amorphous semiconductors and related materials. Topics range from the physics and chemistry of fundamental phenomena to the engineering of materials and devices. An emphasis since 1997 on microcrystalline and nanocrystalline semiconductors augments the traditional emphases on amorphous thin films such as hydrogenated Si (a-Si:H) and bulk glasses such as the chalcogenides. In addition, the conference will feature key sessions on amorphous and nanocrystalline electronic oxides and organic semiconductors. Sessions for specialists on film growth mechanisms, on medium-range order, defects, and metastability, and on electronic transport and optical properties will provide opportunities for cross-fertilization among researchers studying diverse material systems.

Conference Venue

ICANS 22 will be held at the Beaver Run Resort in Breckenridge, Colorado, USA (www.gobreck.com; www.townofbreckenridge.com), a picturesque Victorian town in the Rocky Mountains settled about 150 years ago during Colorado's gold mining boom. In August, the surrounding mountains and valleys, with late-summer wildflowers blooming, are excellent for all kinds of outdoor activities, including hiking, biking, tennis, golf, and nature photography.

Breckenridge is also known for its 180 shops and boutiques and 80 quality restaurants and micro-breweries, all of which are open for the summer tourist season. In August, the average daily high temperature is 21°C (69°F), but it will often reach as high as 27°C (80°F). The average rainfall amounts to only 5 cm (2 in) for the entire month of August — usually in the form of brief afternoon thundershowers. The typical weather pattern is sunshine during the day followed by cool, clear evenings that are ideal for stargazing.

Breckenridge is less than 2 hours by car (105 mi, 170 km) from Denver International Airport, which can be reached by direct flights from London, Frankfurt, and most major North American cities. Frequent shared shuttle service links the airport and Breckenridge, and the Conference will ensure good service during popular arrival and departure dates and times. The Conference site is near well-known Colorado mountain resorts and less than a day's drive from the spectacular U.S. national parks of Central/Western Colorado and Eastern Utah, including Rocky Mountain, Black Canyon, Great Sand Dunes, Mesa Verde, Arches, and Canyonlands. Denver is itself a popular tourist destination, featuring a variety of excellent museums, restaurants, and other attractions.

The ICANS 22 site is about 2930 m (9600 ft) above sea level, an elevation that can cause altitude sickness in some individuals. We strongly suggest you enjoy a day or two before the conference in Denver or Boulder (1615 m/5300 ft). This will give your body a chance to adjust to the change in altitude a step at a time.





Accommodations at Beaver Run Resort

The Beaver Run Resort (www.beaverrun.com) will host all ICANS 22 sessions and events. The resort is a 5-minute walk from the town of Breckenridge; frequent shuttle service runs between the resort and town. The resort lies at the base of the mountains at an elevation of 2930 m (9600 ft) and has full facilities typical of a year-round mountain resort, including restaurants, clubs, outdoor hot tubs, and spa. Standard double rooms are reasonably priced, starting at \$88 per night; various upgrades for suites and condominiums are also available. To reserve a room, call the hotel directly at 1-800-525-2253. From outside of the United States, call 970-453-6000. Please identify yourself as part of "ICANS 2007" to qualify for the discounted room rate. Attendees from the developing world and all students can apply to the Conference for shared rooms at special low-cost rates.

Social Program

Breckenridge and the surrounding Summit County resorts are well known for an active summer music, theater, and arts scene. Event tickets will be available from the Beaver Run Resort concierge, who can also arrange transportation. Many small galleries and boutiques are convenient to the Conference site in the town of Breckenridge, where "western" souvenirs, art, and apparel can be found. There will be a morning of Conference Excursions, including a golf tournament, naturalist-guided walks, a high mountain hike, and other options. The Conference Banquet is planned for Wednesday evening, and will include excellent provisions and entertainment. Daily local excursions will be available to attendees and guests.

Organizing Committee

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Tentative Conference Schedule

Conference registration will begin on Sunday, 19 August. A tutorial program on Sunday will feature distinguished lecturers on the topics of amorphous and nanocrystalline films, electronic oxides, and organic semiconductors and will be designed for students and newcomers to the field. An informal reception Sunday evening will provide an opportunity to greet old friends and socialize over hors d'oeuvres and drinks. The conference proper will begin on Monday, 20 August, with a plenary session highlighted by the traditional Mott Lecture. Parallel oral sessions will feature invited talks that provide reviews of key advances and present exciting new results. Poster sessions are planned for Tuesday and Thursday. Wednesday morning will be open for Conference Excursions (to avoid possible afternoon thundershowers), and Wednesday evening will feature the Conference Banquet. The ICANS 22 Closing Session will end at noon on Friday, 24 August.

Abstract Submission and Manuscript Publication

Abstracts will be evaluated by the ICANS 22 Program Committee. Authors of accepted abstracts will be asked to submit a 4-page manuscript (6 pages for invited speakers) for publication in a special volume of a refereed journal. The manuscripts will be due on 6 August and will undergo full peer review before publication.



Topics

We call for papers in the following subject areas. Submissions on related topics are welcome.

Materials

Films of amorphous Si, Ge, C and their alloys
Thin-film and bulk chalcogenides
Metal-oxide films for optoelectronics
Organic semiconductors
Biological and bio-compatible films
Nano- and micro-crystalline semiconductors
Nanostructured oxides

Growth and Processing

Thin-film growth methods and mechanisms
Film growth at high rates and low temperatures
Glass formation from the melt
Phase changes: amorphization and crystallization
Evolution of nanocrystalline morphology
In-situ monitoring and diagnostics
Combinatorial methods

Properties, Theory, and Modeling

Electronic structure and transport
Defects
Optical properties
Mechanical properties
Metastability
Role of hydrogen, dopants, and impurities
Medium-range order
Nano- and micro-scale structures, phase separation, and self-organization
Surfaces and interfaces

Devices and Applications

Thin-film transistors
Solar cells
Phase-change memories
Flexible electronics
Detectors, sensors, bolometers, and imagers
Transparent conductors and electronics
Electrochromics
Waveguides and photonic crystals
Biosensors and biological microarrays
Microelectromechanical systems



Important Dates in 2007

- 1 Feb Website open for abstract submission *
- 1 Feb Invited speakers list posted on Website
- 9 Mar Abstract deadline
- 11 Apr Notification of acceptance by email*
- 1 May Final program posted on Website
- 18 May Application deadline for need-based shared accommodations
- 1 Jun Abstract submission deadline for Late News Posters
- 19 Jul Hotel registration and early Conference registration
- 6 Aug Manuscript deadline
- 19 Aug Conference begins

***Note to International Attendees**

The U.S. National Academies recommend that foreign scientists apply for visas at least 3 months in advance of a conference and report an average B1/B2 visa issuance delay time of 63 days in 2005 (see www7.nationalacademies.org/visas for U.S. visa information). When an Abstract is submitted, any of the authors will be able to request a formal Letter of Invitation for use in obtaining travel paperwork. The Conference organizers will send the requested Letter of Invitation referring to paper acceptance immediately after the April 11 decision date. If it would be useful, the organizers can also provide a less-specific Letter of Invitation even before Abstract acceptance.

Contact Information

For more information and to contact us, visit the Website (www.icans22.org) or write to:

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