

The IEEE Conference on Decision and Control

Tracing CDC history

By Cheryl B. Schrader and Mark W. Spong

The past and the future bracket the present—much like the authors of this article form bookends around the office of IEEE Control Systems Society (CSS) president. Within this article we comment on the history of the IEEE Conference on Decision and Control (CDC), identify events memorable to the attendees (in their own words), and anticipate the nature of future meetings. It is interesting to see what people remember about these important gatherings as we plan upcoming conferences in The Bahamas, Spain, and San Diego and as we tackle new “firsts”—such as holding a CDC in conjunction with the European Control Conference in 2005. And let us also recognize the many volunteers who made these conferences so successful, timely, and innovative.

The CDC is the historical meeting place of the CSS. It is a place to see and be seen; a place to grow, to nurture, and to learn; and it is truly a homecoming for many. It is an international conference hosting Society meetings such as the Board of Governors. It is a meeting widely recognized within the control community as a high-quality conference where people go to meet old friends and new colleagues. It is where a great deal of business gets accomplished, woven within a tapestry of technical and social interactions. It is where new researchers make their debut and established veterans offer words of wisdom and inspiration. It is where the Bode lecture is delivered and the Society awards ceremony is held.

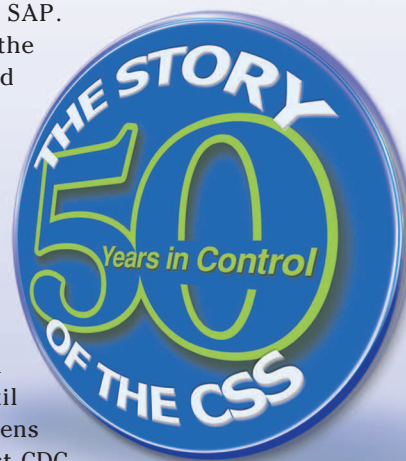
From the list of conferences over the next few pages, you can readily identify the growth that both the CDC and the Society have experienced over the years. The CDC grew out of a series of meetings known as the Symposium on Adaptive Processes (SAP), the first of which was held in New York City in June 1962 in conjunction with the Joint Automatic Control Conference (JACC). The JACC, in turn, was a precursor to the American Control Conference

(ACC). At the time of the first SAP, Yuri Gagarin and John Glenn had recently become the first humans to orbit the earth, the Beatles were unknown outside of Liverpool and Hamburg, and the Cuban missile crisis was about to begin. We were, of course, in grade school and largely unconcerned with such events. We, along with many others, have grown up together with the CDC through Vietnam, Watergate, détente, the fall of communism, and the rise of terrorism. We have formed close friendships, established professional contacts, and witnessed the passing of several colleagues and friends.

The first few meetings were relatively small, with some held at universities. Five in a row were held in the city of Chicago in conjunction with the National Electronics Conference (NEC), four of these at McCormick Place. At least the Chicago meetings were in October and not December! The IEEE sponsorship was added in 1968, and 1970 marked the first IEEE Conference on Decision and Control, still in conjunction with the SAP.

Beginning in 1982, the SAP was dropped and the conference has been just the “IEEE CDC” ever since.

From 1970 onward, the CDC was a winter conference held in a warm venue. This meant the southern United States until 1986, when the Athens CDC marked the first CDC outside the United States. Subsequently there have been three other



CDCs outside the United States: in Brighton, United Kingdom (1991), Kobe, Japan (1996), and Sydney, Australia (2000). In 2005 the CDC will again be outside the United States—this time in Seville, Spain—and will be held jointly with the European Control Conference (ECC), another first for the CDC.

What have been the most popular CDC destinations? Although many people would probably guess Orlando, Florida, there have actually been only two CDCs in Orlando. The surprising answer is actually Chicago, Illinois, with five, although it's a good bet that we'll not likely see another CDC in Chicago any time soon. In second place is San Diego, California, with four CDCs. Overall, the state of Florida is the most popular destination, with a total of eight CDCs spread among Orlando, Ft. Lauderdale, Clearwater, and Miami.

Take a stroll down memory lane with us. We are sure that you will supplement the following with some memories of your own. We hope to bring a smile or two to your face. And we hope to see you soon at the next CDC!

The 1960s—The Beginnings

Discrete Adaptive Processes—Symposium and Panel Discussion (IEEE) (part of 3rd JACC)

29 June 1962

General Chair J. Sklansky

New York University, New York

Symposium on Adaptive Processes (part of NEC)

28–29 October 1963

General Chair L. Kanak

McCormick Place, Chicago, Illinois

Symposium on Adaptive Processes (part of NEC)

19–21 October 1964

General Chair F.J. Mullin

McCormick Place, Chicago, Illinois

Symposium on Adaptive Processes (part of NEC)

25–27 October 1965

General Chair E.C. Jones, Jr., Program Chair G. Brown

McCormick Place, Chicago, Illinois

Symposium on Adaptive Processes (part of NEC)

3–5 October 1966

General Chair F.N. Bailey, Program Chair J.C. Hancock

McCormick Place, Chicago, Illinois

Symposium on Adaptive Processes (part of NEC)

23–25 October 1967

General Chair F.M. Waltz, Program Chair P.E. Mayes

International Amphitheater, Chicago, Illinois

IEEE Symposium on Adaptive Processes

16–18 December 1968



Chicago, Illinois

General and Program Chair J.M. Mendel

UCLA, Los Angeles, California

IEEE Symposium on Adaptive Processes

17–19 November 1969

General Chair J.B. Lewis, Program Chair G.J. McMurty

Pennsylvania State University, Philadelphia, Pennsylvania

The 1970s—SAP Becomes CDC

1970 Symposium on Adaptive Processes (9th)

IEEE Conference on Decision and Control

7–9 December 1970

General Chair C. Coates, Program Chair D.J. Lainiotis

University of Texas at Austin, Texas

It has been decided to broaden [the Symposium] into a Symposium on Decision and Control Systems, which will contain the Symposium on Adaptive and Learning Systems, as a recognizable entity. In its new broader scope this annual meeting . . . with its own proceedings, will provide an enterprising outlet not only to the new activities in the societalecological systems fields, but in any of the new departures of the field that are certain to come along. [1]

—John Zaborszky

1971 IEEE Conference on Decision and Control

including the 10th Symposium on Adaptive Processes

15–17 December 1971

General Chair J.T. Tou, Program Chair S.K. Mitter,

Sessions Chair J.M. Mendel

Hotel Americana, Miami Beach, Florida

By the time of my presidency in 2000, I already had garnered a long and rich history of pleasant memories with the Society beginning with the first CDC I attended in 1971.

—Tamer Başar

1972 IEEE Conference on Decision and Control

including the 11th Symposium on Adaptive Processes

13–15 December 1972

General Chair J.M. Mendel, Program Chair Y.C. Ho,

including the 13th Symposium on Adaptive Processes
20–22 November 1974

General Chair Elliot Axelband, Program Chair Stephen
Kahne, Sessions Chair David P. Lindorff
Del Webb's Towne House, Phoenix, Arizona

The first best paper award was presented at the 1974
CDC. The best paper, selected from *IEEE Transactions on
Automatic Control (TAC)* papers published during the pre-
ceding two years, was authored by Y.C. Ho and K.C. Chu.

—Cheryl Schrader

1975 IEEE Conference on Decision and Control

including the 14th Symposium on Adaptive Processes
10–12 December 1975

General Chair J.B. Cruz, Jr., Program Chair J.B. Pearson,
Sessions Chair G. Stein
Hyatt Regency Houston, Houston, Texas

1976 IEEE Conference on Decision and Control

including the 15th Symposium on Adaptive Processes
1–3 December 1976

General Chair M. Athans, Program Chair E.R. Barnes,
Sessions Chair T. Pavlidis
Sheraton-Sand Key Hotel, Clearwater, Florida

Another activity, which was undertaken by the Stochastic
Control Committee, was the organization of a panel dis-
cussion at the 1976 [CDC] titled “Applicability of Adaptive
Control to Real Problems.” This panel discussion was very
well attended, and there were several interesting contribu-
tions from the audience to its deliberations. [2]

—Yaakov Bar-Shalom

One would expect to go to a CDC in Florida and see
nice, sunny, warm weather. Not so in 1976! It was cold and
wet. There is a picture of me on the (deserted) beach near
the hotel, in my parka, during one of the short periods of
sunshine! [Editor's Note: This photo can be found in Doug
Birdwell's eclectic photographic history, pp. 67–73.] The
closing reception/banquet was notable for the steel drum
band and dance floor (which was mostly unoccupied).

—Doug Birdwell



Houston, Texas



New Orleans, Louisiana

1977 IEEE Conference on Decision and Control

including the 16th Symposium on Adaptive Processes
7–9 December 1977

General Chair K.S. Fu, Program Chair H. Sorenson,
Sessions Chair T. Pavlidis
Fairmont Hotel, New Orleans, Louisiana

This CDC comprised 40 sessions, including the Fuzzy
Set Symposium organized by M.M. Gupta.

—Cheryl Schrader

1978 IEEE Conference on Decision and Control

including the 17th Symposium on Adaptive Processes
10–12 January 1979

General Chair Robert E. Larson, Program Chair Alan S.
Willsky, Sessions Chair Jerry M. Mendel
Islandia Hyatt House Hotel, San Diego, California

18th IEEE Conference on Decision and Control

including the Symposium on Adaptive Processes
12–14 December 1979

General Chair Stephen Kahne, Program Chair Alexander H.
Levis, Sessions Chair Yaakov Bar-Shalom
Galt Ocean Mile Hotel, Ft. Lauderdale, Florida

I recall that we wanted to find a hotel that was not too
expensive, and we succeeded admirably. We were trying to
save money in anticipation of the publication of the 25-year
index of the transactions, which would be distributed to all
CSS members at no additional cost to the members. That
occurred as a supplement to the August 1981 issue of *IEEE
Transactions on Automatic Control* (vol. AC-26 no. 4, part II).
There probably never was a less pretentious suite for the
general chair of the CDC! The Galt Ocean Mile Hotel in Ft.
Lauderdale was really cheap! I recall that the conference
was very successful—as was the case for most of the CDCs
in their 50-year history. It just goes to show that you don't
need a fancy hotel to have a successful meeting! In those
days there was a separate chair of the SAP, in addition to



San Diego, California

the program chair for the conference.

—Stephen Kahne

The 1980s—CDC Goes Abroad

19th IEEE Conference on Decision and Control

including the Symposium on Adaptive Processes
10–12 December 1980

General Chair Pierre R. Belanger, Program Chair
David L. Kleinman, Sessions Chair Richard V. Monopoli
The Regent Hotel, Albuquerque, New Mexico

20th IEEE Conference on Decision and Control

including the Symposium on Adaptive Processes
16–18 December 1981

General Chair William R. Perkins, Program Chair Abraham
H. Haddad, Sessions Chair Kumpati S. Narendra
Vacation Village Hotel, San Diego, California

The last time that the SAP existed as a separate entity was 1981. The CDC was an outgrowth or extension of SAP in a sense, so this marked a milestone in the timeline of the CDC. Also, the luncheon speaker was Dr. John Slaughter, Director of the National Science Foundation (NSF). He was a control person and has papers in the transactions! He has gone on to university presidencies and leadership in minority organizations.

—Bill Perkins

This was my first CDC and I was excited to meet people—like Jan Willems—who I knew only from their books and papers. The guest rooms were in little cottages rather than a high-rise hotel, and there were little shuttle vehicles to take you around. I remember that the fog rolled in about 4:00 p.m. every day so that you could hardly see one cottage from the adjacent ones.

—Mark Spong

Our conference on Decision and Control is extremely successful. It is not an exaggeration to say that it is now the

most important annual meeting on control theory in the world . . . This stable high-quality control theory conference has reached an enviable state of maturity, which clearly is in demand as annual attendance approaches 600. [3]

—Stephen Kahne

This year marks the 21st year of combined Symposium on Adaptive Processes (SAP) and Conference on Decision and Control (CDC). This year will be the last of SAP . . . The Society has plans to add several workshops and more specialized meetings to fill the needs of the members. [4]

—Mo Jamshidi

21st IEEE Conference on Decision and Control

8–10 December 1982

General Chair Alexander H. Levis, Program Chair William S. Levine

Holiday Inn—International Drive, Orlando, Florida

The second plenary talk was given by Lawrence Marcus. Using an innovative and highly entertaining format based on the movie “The Sting,” complete with musical interludes, he described the key ideas in geometric approaches in a lucid and precise manner. His talk was titled appropriately, “Global Geometry: An Alternative Lifestyle for System Theorists.” . . . The CDC was one of the sites for the short course, “The Past Is Prologue. ROBOTICS: Research and Business Opportunities,” which was beamed live nationwide via satellites. This was a first for the CDC. [5]

—Alexander Levis

22nd IEEE Conference on Decision and Control

14–16 December 1983

General Chair James L. Melsa, Program Chair Steven I. Marcus
Marriott Hotel, San Antonio, Texas

Following CDC custom, a welcoming reception was held on Tuesday evening. The reception featured a Mexican theme with a mariachi band, Mexican hors d'oeuvres, and unlimited free margaritas. Everyone left the reception in good spirits . . . All the attendees enjoyed the visit to one of America's unique cities. The casual, relaxed pace, good weather, and friendly atmosphere allowed us to renew old acquaintances or make new ones. [6]

—Jim Melsa

I remember the great Tex-Mex food!

—Mark Spong

23rd IEEE Conference on Decision and Control

12–14 December 1984

General Chair Abraham H. Haddad, Program Chair Michael P. Polis

Las Vegas Hilton, Las Vegas, Nevada

This was a good conference for me even before arriving in Las Vegas. I met Bob Newcomb on the plane there and had a great discussion about time delay systems.

Later he put together a special issue of a journal and published one of my papers. Also, as they say, what happens in Vegas stays in Vegas, but I'm sure I did something few other CDC participants have done in Las Vegas. One evening I went to the local YMCA with Randy Phillips, and we played basketball with the townies!

—Mark Spong

Las Vegas was so gaudy you had to drive across the street to the drug store. It was impossible to walk. However, that was where MATLAB was introduced and where Abe Haddad rescued me from being thrown out by the hotel management when I wanted to take a nap. And where I re-met my now dear friends Mark Balas and Rick Johnson. It takes a bad place for you to make a good time.

—Carla Schwartz

24th IEEE Conference on Decision and Control

11–13 December 1985

General Chair Gene F. Franklin,
Program Chair Anthony N. Michel
Bonaventure Hotel & Spa, Ft.
Lauderdale, Florida

My first CDC! It was truly shocking to realize that a glass of orange juice in Florida could cost US\$6.50 (in 1985 money). A bit steep on a student budget. I must say that it was made up for by the fact that I was given a luxury two-room suite while my advisor was stuck in an economy room.

—Pradeep Misra

We stayed at a hotel that was a 45-minute drive from the conference in order to be near the ocean, but I remember it was unusually cold, too cold to swim. And, of course, a few weeks later was the Challenger space shuttle explosion caused by cold weather.

—Mark Spong

25th IEEE Conference on Decision and Control

10–12 December 1986

General Chair Anthony Ephremides, General Cochair
Spyros Tzafestas, Program Chair H. Vincent Poor
Athenum Intercontinental Hotel, Athens, Greece

The first international CDC was a great success with more than 600 attendees and also great fun, with Greek dancing at the usual CDC banquet.

—Jane Cullum

My first CDC, and in fact my first major conference, was the 25th CDC (1986) in Athens. Some of my memories were of an unbelievably long plane flight (I've since adapted to the traumas of international travel!); the enormous excitement of meeting and interacting with many well-known researchers who were previously just names on papers; the extremely short (if not nonexistent) time between when the traffic light turned green and when the horns started.

—Rick Middleton

Athens was great. No one was there. Everyone was on vacation.

—Carla Schwartz

26th IEEE Conference on Decision and Control

9–11 December 1987

General Chair William S. Levine,
Program Chair John Baillieul
Westin Century-Plaza Hotel, Los
Angeles, California

Another fond memory of CDC was in 1987 in Century City in Los Angeles. John Doyle disguised himself as an extraordinarily disheveled looking “street person.” He circulated around the opening reception, and everyone he approached looked extremely uncomfortable and tried to give this filthy reprobate a wide berth. Rather than ask for spare change, John began to ask for “spare the-

orems” and such and eventually a few people caught on. It was a wonderfully performed stunt.

—Alan Laub

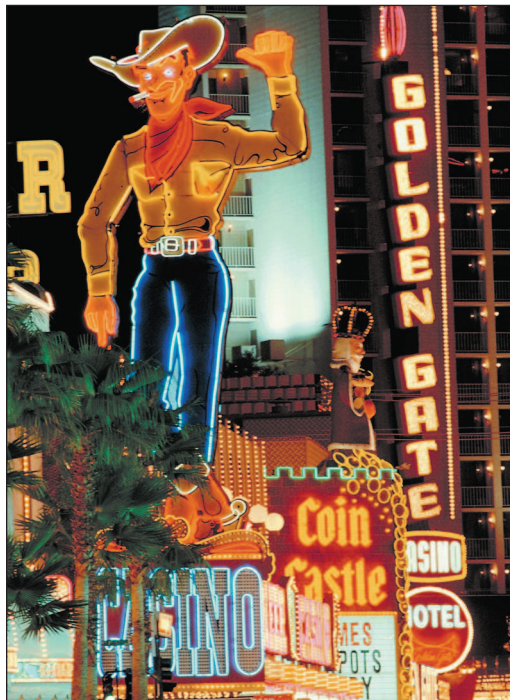
It was the 26th CDC in Los Angeles when John Baillieul, the chair of the Program Committee, brought to my attention the issue of women in control, or rather, the lack of women in control. John pointed out that out of over 700 papers delivered at that CDC, there were only two delivered by women. Coincidentally, both of them were Polish women who had moved to the United States: Irena Lasiecka and myself.

—Bozenna Pasik-Duncan

27th IEEE Conference on Decision and Control

7–9 December 1988

General Chair Michael P. Polis, Program Chair William E. Schmitendorf
Hyatt Regency Austin on Town Lake, Austin, Texas



Las Vegas, Nevada

And then, of course, there was Austin, where Rick Johnson went and hired a band for the final party . . .

—Carla Schwartz

I gave my first talk at this CDC. I followed Sir Howard Rosenbrock, who drew a crowd of 100+ spilling over into the hallway past the propped open double doors. Many people, polite and perhaps somewhat curious, stayed to listen to my presentation, which was received warmly and provoked much discussion during and after the conference. After that entrée, I was hooked!

—Cheryl Schrader

This was the CDC at which the student best paper award was initiated. I remember because my first Ph.D. student, Bob Anderson, won it for his work on control of teleoperators with time delay. There were also some invited sessions where the first paper in the session was a tutorial allotted twice the normal time. I don't know if this was a first for CDC but it was definitely a good idea, and I learned a lot from those sessions.

—Mark Spong

28th IEEE Conference on Decision and Control

13–15 December 1989

General Chair Leonard Shaw, Program Chair Tamer Başar
Hyatt Regency Tampa Hotel, Tampa, Florida

The Bode Lecture was first introduced at the 28th CDC. The first recipient and lecturer was Gunter Stein, who chose the title “Respect the Unstable.” The major decision that had to be made in connection with this first Bode Lecture was which day and what time to schedule it for. There were arguments for scheduling it in the early part (day one, as an opening event), but Len and I decided to schedule it on the last day (Friday) just before noon and after the morning sessions. The main factor that drove our decision was the significant drop in attendance to Friday sessions we had noticed in previous CDCs, and we thought that scheduling the Bode Lecture as a featured event in the late morning would entice at least some of the departing crowd to stay around part of Friday. And it worked!! Gunter Stein's lecture was extremely well attended (full house, standing room only), and Bode Lectures have been scheduled late Friday morning at every CDC since then.

—Tamer Başar

Other memories that stick in my mind a bit are things like Gunter Stein's Bode lecture on “Respect the Unstable.” Or the strong clash of minds over the robustness of adaptive control—clearly, the idealized adaptive control algorithms presented in some papers were not robust in practice without requiring extra conditions such as certain types of persistent excitation or modifications to the algorithm. In some ways I miss these arguments; although per-



Tampa, Florida

haps tense and a bit more aggressive than necessary at times, the debates spurred a lot of work in resolving theoretical and practical issues around adaptive control.

—Rick Middleton

The 1990s—

29th IEEE Conference on

5–7 December 1990

General Chair Charles

Raymond A. DeCarlo

Hilton Hawaiian Village,

CDC Gets Networked

Decision and Control

J. Herget, Program Chair

Honolulu, Hawaii

I personally pushed extremely hard to have the 1990 CDC in Hawaii, partly to test the waters with an eye toward having a future CDC in Japan (Hidenori Kimura and Katsuhisa Furuta were of great assistance in the latter). This was not a straightforward decision for the Society in those days. We were quite a conservative bunch! The naysayers were full of, “If you have it in Hawaii, attendance will plummet. No one from industry will attend.” With the benefit of hindsight, of course, the 1990 CDC was one of the largest and most successful to date. And the 1996 CDC in Kobe was a roaring success. We now readily accept non-United States venues for the CDC, and we even went back for a wonderful CDC in Hawaii (Maui) last year.

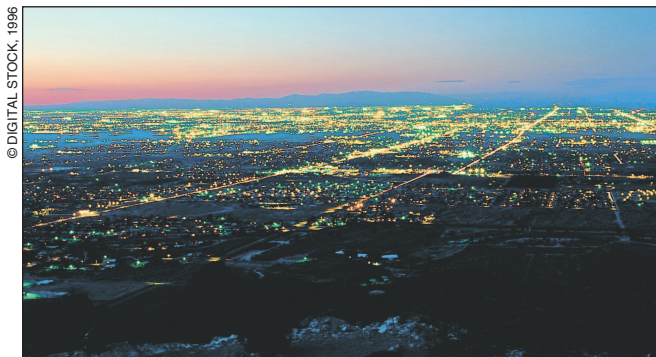


—Alan Laub

This was definitely the CDC to attend if you wanted to meet people. It seemed that everyone and their significant others were there. Everywhere we went, from Hanauma Bay to the top of Diamond Head, we ran into CDC attendees.

—Mark Spong

30th IEEE Conference on Decision and Control



Tucson, Arizona

11–13 December 1991

General Chair Derek Atherton, Program Chair Panos J. Antsaklis

Metropole Hotel, Brighton, United Kingdom

I remember a panel discussion on robust control. There was standing room only, and George Zames was in the audience. After a while George stood up and shouted out, “You don’t know what you’re talking about!” He was really pumped up. We all laughed. Keith Glover, the panel chair, handled it very tactfully. That memory will stay with me forever.

—Mark Readman

The day before the CDC began, it was a sunny and mild early afternoon. I took a longish walk along the main street wearing a light sweatshirt, unaware of the quirky Brighton climate. I came back to the hotel with four thick sweatshirts, acquiring one at a time on the way back as the weather got progressively colder. On the bright side, a cup of hot tea never felt better than after that walk.

—Pradeep Misra

We started the past CDC list, which is now included in every CDC proceedings, in the early 1990s. When I was program chair of the 1991 CDC in Brighton, I tried to use such a list for the proceedings but I discovered there was none available! I got old proceedings from the Notre Dame library to find out the details (GC, PC, venue, dates) but our records did not go back to the very early days. Several people helped tap their libraries and their memory banks, and finally Len Shaw came to the rescue by sending some of his graduate students to the New York Public Library where they uncovered the proceedings of the very early CDCs! We then compiled the complete CDC list, which has now become a permanent part of the CDC proceedings, a tradition almost.

—Panos Antsaklis

31st IEEE Conference on Decision and Control

16–18 December 1992

General Chair Tamer Başar, Program Chair Sergio Verdu
Westin La Paloma, Tucson, Arizona

This was the first CDC in Tucson and had a record (up to that time) attendance of 916. Brian Anderson gave the Bode lecture entitled, “Controller Design: Getting from Theory to Practice,” and Harold Kushner received the IEEE CS Field Award.

—Tamer Başar

My wife and I hung out with some of the Purdue crowd—Ray and Kathy DeCarlo and others. John Chaisson (who reminds me of Jay Leno) was driving his folks’ car during the conference since his parents happened to live in Tucson. After dinner, we went out to the parking lot only to find that another car had hit his parents’ car and broken the tail light. “I guess I’m going to get grounded now,” he quipped. We joke about it to this day.

—Dennis Bernstein

32nd IEEE Conference on Decision and Control

15–17 December 1993

General Chair Raymond A. DeCarlo, Program Chair Peter Ramadge

Marriott Rivercenter, San Antonio, Texas

The 32nd CDC was the IEEE Control Systems Society’s first foray into networked conference registration (I happened to be the registration chair), and no expenses were spared. It was mostly successful, except we never got to test the software system on networked computers before the CDC; the network did not work; the developer left the country at the most opportune moment; the perforated sheets that you are familiar with were jamming in state-of-the-art laser printers. [The] database was split over three workstations, which were consolidated during each break. We were printing receipts on plain paper and copying them onto perforated sheets using a personal copier (vintage 1960). From the organizers’ viewpoint, an unmitigated disaster, but I was told it was the smoothest registration till that time. Expectations must have been a bit low!

—Pradeep Misra

Cascarones (brightly colored confetti eggs) are a South Texas tradition to celebrate friends and colleagues. At the 32nd CDC held in San Antonio, I was working at the registration desk, and Ray DeCarlo, the general chair, was walking by, and looked very intense about something (I never did find out what it was). I had a few cascarones, and I took one and smashed it on his head—he was SO surprised, he didn’t know whether to get mad or laugh. He obviously wasn’t wet, or covered with anything sticky, just tiny pieces of brightly colored confetti—from then on, he kept a light attitude, and he surprised me with cascarones at least once during that conference.

—Dawn Roberson

The first informal luncheon meeting was held for women

at the 1993 CDC. We considered it a big success to get 15 women together from about 800 participants, and most of the women were Ph.D. students. At that time, we discovered that there were only six tenured women in control in the United States and, among them, only about two or three were full professors. In 1994 the CSS, with the strong support of Past President Herb Rauch, had formed an ad hoc subcommittee of the Membership Activities Committee focusing on “Women in Control” (WIC). Today WIC is a standing committee that has become an important part of the Society, and it is a proud achievement for the CSS. It stands as a big success for the CSS and a role model group for other Societies.

—Bozenna Pasik-Duncan

33rd IEEE Conference on Decision and Control

14–16 December 1994

General Chair Michael K. Masten, Program Chair N. Harris McClamroch

Buena Vista Palace, Lake Buena Vista, Florida

[This conference] set several new CDC records: total registration of almost 1,100, more than 930 technical papers, 18 parallel sessions each day, a total of 144 sessions, and a four-volume published proceedings containing over 4,600 pages! . . . We found most attendees felt 20-minute presentations were better than conferences where short papers were allowed only ten minutes. With the 20-minute format, one attendee estimated that there were 1,134,000 words spoken during the formal presentations (not counting informal discussions over coffee and/or lunch or dinner)! Another attendee estimated it would take over 20 weeks to read the entire published conference proceedings! . . . A new feature at this CDC was the “Newcomer/Student” reception, intended to provide a special welcome for students and others who had not attended prior CDCs. [7]

—Mike Masten

34th IEEE Conference on Decision and Control

13–15 December 1995

General Chair Panos J. Antsaklis, Program Chair Edward W. Kamen

New Orleans Hilton Riverside, New Orleans, Louisiana

You may think this is ridiculous but we did not have a record of the past presidents! I found out the hard way at the 1995 CDC in New Orleans where, as general chair, I wanted to invite all the past presidents to a VIP reception and there were no records! To find out who the past presidents were, we had to go to old transactions year by year to generate the CSS president list. Which we did!

—Panos Antsaklis

What timing! One year later a ship ran into this hotel, right into the general chair’s suite where the VIP reception was held. Another “natural” disaster averted.

—Cheryl Schrader

35th IEEE Conference on Decision and Control

11–13 December 1996

General Chair Hidenori Kimura, Program Cochairs

Katsuhisa Furuta and J. Douglas Birdwell

Portopia Hotel and International Conference Center, Kobe, Japan

This CDC stands out in my mind. There was a major earthquake that seriously damaged Kobe, Japan, about a year before the conference, and ours was the first major conference held in that area after the earthquake. We had a Japan-United States operating committee with experienced organizers on both sides of the Pacific. The conference came off without a hitch, in great style, and with reasonable hotel room rates (for the United States, not just for Japan). At the time, Japan was viewed as expensive, but thanks to many donations from Japanese companies, the conference was held at reasonable cost and great value for all attendees. It was also very well attended and not just by the usual crowd.

I was the finance cochair on the United States side. I remember vividly that I was the most junior member on the United States side of the operating committee. The Japanese finance cochair was the most senior member of the Japanese side and the president of one of the Japanese societies. This contrast reflected cultural values about how responsibility for the management of money was viewed in the different countries. The Japanese organizers treated me very well throughout the experience. I thoroughly enjoyed working with them in organizing the conference.

—Molly H. Shor

As program cochair, the two events that are most memorable to me occurred before the beginning and at the end of the meeting. Within a couple of weeks after we had agreed upon the conference site and signed a contract with the hotel, Kobe experienced a severe earthquake (17 January 1995). For days, we were not able to communicate with people in Kobe and could not determine whether people we



Japan

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Closing reception at the 1998 CDC in Tampa, Florida.

knew were okay, or whether the hotel was damaged, or even still standing. Our friends turned out to be fine, and the hotel survived, although with some damage—most notably a crack and shift in elevation of around a quarter meter running across the plaza between the hotel and the building housing the meeting rooms. The second memorable event was much more personal—my father passed away of a stroke during the conference, and I left the conference early and made emergency arrangements to fly home.

—Doug Birdwell

Michel Gevers left this conference in a wheelchair after having signed a memorandum of understanding (MOU) between the IEEE Control Systems Society and the European Union Control Association while laid up due to a bad back. This MOU became the cornerstone for the upcoming 2005 joint CDC/ECC.

This was also the first CDC that printed a book of abstracts and distributed a proceedings CD-ROM for use during the conference and held off printing hardcopy proceedings until after the conference was over. This was much easier on the conference participants, who no longer had to lug six volumes home with them, and on the conference budget, which did not have to absorb US\$40,000 in shipping hardcopy proceedings to the conference site. Never again would the CDC print hundreds of unnecessary hardcopy proceedings just to make sure there were enough at the conference.

The electronic author's kits were a hit and continue to be used to this day. How do I know so much about these details? I was the publications chair, the only position on the organizing committee without a Japanese counterpart.

—Cheryl Schrader

Kobe was indeed a memorable CDC for me. I had organized an invited session and was also going to receive my Fellow certificate at the awards banquet. As I was packing my bags on Friday night preparing for an early Saturday morning flight to Detroit, I discovered that my passport had expired! Needless to say I did not make my flight. Instead, I spent a great deal of time on the phone with Northwest Air-

lines pleading with them to change my ticket without charging me US\$2,700 (which was the first price they quoted me), followed by a quick trip to Chicago on Monday for a one-day passport. In the end I made it to Kobe only three days later than planned and made both the banquet and my invited session. All's well that ends well!

—Mark Spong

36th IEEE Conference on Decision and Control

10–12 December 1997

General Chair Anthony Michel, Program Chair Theodore E. Djaferis

Hyatt Regency San Diego, San Diego, California

The total number of papers submitted (1,616) compares favorably with those from other recent CDCs: 1,678 papers for the 1996 CDC (Kobe); 1,348 for the 1995 CDC (New Orleans); and 1,493 for the 1994 CDC (Orlando) . . . It became necessary to transform our traditional "Awards Luncheon" into an "Awards Dinner" so that afternoon sessions on Thursday could be held. [8]

—Tony Michel

37th IEEE Conference on Decision and Control

16–18 December 1998

General Chair J. Douglas Birdwell, Program Chair David Castanon

Hyatt Regency Westshore, Tampa, Florida

One of the plenary sessions featured a debate between Lotfi Zadeh and Michael Athans on fuzzy control. The session was extraordinarily well attended, and, as expected, the debate was lively. Michael and Lotfi left in good spirits and as good friends, after staging a mock fight in front of the Christmas tree.

Jan C. Willems accepted the IEEE Control Systems Award "for seminal contributions to control theory and leadership in systems research" at CDC'98. Saturday morning, after the CDC, a special symposium was held to honor Michael Athans on the occasion of his retirement from MIT in the spring. A luncheon followed, with many of his friends and former students in attendance.

I suspect most of those who attended CDC'98 remember the food. The closing reception was held in a large tent, and the buffet tables, in addition to the usual items, included cheesecake for all. I realized that we must have made quite an impression on the hotel staff when I asked a bartender for a glass of wine at the closing reception. He said "Oh, no sir, you don't want that bottle of wine, you want this one!" and produced a special bottle from under the table, whereupon I called over David Castanon, the program chair, and we enjoyed a great finish to the conference.

—Doug Birdwell

38th IEEE Conference on Decision and Control



Debaters Michael Athans and Lotfi Zadeh stage a mock fight at the 1998 CDC.

7–10 December 1999

General Chair Edward W. Kamen, Program Chair Christos Cassandras

Crowne Plaza Hotel and Resort, Phoenix, Arizona

The Board of Governors of the IEEE Control Systems Society voted to adopt a four-day format on a trial basis starting with the 1999 CDC. The primary reason for the change was the desire to reduce the number of parallel sessions . . . With the four-day format, the number of parallel sessions is expected to be reduced to 12 or 13 . . . [which makes] it possible to choose Phoenix as the site of the 1999 CDC. [9]

—Ed Kamen

The Next Century—Great Things Await

39th IEEE Conference on Decision and Control

12–15 December 2000

General Chair Robert R. Bitmead, Program Chair Cheryl B. Schrader

Sydney Convention and Exhibition Centre, Sydney, NSW Australia

Location, location, location! These are the top three things to consider when organizing a CSS conference. Sydney had it all, including summer weather in December and an awesome Aussie influence. And everyone wanted to be there: nearly 1,800 papers were submitted for a program constrained to about 980 slots.

This conference was a first for many things: the first CDC in the summer since 1962, an awards ceremony separate from the conference banquet, record attendance and paper submissions, and a free afternoon to enjoy a harbor cruise or bridge climb. Lest you think this was all play and no work, we made up this free time with evening sessions and lured attendees back to the conference by a stimulating history panel on the selection of 25 seminal papers in control. The exceptional audience size is testimony to the presentation and to the importance attached to such historical analyses by the attendees.

Perhaps the most memorable event, however, was the

special speaker at the banquet Austrian-born Dr.-Ing. Erik Hochleitner, who, at the end of his commentary on control systems and roast of the Society and its members, revealed that he was actually Melbourne actor Campbell McComas. As one of the few people in on the secret, it took great concentration and effort to make it through a sumptuous banquet dinner while listening to the “guest speaker” converse in his affected accent and toupee with the Society president and president-elect, who were not fully informed of the joke!

—Cheryl Schrader



2000 President Tamer Başar, Campbell McComas as Dr.-Ing. Erik Hochleitner, and General Chair Bob Bitmead at the conference banquet.

I also remember the quite humorous banquet talk. I was sitting with friends from Munich and, at first, we were a little puzzled by the horrendous German accent and unusual grammatical mistakes that no native German would make no matter how poor his or her English. Then it became clear that it was all a joke!

—Mark Spong

40th IEEE Conference on Decision and Control

4–7 December 2001

General Chair Theodore E. Djaferis, Program Chair Kevin M. Passino

Hyatt Regency Grand Cypress, Orlando, Florida

Too bad I had all those executive committee and board meetings, not to mention an action-packed conference, and was unable to take advantage of the self-contained resort amenities of this venue. But I heard stories about sailing and horseback riding, and I enjoyed the suite assigned to Secretary-Administrator Linda Bushnell and me. And there was a fire alarm during the Board of Governors meeting that livened things up a bit!

—Cheryl Schrader

41st IEEE Conference on Decision and Control

10–13 December 2002

General Chair Umit Ozguner, Program Chair Kenneth Loparo
The Venetian Hotel, Las Vegas, Nevada

In late 2001, the original hotel backed out of our contract. Luckily, the CDC was planned in Las Vegas, which has a large selection of sites within the same city. The CDC



The Bahamas

ended up in a more luxurious venue than anticipated with an appeasement paid by the original hotel. Talk about making lemonade out of lemons!

—Cheryl Schrader

42nd IEEE Conference on Decision and Control

9–12 December 2003

General Chair Frank Lewis, Program Chair Chaouki Abdallah

Hyatt Regency Maui, Hawaii

I greatly enjoyed Lennart Ljung's Bode lecture from Maui in 2003. The illustration of what can go wrong with neural networks (as with other forms of identification) if you try to overfit the data was very well made. Also I remember his home university's name being pronounced as 'lin-cope-ing' (which does match the Anglicized form of the spelling: Linköping), but I think the correct Swedish is closer to 'lin-show-ping.'

—Rick Middleton

43rd IEEE Conference on Decision and Control

14–17 December 2004

General Chair Christos Cassandras, Program Chair Wei-Bo Gong

The Atlantis, Paradise Island, The Bahamas

References

- [1] J. Zaborczyk, "A report," *IEEE Trans. Automat. Contr.*, vol. AC-15, no. 6, pp. 617–619, Dec. 1970.
- [2] Y. Bar-Shalom, "Editorial: Some thoughts after two years on the information dissemination committee," *IEEE Trans. Automat. Contr.*, vol. AC-23, no. 6, pp. 973–974, Dec. 1978.
- [3] S. Kane, "Officer's column," *IEEE Contr. Syst. Mag.*, vol. 1, no. 4, pp. 3–4, Dec. 1981.
- [4] M. Jamshidi, "Editorial," *IEEE Contr. Syst. Mag.*, vol. 1, no. 3, p. 3, Sept. 1981.
- [5] A. Levis, "Meeting reports," *IEEE Contr. Syst. Mag.*, vol. 3, no. 2, pp. 23–24, May 1983.
- [6] J. Melsa, "News," *IEEE Contr. Syst. Mag.*, vol. 4, no. 3, pp. 18–20, Aug. 1984.
- [7] M. Masten, "33rd CDC sets records," *IEEE Control Syst. Mag.*, vol. 15, no. 3, pp. 97–1009, June 1995.
- [8] T. Michel, "The 36th IEEE CDC in San Diego," *IEEE Contr. Syst. Mag.*,

vol. 18, no. 3, pp. 77–81, June 1998.

[9] E. Karmen, "Four-day CDC in 1999," *IEEE Control Syst. Mag.*, vol. 18, no. 6, pp. 89, Dec. 1998.

Cheryl B. Schrader (schrader@ieee.org) became dean of Boise State University's College of Engineering in July 2003. She joined Boise State after 12 years with the University of Texas at San Antonio, where she was associate dean for Graduate Studies and Research in the College of Engineering and the College of Sciences and professor of electrical and computer engineering. She previously held positions at McDonnell Douglas Astronautics Company, Valparaiso University, Rice University, and Chimera Research. She completed her Ph.D. and M.S. degrees in 1990 and 1987, respectively, in systems and control at the University of Notre Dame. She earned her B.S. degree in electrical engineering with high distinction from Valparaiso University in 1984. She has an extensive record of publications and sponsored research in systems and control and has received several best paper awards. She is a Senior Member of the IEEE and is currently IEEE Control Systems Society past president and has held a number of elected positions in the IEEE Control Systems Society, IEEE, and AACC over the past 15 years. She can be contacted at Boise State University, 1910 University Dr, Boise, ID 83725-2100 USA.

Mark W. Spong received the B.A. degree in mathematics and physics from Hiram College in 1975, the M.S. degree in mathematics from New Mexico State University in 1977, and M.S. and Ph.D. degrees in systems science and mathematics from Washington University (St. Louis) in 1979 and 1981, respectively. Since 1984 he has been with the University of Illinois at Urbana-Champaign, where he is currently Donald Biggar Willett Professor of Engineering and interim head, Department of General Engineering. He is the director of the College of Engineering Robotics and Automation Laboratory, which he founded in 1987, and director of the John Deere Mechatronics Laboratory, which he founded in 1995. He is president of Mechatronic Systems, Inc., a company he founded in 1996. He was editor of *IEEE Transactions on Control Systems Technology*, a member of the Board of Governors of the IEEE Control Systems Society, and vice president for Publication activities. His research interests are in nonlinear control and robotics. He is a Fellow of the IEEE and currently IEEE Control Systems Society president-elect.

