



Wilmington Section ISA  
Box 9254  
Newark, DE 19714-9254

Wilmington Section ISA

ISA—The Instrumentation, Systems, and Automation Society



Check out our web page at <http://www.isa.org/community/wilmi>

### Wilmington ISA

## Blue Rocks Baseball Blue Rocks Vs. Myrtle Beach

Thursday, August 26, 2004  
Daniel S. Frawley Stadium  
5:45 PM Picnic  
7:05 PM Game Starts  
Prozone, 3rd base picnic area

RSVP to: Mike Morkun or Matt Murphy

### ISA SENSOR

Published By  
WILMINGTON SECTION ISA  
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Newark, DE 19714

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# The Sensor

August 2004

## August Event

### ISA - Wilmington Annual Blue Rocks Baseball Thursday, August 26, 2004

Need a break from the hustle and bustle of summer? Come out and enjoy a summer evening at the ISA Wilmington Section Blue Rocks Outing.

This year we'll watch the Blue Rocks host the Myrtle Beach team. For the reasonable cost of \$20 you get prime seats in the Prozone at the 3rd base picnic area. Besides the game you can enjoy an all you can eat smorgasbord of hot dogs, hamburgers, barbecue chicken, salad and ice cream.

The picnic time is 5:45pm - 7:30pm for the 7:05pm game. When you arrive enter through the stadium's main gates and head to the 3rd base picnic area. A hostess will be waiting at the picnic area to check your ticket stub and give each member a wristband. The hostess will direct you to the designated area for the ISA Section.

The promotion item for this game is a bobble-head doll. The first 1,000 fans will get one as they enter the gate.

For further information on Blue Rocks visit their website at [www.bluerocks.com](http://www.bluerocks.com)

**For tickets contact,  
Michael Morkun at  
[michael.b.morkun@usa.dupont.com](mailto:michael.b.morkun@usa.dupont.com)**

## FUTURE EVENTS

Sept 9th - Golf Outing  
[www.isa.org/community/wilmi](http://www.isa.org/community/wilmi)

Sept 28th- Section Meeting

Oct 26th - Section Meeting

Oct 5th - ISA Expo  
Houston, TX

Nov 11th - ISA Wilmington  
Show

### Annual WISA Picnic, June 22

Once again the members of the Wilmington section gathered with family members at the Our Lady of Grace picnic grounds.

The turnout was good, food was great and the beverages were cold and refreshing. Benjamin Rollins, son of WISA senior life member Dave Rollins was awarded the Ralph L Moore Scholarship. The section also recognized the contributions of several members over the past year; program chair Joe Baker, president Nick Sands. Special service recognition awards were given to current web master and long time pillar of the section Cullen Langford, and Dirk Sweigart for his dedicated service to the section especially distributing the Sensor.

The weather was cooler than the past few years, but the skies opened in mid picnic, washing out the softball game. Word was that this was the year for the users to make a comeback.

## President's Corner Ken Lawrence

The 2004-2005 year for the WISA section has started and I look forward to serving the members and working closely with our executive committee this year. We start the year on a sad note with the tragic death of Dan Roarty, one of our long term members. Dan invested time each year handling the Ralph L Moore scholarship and providing the unforgettable Shrimp Boil menu for our April meeting. I had the pleasure to introduce Dan at the District II meeting where he was awarded the Old Shoe award. We will all miss him and send our prayers and condolences to his family as they grieve.

I want to thank Nick Sands for his leadership and section guidance over the last year. Nick has jumped head first into the planning and organization of our November ISA show. It will be a challenge filling his shoes as president, but with his support and the rest of the executive committee help, I know we will have a great year.

I want to welcome Stephen Prettyman from Rohm & Haas in his new position as President elect/Secretary and Matt Murphy of DuPont as a Program Co-Chair. I also want to thank Bill Balascio for coming back to the committee to help start our University Student Chapter and the returning executive board members that give so much to make this section a success.

**2004 Industrial Measurement and Control Exhibit and Technical Seminars**

**Thursday, November 11, 2004  
Holiday Inn Select-Wilmington  
off I-95 and Naamans Road,  
Claymont, Delaware just below  
the Pennsylvania State line  
10:00 AM – 5:00PM**

This Show Offers One-Stop Shopping, Providing . . .

- Access to new and innovative instrumentation products and technology
- One-on-one interaction with vendors to discuss the most appropriate products and equipment to meet their facility's needs
- Free Admission
- Easy to get to Location (off I-95 and Naamans Road in Claymont, DE
- Free on-site parking

ISA Training Seminar  
(Registration required)

Safety Instrumented Systems:  
The Must Know for  
Implementation (EC505)

Course: 8:00 am – 4:00 pm Sign-  
in: 7:30am \$395 for Members,  
\$445 for non-Members

FREE Technical Seminars (Pre-  
registration not required)

- 1) Level Measurement
- 2) Batch Control (S88)
- 3) Fieldbus Instruments
- 4) Network Security
- 5) Enterprise Connections (S95)
- 6) RFID Wireless

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**Dan Roarty Memorial**

It is with great sadness that we at Scott Instruments must announce that, in an unfortunate and tragic accident on August 8th, 2004 Dan Roarty (Sr Product Manager) was killed when his car was struck at an intersection on his way home from a long deserved family vacation. His children, although injured in the accident, are expected to recover.

Trying to make sense of his passing is difficult for all of us. We ask "why him" and we start sentences with - "if only" - then trail off into thoughts not spoken.

To his wife and four children he was their pillar. To his family a man who was loved beyond words. To his friends he was someone that we all valued as a man we could rely on - a true friend, a good guy.

Dan was both passionate and compassionate. His home always had an open door and his friendship was never more than a phone call away. He was genuine and possessed a truly memorable quick wit and humor. Laughter was a sound that always surrounded him.

With every ounce of his being Dan enjoyed life and engaged it head-on. Dan participated in his life and often in ours.

This letter is an open invitation and is dedicated to Dan and is for his family. It's purpose is to let us all contribute to the family in their time of need as well as to share our anecdotes, memories, and images of him.

Any materials you share will be put together and eventually delivered to his family so that maybe someday, when the pain subsides, they can again touch a small part of Dan and remember a soul that was truly unique.

There has already been an outpouring of response with many of you eager to contribute in some way. Dan's family is obviously still working through their ordeal but has expressed a desire to set up a fund through their church. In the coming days you will receive additional information regarding funeral services and where your contributions may be sent.

Jon Bauer  
Marketing Communications  
Manager  
Scott Instruments

Note from WISA Executive  
Committee.

We have already approved a donation for the family and encourage all our section members to send in contributions when appropriate.

We will forward all information on the services and memorial fund for Dan as we receive it.

Our prayers and thoughts go out to the Roarty family for their loss of Dan and for the healing of his children.

The executive committee also voted unanimously to add the scholarship for University of Delaware students and name it in honor of Dan.

**Basic and Advanced  
Regulatory Control: System  
Design and Application by  
Harold L Wade  
Reviewed by Nick Sands**

Harold Wade's new book, *Basic and Advanced Regulatory Control: System Design and Application*, is an excellent tour through practical process control, from the basics of process dynamics to the common implementations of PID algorithms to advance regulatory control strategies, including an introduction to some truly advanced control techniques. Wade covers the important concepts of process control in a readable and understandable fashion. He covers both external reset and relative gain array, a range few books can match. His stated goal is to promote intuitive understanding over mathematical rigor, and except for the sections on level control and model predictive control, he succeeds admirably.

The first of the three sections of the book is a grounding on symbols, math, and terminology. Wade keeps the math simple, but no simpler than it needs to be: just the concepts of integrals and derivatives are needed. Both ISA and SAMA symbols are described and used throughout the book for the details of control strategies and configurations. With common terms and symbols, Wade describes the basics of control valves and control loops like flow, temperature, pressure, and level.

The second section builds on the foundation of the first. Wade provides one of the better explanations of PID control algorithms.

Then comes a real bonus, a description of how several common control system actually implemented the PID controller; Honeywell, Moore 352, and Foundation Fieldbus. Naturally, this leads to a chapter on tuning and another bonus, a guide to tuning by trial and error, along with the usual methods. Wade provides a new (from the previous version) flowchart to improve controller tuning. There is also a short chapter on self-tuning controllers.

The last section covers advanced regulatory and advanced control. There are chapters on cascade, ratio, feedforward control. As with the basic controller, Wade provides implementation details found in several common control systems. The chapter on override control is another bonus; building on the explanation of external reset and control algorithms in the previous section, the implementation details provide keys to success missing from most other books.

Also in the last section are chapters on the more advance control techniques of decoupling, model based control and model predictive control. These chapters require more mathematical discussion and detail, but Wade provides an overview of the techniques. The final chapter returns to advanced regulatory control, covering some important strategies by way of examples of split-range, cross-limits, and time-proportional control.

For 10 years I have purchased copies of what I considered the best process control book ever, *Regulatory and Advanced Regulatory Control: System Development*.

The first edition was an excellent reference for control technologists and engineers. A unique feature is the discussion of functions like PID as implemented in some common control systems. The second edition, *Basic and Advanced Regulatory Control* is new and improved, with 50% more information for only one extra dollar. Available from ISA for \$86 (member price), Wade's updated book is definitely a bonus (BBBBB).

My system is a five B system:

|-----+-----|  
|BBBBB|Bonus |  
|-----+-----|  
|BBBB|Buy |  
|-----+-----|  
|BBB|Borrow |  
|-----+-----|  
|BB|Booring |  
|-----+-----|  
|B|Bologna |  
|-----+-----|

**Leadership Need for WISA**

For the 2004-2005 ISA year, June to June, there are still positions available: Two key positions we would like to fill this year are Education Chair and Membership Chair. There are other opportunities as well, planning and assisting for the November WISA Show, speaking at a section meetings, or assisting with the newsletter or website.

If you enjoy the ISA section meetings, please consider spending some time helping us with these positions.

Please contact Ken Lawrence if you are interested in any of these positions or to discuss ideas and ways you can contribute to our Wilmington Section.