The ISA Birmingham Section Leadership Team encourages everyone to be aware of the restrictions and concerns with the COVID-19 pandemic. This is a very serious situation that we are all dealing with and making alterations to our lifestyle to deal with the coronavirus threat to our health. We hope everyone had a Happy Memorial Day holiday and break in the action. This was a wonderful time to express our appreciation for the service of all of our armed forces, and especially to the families of those who gave the full measure to defend our liberty and make the United States of America the greatest country in the world.

The Nominating Committee has brought forth the slate of officers who will assume the leadership roles for 2020-2021, effective July 1, 2020. The new officers will be making plans, setting up budget parameters, scheduling section events, and announcing dates for upcoming meetings.

**ISA Birmingham Section Officers (July 1, 2020 – June 30, 2021)**

- **President:** John Cover – BBP Controls
- **Vice President:** Patrick Joseph – Southern Company Services
- **Treasurer:** Patrick Joseph – Southern Company Services
• **Associate Treasurer:** Beth Clarkin – Southern Company Services  
• **Secretary:** Logan Gibbs – KBR

If you are interested in becoming a committee chair, member of a committee, or working in any area of leadership with the ISA Birmingham Section in 2020-2021, please let the nominating committee hear from you. Please contact Catherine Andrews (candrews@hilealabama.com) or Skip Wells (skipandalice@att.net) to learn what opportunities exist for these positions.

This is the 75th Anniversary Year for ISA, and you may click on the following link to see a very interesting slide show of the history of ISA.  
http://isa-5382318.hs-sites.com/75in2020

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**Mark Your Calendar:**

All meetings and classes are cancelled until further notice of health clearances.

Anyone with suggestions as to program topics and presentations, should contact Mark Isbell at misbell@wgyates.com, with ideas and suggestions.

**Society Leader Elections open 2 June – Every vote counts**

All ISA Birmingham Section members are encouraged to vote and have an influence on the overall direction that is taken by the International Society for Automation (ISA) in the coming years. Please click on this link - vote – any time from June 2 – July 3, 2020 to cast your ballot in the very important Society leader elections. Only paid, professional members as of May 1, 2020 are eligible to vote.

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**Megatrends Impacting the World of Automation**

As ISA reflects on 75 years of rich history, we are also looking closely at predictions and analysis of what’s next – the megatrends that will shape our world in the days to come.

A megatrend is a shift in behavior or technology that has global impact, crossing multiple industry sectors and disrupting business-as-usual.

**We hope that you will be inspired to start a dialogue about change with your fellow members and how it may impact their organizations. Check out the Megatrends webpage for more information.**

Upcoming Education Committee Announcement

All of us have had to make changes in our lifestyle during the recent months and many meetings and training activities have been cancelled due to the Pandemic. The annual short course had to be cancelled for the first time in 50 years, but we have all made changes and are adjusting to a “New Normal”, which is yet to be determined.

An official announcement and information regarding an upcoming education event will be announced very soon that will be of interest to all the members of the ISA Birmingham Section. This will be an exciting addition to the actions of the section to continue to disseminate technical information and enable members to perform their work, while taking steps in their professional development.

#### Upcoming Education Committee Announcement
ISA Birmingham Leaders 2019 – 2020

Visit the ISA Birmingham web site:
www.isa.org/birmingham

- President: Meg Moore – W.G. Yates Company (mmoore@wgyates.com)
- Vice President: John Cover – BBP (cover.john5@gmail.com)
- Treasurer: Patrick Joseph – Southern Company Services (pvjoseph@southernco.com)
- Secretary: Steven Holland – W. G. Yates Company (sholland@wgyates.com)
- Past President: Jim Key – Southern Company Services (jimkey@southernco.com)
- Section Delegate: John Cover – BBP (cover.john5@gmail.com)
- Program Chair: Mark Isbell – W. G. Yates Company (misbell@wgyates.com)
- Education Chair – Gerald Wilbanks – DES (gwilbankspe@charter.net)
- Membership Chair: Catherine Andrews – Hile of Alabama (candrews@hilealabama.com)
- Honors & Awards Chair: Gerald Wilbanks – DES (gwilbankspe@charter.net)
- Web Master: Jimmie Johnson – Southern Company Services (jimjohns@southernco.com)
- Marketing Chair: Chris Sorensen – Southern Company Services (chris.sorensen@juno.com)
- Publications Chair: David Hyche – KBR (david.hyche@kbr.com)
- Standards & Practices Chair: Jim Key – Southern Company Services (jimkey@southernco.com)
- Historian: Skip Wells – Southern Company Services (skipandalice@att.net)
- Student Section Liaison: Yao Wang – Southern Company Services (ywang@southernco.com)
Matt’s – Word for the Day

**Divaricate**

di-VAR-ə-kayt

Part of speech: *verb*

Origin: *Latin, early 17th century*

1. Stretch or spread apart.
2. Diverge widely.

Examples of *Divaricate* in a sentence

"You'll want to divaricate the plants as you're starting your garden to allow the roots to grow."

"We divaricated on our political views, but we agreed to put them aside for family dinner."

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**Technical Brain Teaser**
A control valve is used to maintain oxygen flow to a reactor at a maximum design rate of 50,000 scfh. The flowing conditions are a temperature of –50 degrees F and an upstream pressure of 75 psia. The downstream condition is 55 psia before entering the reactor. The control valve flow coefficient is most nearly equal to __________.

a. 10.8  
b. 22.5  
c. 56.7  
d. 62.4

**Answer**

For this application, a globe body control valve would probably be most appropriate style to use. Let’s assume an FL (pressure recovery coefficient) value of .85, which is an average value for this valve construction. The molecular weight of oxygen is 32 and when compared to air, molecular weight of 29, the specific gravity is 1.1. The sizing equation needs the temperature in degrees Rankine, so the negative 50 degrees Fahrenheit becomes 410 degrees Rankine. We will take the compressibility factor to be 1 for pressure less than 100 psia, and we can calculate the expansion factor, Y, from the pressure drop ratio (X) and the limiting pressure drop ratio, Xt. The resulting calculation is shown below.
\[ C_v = \frac{Q_g}{1360 \ P_i \ Y} \sqrt{\frac{GTZ}{X}} \]

\[ C_v = \frac{50,000}{1360(75)(.85)} \sqrt{\frac{1.1(410)}{.27}} \]

\[ C_v = 23.6 \]

\[ X = \frac{\Delta P}{P_i} = \frac{20}{75} = .27 \]

\[ G = 1.1 \]

\[ T = 410^\circ R \]

\[ X_{\text{T}} = .85 \ F = .85 (.85) \]

\[ X_T = .61 \]

\[ Y = 1 - \frac{X}{3X_T} \]

\[ Y = 1 - \frac{.27}{3(.61)} \]

\[ Y = .85 \]

Answer is B \( 23.5 \)